





Table of Contents

Editorial

Fenny Léautier

Humanity in Creative Development

Agile, AI-powered creative excellence

Rafik El Noumeir · Monica Tenorio

Creating a Better Everyday Life

The enormous potential to fulfil customers' dreams by democratising research

Eva-Carin Banka Johnson · Stefan Vukicevic · Terje Nilstun

Selling Insight through Live Commerce in China

Behind-the-scenes of China's first ever consumer insight livestream de-brief

Yingying Gu · Jennifer Liu

Can Social Listening Obsolete All Other Research Methodologies?

How we have been stretching social listening use cases

Nicolas Pochart · Pierre-Antoine Dubosc

Using the Data You Have to Get The Insights You Need

Leveraging unstructured data, AI, qualitative synthesis and CX listening to create and audience models in an agile way

Loren Crawford

Boosting Economic Growth and Shaping Livelihoods with Machine Learning

Dickstein Mukaria · Dolphine Mongina · Jasper Grosskurth · Xavery Ray

Uncovering the Why

How primary research unlocked tech giant Meta's understanding of consumers

Cecily Mejia · Karl Joyce · Hannah Pucci

Digital DNA: If Your Data Could Talk?

Mapping the data genome and its surprising secrets using data ethnography and behavioural science

Patrick Fagan · Vanja Ljevar

Uncovering the Human Voice for Deep Insights

Transforming online conversations into actionable insights with emotional drivers such as brand love

 $Bernard\ Brenner\cdot Melissa\ MacGregor\cdot Justin\ Schoen\cdot Jasmin\ Fischer\cdot Camila\ Angio\cdot Sarah\ Johnson\cdot Lucas\ Henderson\cdot Lucas\ Henderson\cdot Kyle\ Stalcup\cdot Michael\ Tapp\cdot Jack\ Penzer$

Creating the Beauty Insights that Move Africa

AfriLab: How mobile digital communities are co-creating the future of beauty experiences across the continent

Kambe Mwaba · Christine Laurenssen

Growing Up Together

Redefining motherhood as a transformational journey, not a role

Francky David · Nathalie Coste

When Sparks Fly: Thunberg vs Tate

A story on trust, reputation and responsibility

Anneke Quinn-de Jong

Can AI (Computer Vision) Help Us to Evaluate Creatives at Large Scale?

A research framework for meta-analysis of video ads by combining machine learning and human encoding

Minh Nguyen

The New Marketing Renaissance

The merging of creative work and scientific evaluation of communication

Karin Haglund · Cajsa Wirén · Oliver Engist · Hugo Englund · Thomas Berthelsen

Breaking the Fourth Wall: Future Formats for Effective Advertising

Identifying the trends that will define the future of business and public relationships

Lisa Speck · Steve Silvers

Going Beyond Insights

Building strategies for brands in tough times

Sally Joubert · Georgia Phillips

Virtual Frontiers

Assessing the potential of the metaverse for qualitative research

Rupert Sinclair · Faye Soares · Katrin Scheiber

The Metaverse as a Research Laboratory

Leveraging virtual worlds to harness the power of human insights

Alejandro Prieto · Larissa Aieta · Rodrigo Alagón

Augmented Reality: A Critical Part of Your Toolkit

Boosting engagement, influencing purchases, and creating goodwill among audiences

Aarti Bhaskaran · Heather O'Shea

Chat GPT: What's All the Fuss?

Understanding the evolving AI framework for market research

Tim Brewer · Sandy Casey

Human or AI?

How to identify and protect surveys from AI-generated responses

Cecile Carre · Eva Wittmann

Your Attitude is Not Sustainable!

Driving our clients' sustainability efforts to new heights

Ben Liang · Will Goodhand · Chris Wallbridge

Innovation Takes the Wheel

Transforming the future of transport through research

Clare Palmer · Rebecca Posner · Lucy Farrow

Riding the Shockwaves

Connecting with the next generation in a volatile and turbulent world

Luke Mantell · Luke Perry

The Death of the Debrief

If empathy is at the heart of good research practice, why are we still presenting insights in PowerPoint?

Andrew Therkelson · Chris Moschos

Empathy and its Role in a VUCA Business World

A framework for the deployment of empathy as a marketing tool in organisations

Anju Joseph · Adrian Terron · Kavita Mahto

One Size Doesn't Fit All

Can news be gender-neutral? How the BBC World Service's mission to address the gender gap in its audience was able to challenge stereotypes and offer a new path towards inclusivity

Maria Bruder · Celine Llanta · Kevin Cowan · Minnie Kweon

"My Sex, My Way!"

Driving meaningful engagement with the LGBTQ+ community

Oana Stroie · Tania Page

Sustainability at High-Speed

Revolutionising a mature sector with the creation of a new brand

Oscar Santamaría · Anders Braekken · Jordi Crespo

Power Up For Change!

How E.ON Next is navigating the uncharted emotional terrain of eco-anxiety

Kimberley Howard · Dr. Adele James · Kelly McKnight · Emma Webster

How an Agile Community Approach Supported the Transition from Uncle Ben's to Ben's Original (Research Effectiveness Award Finalist)

And how the brand change resulted in positive business outcomes and social impact Katie Kaylor · Patricia van der Hart

Owning Inspiration (Research Effectiveness Award Finalist)

Unpacking the sub-dimensions of inspiration for strategic success at Pinterest Dr. Daron Sharps, PhD · Martyn Hill

An Innovative Approach to Employee Experience (Research Effectiveness Award Finalist)

The story of how Judo Bank changed the way it listens to its people and proved that supporting the well-being and happiness of its people makes for happy shareholders Laurie Hibbs \cdot Garreth Chandler \cdot Ben Griffiths

Editorial

Fenny Léautier

The ESOMAR 2023 Congress, the largest international event for the data and insights community worldwide, is back in Amsterdam! SUPER CHARGE yourself by reading the papers and joining Congress in September!

In 2017, we had our last ESOMAR Congress in Amsterdam with the theme "Visionary!". We reviewed getting gamification to the next level and discussed the potential of "shiny new tools" such as VR, AI, image mining, text analytics and the IOT. Who could have imagined by 2023, only six years later, that the world would have changed so dramatically?! We lived through a pandemic, are facing geopolitical challenges, are impacted more and more by climate change and inflation has never been this high since the 1980s in a large part of the world. As, Justin Trudeau said in January 2018 at Davos: "Think about it: the pace of change has never been this fast, yet it will never be this slow again". Throughout these turbulent times, we as an insights industry have become more essential than ever. Our theme for the 2023 ESOMAR Congress Amsterdam therefore is SUPER CHARGE!

The speed and rate of change has never been higher. It took 75 years for the telephone to reach 50 million users; radio 38 years; television 13 years; internet four years; Facebook three-and-a-half years; Threads took only five days to reach 100 million users!

Just like the movie "Back to the Future Part II" completely missed the rise of the mobile phone, in 2017 we could not have predicted the power of AI. Who could have predicted that generative artificial intelligence and Chat GPT could create new content, including audio, code, images, text, simulations and videos? Will this be a threat or opportunity for us as an insights industry? There has never been a more dynamic time for us; sensors and devices are collecting massive streams of data which are still largely untapped, generative AI is changing the way we create insights and is accelerating the understanding of true human insights, leading to new opportunities to deliver even better personalised experiences at scale.

ESOMAR supports the insights industry to be authentic, trusted and relevant, and the insights industry's relevancy is evolving and growing year-on-year. As a community of insight innovators, we are always looking for new ways to create insights, be even more data driven and at the same time human-centric in order to stay relevant and even more impactful! Hence, as a programme committee we felt it was important to create a programme that would be inspiring, challenging and innovating, all with the sole purpose of moving forward and super charging all of you with the latest developments in our industry from all over the world, to increase our relevancy, impact and in the end deliver even better experiences to our end customers.

We received an incredible 282 speaking proposals from 47 countries—this is more than ESOMAR ever received for Congress! In comparison, the Edinburgh 2019 Congress attracted 200 outlines from 36 countries. The papers we have curated cover critical themes that are relevant for all of us, ranging from sustainability,

inclusion and diversity, to challenges we face as an industry and opportunities it can bring like Chat GPT and the metaverse and so much more.

On day 1 we will prioritise people: how to create an immerse experience of the insights we created to drive impact in organisations and supercharge brands? How can research accelerate sustainability and how can the role of data fuel human insights? Day 2 will super charge you with empathy for the people we serve, challenging stereotypes, understanding Gen Z, innovating human-centric design, as well as how the metaverse can enable us for creating deeper insights. On the last day of Congress, we will deep dive into generative AI and Chat GPT; will it be a super boost or a super burden for us as researchers? Further, we will discuss how by connecting data, we can supercharge our understandings of people.

Throughout the programme we will have inspiring key notes and panel discussions debating the need to accelerate progress, embrace technological innovation and the ways to drive impact. Additionally, we will address the need to further strengthen our capabilities as insight professionals, as the big topics of our industry are asking for different skills from our people and the stakeholders we work with.

As our community gathers in September in the exciting city of Amsterdam, I am convinced we will once again experience the impact of meeting face-to-face, exchanging ideas, inspiring and learning from each other to leave re-energised and super charged with new thoughts, ideas, experiences and knowledge. Thus, it only remains for me to say a big "thank you" to my fellow programme committee members for their hard work, energy, passion, thoughtfulness and spirit of collaboration throughout the process: Tony Costella, Ndeye Diagne, Barry Jennings, Jack Miles, Bianca Saldanha, Lyndall Spooner and Urpi Torrado. The way we teamed up as a committee, digesting, discussing and deciding on the content you will read here and see at Congress, has created the magic to bring together this "Super Charge" programme!

A huge well done also to Rhiannon Bryant and the ESOMAR team for all the hard work involved in pulling the Congress together—thank you!

SUPER CHARGE yourself by reading the papers and joining us at Congress in September!

Fenny Léautier

Congress Programme Committee Chair

Head of Marketing Insights and Analytics, Personal Health, Philips, Amsterdam, the Netherlands.

Humanity in Creative Development

Agile, Al-powered creative excellence

Rafik El Noumeir Monica Tenorio

The insights industry is at a crossroads, similar to that faced by the global energy industry. In short: "what got us here, won't get us there!" Change is needed for our industry to continue to inspire our business stakeholders, create impact and power positive growth.

The challenges we face

PepsiCo realised some years ago that a significant change in our approach to insights was needed in order for us to continue to power positive growth for our business. We started by diagnosing the challenges faced by our insights industry.

VUCA is the new normal

For many years now, insights people have been talking about the "VUCA" world we live in (i.e., volatile, uncertain, complex and ambiguous). In fact, the last few years have shown us that people's lives globally have never been more "VUCA"—from pandemics and wars, to social, economic and political crises. All of this means that our stakeholders have never needed their insights teams more, to quickly help them make sense of the world, the people who live in it and what this means for their businesses. Paradoxically, the added challenge in this VUCA world is that truly understanding people and being "human-centric" has never been more challenging.

Firstly, reaching and engaging people in order to understand them has never been harder. Every day, our consumers and shoppers are bombarded with messages, and their attention spans are getting shorter. Gens Z and A have grown up as "digital natives", so reaching these people requires a different approach. Consequently, getting your insight tools and capabilities right really matters. Secondly, the pace of tech-fuelled change has never been faster, and our industry has never been more complex—with the fragmented proliferation of smaller agencies, the influx of consultancies into the mix and the never-ending relentless pace of tech advancement. From metaverse and Web 3 one day, to AI, machine learning and Chat GPT the next. Thirdly, perhaps most importantly, people are harder than ever to truly understand; as we know, historically our industry has relied too much on system 2, declarative research. However, we now know people do not necessarily do what they say they are going to do. Additionally, with digitised "big" data and tech progress, we are bombarded with more data than ever. The big question is: what to pay attention to, and then how to integrate and apply it?

Disconnected leaky buckets of data

If only we knew what we know! Our riches of data and insights historically have been housed in siloed buckets, within agencies, outside of our business. It feels like we are constantly re-inventing the wheel, re-

asking the same questions in different ways and building new "frameworks". This is wasteful making knowledge management and meta-analysis labour intensive and a painful process. Our industry's approach to knowledge management can feel more like a traditional bricks and mortar library than a tech enabled search engine—i.e., an overwhelming array of information, not organised intuitively and difficult to navigate quickly.

Ever more complex, nuanced demand on insights talent

Retaining top talent is tough in any industry. For us in insights, gone are the days of a simple "market insights" and "consumer insights" division. The role insights is being asked to play is evolving fast; our stakeholders now need us to play a more complex, demanding and end-to-end role in growing the business. In other words, we're being asked to catalyse growth. This pace of change means that in order to keep our insights talent engaged, we must ensure they are: i) clear on what's expected of them; and ii) enabled, empowered and energised with the best tools and capabilities to deliver.

It's also easy for insights voices to go unheard. In an ever-more fragmented and complex business context in which we have access to more data than ever, the insights function is often overlooked or drowned out by more simple, compelling storytelling from other teams, both internally and externally. The insights leaders of the future must be able to blend an "art and science" approach—seamlessly and quickly integrating hard data and human empathy to convey their message, influence and drive timely business impact.

Why this matters to PepsiCo

Solving these challenges really matters to us at PepsiCo. We believe doing so will create a sustainable competitive advantage and help us power positive growth for our business, through human-centric insight. There's a lot at stake: with 86 billion USD revenue and approximately 315,000 employees, PepsiCo is the second largest convenient food and beverage company globally. Our brands are consumed nearly 1 billion times each day around the world, and we have numerous iconic brands in our portfolio, many of which each generate over 1 billion USD revenue annually, including (but not limited to): Lay's, Doritos, Cheetos, Gatorade, Pepsi, Mountain Dew, Quaker and SodaStream. We're transforming how we operate as an insights team in order to deliver a stronger return on investment from what we do—creating impact faster and inspiring a stronger, better business.

Three ways we are transforming PepsiCo's insights function to power positive growth

Super-charged digitalisation of tools, data and world class insight capabilities

In recent years, we've built one global digitised PepsiCo insights platform, with the vision to become to insights what Google is to web searching: cutting through complexity, integrating and getting more from what we do, faster. This integrated, fully-digitised platform enables one insights way of working, one set of capabilities and one version of the truth to fuel our ~1000 insights professionals—putting human centricity at the heart of decision-making. We named our insights ecosystem "Ada" after Ada Lovelace, the pioneering mathematician who is widely regarded as the first computer programmer.

Ada is to PepsiCo's what iOS is to Apple users; it enables human centricity through a digitised eco-system of insights capabilities and tools—our "apps". In recent years, we have systematically reviewed each of our existing tools and/or capabilities, and built a faster, better PepsiCo-proprietary version, working with key strategic partner agencies and tech start-ups. These are our "apps". Globally we consistently standardise, connect and integrate each of these "apps" to get to richer insight and enable powerful meta learning. Our Ada capabilities and tools now cover everything from creative development, innovation and brand/demand science, to human empathy, culture and in-home ethnography. In this paper, we look at three use cases in area of creative development.

Use case 1: Ada Digital Brilliant Basics (powered by Creative X)—driving efficiency and return on digital media investment at scale globally, through world-class AI

Through our global "Pep Labs" programme, we partner with tech start-ups, such as Creative X, to co-develop tech-led solutions, such as the Ada Digital Brilliant Basics, which enables us to integrate human centricity-based measurement of metrics that matter for digital/mobile advertising effectiveness at scale globally, using their Al-based platform. All of the 1000s of digital and mobile adverts that PepsiCo airs globally are now systematically measured by the Creative X Al-driven platform versus the "Digital Brilliant Basics"—i.e., five criteria digital/mobile ads must meet in order to "reach" people, and not be skipped or scrolled over. These criteria are:

- 1. Having quick shots or movement;
- 2. Having upfront branding;
- 3. Designing for sound being on or off;
- 4. Tight framing;
- 5. Respecting the media platform aspect ratio.

This gives a seamless, integrated view globally of how effective the 900 million USD we spend each year on mobile and digital advertising is, and what we need to do to improve the media ROI, reduce cost of media and improve brand recall.

By integrating the Digital Brilliant Basics into how we created ads in Europe last year, we significantly improved the effectiveness of our media spend across the region. Today more than 90% of our 75 million USD digital media spend in Europe is on "optimised" mobile/digital adverts that pass all five Digital Brilliant Basics, delivering a roughly 4% (3 million USD saving on cost of media), +4% brand recall, +10% views and, most importantly, stronger media ROI to reinvest in longer-term brand growth. We're currently scaling this approach globally.

Integrated democratisation and globalisation of world class insights technology

We systematically ensure that each of our Ada capabilities and tools are fully integrated (often powered by tech/Al) to give our teams faster access to data and insights, enabling easier and more powerful meta-analysis across brands, categories, markets and regions. One example of this is "Ask Ada", our Al-powered knowledge management ecosystem, used daily by 1000s of insights and marketing colleagues, to get to stronger insights faster, thereby democratising knowledge. Ask Ada's APIs enable the content our insights team creates to be "ingested", but also stay where it is so it doesn't require the human labour of "uploading" of files. Imaging analytics then reads the content to avoid need for tagging and synthesising; the Al also

gets "smarter" over time with usage and feedback. This saved a lot of time and money answering questions we already know the answer to; even better still, PepsiCo gets smarter everywhere every time we do a study somewhere. Ask Ada isn't just an Al knowledge management platform that saves time and money—it also enables connection throughout our insights community. The Ask Ada tech seamlessly matches up people across our function with questions to those in the community most likely to be able to help them, saving time and money, as well as connecting people.

Use case 2: World class creative meta-analysis, powered by an integrated, digitised global ecosystem of Ada capabilities and tools

In the last year, our Global Insights Capabilities and Global Business Services teams (based in India and Mexico) have been able to provide fast, rich and inspiring creative meta-analysis across geographies, brands and categories. The consistency and integration of our validated Ada suit of insights tools globally (our "apps") enables these teams to do complex, impactful analysis in an efficient way. Recent Ada-fuelled creative meta-analysis projects undertaken by our global teams to power positive growth of our brands and businesses include:

- Doritos creative: deconstructing what makes a great Doritos ad, what are Doritos' distinctive band assets and its tone of voice globally, from more than 100 pieces of creative;
- Purpose and sustainability: by looking at the creative pre-testing results for 60 non-PepsiCo CPG TV and digital adverts addressing a "purposeful" topic (e.g., sustainability, farming, DEI), we were able to answer: what do the best ads have in common? What are the things to avoid? What is the right tone of voice on these topics?
- Digital versus TV advertising: looking at over 250 digital ads across two channels and five markets, we were able to understand what drives digital creative effectiveness, and how best to reach people, resonate with them and drive response.

End-to-end role for world class insights talent

The vision and role: we believe our function should be growth catalysts for their businesses, powered by human insights. The role we ask our insight talents to take in powering positive growth is truly end-to-end-art and science. For example, in the creative development process, we don't just ask our insights people to "test the ads", we expect, enable and empower them to:

- "Spark": fertile brand growth strategy and positioning, inspiring creative excellence through powerful "killer" insights and universal human truths;
- "Catalyse": brand and creative strategies and ideas through learning, optimisation and inspiration;
- "Temp check": assessing and further optimising brand and creative activations to be ready to launch;
- "Fan the flames": of growth post-launch to further improve effectiveness.

The enabler

"Insights the PepsiCo Way" is our global framework for how we operate as an insight function. The three key behaviours we enable and empower our teams with are: be brave, be simple and be intentional.

Nurturing talent

How we recognise and reward our talent is also critical. Our *Insights Recognition Program* rewards talent internally, who deliver impactful and inspiring work to have fun, inspiring, critical experiences. This year's winners globally enjoyed an enriching cultural ethnography experience for a week in South Africa.

Collaborating across borders

Enabled by our seamlessly integrated Ada ecosystem, our insights talent works on a wide variety of insights role in markets, both regionally and globally. We also have large and growing Global Business Services (GBS) insights teams with a deep specialism in reporting and analysis of the data and insights we get from our Ada suite of tools and capabilities. These GBS teams are based in India, Egypt and Mexico, but support our wider insights team globally, making for a truly collaborative, global and efficient team.

Use case 3: Fuelling super-powered creative output end-to-end-Walkers, UK, "Crisp in, Crisp out", TV and mobile/digital

The Walkers UK insights team played a truly end-to-end role in catalysing a highly effective, award winning, multi-year TV and digital campaign for the Walkers brand. The specific role the insights team played (and continue to play) is as follows:

- "Spark": The insights team led the inspiring "killer insights" work, enabling Walkers brand teams and agencies to arrive at a compelling universal human truth and a fertile creative "killer insight" in order to fuel the "Crisp In, Crisp Out" creative campaign idea.
- "Catalyse": Throughout the creative development process, the team used our proprietary Ada Amplify
 TV and Digital suite of tools, capabilities and meta learnings to help develop world class creative
 (from storyboard to animatic to finished film).
- "Temp check": Pre-airing, the team used the Ada Amplify TV tool, validated as being twice as predictive of media ROI as the incumbent creative development tool, in order to ensure that the final creative executions were as strong as possible.
- "Fan the flames": Throughout year one and year two of the campaign, the team continued to use the Ada Amplify TV and Digital suite of tools, capabilities and meta learnings to help them develop fresh edits and new executions from the same campaign idea.

The results for Walkers from the "Crisp In, Crisp Out" campaign were (and continue to be) phenomenal. The business impact on Walkers' core brand performance during year 1 of the campaign period was:

- +17% RSV versus last year (May 2022: NIQ RSV versus LY);
- +1.5pts market share (NIQ, P5 22 versus LY);
- +3.7pts penetration (Kantar, P5 YTD).

Meanwhile, the creative performance during year 1 of the campaign period was as follows:

- · Reached over 85% of UK adults;
- Outstanding earned media–286 million opportunities to see, 106 unique pieces of coverage;
- External awards (e.g., The Drum).

Conclusions

Copyright © **ESOMAR** 2023 CONGRESS 2023

We must transform insights to power positive growth through human centricity. As with the energy industry, the case for transformation of our insights industry is clear. The opportunity has never been greater, but the challenges have also never been bigger—it's now or never: "what got us here, won't get us there!" PepsiCo believes that the insights industry can power positive growth through human centricity, but to do this requires:

- Super-charged digitalisation of tools, data and world class insight capabilities;
- · Integrated democratisation and globalisation of world class insights technology;
- End-to-end roles for world class insights talent.

About the authors

Monica Tenorio, Vice-President of Insights, Analytics & Marketing Capabilities, PepsiCo Europe, Geneva, Switzerland.

Rafik El Noumeir, Vice-President of Insights & Analytics, PepsiCo Africa, Middle East and South Asia, Dubai, UAE.

Creating a Better Everyday Life

The enormous potential to fulfil customers' dreams by democratising research

Eva-Carin Banka Johnson Stefan Vukicevic Terje Nilstun

Abstract

IKEA aims to create a better everyday life for customers by creating home furnishing products that fulfil their needs, dreams, and frustrations. Since the 1970s, IKEA has visited real customers' homes to better understand their everyday lives and desires. The insights they gather from these home visits are then used to develop the IKEA product range.

Over time, IKEA has used many different methods to document home-visit data. None of the previous methods allowed co-workers to share and compare results across the world. There was an opportunity to build a knowledge platform to collect and host this data. It could serve as a base for the company's understanding of existing and future customers.

In spring 2023, IKEA launched a new global platform, Open Home. It not only allows IKEA employees to safely document and share data from home visits, but it also enables employees without a research background to contribute valuable insights through an inclusive method.

Involving employees in the actual fieldwork increases their awareness, knowledge, and commitment to the IKEA vision. Employees get recognised for their valuable contributions and are encouraged to make high-quality documentation.

What was previously only used to better meet the needs of local customers is now also used for global innovation and product development.

Introduction

The IKEA vision is to "create a better everyday life for the many people". Offering one common product range to a global market, it is essential to understand what "better" is to the majority of the people that IKEA aims to reach, and gain insight into their needs and living conditions.

IKEA's main product development centre is located in the southern part of Sweden. There, the global product range is developed by specialised home furnishing business units, each focused on a different home area and its related activities. To acquire the insights needed for product development, each business unit conducts qualitative and quantitative studies about the specific needs of their business unit.

IKEA has conducted home visits since the 1970s, to learn about people's everyday struggles and needs. Most home visits are done by the employees who work in the retail environment, either in the store within communication or sales, or in the national administrative office. IKEA stores want to know how people live in the area where their customers reside, in order to be able to market their offer in relevant ways. They use this information to build room sets in the store and create communication materials. IKEA consumer and market research units use home visits as part of the qualitative research they do in order to understand life at home on

a global level. To strengthen their retail and product development, different business units conduct their own home visits and share limited information with each other.

In 2017, Gapminder, an independent Swedish foundation, gave a presentation to IKEA's product development and design teams about their online platform, Dollar Street, which shows photos of people's homes organised by income bracket. The IKEA team was impressed by the platform's direct visual impact. It was powerful to see snapshots from peoples' everyday lives all over the world. Comparing activities in different parts of the world in relation to people's incomes made it simple to see that people all over the world are more similar than different. The product development and design teams immediately requested a similar tool that could give them comparable information about IKEA-related activities, which are the activities that take place during daily life at home, such as cleaning, cooking, and sleeping.

This is when development began of an IKEA-specific platform, eventually known as Open Home, pulling inspiration from the simplicity and the direct visual impact of Dollar Street. In developing Open Home, the goal was to provide a direct understanding of how people perform their daily activities in different markets. This is what product developers and designers need in their work, in order to make products that better customers' everyday lives all over the world.

Objective

The objective of creating the Open Home platform was to make global data and insights from home visits available to different business units of the IKEA organisation and enable a more relevant offer that contributes to a better everyday life for customers. The platform would bring outside views in and allow IKEA to understand the reality of customers' lives. The collected data would enable IKEA to capture and aggregate the vast knowledge that IKEA has about how people live all over the world and to make the research about people's home lives more available to the entire IKEA organisation. At the same time, this knowledge would increase employees' interest and awareness of how people live.

We identified the following requirements to ensure we met the objectives of the Open Home platform:

- Sharing with all IKEA units

 The first objective when creating the new platform for home visit data was to have one common platform for all IKEA units in the world.
- Same platform for professional and non-professional researchers
 The second objective was to develop a platform that could be used both by professional and non-professional researchers.
- A reliable and versatile platform for markets and global control
 The system needed to be flexible, so it could address different business needs and local legal demands while enabling a global governance of the platform.

Development journey

The potential solution was sketched as a minimal viable product (MVP) that could be tested with users; in this case, product development teams. To get data, IKEA collaborated with Gapminder and made several home visits in India. The aim was to create a platform where the users could search on a combination of variables connected to IKEA's strategy. The result would be to provide a visual outcome of the combinations the user was interested in. For example, they looked at how families with children who live in small spaces in a particular market solve their storage needs in their living rooms. They explored how it would vary if a user looked at different income levels, or at whether a family rented or owned their home.

The other part of the solution was the administrative side. It had to be really simple, self-explanatory and fast to document home visits. At the same time, there needed to be consistency in how the data is gathered, as it had to allow for flexibility between the various markets and their specific needs.

Initially there was an intention to connect the available knowledge to the content of the home visit. When researchers conducted home visits in India, they explored documenting air pollution and its consequences for life at home. This knowledge about air pollution and health would be made available to the users. After testing, they found this feature would make the platform too complex to be efficient. Development of the platform continued with a focus on documenting home visits only.

The tech strategy - how it was built

The core team kept the technical side of the development as simple and flexible as possible. The ability to change the platform in response to the user experience was key to success. The technical experts of the team (the architect and developers) were part of the core team and in direct connection with the users throughout the process. Ideation and workshops involved users, developers, and the project owner.

By having a small team with a clear focus, it was possible to have a lot of agility during the build phase. This enabled the team to work in small increments and work collaboratively. They managed to work with considerable speed.

The ambition to reach the entire IKEA world was present from the start, and the platform was built to expand. The production architecture always followed the corporate environment setup.

The pilot

To ensure a smooth global launch, the core team rolled out a pilot version to twelve markets over three months. During this period, the core team and the national administrators in the participating countries collaborated closely.

The national administrators introduced Open Home to the teams in their markets with the support of the core team. Based on the feedback and learnings from the pilot, they developed new support material that was later introduced to all markets through deep-dive sessions.

One learning from the pilot was the need for recruitment support. Based on this input, developers integrated a recruitment process into the tool, with a link that can be posted on any communication. There were also some questions about how to analyse the results. This was further developed in the tool.

There were almost no problems or questions about how to use the tool. It appeared to be self-explanatory to all testers.

Challenges

Democratising the solution

With Open Home, IKEA aimed to democratise consumer research. This means that IKEA employees around the globe could now do their own home visits, including the planning, recruitment, visit, and analytical work. This new reality posed a huge challenge when designing the platform because the quality of the data was essential to the outcome. There was a need to find a way for employees all over the world to collect the data in a coherent and systematic way.

Copyright © **ESOMAR** 2023 CONGRESS 2023

Data privacy

With Open Home, IKEA had a potential to share real-life stories that could increase engagement within the organisation. This required some information about the person whose experience was being shared, which was also anchored with high privacy standards.

A dilemma emerged between respect for people's privacy and the urge to create an inclusive and open solution that inspires and engages people with an emotional connection. There was a need to balance the wish to communicate personal stories with respect for personal integrity and data privacy requirements and laws. To tell people's stories, it was vital to connect emotionally with them. It was not enough to only present pure data about people.

A solution that is available (usable) to many countries

One of the preconditions for providing Open Home to various IKEA countries was to build a solution with high security standards. Because IKEA developed Open Home in-house with partners, it not only provided a lot of flexibility to build different functionalities, but also brought a lot of responsibility in terms of following high quality and security standards.

During the development process, there was a continuous focus on various security components connected to infrastructure, procedures and data processing. This also included collaborating with third parties to ensure an objective approach to development.

Considering that Open Home is a solution that also stores personal data, this was a special area in which the teams involved needed to put extra effort into securing different local requirements when working with personal data. By working intensively with different legal and privacy teams, the core team conducted many workshops in order to identify a global privacy setup to embed in the design. In addition, the team needed to create a flexible structure of privacy components, since there was no unique approach that could fit all different countries. This provided an overview of which data they could collect and who could consume and view different data based on various criteria, such as role, country, legal entity and more. This created a synergy between processing personal data in the best way and creating business value for IKEA.

Methods

Data collection

The data collection journey is quick and seamless. Before the home visit, the respondent (the family or individual being interviewed) is asked to answer some basic questions and give their consent to use their data. This is done through an online form they receive via email, and the submitted data is connected to the home visit that is set up in Open Home. The respondent can also upload photos.

The basic data that is collected is:

- country
- type of home (house, apartment)
- size of home
- areas (cooking area, sleeping area, bathroom, etc.)
- rented or owned
- family members
- income per month/family after tax
- living situation (single, couples, with children, living together)
- name and address (deleted when published)

Copyright © **ESOMAR** 2023 CONGRESS 2023

During the home visit, the team interviews the respondent and asks them to describe their everyday life. They also are asked to show their daily activities and where they take place in the home.

Four "points of interest" are described during the interview and illustrated with photos. The points of interest are:

- favourite spot
- most-loved item
- point of frustration
- the dream (what they would do if they were able to change one thing in their home)

The team can also make a floorplan that they add to the documentation. They take pictures both outside and inside the home.

Collaboration and user support

Democratising research is part of IKEA's DNA. In the case of Open Home, democratising research means letting IKEA employees do their own home visits. To safeguard and make sure that the visits are done in a professional way, Open Home provides support material – documents and videos about why and how IKEA does home visits. There are also guides that cover more practical aspects, such as dividing the tasks between an interviewer, note-taker, and photographer. The support material also includes general interviewer tips and tricks, like how to ask open questions and how to probe further when needed. In the platform, there is an overview of potential respondents, so screening and recruitment can easily be aligned with the project objectives. Different examples in the discussion guide serve as inspiration. With these materials, the home visit team has the resources to conduct organised and successful home visits.

The home visit team starts with the household members to understand who's living there and what's important to their lives. They continue with the role of the home and then dig into the activities of interest or areas of the home, rather than going straight to the sofa or the area of interest. Open Home makes it easy to tag and structure the collected photos and stories. Users can easily sort findings and identify common patterns.

IKEA also works with external research agencies that use the platform for collecting their photos and stories, making it available to the broader IKEA Group. The material can inspire and be used far beyond the specific project itself.

Showing examples of the documentation to create trust

Before the global rollout, the core team created a network of country administrators. Their role was to handle the rollout in their country and act as the speaking partner for the core team. They also helped make sure all legal documents were reviewed and translated. The core team created support material for the country administrators to introduce the platform to their users. The first line of support was also moved to the normal helpdesk.

Results

The results related to the project requirements are satisfying.

The full global launch happened during the spring of 2023. IKEA is present in 62 markets, and almost all now have access to the new platform. The few exceptions are markets with very specific legal or IT security demands where it will take longer to find acceptable solutions.

With the global launch, Open Home achieved the first part of the objective: to make global data and insights from home visits available to IKEA's different business units. Since the majority of markets are preparing the rollout in their country and the build-up of the data still developing, it is not yet possible to say how successful

the result is in relation to the overall objective (to enable a more relevant offer that contributes to a better everyday life for our customers).

For the first time, there is one common platform for home visit data for all IKEA units in the world. It is possible to share the data and learn from co-workers in other markets. The platform is used successfully both by professional and non-professional researchers. The platform is able to host local legal demands and simultaneously enable a global control of compliancy. To strengthen IT security, an external agency conducted intense stress tests. Security is now considered very high. As an extra measure, AI is used to check for inappropriate content and generate search variables in free text.

With approximately 13,000 photos so far, noteworthy patterns have started to emerge. An interesting area is to study similarities in pain points across segments. When searching storage and shoes, common issues are a lack of storage and a need for better solutions. There are also very interesting aspects when it comes to what the cooking area looks like in different markets. When looking at solution for families with middle or high income ('IKEA high') it appears that it is almost impossible to say from which country the pictures are coming from. When looking at the same for families with slightly lower income, there is much greater differences. This hints that IKEA teams should explore how the range is allocated in IKEA's different price ladders and offered to the customers in different markets.

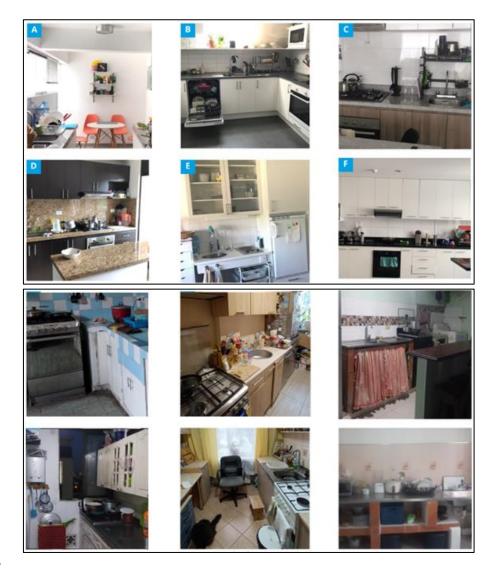


Figure 1: Open Home

Next steps

Open Home has received a great deal of positive responses. These promising findings are just the beginning. There is huge potential in analysing the constantly growing amount of data that is being captured from all over the world. The plan is to develop the tool itself to improve the possibilities for the project teams to analyse the data from each project and get insights from their own work.

The core team will also develop the back-end of the platform to further enable general insights from the platform's material. It may be possible to incorporate other company tools into the functionality to capture the architecture of a room or apartment in a smooth way. With other tools, it is already possible to recognise IKEA products in photos, and the team wants to explore adding this functionality to Open Home as well.

Videos contain so much more information than photos, so the team will develop Open Home to host videos as well. They will establish solid guidelines for creating these videos. Discussions with IKEA employees, business partners, and industry peers generate further development.

This way of gathering, sorting, and analysing qualitative data could be used in various fields. Internally IKEA may expand the platform to host results from home tests, co-creation activities, and much more. Other companies that have seen Open Home have asked how they can have access to a similar platform, and the core team is happy to share their insights. However, it is currently a huge challenge to use the same platform for other purposes, due to very strict legal constraints.

A great potential for future development of Open Home can be found in applying different new technologies, such as artificial intelligence and machine learning, to get the most from the data collected. Open Home collects copious textual and graphical content, which can be challenging to process manually. For example, by applying natural language processing, Open Home can process various text inputs from humans and can detect messages and topics to better understand what is important for specific consumer groups. In a similar way, Open Home can take processing images to the next level to enable pattern recognition and identify points of view on specific topics, which can be challenging to do manually.

In addition to technology enhancements, there is great potential in the collaborative nature of the solution itself. Open Home was built with the goal of being the connection point between IKEA employees and people they visit in their homes. That idea for collaboration can be expanded further. With this crowdsourcing concept, it will become possible to tap into wider and richer sources of data with the goal of understanding how customers live. This will also bring a lot of new challenges that should be addressed in the solution, but the challenges will spark innovation and diversity.

Overall, Open Home filled a real need within the IKEA organisation and was created with democratisation, simplicity, and ethics in mind. It is now a tool for global innovation, product development, and employee engagement.

"When you are visiting people in their home, you can't behave like a tourist with a camera around your neck.

No, you have to learn by taking part with your heart!"

Ingvar Kamprad, founder of IKEA

About the authors

Eva-Carin Banka Johnson is Insight Leader, Deployment Specialist, at IKEA Group, Älmhult, Sweden. Stefan Vukicevic is Product Owner, Product Management, at IKEA Group, Malmö, Sweden. Terje Nilstun is Insight Specialist at IKEA Group, Bjärred, Sweden.

Selling Insight through Live Commerce in China

Behind-the-scenes of China's first ever consumer insight livestream debrief

Yingying Gu Jennifer Liu

Livestreaming e-commerce in China reached 171 billion in value in 2020. The most popular live commerce shows are the ones where hosts open up about who they really are, show how they live their lives and share their honest opinions and feelings towards a certain topic and/or product—just like a very engaging and entertaining real-life ethnography. This inspired the Pernod Ricard CMI team in China to leverage this format across the entire business, as a way to promote consumer-centric thinking. This was especially important when COVID-19 infection rates peaked in the country in January 2023.

Context

Promoting a consumer-centric culture in Pernod Ricard has always been the focus of its CMI team. Since 2021, consumer centricity has started to become one of the brand's strategic pillars to grow imported spirits penetration in China, where they remain less popular than beer and baijiu. What's more, ensuring content to effectively resonate with internal stakeholders has proven to be an even greater hurdle. We have just completed a comprehensive study on moments of consumption (MOCs) for Pernod Ricard China, which resulted in 19 MOCs and 11 consumer segments. The study will lay the foundation for the brand's strategy for the next five years, acting as a guideline for business growth and development. Yet, it's challenging to make the output and insights relevant, digestible and engaging for internal stakeholders across all functions. This is especially the case for those who are not familiar with interpreting market research data and reporting—such as sales, wholesaler management, finance, HR and operations. Getting the insights clear and concise is only the starting point of the job. The real challenge is how to bring 19 MOCs and 11 segments to life without any blurry lines.

Challenge 1: Size of knowledge X the size of internal audiences

Given the size of the internal audience and the number of insights to share, we knew presenting the report in a traditional way—i.e., showing a presentation, sending out bite-size bits of information and workshopping—would not be effective. It would be extremely time-consuming to guide more than 500 stakeholders through the report.

Challenge 2: Empathy X clarity

By connecting with 1,000 consumers in our online agile research engine (ARE) community, we collected real drinking moments in video format. The participants' stories were interesting, engaging and immersive, but

too fragmented to share directly with internal audiences. We ran some test with a small sample of internal stakeholders, and each one of them selected different take-aways from the videos. It's challenging to immerse them in consumers' everyday life, while at the same time focusing on delivering one clear, common take-away.

Challenge 3: Online X engaging

Without COVID-19, we could have hosted and facilitated a consumer immersion week, inviting all stakeholders to one place and organising a consumer safari with a working session. However, simply shifting the process online was not an option, because we would not be able to engage the internal stakeholders. Since the beginning of the pandemic, people's agendas in the digital space were fully blocked with online meetings and virtual events, resulting in digital fatigue. According to a study done by Quality Logo: "The most common online meeting distractions include texting (86%), doing other work (75%) and online shopping (56%). And 50% also turn their webcam off the majority of the time".

Where should we start?

"What we learn with pleasure, we will never forget". Alfred Mercier 1816-1894

If we want people to voluntarily join a presentation, we need to be more creative than ever before. We started to think about non-celebrity content people watch online, which keeps them focused for hours on end. First, we thought about reality shows. According to Atlantis Press, reality shows have become a popular and mainstream entertainment genre in China occupying nearly half of all kinds of variety shows. This popular format also has a nice fit with the ethnographic content we wanted to share with the stakeholders. After going through different kinds of shows, we selected "Heart Signal" as the one with the closest to fit our purpose.

Social interactions

Many MOCs are situated in a social context, and so is "Heart Signal". The reality show follows eight people living together for one month as they get to know each other and go on dates. The makers probe the cast members to observe their social interactions, similar to our study set up in which we observed how alcohol acts as a catalyst in different social contexts.

From the third perspective

Observers always look into a consumer study from a third-person perspective. In every episode of "Heart Signal", a panel of celebrities and experts—the "signal detector group"—watches the show, analyses the cast members' interactions and tries to predict who will text whom. In addition to the widespread popularity of reality shows, livestreaming e-commerce has also emerged as a significant phenomenon in China. Already a multibillion-dollar practice before COVID-19 hit, it gained even more traction during and after the pandemic. Business news outlet *The China Guys* said: "In 2019, 433 million people, or roughly 30% of China's population, had watched livestreams. By March 2020, this number increased to 560 million, or 62% of the country's total number of internet users".

Why should we leverage the livestreaming e-commerce style?

Real-time, intimate interactions

Livestreaming e-commerce websites use a different kind of interaction compared to traditional webinars. There are e-gifts available for the audience to show their appreciation to the host, who then reacts to the gift-giving. This intimate interaction style makes it a true two-way online communication.

Not just about selling, it is about education

"Making valuable knowledge more interesting, and funny clips more meaningful". This is a quote from Jiang Yi, Douyin's Head of Operations (China's version of TikTok). Livestreaming is, indeed, a unique way to make educational content more interesting and digestible. It helps people, for example, to understand a movie summary in three minutes. Without a doubt, we can learn from this format when it comes to helping people digest a pile of consumer insights in a very short period of time. We decided to borrow the format of a reality show in a livestreaming e-commerce style, in order to sell our insights to internal stakeholders.

How we did it

Storyline design for the reality show

To ensure the internal stakeholders got a clear understanding, we used the four key questions that separated each MOCs as the main storyline.

- 1. Venue: Where did it all start? For consumers, their journey begins with why they are meeting up with others and deciding on where they want to go. This is the same for Pernod Ricard. The question starts with on-trade or off-trade channels to aim for in the business.
- 2. Drinking motivation: A gathering at any venue could also be fine without an alcoholic drink, so what's the role of alcohol at this occasion?
- 3. Choice of alcoholic beverage: Why would a certain type of alcohol be more suitable for this occasion?
- 4. Pay off: How does the alcoholic beverage add emotional and/or functional value to the occasion?

This build-up allowed the audience of internal stakeholders to follow the journey of each MOC, based on the key metrics that define and differentiate it.

Reality show set up

Step 1: Casting the candidates

We needed to find the right candidates to participate in the reality show. It's about matching the MOCs with the right consumer segments. This means that the person needed to match the lifestyle, values and drinking behaviours and/or occasion we found in the data, while also being an outspoken and interesting person to watch. We discarded the traditional screener set up, and organised a casting instead. A casting brief was sent to our fieldwork partner, including the lifestyle, occupation and drinking occasion, not by attributes but by a personality portrait. Then the prospects would need to submit photos and provide an introduction about themselves which matched the portrait.

Copyright © **ESOMAR** 2023 CONGRESS 2023

Step 2: Pre-task

We gave the potential candidates a pre-task, and conducted a short interview to discuss what's important in life to them, their family values and the drinking occasions they often experience.

Step 3: Storyline design for the reality show. Scripting the video

We met with the selected candidates and a photographer at the place where they experienced the assigned MOC previously, in order to go back to the moment and bring the context to life.

Step 4: Involving the audiences

We selected Vhall to run our show—a livestreaming platform frequently employed by e-commerce live streaming hosts. It is well-equipped with an array of interactive elements to show appreciation of the content by sending flowers, flashy cars or rockets. It also allows the audience to immerse in a familiar and visually captivating setting when doing e-shopping, meaning they are not required to learn how to navigate the platform's specific features.

Key features

Similar to the format of reality shows, internal stakeholders could guess what choices the participant would make by watching their actions step-by-step. Those who guessed it correctly were then invited to join a live session and participate in a speed dating session, where they could directly ask respondents their most burning questions.

Result

We were able to keep 150 internal audiences (suffering from online fatigue) engaged for two hours, with endless e-gifts being sent to the hosts. Our reality show proved to be a massive success, generating a significant buzz and served as a topic of conversation for many months to come. An internal stakeholder asked:

"It was so much fun to watch it, would you do it again sometime in the future?"

Post-lockdown

Our first event has informed us that an online consumer lounge can be just as impactful and enjoyable as offline. Therefore, we decided to do a hybrid event. Those who join in-person will be able to meet respondents face-to-face as they share their stories, but those who are online can still access through interactive streaming and participate in real-time, creating a seamless online and offline experience. We have prepared them like real celebrities who make appearances on talk shows in a well-designed stage setting. One respondent, Mr. L, stated: "I can feel the passion you want to improve the product and service through the lens of consumers, and as a consumer, and I can be part of this journey, I am also the beneficiary".

About the authors

Yingying Gu, Pernod-Richard China, China.

Jennifer Liu, Managing Partner, Human8, China and Taiwan.

Can Social Listening Obsolete All Other Research Methodologies?

How we have been stretching social listening use cases

Nicolas Pochart
Pierre-Antoine Dubosc

Introduction

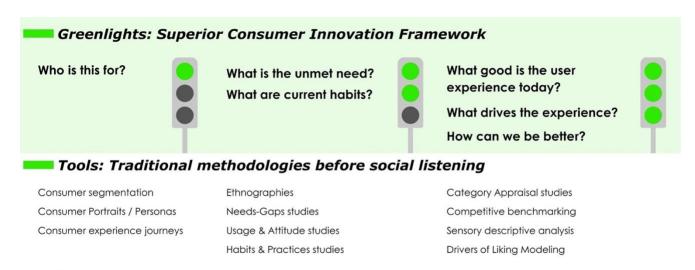
This report showcases how Haleon (formerly GSK Consumer Healthcare), in an effort to stay ahead of the game on deep human understanding, has harnessed the exponential growth of data coming from social media and e-commerce with Semantiweb, a company specialised in social listening. By analysing online conversations, we were able to get insights on consumers' needs, habits, personas and/or portraits, which are critical elements of our innovation framework. Also, by diligently analysing the online ratings and reviews of our products as well as our competitors, we were able to develop a paradigm-shifting approach that is quicker and more cost-efficient than traditional benchmarking studies (quantitative blind product placement), and understand what drives consumers' liking and purchase intent of specific products. The magic happened when Semantiweb's tools unveiled the Haleon consumers behind web-users; the cherry on the cake was that we were able to identify and follow the conversations of key opinion leaders.

The Haleon innovation framework

Haleon (formerly GSK Consumer Healthcare) is a world-leading consumer health company with a clear purpose to deliver better everyday health with humanity. Our leading brands like Sensodyne, Voltaren, Otrivin and Centrum are built on science, innovation and deep human understanding, and are trusted by millions of consumers globally. Our innovation framework places consumers at the centre of every innovation we develop, and no innovation gets the green light to go ahead until our R&D and commercial teams are clear on:

- · Who is this innovation for?
- · What unmet need is it trying to solve?
- Which products are our target consumers currently using?
- How good is the user experience today, and what drives it? How can we be better?

In order to answer these questions, many traditional qualitative and quantitative methodologies have been at our disposal (see Figure 1).



€SPX HAL≣ON

Figure 1: Haleon's innovation framework.

Over the years, these tools have proven very useful. These methodologies often required a qualitative part to understand consumers deeply, followed by a quantitative part to validate the relevance of the findings. As a result, the traditional methodologies were too long and too expensive to be conducted on every single project, and we were on the lookout for cheaper, faster alternatives. A few years ago, as e-commerce channels were becoming a strategic focus, we looked for a partner that had the capability to aggregate and analyse unstructured data coming from online product reviews, treating them as if they were unprompted and/or voluntary comments. We conducted a few pilots, and the one with Semantiweb proved successful thanks to their speed and agility. We started our partnership three years ago, and since then we have built several use cases that demonstrate social listening can indeed obsolete traditional research methodologies.

Key principles guiding our approach to social listening

Social listening is not new, but as it has become omnipresent in conversations about consumer insights, its definition has evolved and opened the way to new approaches, outputs and use cases. Back in the early 2000s, when it was just in its infancy, social listening was mostly used to capture conversations about specific brands or products in almost real-time in order to monitor their e-reputations and help marketing and digital teams react to positive or negative comments. As social networks gained popularity, communication, marketing and consumer insight teams started to use social listening more proactively to assist with longer-term strategic planning. The creation of Semantiweb 12 years ago was guided by four main principles that are still at the core of our current methodology.

- 1. The monitoring of online conversations is much more insightful if we can understand the web users behind them.
- 2. Conversations about brands and products are crucial, but they only represent the tip of the iceberg. Indeed, web users love to talk about their daily lives, passions and pain-points. Most of these conversations do not mention specific brands or products, and yet they provide a 360° understanding of who they are, their lifestyles, consumption habits, expectations and unmet need gaps.
- 3. Real-time monitoring is key to effectively engage with web users, but consumer behaviours also require taking a step back and studying long-term evolutions.

4. Artificial intelligence, machine learning and our proprietary algorithms are key to collect, aggregate and structure unstructured data, but we are convinced that human analysis, both quantitative and qualitative, is also vital to unveil consumer insights that will lead to sustainable and successful innovations.

From unstructured conversations to consumer needs, habits and personas

In this case study, we wanted to understand the landscape of pain sufferers in the US: the key types of pains consumers were experiencing (and some indication of the prevalence of each type of pain), what were the causes of the pain, the key treatments used and also generate personas in order to better understand who we would be innovating for, for each type of pain. Personas are a powerful tool to align our internal stakeholders around the targeted users and prioritise efforts. They also help our innovation teams design products that effectively meet the specific needs of these personas. We chose to conduct a social listening and analyse spontaneous online conversations about pain in order to have a very granular and precise understanding of this broad topic. Indeed, these unprompted comments are perfect to unveil new and unexpected findings, and go against some preconceived ideas. Also, the huge volume of available data enabled us to quantify the findings. The first step was to map out the different types of pain mentioned in these spontaneous conversations (see Figure 2).

9 main types of pain with different levels of intensity & frequency

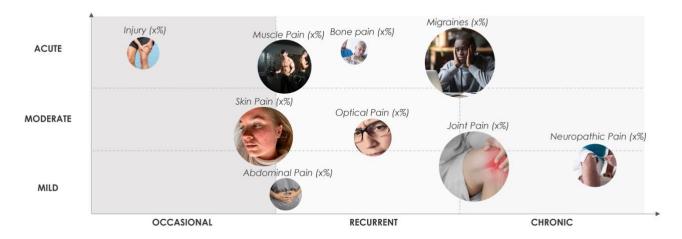


Figure 2: The mapping of the different types of pain.

As a second step, we reviewed the types of pains and further analysed some of these. We analysed the profiles of web users suffering from these types of pain, how they talked about their pain, the affected body areas and the treatments they considered or tried (Rx or OTC medication, as well as holistic treatments such as diet, physical activity, etc.). We also analysed the main sources of influence they mentioned at every step of their journeys (see Figure 3).

	le pain: Ition different types of t the root cause of their		
PROFILE OF WEB-USERS	MOST MENTIONED BODY PARTS	MOST MENTIONED CAUSES	TREATMENT
 There is an overrepresentation of 20-35 yo men Professionals who sit for extended hours Professional and amateur athletes Post-surgery patients 	BackLegNeckShoulder	Lifestyle: Exercising Walking Weight gain Bad posture Side effects of acne medications (Minocycline, Accutane) and vaccines Health conditions: Fibromyalgia Sciatica Scoliosis Hernias Sprained muscles	OTC medications: Product 1 Product 2 Product 3 Natural ingredients Ingredient 1 Ingredient 2 Ingredient 3 Therapies: Therapy 1 Therapy 3

Figure 3: Deep dive analysis of a specific type of pain.

We then went further to analyse the profiles of these web users via our algorithms and semantic tags (see Figure 4), which enabled us to understand their profiles, lifestyles, behaviours, expectations, unmet need gaps and preferences.

____ Let's take the example of a web-users who talks about " Muscle Pain" ...



I think I pulled my left deltoid muscles yesterday. There's no bruising so I don't think I tore anything and I still have full range of motion. It hurts though and I'm debating if I should work out today or not.

Muscle Pain

This web-user may talk about a lot of different topics: These conversations help understand who this web-user is

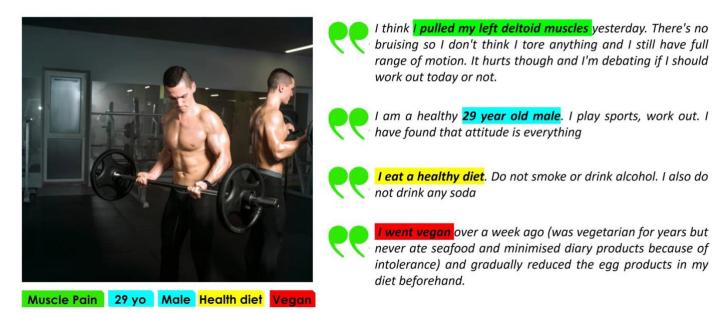


Figure 4: Semantic tags helped us understand who web users talking about muscle pain are.

Finally, the synthesis of the main quantitative and qualitative findings enabled us to define custom-tailored personas (see Figure 5), which could be used by Haleon's stakeholders taking part in the innovation process.

Meet the "Healthy lifestyle transitioner"

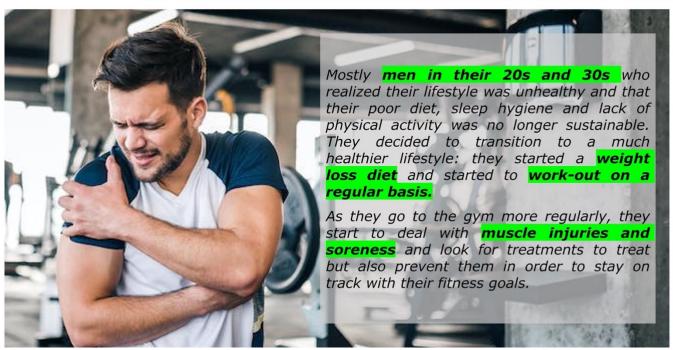


Figure 5: A custom-tailored persona.

Leveraging online reviews to understand users' experiences and the drivers of preference that make superior products

The healthcare industry and the toothpaste category are extremely dynamic: leading brands keep launching new products with enhanced formulations, while new indie brands with direct-to-consumer distribution models and more targeted benefits appear almost every day. Tracking these new launches is fundamental, however, this is anything but a trivial task; even ChatGPT struggles to answer this question (see Figure 6)!

- P How many new brands of toothpastes were launched in the USA between January 2023 and April 2023
- I apologize, but as an AI language model with a knowledge cutoff in September 2021, I do not have access to real-time data or information on specific events that occurred after that date, including the launch of new toothpaste brands between January 2023 and April 2023. To obtain accurate and up-to-date information about toothpaste brand launches during that period, I recommend referring to market research reports, industry publications, or conducting a search using reliable sources or databases.

Figure 6: Example of a question asked to Chat GPT.

Online reviews started to represent an incredible goldmine, with more than 50% of web users posting reviews at least once a month, with increasingly detailed and insightful comments. We had the intuition that we could leverage online reviews to:

- Identify new players and who our main competitors are;
- Identify the strengths and weaknesses of Haleon's key products;
- · Benchmark performances versus key competitors.

The challenge was to harness an ever-expanding flow of unstructured raw data and turn it into actual consumer knowledge. Providing an accurate and unbiased snapshot of consumers' perceptions implied finding a partner able to address different types of skews such as (to name a few): distinguishing reviews about the product experience itself, and reviews about the experience of buying this product (see Figure 7); ensuring that consumers reviewed the correct product and not an expired product or an old version that has been reformulated (see Figure 8), or a product received from another country with a different formula (see Figure 9).



★☆☆☆☆

Worst Amazon shopping experience ever

I would recommend this toothpaste! This is a great kid toothpaste. **5 stars for the toothpaste & 0 star for Amazon!** First time ordering grape flavor ones from Amazon and they sent me expiring products. (...) I have talked to customer service and they couldn't help at all. **Worse online shopping experience ever. I'm very disappointed at Amazon.**

Figure 7: A review praising a product, but giving a 1-star rating.



Expired Product !!!

It's February 2023. I received the toothpaste today with an expiration date of February 2023. So the product is virtually expired toothpaste. That's not a good product. Almost worthless in my opinion.

Figure 8: A review about a product that was already expired when it was received.



★☆☆☆☆

Not the Canadian product.

This toothpaste was **not produced in Canada**. I can't even read the language that it is printed in and I have **no reason to trust the safety or ingredients of the product**.

Figure 9: A review about a product that came from another country.

To confirm our intuition that online reviews could lead to the development of superior products, we adopted a gradual "test and learn" approach. The first project we conducted jointly in 2020 was an ad hoc analysis of 12 specific SKUs. The output enabled us to identify the main attributes (Figure 10), which drove positive or negative perception of the category—i.e., which attributes drive the superiority of an SKU versus another.

		% OF SKU's REVIEWS	% OF TOTAL SKUs
	EFFICACY	35%	32%
•	Relieves teeth sensitivity	8%	6%
•	Relieves sensitivity to cold beverages	4%	3%
•	Relieves sensitivity to hot beverages	3%	2%
•	Leaves a clean feeling	2%	6%
•	Cleans teeth well	1%	3%
•	Whitens	1%	6%
•	Removes stains	1%	1%
•	Brightens	1%	1%
•	Protects against stains	1%	1%
	SENSORIAL BENEFITS	9%	15%
•	Leaves a fresh breath	3%	5%
•	Has a minty flavor	2%	4%
•	Has a nice minty taste	2%	3%
•	Has a pleasant taste	1%	2%
	ATTRIBUTES	2%	4%
•	Can be used every day	1%	3%
•	Can be used by children	1%	1%

		43		
		% OF SKU's REVIEWS	% OF TOTAL SKUs	
	EFFICACY	4%	3%	
	Hurts sensitive teeth	2%	1%	
•	Stains teeth	1%	<1%	
•	Does not whiten teeth	1%	<1%	
	CENICODIAL DENIEEITO	207	297	
HAX.	SENSORIAL BENEFITS	3%	2%	
•	Whitening agents	1%	<1%	
•	Whitening agents Has a watery texture	1% 1%	<1% <1%	
•	Whitening agents	1%	<1%	
:	Whitening agents Has a watery texture Leaves residue ATTRIBUTES	1% 1%	<1% <1%	
:	Whitening agents Has a watery texture Leaves residue	1% 1% 1%	<1% <1% <1%	
:	Whitening agents Has a watery texture Leaves residue ATTRIBUTES	1% 1% 1%	<1% <1% <1%	

Figure 10: Output from the analysis of the online reviews.

After this first analysis, we conducted approximately 20 similar analyses across several categories and countries, which helped benchmark performance as well as drivers of positive and negative perception across categories. It also confirmed that many questions could be answered through the analysis of online reviews. We went one step further in 2022, when we decided to kick-off a three-month proof of concept, and incorporate the analysis of online review in the new framework we developed to track the superiority of our products. We collected and aggregated in Semantiweb's proprietary "Ratings & Reviews Superiority Dashboard" (R&R SD) the online reviews of 10 US brands of toothpastes (see Figure 11), representing a total of 281 SKUs, and more than 200,000 reviews across four retailers.

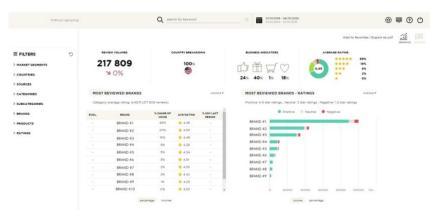


Figure 11: The Ratings & Reviews Superiority Dashboard.

We defined nine attributes, which we believed were critical to the overall liking of toothpastes: efficacy, cleaning, freshness, flavour, texture, appearance, price, packaging and sustainability. In order to fit into this framework, Semantiweb developed ad hoc semantic queries to capture positive or negative mentions for each of the nine attributes. Out of more than 200,000 reviews, approximately 88% mentioned at least one of these attributes (see Figure 12), which confirmed the relevancy of these attributes to assess the performances of toothpastes.



Figure 12: Penetration of the nine attributes out of all the category's reviews.

A widget was also developed and added to Semantiweb's dashboard to compare the performances of two specific SKUs, including the penetration of each attribute and the tone of voice of reviews that mention these attributes. This enabled us to have a quick overview of how our key SKUs compared versus their main competitors (see Figure 13), which would otherwise have been possible through lengthy and costly blind product placements.

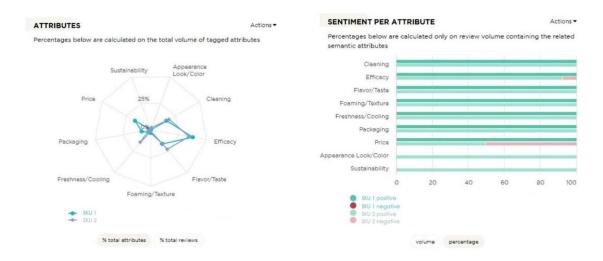


Figure 13: The widget allowing the comparison of SKUs.

To measure the success of this proof of concept, we compared the results from previous traditional home usage tests (HUTs) to the KPIs available in the R&R SD. We first matched the items tested in these HUTs with indicators available in the dashboard: the penetration of the nine attributes, but also business indicators such as the average star rating, the intention to buy again or the "brand love"—a proprietary indicator that measures advocacy (see Figure 14).

HOME USAGE TEST RESULTS			RATING & REVIEWS			
	SKU #1	SKU #2		SKU #1 (n= 181)	SKU #2 (n= 527)	
	200	4		20	0	CONSISTENCY OF RESULTS
Overall liking	7	7.5	Brand love	5%	23%	Ø
Purchase intent (top 2 box)	64%	76%	Intention of repurchase	1%	2%	0
			POSITIVE ATTRIBUTES			100
Freshness liking	74%	79%	Freshness	9%	11%	
Flavor liking	58%	74%	Flavor	17%	21%	0
• Cleanliness	81%	87%	Cleaning	12%	13%	Ø
Foaming	67%	70%	Foaming	2%	3%	Ø
Appearance	69%	79%	Appearance	<1%	<1%	

Figure 14: Scorecard used to compare Sensodyne SKU versus competitor.

Previous HUT reports provided eight "battles" comparing each time one Haleon toothpaste versus one competitor. Generally, the results from HUTs and the R&R SD aligned in a very impressive way (see Figure 15). Overall perception matched across all "battles"; When comparing attributes, results were also very consistent and totally aligned for seven battles out of eight. For one battle, we had slight differences for two attributes: freshness and flavour. Further analysis revealed that the SKU that had a higher percentage of reviews mentioning both, actually had the term "fresh" in its name. Since a significant percentage of web users mentioned the product's name, it artificially boosted this indicator. This SKU also had a higher percentage of reviews that mentioned its flavour, but most web users mentioned that the taste was "OK", or not overwhelming, but did not mention loving it.

				CONSISTENCY OF RESULTS (HUT vs. R&R)
20	SKU #1	VS.	COMPETITOR #1	Ø
20)	SKU #2	VS.	COMPETITOR #2	②
207	SKU #3	VS.	COMPETITOR #3	Overall performance: OK Some differences (flavor & freshness)
Car	SKU #4	VS.	COMPETITOR #4	Ø
20	SKU #5	VS.	COMPETITOR #5	②
Car	SKU #6	vs.	COMPETITOR #6	②
30)	SKU #7	VS.	COMPETITOR #7	Ø
Cas	SKU #8	VS.	COMPETITOR #8	②

Figure 15: Synthesis of the results comparing HUT results with online reviews data.

After conducting this pilot, we felt even more confident about using online reviews to track the superiority of our products. Among the many advantages of this methodology were:

- Time and cost-efficiency;
- · Scalability, since we can now compare a much higher number of SKUs;
- Flexibility, since we can at any moment decide to add new brands or countries, but also duplicate the approach to other categories.

Cherry on the cake: Identifying and following key opinion leaders

Key opinion leaders (KOLs) in the healthcare industry are influential individuals who possess expertise, knowledge and credibility in specific therapeutic areas or medical fields. They can be physicians, specialists, researchers, scientists, key academic figures, etc. They play a significant role in shaping medical and scientific practices by providing insights, opinions and guidance to healthcare professionals, industry stakeholders and the general public. Traditionally, the challenge has been to first identify KOLs in a certain healthcare domain, and then follow their insights through conferences and publications.

The cherry on the cake for us has been that KOLs typically have a presence on social media, and that social listening tools made it possible to identify these KOLs and track their conversations over time. This has enabled us to quantify their main themes of conversations, the new topics they may mention, the brands and products they recommend and why they recommend them. We were even able to contact a few of them directly. The on-going dialogue between the KOLs and their followers is also helpful to understand end-users' questions, in order to develop better products and experiences for them. For example, in an oral care case study, Semantiweb identified KOLs who talked about "enamel". In order to do so, Semantiweb analysed spontaneous online conversations about "enamel" and identified potential KOLs who were spontaneously mentioned by women, with comments such as "watch a video on YouTube", "read the book by...", "follow on Instagram", "listen to a podcast", etc (see Figure 16).

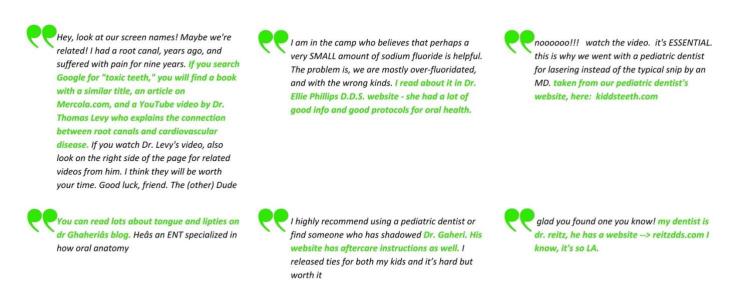


Figure 16: Examples of terms used to identify KOLs.

Semantiweb then analysed the online conversations posted by these KOLs, to identify their main themes of conversation, as well as the comments posted by their followers to understand consumers' expectations and needs. These KOLs can be tracked over time in an effort to identify new themes, brands, products or ingredients, and help us stay ahead of the market's latest trends.

Conclusions

For the last three years, the partnership between Haleon and Semantiweb has been enriched by an ongoing dialogue, which has led to new case studies, methodologies and services. So far, we have been able to have an in-depth analysis of approximately 500 SKUs across our five categories of products: oral health, supplements, respiratory, pain relief and digestive health. In addition to our own brands, we have also been able to analyse more than 150 competitors across 20 different countries in North America, Europe and Asia. We decided to extend the R&R SD to also include other markets. We also asked Semantiweb to conduct bi-yearly analysis of the category to analyse the main evolutions and brands' portfolio of products. Moreover, we are developing similar dashboards for other categories: gummies, nasal sprays and pain relievers.

We were very surprised to see the number of traditional methodologies that could be made obsolete by social listening. It was like doing qualitative research (listening to unprompted and/or voluntary comments) on thousands of consumers. This is something that no one could have thought of 20 years ago; at that time, proper research required first a qualitative part to understand consumers deeply, followed by a quantitative part to validate the relevance of the findings. We were able to get large volumes of unprompted feedback (100 to 16,000 reviews per SKU versus ca. 100 on average for HUTs) from all profiles of users (i.e., gender, age, location, ethnicity, etc.).

Some considerations still need to be kept in mind as we constantly monitor new behaviours and new technologies to enhance our methodology:

- We are currently working on new ways to better understand the profile of web users who leave reviews and understand their journeys, thanks to all the other reviews they have left within the same category but also other categories.
- We are actively working on how to capture new media: photos left in the reviews, but also new
 formats, especially videos that are increasingly popular to share reviews of products, especially on
 social media. For example, in June 2023, #productreview represented more than 1.2 million posts on
 Instagram, while #productreview represented more than 1.8 billion views on TikTok.

About the authors

Nicolas Pochart, Senior R&D Director, Head of Consumer & Sensory Science, Haleon, Switzerland. Pierre-Antoine Dubosc, Managing Director, Semantiweb, USA.

Using the Data You Have to Get The Insights You Need

Leveraging unstructured data, AI, qualitative synthesis and CX listening to create and audience models in an agile

Loren Crawford

way

Introduction

Cisco.com needs to be many things to many people: a showroom, a library, a help desk, a training centre and a sales funnel. However, how can we design a site that can do all that with the right message, at the right time, for the right audience? With a mandate to reimagine Cisco.com to create the best possible customer experience, how can we measure if we are getting it right? This presentation will share how internal teams at Cisco DIY'ed an approach using Al behavioural data cluster modelling, qualitative research synthesis and CX listening, to create new audiences, measure audience experience and continuously improve our audience modelling with zero net new marketing spend.

Background

I'm certain many of you understand the challenges of joining a new team. After eleven years of insights and research work for at HP Inc.'s Consumer and Business Printing department, I decided I knew more about printers than was good for any single human being. I left and joined Cisco as the Worldwide Audience Lead for their robust international website. I'd never worked on web analytics in-depth, and was moving from a traditional market research and insights role into leading audience strategy for the number one manufacturer of sophisticated networking solutions and software in the world. Essentially, Cisco creates the infrastructure that runs the internet, and I'd be researching and learning about some of the smartest IT engineers in the world. I was extremely intimidated.

Adding to that, I was joining the Digital Experience Team. Where before I'd been working alongside other researchers, I would now be embedded with digital strategists and marketers. Not being on a research team also meant I no longer had a research budget. Immediately the pressure was on. During week one my skip-level manager told me that she had high expectations and she needed me to produce standardised persona audiences quickly. She explained more around the history of the site, our current situation and emphasised the importance of fast results. It was clear to me that a traditional persona study would not meet this timeline. I thanked her for her candour and left with steely determination. Cisco needed to move fast; The

company was already six months into a massive multi-million dollar reworking of its website—a project we dubbed "Reimagine".

During the COVID-19 pandemic, our business had dramatically shifted. Our customers and partners began using the website more intensively, coming to us with more questions than they had before. In 2020, Cisco.com experienced a +106ppt surge in demand for digital marketing internally from marketing and sales shifting to digital strategies; a +20ppt increase in traffic to the site; and a +40ppt increase in solutions search activity, particularly regarding hybrid work. The site couldn't handle the increased volume and a total rebuild was required to reflect this new reality. The company was on a 10-year-old, highly customised platform that could no longer keep up with the speed of the business and a primarily digital marketing strategy. We would need to update the platform and, instead of just porting over the content, reimagine completely what is Cisco.com.

It was a huge undertaking to completely reimagine a site that served 50 million annual visitors spanning 58 countries. In 2021, the team worked to develop a digital strategy to take the site from a hardware-focused informational portal to a modern software-focused and lead-generation platform. In 2022 they began executing the strategy, and when I joined in February 2022 they were six months into the project.

How we built an audience insights engine

Temporary segments

In early 2022, Cisco's audience strategy and personas were behind industry benchmarks. I first thought to create the personas that way that I had at HP for consumer and B2B print technologies. However, I couldn't perform a traditional segmentation and personas project complete with ethnography and robust surveys; that would take nine months to a year. As much as I wanted to move fast, I'm not OK audiences and personas that are not supported by data; it's antithetical to how I operate. We were posed with a tricky question: how could we create something that was fast, but also gave a quality result? We needed data we could work with and iterate upon.

Therefore, we needed to get creative: I decided to list out what resources, people and methods I could work with to build a solution. This would need to be an agile process. It needed to feel fast by delivering consistent improvements to a minimum viable product over time. By consistently delivering new updates and features every month, I could give myself space to eventually achieve a more perfect result. However, for now, the organisation couldn't wait for perfect; they needed action now.

The greatest asset to this process has been our audience activation team made up by Saivikas Reddy, Jyothi Naik and Shamik Roy (who were each contracted through MRM). When I started working with them, they were very focused on audience activation which consisted of activating a list of accounts as audiences in Adobe. They also managed the audience taxonomy. This was quite a heavy workload since we were

constantly creating new audiences from account lists, as well as for each new project on the site. I realised quickly that this was a very talented team that had a lot of skill with insights and analysis that was not being tapped into. They also deeply understood the site and were kind enough to bring me up to speed while tolerating my numerous mistakes. They were the best type of team: skilled, experienced and, crucially, open-minded.

I talked with them about my desire to create some quick behavioural stop-gap audiences, and together we came up with the concept of looking at where users were engaging on the site and segmenting with that data (see Figure 1). We delivered an analysis of the home page and a self-service dashboard that could dissect any page by these audiences. As far as I know, this was the first behavioural segmentation attempted at Cisco. Naturally, all these segments overlapped, but this view of the homepage resonated with stakeholders. We could soundly demonstrate that our customers were behaving differently from one another, so why were we treating all of them the same?

Visit Support Pages			
End of Life Pages			
Product Visitors Product Pages			
Learning and Certifications			
Solutions Pages			
Use the Search Functionality			

Figure 1: Temporary segments.

Audience lens strategy

That was the first step of our audience lenses strategy (see Figure 2). We made a deliberate choice to move from creating new audiences for every effort into using different audience "lenses" to create layers. With the audience lens strategy, we wouldn't spend 90% of our time on activation and 10% on analysis; we could flip that and have audiences that were consistent and comparable, but also flexible. By stacking audiences on top of each other, we could create the same outcome as creating a custom audience but with more consistency. Also, we could add new lenses as we learned, rather than always starting from scratch. This strategy freed up the audience team to support analysis rather than activation, which made them happier as it was more interesting work that allowed them to expand their skill set.

Additional Lenses Account Based Targeting Behavioral Persona Industry Audiences Journey Stage Topic of Interest

Improvements:

- Factual based on actual behavior modeling and . account data
- Standardization means can compare over time and efforts
- Less customization but retain flexibility
- Larger audiences for more impactful efforts Ability to use lookalike modeling to grow audience size
- · Less time making audiences more time on audience strategy
- Can analyze audience performance and improve Everyone using the same audiences reduces confusion

Figure 2: Audience lens strategy.

While this first pass at behavioural audiences was a simple quick solution, it was wildly popular with our stakeholders as it allowed them to look at user behaviour that hadn't been tapped into before. This was an ideal temporary solution, as it took the organisation down a path of thinking about user behaviour rather than user accounts. They also began thinking about how to use lenses with audiences, utilising data that we already had at hand and giving the team an opportunity to shine and lead through analysis.

This helped to solve two of our biggest analysis problems temporarily: one was how do we think about anonymous users when we have only 1% log in and a limited ability to identify users based on account? Also, how do we stop creating one-off audiences and start developing consistency? From a personal perspective, delivering these temporary audiences lifted pressure on me because I was only a month into the role and already delivering on my objectives. However, providing audiences so quickly did create higher expectations of what the team and I could deliver on short notice.

Al data cluster persona audiences

The excited response from stakeholders told me that I was aiming in the right direction. Before I joined Cisco, they had been only looking at content interaction in aggregate and by individual pages. What if we could take this idea to look at it from a person-based behavioural perspective and extend it even further? I wanted to know: does everyone use Cisco.com the same way? Can we infer something about who they are by how they use the site?

Previously, I had used clustering to deal with large sets of survey data. What if we treated the site like a giant behavioural survey and clustered it that way? From the blank looks I got when I shared it with our retained agency partners, the idea seemed pretty unlikely. I certainly did not have the skills to do it on my own. I needed someone who could translate my vision into action. After a series of meetings, I realised our partners could not build a massive cluster model without investing a significant amount of time. It would also cost at least 500,000 USD in additional vendor fees. Given this disheartening situation I could have given up and just kept building out the temporary audiences. However, like I mentioned earlier, I'm pathologically

incapable of quitting. I wondered, was there someone among the more than 40,000 Cisconians who had the ability to conduct this kind of analysis?

I had been on a meet-and-greet tour since joining the company, and was greatly impressed with the data and analytics team. They had a great deal of sophistication and accomplished a lot in-house with predictive modelling for journeys and purchase. I met with Sri Srikanth, Director of Analytics and Data Science, Sales and Marketing. I explained to him my vision and, for the first time in several weeks, felt heard and understood. He said my goals sounded achievable with a black box machine learning model. Basically, we would allow the model to look at all the cookies on the site over the past year, and group them using whatever behavioural data categories that it deemed most relevant.

It was a way to use AI and machine learning as a launching point. This strategy would give us a clear view of our customers' behaviours that we could then interpret, rather than starting with a given interpretation. The data analytics team is lean, and they already have a bunch of models to build and maintain, so my request was properly prioritised. In short, this meant I had to wait a bit to get results; I requested the model in April and would wait six weeks for the first pass.

Qualitative synthesis

While Sri's team worked on the AI modelling, I wanted to get a baseline qualitative understanding of Cisco's customer. I had a basic understanding due to previous research at HP on B2B IT buying committees, from small business to enterprise scale, but I wanted to go deeper still. Having created personas a few times at HP, and having presented at a research conference on how to create actionable personas even in a big matrixed organisation, I felt prepared for this part of the challenge. (Please reach out if you would like a copy of this paper, it has some useful worksheets). Nonetheless, I was struggling to pull together resources. There was no central repository for research because each product team was doing their own personas and research. During a catch-up call with an old friend from my MBA programme, Becca Fairchild—now a senior UX researcher at Cisco—she informed me that she had already been working on a project to compile all the qualitative persona research. Had Becca not already had this compiled, I'm certain it would have taken me a month or more to find them and, even then, I may not have identified them all. With the resources now in hand, I immersed myself in Cisco personas. There were six different persona studies that had been done in the last three years by different product groups.

Because I'm responsible for dot com audiences (i.e., I cover audiences for all products and solutions), I am product agnostic. I also had the sneaking suspicion that there was probably a ton of overlap between some of our product audiences—for example, a network buyer and a collaboration buyer or security product buyer. I had the suspicion that these different product buyers might even be, in most cases, the exact same human being. Our internal product divisions don't hold in the real world; I was going to do my part not to replicate our product divisions and to try and undertake a truly person-centred approach. I delved deep into these personas and noted their similarities and differences. I ended up preferring a set that the cloud research

team had completed the year before. They were the most comprehensive personas in that they were well researched, thorough and covered the entire product lifecycle.

Having previously had sets of personas in the range of eight I decided that a smaller set would work better, since in most situations only between three and five of the personas ended up being relevant. A smaller set would also work better with the lens strategy. Rather than creating more personas, we could instead create useful combinations with the personas we did have, using lenses to represent all the possible cases. This would be both product agnostic and flexible enough to enable sub-personas where relevant. I pared the cloud set of six personas down to three, choosing to combine similar personas that were differentiated by product in order to be product agonistic (see Figure 3).



Figure 3: Cloud personas to new personas.

This left me with a set of three personas that were broad enough to be relevant across all the product, and were also general enough that we could apply lenses to them for more detail. I renamed them to reflect their broader role in IT buying; the personas were now called "decisionmaker", "recommender" and "practitioner". The persona descriptions lean toward enterprise, but are relevant for all business sizes and products and adjustable by using lenses. Crucially, they were based on the user's role and behaviour, and not solely on job title. In the past, the company had tried to use job titles to perform segmentation but had struggled. You will find chief information officers on Cisco.com sometimes but, as my manager jokes, you would probably find more on a golf course. Of course, I could not totally eliminate job title. I needed to integrate job titles to make them more acceptable organisationally, but each conversation gave me the opportunity to push the idea of focusing on behaviour and role, rather than title.

I also made sure to emphasise that these personas are roles. Depending on business size, one person could certainly enact two or more of the personas, in which case we would default to the persona closest

to "decisionmaker". This was a deliberate choice to support analysis on the site. This makes it easier to analyse if we don't allow overlap, but it doesn't reflect 100% reality. At this stage in our development, I made the choice that we needed something easy to use rather than needing something 100% accurate. We could evolve towards greater accuracy later, but understanding behavioural personas was a priority.

The first round of analysis Sri and the rest of the team came back with considered only the pre-sale aspect of the site, and did not include our learning and certifications content or support content. Based on my growing knowledge of Cisco.com and the qualitative analysis of personas, I realised that this analysis would neglect our biggest site users: "practitioners". At the time I received this news, I was actually at our annual conference conducting research. Sitting in a food court in Las Vegas at Cisco Live, surrounded by the very people who use our website as "practitioners", I realised that we needed to re-run the analysis to include the post-sale part of the site. I insisted that we include these sections and run the model again.

I had so many conversations that week at Cisco Live with users about the site, and how they used it to do their day-to-day jobs, got support for products, learned about new products and trained in their roles. It would have felt like a betrayal to ignore what I had learned. Cisco.com is not just about sales; it needs to work for everyone who uses it, and especially the people who use it most. To me, there was no question this choice of pages to include in the machine learning model would limit us to pre-purchase in the customer relationship cycle. That would limit our view of "practitioners" who engage significantly with Cisco, even though they aren't directly involved in purchase; "practitioners" use our products every day and influence choices and brand value. The analytics team understood this and went back to building the model. Two months later, the excellent Ade Owelye (on Sri's team) presented me with a model with eight clusters. He had grouped some of them but he didn't have direct knowledge of the qualitative research, so I worked with him to re-group the clusters. We grouped them in a very simple way, based on what type of content they engaged with (i.e., technical versus non-technical) and how frequently (see Figures 4 and 5).

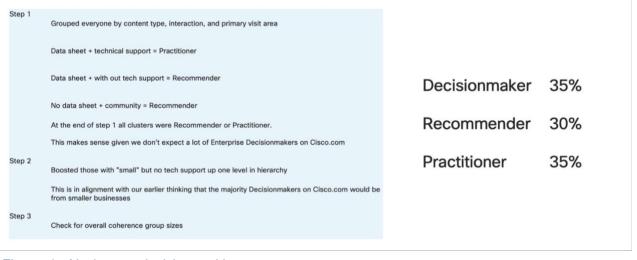


Figure 4: Al clusters decision-making process.

Cluster	New Persona	Technology	Channel	Content	Interaction	Sales Segment	Primary Visit Area	Visit Freq.	Days btwn visits
2	Decisionmaker	Services Cloud Collaboration	Social Earned Display Display	Product Overview Blogs/Social Media Video Newsletter	Videos Watched Minutes Interactive Content Start Buy Actions	Service Provider Small	Home Pages Networking Application	6	9
5	Decisionmaker	Collaboration Security Services	Display Social Earned DoubleClick Ad	Product Overview EOL Video Demo	Videos Buy Actions Watched Minutes Gateway Act Of Advocacy	Small Service Provider	Home Pages	7	5
3	Recommender	Switching Routing Wireless Cloud	Search	How To Community Data Sheet	Downloads Community Conversation Community Like Community Share	Enterprise Service Provider Public Sector	Products Technologies	7	8
4	Recommender	Switching Routing Cloud	Search Social Earned	Community Blogs/Social Media Design Podcast	Community Conversation Community Like Community Post Community Share		Networking Technologies	4	8
6	Recommender	Cloud Networking Services Switching	Calendar	How To Data Sheet White Paper	Downloads Content Clicks Assessment Clickthrough Interactive Content Depth	Public Sector		8	7
9	Recommender	Cloud Services Security	Email Search Display	Product Overview Data Sheet Solution Overview Blogs/Social Media	Content Clicks Videos Search Watched Minutes	Small Service Provider	Products Home Pages Networking Application	7	8
1	Practitioner	Routing Cloud Switching Wireless	Search Site Search Search	How To Community Data Sheet	Downloads Search Clicks Content Clicks Search	Commercial Public Sector Enterprise	Products Support Technologies Networking	11	6
7	Practitioner	Routing Switching Security Cloud	Site Search Search Search Display	Data Sheet Search Video Product Overview	Content Clicks Downloads Videos Search Clicks	Enterprise Public Sector Small	Products Home Pages Support Technologies	6	5
8	Practitioner	Security Cloud Switching Routing	Search Site Search Search Email	Product Overview Data Sheet Community Blogs/Social Media	Content Clicks Videos Search Clicks Search	Commercial Enterprise Public Sector	Products Home Pages Support Networking	8	8

Figure 5: Al clusters table.

We realised that we did have a group of "decisionmakers" on the site, but they were mostly clustered in the small business category. This was a whole group of people we had not considered deeply before, and represented a new opportunity space. Just like our previous qualitative understanding, here we based the persona on lean. In other words, the whole model was based on what cluster a specific user leaned towards the most, rather than allowing multiple clusters. For a cookie that had "decisionmaker" and "recommender" characteristics, we would segment it into which category it most leaned toward, even if it was by as little at 1%. Critically, the clusters underneath the personas gave us a lot of flexibility to make changes if necessary. If we decided, based on new evidence, that cluster seven actually fit better under "recommender", we would simply change it on the back-end and update the artifacts; we wouldn't have to change the overarching set of personas. This approach, just like the lens approach to audiences, made us more confident because we could make changes in an agile way without having to walk back anything.

Using these clusters, Ade and his colleague Sai Dantu built out the segments in Snowflake, and pushed them to Adobe Analytics in October. In November, they were fully populated in Adobe Analytics and we started using them for analysis. We had already started workshopping the personas with the stakeholders in September, and after a few rounds of feedback they were ready to be shared out. We created dashboards that enabled site strategists to be able to look at any page on the site, and see which personas were using it and what they were doing. Everyone across the Cisco.com team took up the personas, leveraging them for everything from sales collateral to campaign strategy. The excitement was intense.

Data validation with CX listening

I wasn't satisfied. We had built in the escape hatch of being able to change the clustering on the backend to adjust the clusters if we had accidentally miscategorised them, but we still had not validated this qualitative layer that we had put on top of the model. Given the way I normally validate all my research using multiple methods, I felt concerned that we had not done any original research, or heard directly from customers. Could I be missing something crucial that could up-end the whole model?

I considered using a LinkedIn survey and validating based on job titles and survey results. However, it would be clunky to make this connection to our site audiences in Adobe Analytics. What about if we did a survey on Cisco.com? In parallel to all this audience work, I had begun working on a passion project outside my main role on Customer Experience Listening Pilot. In particular, I was creating a framework for capturing a customer effort score (CES) for the company. CES, as championed in the book *Stop Trying to Delight Your Customers*, is a simple measure of how easy something is to do. A Harvard study of more than 75,000 people found that all customers really want is a simple, quick solution to their problem. That same study found that 96% of customers with a high-effort interaction became more disloyal compared to just 9%, who had a low-effort experience. Also, the reverse is true 94% of customers who experienced low-effort service interaction intended to re-purchase.

At first, it was an uphill battle to get the organisation behind CES. Apparently, surveys had been run on Cisco.com prior to my hiring to little effect, and the UX team was deeply unhappy with the idea of interrupting our new design system with a survey. I had actually never done customer experience listening (CX listening) before, but I could tell that we desperately needed it and began researching best practices. Subsequently, I connected with the internal team that ran the Qualtrics engagement and managed brand metrics; the team gave me permission to run an initial pilot in May. I also gained the opportunity to support an A/B test to reimagine the Solutions Index page—a wayfinding page that helps users locate all of Cisco's solutions. This would give us a chance to show the impact of CX listening and CES to a redesign project.

We ran the CX listening pilot across the test and control versions of the Solutions Index page from July to September 2022, and received a humble 149 responses. Despite the modest number of responses, we had significant findings for CES and could say definitively that our test page improved over control by 19ppt CES. It was only on one page, and only 149 people, but this was the first real customer experience metric over a year into the reimagined redesign. We could also demonstrate a strong relationship between CES and CSAT, and discovered customers were struggling with navigation, in particular from our open-ended responses. This pilot gave us the momentum we needed to go further. Suddenly, it was very obvious to everyone that we needed CX listening and CES. Nevertheless, we couldn't validate our persona model based on one page out of tens of thousands.

Our next step was to go deeper and connect the tech stack to bring in the embedded data about audiences from Adobe Analytics into Qualtrics, and also connect with Content Square to support journey understanding. In thinking about this step, I realised that by connecting all of these pieces of data we could make our data more comprehensive, and increase its usability by creating a virtuous cycle where each piece of information contributes a little more to the picture. Figure 6 offers an example of a customer, and how we can connect the pieces to create intelligent personas that are continuously updated. As we learn from our customers through CX listening, we can track journeys by audience and score across the site to identify where we are

weak and where we are strong. They also enable us to improve our personalisation, and get better at marketing to our audiences over time.

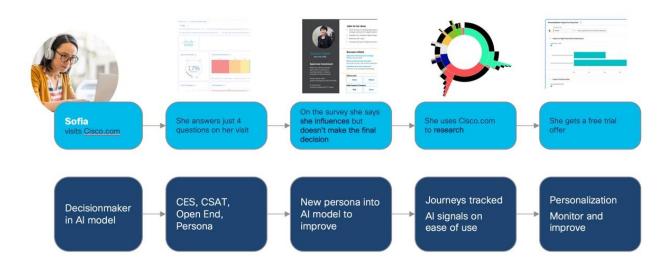


Figure 6: Virtuous cycle.

We ran one more pilot across a set of three pages to test out form factors, connect our tech stack more and generate proof of concept. The awesome Vini Shankar joined our project from the customer insights and analytics group, and was incredibly helpful with her deep experience in CX listening. In this process, we realised we would need to switch away from the black box model to a predictive model, because any change to the black box model would re-set the clusters, which is not ideal for our stated purpose of creating consistency and usability.

Meanwhile, the analytics team built a new model based on both job titles for our known accounts and behavioural data; this model came back with majority "practitioners". I knew that was likely incorrect based on the data that we were getting, but I had to scale up our CX listening to get more sample so that we could prove it. The analytics team agreed to input behavioural data to adjust the predictive model. It was something new for all of us to use CX listening in order to improve our modelling, and we would need to learn together how to make it work on a practical level. We got a great deal of learning from our second pilot. This time it was more about how to run a good CX listening survey than about the site content. We cut our survey from eight questions to just four, and saw a huge amount in improved data quality.

We also focused on connecting the tech stack with Qualtrics, Adobe Analytics and Content Square to truly enable audience analytics, and then set up a dashboard to enable self-service for digital strategists with CES and CSAT. It sounds simple, but it was a heavy integration load that the audience activation team supported in putting together, and even ran manually until we could automate the connections. We worked with the UX team to integrate the survey into the new Reimagine design language, in order to make it align with our overall site aesthetic. Finally, the day came for the go or no go decision to scale: it was a go! Right now, the survey is live on 16,000 pages across the US version of Cisco.com (approximately 50%),

and we are targeting a sufficient sample of 1,000 responses by the end of July. As of June 15th, 2023 (at the time this paper was submitted to ESOMAR), we have 529 responses. We have already begun working with the analytics team to translate those learnings into the predictive model that reflects what we are hearing from our customers. Comparing our original data cluster model mix with our self-reported model indicates to me that we are likely on the right track (see Figure 7).

November 2022 Black Box Clustering		June 2023 Self Reported Persona		Delta		
	Decisionmaker	35%	Decisionmaker	32%	Decisionmaker	-3ppt
	Recommender	30%	Recommender	34%	Recommender	+4ppt
	Practitioner	35%	Practitioner	35%	Practitioner	+0ppt

Figure 7: Behavioural clusters versus self-reported personas.

Next steps

My next steps are to validate the model at scale across the entire site, and work with the data analytics team to build a predictive model. I'm excited to see what we learn and how we can improve our targeting, analytics and personalisation strategy. We are also building out the rest of our CX listening strategy over the next year with three additional types of data collection: persistent listening, content effectiveness and innovation (see Figure 8). Part of the strategy is to work on connecting these persona audiences across the entire digital landscape. We plan to connect these personas and audience to digital strategy outside of Cisco.com and email, into the world of paid, learning how to identify them off our site.

I'm also working alongside my audience team to go deeper on journeys. We will look where our customers are scoring us low throughout the site, and identifying a golden path for each of our personas in order to make it super simple for them to do what they need to do on Cisco.com. Outside of my team, there are two additional teams now researching these personas for both Cisco.com and digital campaigns. We now have also added the CES and CSAT to our Reimagine dashboard. In fact, they are our only two experience measures. Our CES scores are very good but, of course, there is always work to be done and now we can identify where we need to do it. While it is a very difficult process that required a great deal of collaboration and grit, I get immense satisfaction from having delivered workable personas, evolved them and kept them alive. This work will enable a virtuous cycle that my team can support through audience analysis. Finally, we are all working off the same set of audiences and can compare over time and are learning as we go. We've created a learning machine by using what we have.

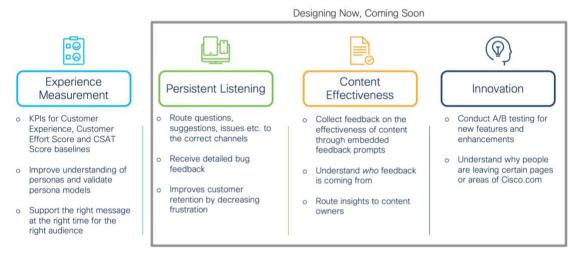


Figure 8: Next steps.

Learnings and recommendations

Nest your goal under the organisational objectives and stick to it

Throughout this process, I've been laser focused on how to use audiences to enable Cisco.com users to find exactly what they need, exactly when they need it. I knew that to do that I would have to understand our customers better, and that the best way to do that was through observation. I chose this goal based on the existing goals of Reimagine:

- Simplicity: making it simple and meaningful for our customers;
- Growth: fuelling demand and new routes to market for Cisco;
- Innovation: scaling a platform for conscious culture and innovation.

My goal for building a persona audience hit on all three Reimagine objectives. This made me much more persuasive, because my objectives were relevant for all of my colleagues. I could point out why they should care and why it would help them with their goals. Having a very tight problem scope tied to your organisational goals will help you stay on track when it's tempting to stray. What goals does your organisation have, and how can you directly support those with insights in a way that is going to drive action?

Figure out what you have and use it

What I learned from this experience is that being able to use what you have to approach a problem is invaluable; as is being able to lean on the skill-sets of your colleagues. As researchers, we want to deliver the best possible audiences and personas from the start, but there is value in being agile and starting with what you know rather than from scratch each time. It can be helpful to go out and buy expertise and more research, but if you already have the expertise and research, then all you need to do is to coordinate and keep everyone focused on the vision. There's much less organisational drag and difficulty when you can say: "We're already using these personas, or platforms, or audiences. I'm just updating them"; just because it's new doesn't make it better. Take inventory and use what you have to make a strategy in order to get

what you need. When you understand where and what your gaps are after an inventory, you'll know what you truly need to develop. Keep an open mind, I think you might be surprised by what already exists at your organisation that you can leverage.

It's better to deliver often than to deliver once

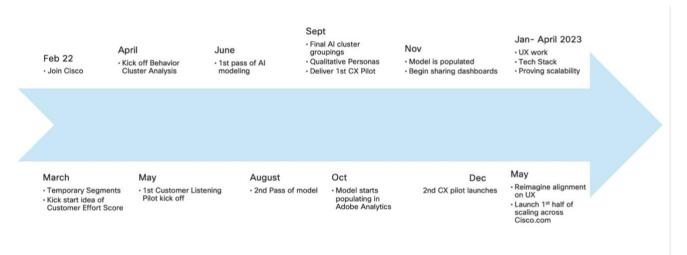


Figure 9: Project timeline.

If you're doing a big important project, think about all the milestones that you can deliver over time, rather than going silent and delivering months later when everyone has forgotten about it (see Figure 9). This has two crucial benefits: one is that you'll be building momentum and credibility for your ideas, and two is that you will be making valuable resources available to your colleagues when they need them. The momentum that I built by delivering quick, temporary behavioural personas within one month snowballed into being able to build new data models with AI, and launch a survey on a site with 50 million users. Make yourself useful fast and you might be surprised by what you're allowed to build.

Acknowledgements

Thank you to all my Cisco and MRM colleagues, especially the audience activation team, Saivikas Reddy, Jyothi Naik and Shamik Roy. Thanks also to the data analytics, customer insights and action teams, especially Vini Shankar. Thanks to Stella Landers, Becca Fairchild, Sri Srikanth, Ade Owelye and Sai Dantu. Thank you to my manager Alex Montuschi for always supporting me. Thank you to my partner Ben for listening to me go on and on about this for the last year.

About the author

Loren Crawford, Audience Insights Senior Manager, Cisco, Portland, Oregon.

Boosting Economic Growth and Shaping Livelihoods with Machine Learning

Dickstein Mukaria Dolphine Mongina Jasper Grosskurth Ray Xavery

Abstract

70% of Africans rely on agriculture for their livelihoods. However, the extent to which land use is mapped and monitored is largely ineffective in many countries. This often leads to inaccurate identification of available land in advising new investment. Suitability analysis based on ground survey training data can be used to identify potential crop-growing areas and thus enable agricultural investments in areas with the greatest potential for successful crop yields. This study successfully predicted potential areas that can grow tea and cranberry in Malawi, where the agricultural sector is characterised by limited private investments. The two value chains were based on expert advice. We used geospatial data-sets on climatic variables to determine suitable crop growth areas. The Ecocrop model was used to determine suitable areas for farming. The suitability results were then overlaid with the socioeconomic characteristics of the area. The results were crucial to evidence-based decisionmaking as they enabled agricultural investments in high-potential areas. The suitability analysis was then conducted in Kenya, where 4.4 million Kenyans in arid and semi-arid areas are currently facing acute food insecurity. Using the Random Forest algorithm, we predicted additional food production areas for maize, which is the major staple food in the country. This supervised machine learning algorithm sampled different variables to classify and combine results into the most optimal outcome. The training data-set used was ground-collected data from areas where maize naturally thrives. The results of this study showed that Kenya has an additional four million hectares of land that is viable for maize farming. This translated to a production potential of eight million metric tonnes, which would feed the growing population with enough left for export. These studies highlighted that predicting potential crop-growing areas is an effective strategy for agricultural investments in Africa. By investing in areas with the greatest potential for successful yields, government and private investors can address food insecurity and promote the economic development of the region.

Introduction

Agriculture remains the most dominant economic sector in Sub-Saharan Africa with 90% of the rural population depending on agriculture as the primary source of income. Despite this dominance, most of the potential in the sector remains untapped, with a study by McKinsey in 2019 determining that Africa could produce up to three times more grains and cereals. A substantial financial commitment to inputs, infrastructure and markets would be needed to realise this potential. Land use mapping and monitoring, which is largely ineffective in many African countries, is needed to advise on new investments for maximum returns.

Suitability analysis, a geospatial-based process, allows us to assess the appropriateness of an area for specific use. Suitability analysis integrates earth observation data and socioeconomic data using geospatial tools to identify areas that are suitable for crops or farming practices based on various factors such as climate, topography, soil characteristics and socioeconomic factors. The suitability studies were conducted in Malawi and Kenya. In Malawi the agricultural sector has been characterised by low productivity and limited private investment while in Kenya the country is facing acute food insecurity after six consecutive failed rainy seasons.

Business challenge

Malawi

Despite Malawi's economy being highly dependent on agriculture, the sector operates below its potential, with periodic food shortages gripping the country. Seeking to increase agricultural investment, the Africa Land Policy Center (ALPC), supported by United States Agency for International Aid (USAID), was seeking to develop a tool that can help the Government of Malawi and investors identify where there is viable land for agricultural investment and, where possible, understand what kinds of claims existed on the land. Tea and cranberry were the value chains chosen to drive agricultural investment, a choice based on the government's National Agriculture Investment Plan (NAIP), which identified certain priority value chains, including tea and cranberry.

Kenya

Arable land in Kenya accounts for just 20% of the total land area. 4.4 million Kenyans in arid and semi-arid areas are currently facing acute food shortage, and with the population projected to rise from the current 51 million to 57 million by 2030, food supply will be constrained further, exposing the country to food insecurity. The International Futures (IFs) forecasting system predicts a gap of nearly 17 million metric tons between agricultural production and consumption by 2040. To bridge the gap there is a need to ramp up agricultural production. In Kenya, some of the cited constraints for maize production are:

- Pests and diseases.
- Extreme drought events, and
- Low soil fertility.

This has led to a declining production of approximately 7% between 2018 and 2022 as shown in the graph below.

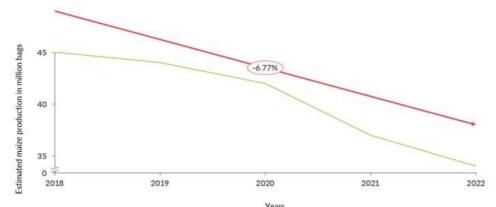


Figure 1: Maize Production Statistics (KNBS, 2023)

In response to this crisis, Dalberg Research's Location Analytics (LOCAN) combined the power of earth observation and ground data to create a Random Forest model that informed climate-resilient maize farming systems.

Our approach

We applied the use of Geospatial Information Systems, the Ecocrop modeller, and machine learning algorithms to evaluate the suitability of tea and cranberry crops in Malawi and maize in Kenya. In the following sections, we provide detailed explanations of each of these methods.

Geospatial Information Systems, (GIS) is a powerful tool that allows the visualisation and exploration of information using maps. In the agricultural context, GIS has extensive applications, for instance, farmers can utilise GIS and generate digital maps of their farms and gather valuable data relevant to yield such as soil fertility, rainfall, temperature, etc. This, therefore, empowers farmers to optimise their land usage, improve crop productivity and make informed decisions that generally will contribute to efficient and sustainable agricultural practices.



Figure 2: Revolutionising farming with GIS (Geospatial World, 2018)

The Ecocrop modeller

The Ecocrop modeller is a simple mechanistic model that has been largely used to predict the suitability of various crops under varying climatic conditions. The model was adapted for use in DIVA GIS software by R.J. Hijmans, L. Guarino, M. Cruz and E. Rojas (2001), and it relies on the Food and Agriculture Organization (FAO) database which provides detailed profiles of a variety of crops, including their ideal growing conditions. By utilising inputs from FAO's Ecocrop database, the model determines the primary niche of a crop and generates an overall assessment of its suitability. Given that the Ecocrop model solely accounts for rainfall and temperature, there is need to incorporate biophysical drivers of yield such as soil fertility. The diagram below provides an illustration of the model.

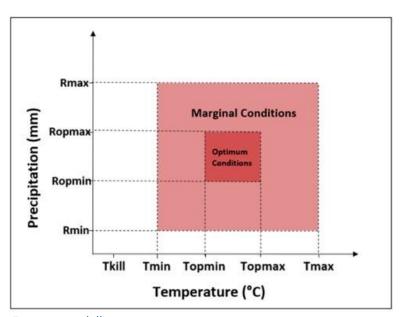


Figure 3: Description of the Ecocrop modeller

The two ecological ranges for a given crop (Temperature and Rainfall) are each defined by a pair of parameters for each variable.

- The absolute range which is the minimum and the maximum absolute temperature at which the crop can grow, (Tmin and Tmax), the maximum and minimum absolute rainfall (Rmin and Rmax).
- The optimum ranges for both rainfall and temperature. (Ropmin and Ropmax, Topmin and Topmax).
- The Tkill is the month's minimum temperature below which there are no suitable conditions for the crop.

From figure 3:

- *Scenario one:* When the conditions for both temperature and precipitation are beyond the absolute range (Tmin, Tmax) and (Rmin, Rmax) the conditions are not suitable for the crop.
- *Scenario two:* When the conditions for both precipitation and temperature are within the absolute range (Tmin, Tmax) and (Rmin, Rmax) the conditions are marginal for the crop.
- *Scenario three:* When the conditions for both precipitation and temperature are within the optimum range (Topmin, Topmax) and (Ropmin, Ropmax) the conditions are optimum for the crop.

The Ecocrop modeller use case: the Malawi Land Investment Tool

The *Malawi Land Investment Tool* (MLIT) is a web-based tool that was developed by LOCAN in 2019 and enables agricultural investors to make informed decisions on where to grow tea and cranberry. It also provides contextual information on the socioeconomic and environmental landscape of Malawi. The study used the Ecocrop modeller and GIS to determine the overall suitability of tea and cranberry.

MLIT allowed agricultural investors to query and find optimal locations for tea and cranberry cultivation. To help the investors understand the environment in which the viable land was located, the tool provided vital statistics on Malawi's socioeconomic landscape, including population distribution, employment, and education status, with a focus on gender.

To achieve this, we employed the following steps:

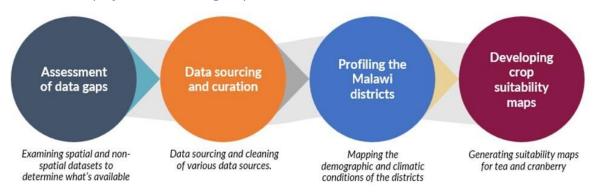


Figure 4: A diagrammatic representation of the methodology

1. Assessment of data gaps in Malawi: We examined both spatial and non-spatial data-sets in Malawi to determine the information available. From this assessment, we identified land tenure information, land surface and settlement as the specific thematic areas where data was missing. This informed the data-sourcing strategy. In addition to this, we evaluated the quality of the existing data-sets to ensure that they were consistent, reliable and credible. This step was crucial in mitigating any potential impact of data limitation and inaccuracies on the final analysis.

- 2. Data sourcing and curation: We built on the gap assessment to collect and curate data. We also identified other relevant data-sets that would supplement the identified gaps. These included public repositories and the Location Analytics (LOCANSM) database, which was built largely from multiple publicly sourced, proprietary and primary research data across Africa and Asia. We also conducted site visits to Malawi to collect additional data from local ministries. In this step, we documented all the available data-sets.
- 3. Data preprocessing and analysis: The data-sets were cleaned and pre-processed to ensure they are fit for analysis. To retain data integrity, we applied non-destructive techniques. These included reclassifications of land use and land cover categories, extraction of population demographics and historical climatic conditions from census reports, and satellite imagery.
- 4. *Profiling Malawi districts:* To provide a comprehensive understanding of Malawi's demographic and climatic conditions, we conducted mapping exercises to capture population demographics, including population counts, education levels and employment status. Historical climatic data such as temperature and precipitation were also analysed. Subsequently, all these factors were integrated into the profiles, providing a comprehensive overview of the districts in Malawi.
- 5. *Developing and refining crop suitability maps:* Using the Ecocrop model, we generated suitability maps for two value chains in Malawi, tea, and cranberry. The limitations of the model were addressed by incorporating additional factors like soil fertility, which improved the accuracy of the results.

Random Forest Machine Learning algorithm use case: Kenya maize suitability analysis

For the Kenya Maize Suitability Analysis, we applied the Random Forest Machine Learning algorithm to make accurate predictions of maize yield in Kenya. Random Forest (RF) is a machine learning algorithm mostly used to make predictions and decisions, and is driven by a combination of multiple components known as decision trees.

To make a prediction on climate resilient maize yield in Kenya, the Random Forest model was trained with data on locations growing maize that have shown resilience to climate change over a period. This was achieved through the steps below:

- 1. *Desk research on drivers of yield:* We embarked on desk research for an in-depth study of some of the drivers of maize yield. From this, we narrowed down to biophysical and climatic variables that influence maize production. These include vegetation indices, land cover type, soil carbon content, slope, precipitation and temperature. Subsequently, these variables would be used to train the model.
- 2. *Defining the dependent and independent variables:* From desk research, we identified the dependent variable as the yield, which would be influenced by the independent variables.
- 3. *Prediction and accuracy assessment:* We predicted the machine learning algorithm using the training sites we identified in the previous steps and conducted an accuracy assessment. This was an iterative process to ensure that the best accuracy is obtained.

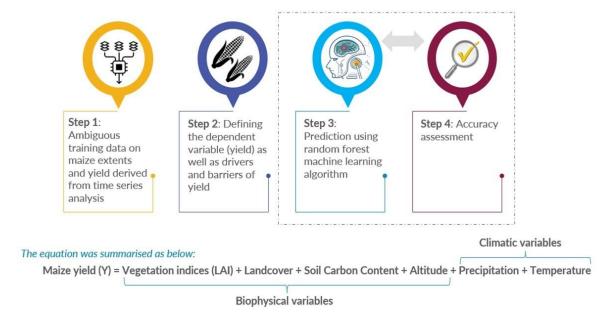


Figure 5: A diagrammatic representation of the methodology

Results

The Malawi Land Investment Tool

The tool provided investors with the capability to explore appropriate agricultural land, engage with local experts, and acquire land parcels. By utilising its capabilities, investors gained the ability to pinpoint and invest in areas that offer favourable conditions for tea and cranberry cultivation, while developing a contextual understanding of the various districts in Malawi. Furthermore, the tool facilitated resource mapping, enhancing comprehension of land utilisation patterns within Malawi. Below is an illustration of the tool.

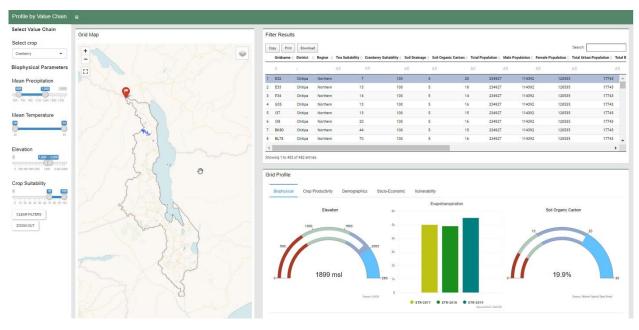


Figure 6: Malawi Land Investment Dashboard

The Malawi Land Investment Tool further has the provision for data upload to ensure continued development. This provision is locked by the administrator, that is, read and write privileges are assigned to contributors and users separately. The application provided valuable insights into three use cases:

- *District profile:* This page provides information at the district level. When the user lands on this page, by default, the 'All Districts' option is selected on the left sidebar. The corresponding visualisations on the themed panels (charts and graphs) reflect values for the entire country.
- *Value Chain:* The Value Chain page identifies locations across the country that are suitable for specific agricultural value chains. The value chains that were included in the tool were tea and cranberry.
- *Location:* This functionality allows one to define a location either using geocoding or by drawing grids in the map. Once the location was selected, the biophysical, demographic, crop production, and socioeconomic data is populated to reflect the defined area. The snapshot below illustrates this.

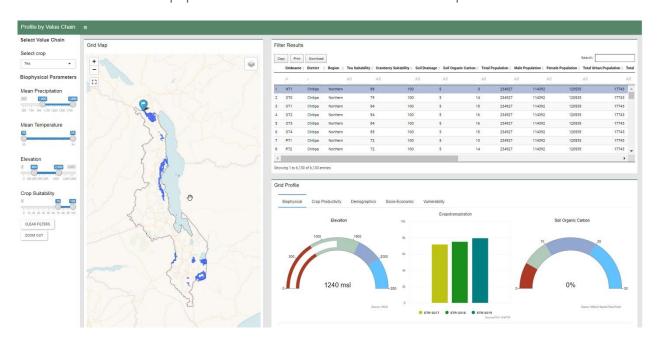


Figure 7: Malawi Land Investment tea suitability

Machine Learning Approach

From our analysis, an additional 4 million hectares of land in Kenya is viable for maize production based on the biophysical and climatic predictors. That translates to an additional 8 million metric tonnes of maize production in Kenya, which can sustain additional households with enough left for export. Further to this, the additional 8 million metric tonnes of maize can increase the per capita consumption to 141kg, a 44% increment.

The snapshot below showcases the existing maize production zones which cover the western, central, and coastal regions of the country. Towards the north of the existing production zone lies a belt of additional potential maize production region which is yet to be explored.

The model was able to predict with an accuracy of 96.4% and an estimated error of 3.05%. From our list of variables, temperature, precipitation and Leaf Area Index largely account for the results achieved. As a result, we believe that the above additional potential production zones will perform well if other external factors are held constant.

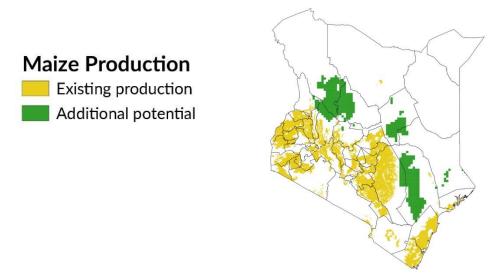


Figure 8 and 9: Predicted maize production and implication on per capita maize consumption.

Impact

The Malawi Land Investment Tool is an asset management tool that helps individuals as well as organisations to make prompt decisions when it comes to identifying land for agricultural investments. Apart from identifying the land, it incorporates a suitability analysis for tea and cranberry. Just as the tool is currently used with the two value chains, other relevant crops can be incorporated into the tool, and it can also be customised for other regions of the world.

Machine learning, on the other hand, in the agricultural sector involves machines mimicking human intelligence and executing tasks from the simplest to more complex. Given that the global population is growing, there is a need for innovative ways to increase agricultural production to support the growing demand. As a result, using machine learning, we can identify pockets of regions that can support specific value chains which are yet to be explored. This is also not locked to maize production only. Apart from identifying additional production areas, machine learning can also be deployed in monitoring crop health, soil condition, and weather patterns. This data can be optimised for irrigation, fertilisation, and pesticide applications.

Machine learning bundled up with asset management tools has the potential to bring about significant impacts and improvements across various aspects of the industry. Below are some of the key impacts:

- 1. *Better decision-making:* Leveraging the tool helps in making better decisions backed up by supporting data. Donors can also use the tool as a surety on their return on investment in their investment portfolios in the agricultural sector.
- 2. *Food security:* The identification of additional potential agricultural land improves the agricultural sector by injecting additional products into the supply chain. The surplus supply ensures that there is sufficient food to meet dietary requirements for a productive and healthy life.
- 3. *Climate-smart agriculture:* Adopting agricultural methods to the ever-changing climate landscape helps in addressing the interlinked challenges of food security and climate change. This ensures that the agricultural sector continues to thrive despite climate change.
- 4. *Predictive analytics:* By leveraging population and land use data, we can make near-accurate predictions on market demand and the overall production potential. This information assists farmers in making informed decisions about planting schedules, optimal harvest times, and market pricing strategies, maximising profitability and reducing risks.

Copyright © **ESOMAR** 2023 CONGRESS 2023

- 5. *Improved livelihood:* Investment in the agricultural sector will, in the long run, improve the livelihoods of the population, as it provides the population with a source of income which is in line with the United Nations Sustainable Goals.
- 6. *Innovation:* Once food security and improved livelihood have been achieved, the population is at liberty to be industrious.

Overall, the use of asset management tools and machine learning in agriculture has the potential to increase productivity, reduce environmental impact, enhance sustainability and improve the overall profitability and efficiency of farming operations.

References

Geospatial World. (2018). *How GIS is enabling the agricultural sector*. Retrieved from https://www.geospatialworld.net/blogs/gis-in-agriculture/
Kenya National Bureau of Statistics. (2023). *Economic Survey 2023*. KNBS. Retrieved from https://www.knbs.or.ke/publications/
R.J. Hijmans, L. Guarino, M. Cruz, E. Rojas (2001). Computer tools for spatial analysis of plant genetic resources data. 1. DIVA-GIS. *Plant Genetic Resources*, 15-19.

About the authors

Dickstein Mukaria, Junior Location Analytics Executive, Dalberg Research, Nairobi, Kenya. Dolphine Mongina, Senior Location Analytics Executive, Dalberg Research, Nairobi, Kenya. Dr Jasper Grosskurth, Managing Director, Dalberg Research, Nairobi, Kenya. Ray Xavery, Senior Location Analytics Executive, Dalberg Research, Nairobi, Kenya.

Uncovering the Why

How primary research unlocked tech giant Meta's understanding of consumers

Cecily Mejia Karl Joyce Hannah Pucci

Introduction

Researchers and data scientists are easily siloed into their fields of expertise. Clients and scientists often have limited time-frames and budgets, and so are forced to opt for one over the other. While both social listening and survey research reveal underlying consumer trends, they each only illuminate a part of the bigger picture. Social listening is exceptional in finding real-life manifestations and examples of consumer trends, and serves as a proxy for "behavioural" data—i.e., the "what". Survey research, on the other hand, can be used to capture consumer attitudes using direct and adjacent lines of questioning—uncovering the "why". This paper demonstrates the specific value of combining social listening and consumer research by examining the relationship between the two methodologies, and the quality of the insights yielded by Mintel and Meta through the *Global Society & Lifestyle Study*.

How Mintel expanded Meta's line of sight

Meta is an industry thought leader and expertly guides its clients through changing times. As one of the big five tech giants, it has access to vast amounts of data from its social platforms, and access to the brightest data scientists in the industry. However, this data is historical—not a look forward. It is important for Meta to be proactive, which requires a sightline into the drivers behind emerging cultural shifts to help anticipate the next stages of how trends will manifest. Mintel's primary research filled that gap; building off work done by Meta's Business Marketing Research & Intelligence organisation, Mintel first created the *Global Society & Lifestyle Study* in 2021. This is a research project combining primary quantitative research with strategic foresight and anonymised, aggregated behavioural insights of 3.5 billion people on Facebook and Instagram.

A second iteration of the research was executed in 2022 in order to build upon the insights from the 2021 results. Meta identified key trends to be tested based on over 6 million unique and rising conversation topics falling under five priority themes. With these specific trends in mind, Mintel fielded a large-scale quantitative survey in seven countries to dive deeply into the consumer attitudes, sentiments and motivations driving the acceleration of these trends. Both teams collaborated to organise Meta's internal analysis and trendspotting with the large-scale global consumer attitudinal data, resulting in the identification of underlying themes beneath seemingly unrelated verticals.

Social listening data and research methodology

As initial inputs into the 2022 research, Meta's data science team developed an analysis of anonymised global Facebook conversational topic growth and global Instagram hashtag growth from September 2021 to November 2022, controlling for seasonality. Taking this mass amount of data, the Meta foresight team formulated a foresight framework to identify societal macro-trends relevant to Meta and its clients. Due to the timing of the research at the height of pandemic lockdowns, Meta took increased care to pressure-test these trends to ensure each was robust enough to last several years, but flexible enough to accommodate major societal shifts. Meta identified the following macro-trends, as outlined below.

Diversifying identities

Self and group identities are rising in fluidity and prominence, leading to the fragmentation of existing identities and the creation of new ones. Key topics of exploration included cultural rediscovery (building off of increased global engagement), and misunderstood identities (evaluating resonance with generational stereotypes and authentic self-expression).

- Rising topics (Facebook): Jellabiya (+769%); breadwinner model (+126%).
- Rising topics (Instagram): C-pop (+1,599%); women's empowerment (+1,138%).

Complex connectivity

Behaviours and expectations constantly evolve with the continuous interplay of early-stage and mature technologies. Key topics of exploration included apathy toward and normalisation of technology, as well as information sourcing ("the truth is out there!").

- Rising topics (Facebook): Haptic communication (+1,083%); electronic signature (+627%).
- Rising topics (Instagram): Generative art (+676%); digital economy (+283%).

Relationships renegotiated

The growing non-linearity of human relationships is changing the scope and scale of how we connect and relate. Key topics of exploration included community and belonging, courtship rituals and the rise of mental health and mental wellness.

- Rising topics (Facebook): Intimate relationship (+4,078%); colour psychology (+224%).
- Rising topics (Instagram): Therapy (+385%); meet cute (+221%).

Higher aspirations

The desire to achieve greater heights of success is being matched by new avenues and opportunities. Key topics of exploration included job turnover and motivations for career change, and consumer behaviour in the face of economic uncertainty.

- Rising topics (Facebook): Deindustrialisation (+600%); split shift (+464%).
- Rising topics (Instagram): Employee retention (+385%); purpose (+142%).

Expansively curated

Consumer culture openness and globalisation are driving new product expectations, purchase behaviours and brand interactions. Key topics of exploration included specific food and beverage shifts (such as experimentation with global cuisines or sobriety) and consumer attitudes toward the climate crisis.

- Rising topics (Facebook): Camel milk (+2,682%); ecovillage (+1,132%); digital distribution (+681%).
- Rising topics (Instagram): Electric potential (+407%); fatayer (+384%); representation (+122%).

Following the development of these trends, Mintel designed and executed a large-scale global research project to specifically address consumer drivers pertaining to Meta's interests. Mintel fielded a 20-minute online survey using sample providers between September 8th, 2022 and November 8th, 2022. The sample consisted of n~3,000 adults in seven markets (US, UK, South Africa, Brazil, Germany, South Korea and Vietnam) for a total of 21,282 respondents. Fielding was balanced to internet general population quotas unique to each market, based on age, income, region and gender. Quotas were developed using a combination of global census data and online survey traffic. To ensure high-quality data, cleaning criteria included excessive straight-lining, conflicting answers (e.g., said they were under the drinking age three years ago, but are more than three years older than the drinking age in that market), suspicious open-ended responses and reCaptcha. The survey was written in US English, localised into UK English and translated into Brazilian Portuguese, Korean, German and Vietnamese to ensure comprehension across the various markets. Questions were organised by theme and generally followed the structure of starting broad and moving into specifics. Additional care was taken to ensure that multiple hypotheses of Meta and Mintel contributors were included in the drafting process to avoid confirmation bias. Questions were typically singleselect or single-select per row. Key questions included seven-point bi-polar agreement scales to gauge reactions to attitudinal statements, five-point uni-polar importance and familiarity rankings and rank order among the top two box selections where applicable to encourage differentiation.

Data was then analysed and data cross-tabulations were used to compare key demographics within each market, with a specific emphasis on comparing between age groups. Data between markets were also compared but with caution, due to the distinct differences in scale usage across global markets. All precision scores were tested at 95% confidence. Please note that throughout the article, "agreement" is indicative of the top two boxes ("6" and "7 - Strongly Agree").

Analysis and findings

Mintel's initial evaluation of the research was focused on validating the social listening trends by considering the most commonly agreed-upon attitudes and portions of awareness of and engagement with trends.

Diversifying identities

33% of global consumers agree that they are making efforts to rediscover or embrace their heritage, and 43% of global consumers agree that they make an effort to learn about or engage in cultures other than their own— providing context to the increase in conversations referencing specific cultural topics identified through Meta's platforms. Additionally, 37% agree that they consider themselves to be a "global citizen", and 27% agree that the experience of any one group of people does not come close to describing their personal identity, supporting the increased fragmentation of existing identities from a single source to multiple (see Figure 1). Identities can also be fluid, as demonstrated by the 32% of trend-followers (based on engagement with specific trends, see Figure 2) who feel following certain trends help to define their identity (see Figure 2b).

Q. Below is a list of statements. Please indicate how much you agree or disagree with each statement using a scale of '1' to '7' where '1' is 'Strongly Disagree' and '7' is 'Strongly Agree.'

Selected '6' or '7 – Strongly Agree'

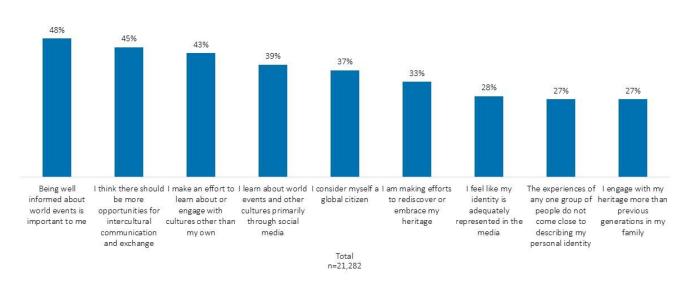
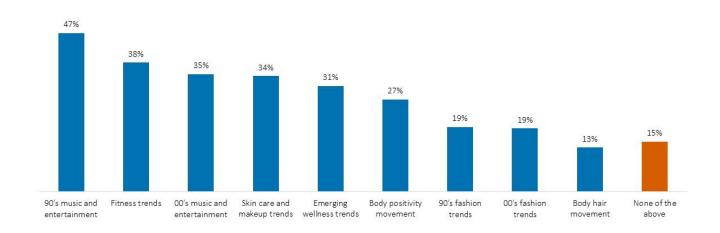


Figure 1

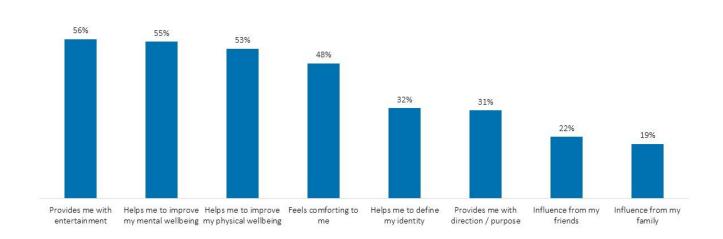
Q. Are you currently engaging with any of the following trends? By engagement, we are referring to following topics on social media, participating in the activities or fashion, enjoying these trends, etc. Please select all that apply.



Total n=21,282

Figure 2

Q. Which of the following do you think accurately describe why you engage with some of these trends? Select all that apply.



Among those who engaged with any trend n=18,327

Figure 2b

Only 19% of global consumers agreed with the statement "stereotypes about my generation align with my identity"—supported by the fact that when respondents were asked to define the level of importance of multiple aspects to their identity, age ranks ninth out of eleven (see Figure 3).

Q. How important do you consider each of the following to the identity you present to others? Please select one per row. Q. How important do you consider each of the following to how you see your own identity? Please select one per row. Selected 'Extremely Important' or 'Very Important'

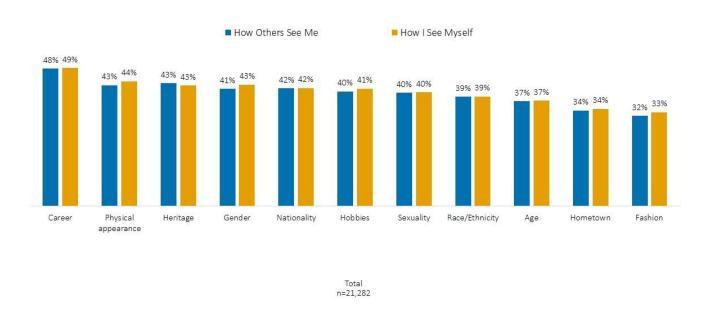


Figure 3

Authenticity is also a fluctuating topic, especially when considering online avatars. Respondents aged 25 to 44 globally are more likely than those 24 or younger and those 45 or older to consider it important for a person's virtual avatar to be authentic, and are also more likely to associate that authenticity with a person's real-life identity, such as race or gender. This is also the age group that leads the interest in "true life content" (48%), suggesting their investment in authenticity differs from other generations in general (see Figure 3b).

Q. Below is a list of statements. Please indicate how much you agree or disagree with each statement using a scale of '1' to '7' where '1' is 'Strongly Disagree' and '7' is 'Strongly Agree.'

Selected '6' or '7 – Strongly Agree'

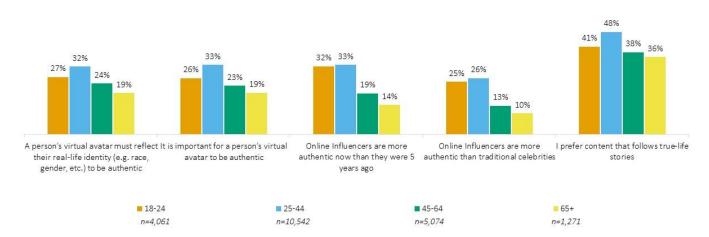


Figure 3b

Complex connectivity

Naturally, the relationship between humans and technology varied drastically between countries, where developing countries see more potential and benefit from technology than more developed countries, likely correlated to the current stage of technology adoption and influence in the market. Countries such as Vietnam, Brazil and South Africa report high levels of optimism that technological advances will make life easier and make the world a better place, as well as reporting excitement around new and emerging technologies. Meanwhile, other markets included in this study were less enthusiastic. For example, 36% of South Korean respondents agreed that they wish technology were simpler and easier to use, while only 16% get excited at the thought of new and emerging technologies. This isn't attributed to a lack of innovation—only 6% of South Korean respondents indicate they believe technological innovations have plateaued in the last few years (see Figure 4)—suggesting an increased apathy towards innovations, possibly based on perceived complications.

As technology opens doors to new sources of information, this study also explored consumer engagement and trust in online sources of information. The two most commonly used sources of information, search engines (76%) and social media sites (45%), see a significant gap between frequency of use and perceived trustworthiness (52% and 32%, respectively; see Figure 5). More frequently perceived trustworthy sources like academic journals and public news websites are used less frequently, possibly due to accessibility issues. To make up for this gap, 85% of consumers say they tend to check two or more sources online when searching for information, likely to validate their findings.

Q. Below is a list of statements. Please indicate how much you agree or disagree with each statement using a scale of '1' to '7' where '1' is 'Strongly Disagree' and '7' is 'Strongly Agree.'

Selected '6' or '7 – Strongly Agree'

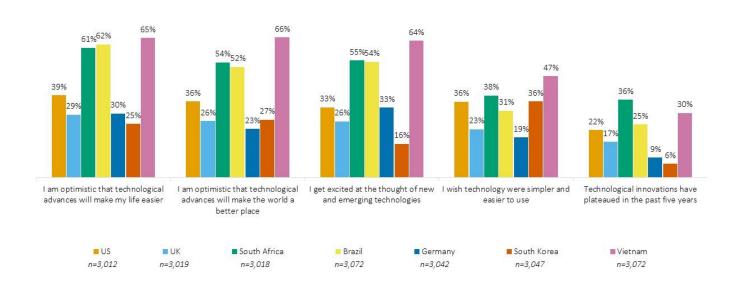
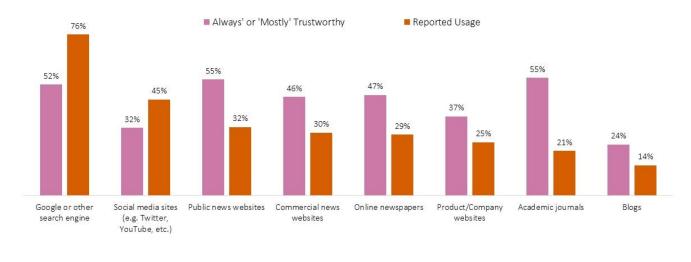


Figure 4

Q. Please indicate how trustworthy you consider the information from each of the following sources. Select one per row. Selected 'Always' or 'Mostly'

Q. Which of the following sources do you use when looking for an answer to a question or specific information online? Please select all that apply.



Total n=21.282

Figure 5

When looking to meet new people in the past three years, global consumers still rely on tried-and-true methods, such as meeting through mutual friends in person (49%) and through work (44%). However, around a fifth of consumers have met people digitally, either through online social groups or forums (23%), or through mutual friends online (21%). Meeting new people from these formal and informal communities could help consumers feel more secure when making connections, especially as there are underlying similarities and "vetting" occurring in each of these instances. More formally, 29% of global consumers agree that belonging to a community is important to them. Of these respondents, shared interests and hobbies (54%), familial relationships (52%) and proximity (e.g., neighborhood, 53%) are the most common drivers of these communities, though there is significant variation between countries. Workplace or educational communities are more commonly selected by respondents from Vietnam, South Korea and Germany. Religious communities are also prominent among respondents from South Africa, the US and Brazil.

Q. In the past three years, how have you met new people? Please consider both platonic and romantic relationships. Select all that apply.

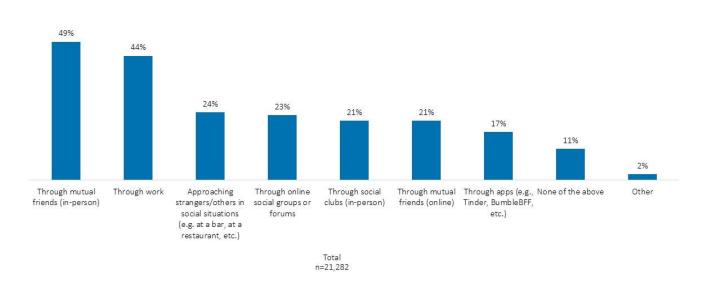


Figure 6

Q. Which of the following best describe(s) the community or communities that you feel are important to be a part of? Please select all that apply.

Among those agreed to the statement 'Belonging to community is important to me'

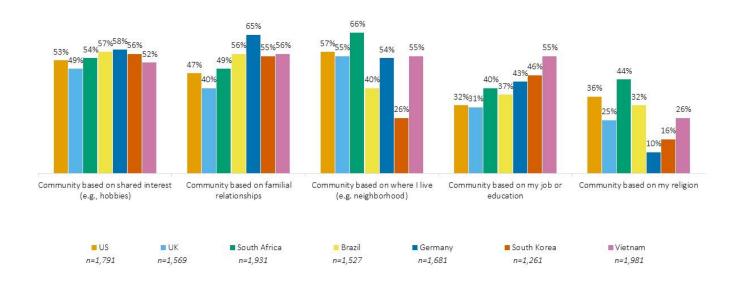


Figure 7

Mental health and wellness are also rising conversation topics in all markets, supported by 30% of global consumers ranking emotional wellness as the most important aspect of their overall wellness. Although social wellness is least likely to be considered "most important", consumers acknowledge the value of socialisation to their overall wellness. 67% agree that relationships with close friends and close family have a positive impact on their overall wellness, and 36% selected socialising as a way they actively improve their wellness. Perceptions of these close relationships are also shifting. Only 19% of respondents agree that people need to be genetically linked to be considered family, and 31% of respondents agree that platonic relationships are just as valuable as romantic relationships in their life.

Higher aspirations

The workplace has shifted for many consumers in the face of global and economic uncertainty, and employees' priorities reflect that. Financial uncertainty is felt by the vast majority of consumers, with 60% indicating they are concerned about economic changes in the next year. Therefore, naturally, competitive wages are the most highly prioritised attribute in a job, career, or vocation (48% ranked 1, Figure 8). 33% of respondents indicated they had made a career change in the past three years, 45% of whom did so for better pay (Figure 9). 24% of those employed indicated they anticipated leaving their current position in the next year. 47% of those who anticipate leaving their position in the next year state that the worry about economic change is impacting that decision. However, another undercurrent of job motivation was revealed to be self-fulfillment; 41% of all consumers agree with the statement "meaningful, fulfilling work is more important to me now than ever". Work/life balance is the most important job attribute for around one fifth of

global consumers (20% ranked 1), and 43% of those who made a career change in the past three years did so for a job that was a better fit for their interests and passions.

Q. How important is it that your job, career, or vocation offers each of the below on a scale of '1' to '5' where '1' is 'Very unimportant and '5' is 'Very important.' Please select one response for each item. Selected '5' or '4'.

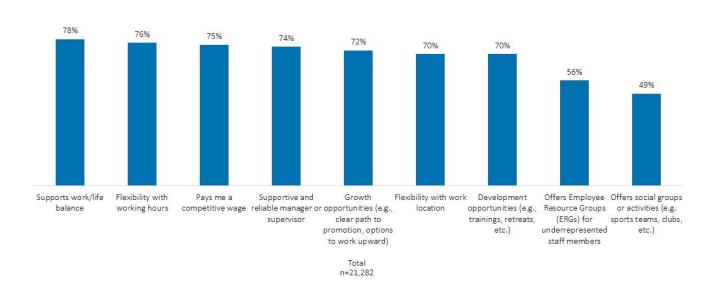
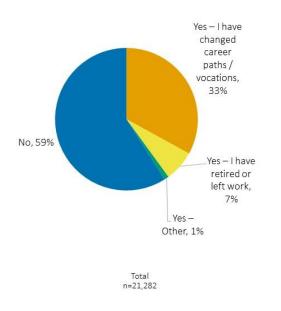


Figure 8

- Q. Have you made a career change in the past three years? Please select one response
- Q. Which of the following best describes why you changed career paths/vocations? Please select all that apply.



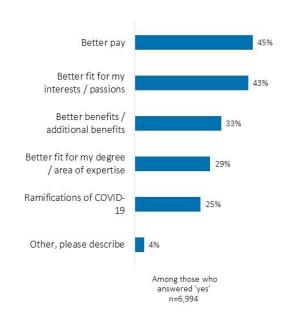


Figure 9

Expansively curated

57% of global consumers agree that climate change is a real concern, with 73% agreeing it is important to them personally. 69% of all respondents indicated they had experienced at least one of the following natural disasters in the past year: extreme temperatures, severe storms, drought, severe flooding, forest fires or an unspecified incident. When asked to evaluate the role climate change played in those events, around half indicated these events were entirely the result of climate change, while another third reported it was at least partially responsible (see Figure 10). These concerns can have real consequences in the marketplace, especially as consumers lean into the "anthropomorphic brand". 35% agree that brands must reflect their social values internally if they make a public statement, and 27% agree that brands have the responsibility to speak out on social or political issues. 23% claim they will not purchase items from brands that do not share their beliefs (see Figure 11).

Q. To what extent do you believe each of the following were caused by climate change? Please select one per row. Among those affected globally, n varies. Selected '5' or '4'.

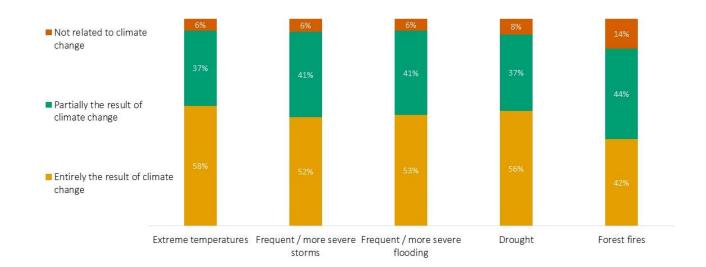


Figure 10

Q. Below is a list of statements. Please indicate how much you agree or disagree with each statement using a scale of '1' to '7' where '1' is 'Strongly Disagree' and '7' is 'Strongly Agree.'

Selected '6' or '7 – Strongly Agree'

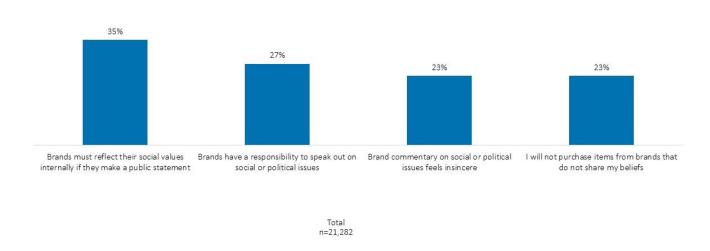


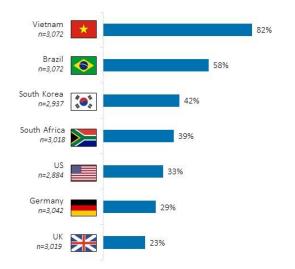
Figure 11

Globalisation of food trends are well-documented, and 43% agree that exploring foods from other cultures has influenced their worldview. One specific trend explored in this research is the rise of sobriety or sober curiosity— defined as the choice to stop drinking alcohol for personal, mental or physical benefits. Across all

markets, most consumers indicate they are drinking the same amount or less than they did prior to COVID-19. 39% of global consumers state they are familiar with the sobriety movement, but this is especially true in Vietnam (69%), Brazil (48%), South Africa (44%) and among consumers under age 45 (45%). Beyond asking about each respondents' identification with the movement, respondents also provided their perspectives on how popular the movement was in their social circles. Vietnamese respondents lead in both participation (82%) and perceived popularity (54%), but other market data was mismatched. For example, 58% of respondents from Brazil identified with the sobriety movement, significantly more than the 33% in the US, however, the perceived popularity was similar in both markets (29% in Brazil versus 30% in the US). Furthermore, South Korea and South Africa also had high identification rates (42%, 39%), but low perceived popularity (22%, 19%; see Figure 12).

Q. Do you identify as part of the sobriety movement? Please select one. Please select one. Only asked of respondents who are at or over the legal drink age per market.

Q. From your perspective, how popular is sobriety in your social circles? Please select one. Only asked of respondents who are at or over the legal drink age per market. Selected 'Extremely' or 'Very' popular.



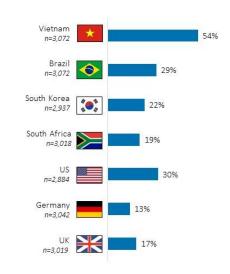


Figure 12

While validating social listening in isolation provides rich context, we know that consumers are not onedimensional, and do not experience each trend independently. The underlying motivations across themes are likely to be related, if not consistent, and we as researchers would be remiss to not explore those universal drivers. Mintel looked at attitudinal statements across the macro-themes and identified common threads to weave them together.

Detailed example of application: Work at the centre

One such thread, dubbed "Work at the Centre", expanded Meta's interpretation of what it means to consider the workplace to be "meaningful", and the shifting role of the workplace in consumers' lives. In 2021, Mintel called out the blurred lines between the workplace and the home—not just physically due to the increase in

work-from-home policies, but emotionally. Consumers expressed a desire and commitment to express their authentic selves in the workplace. Given these findings, Mintel shifted the 2022 research to focus more specifically on the symbiotic relationship between consumers and their workplace. Global consumers are most likely to select "career" as the most important to their identity compared to other qualities, and we see that this is especially true in Brazil, South Africa, South Korea and Vietnam, suggesting additional incentives to ensure that the work should reflect internal values or interests. Furthermore, while competitive wage and flexibility are most highly valued, growth and development opportunities are not far behind. As previously expressed in the "higher aspirations" section, consumers who indicated that they had changed career paths in the prior three years, cited better pay and a better fit for their interests and passions at an equivalent rate. Moreover, of those who had changed career paths recently, over a third (35%) anticipated leaving again in the next year—a significantly larger portion than the general population (24%), supporting the notion that "job hopping" is gaining popularity, and suggesting that job hopping might express a growing sense of employee agency over their career.

In the social sphere, consumers indicated that the workplace is a key social driver to meeting new people, despite increasing online options. 44% said they had met new people through work in the past three years. Furthermore, 41% of consumers who consider belonging to a community important to them indicated that one of those communities was based on their job or education. As the "renegotiated relationships" section explores regarding the prevalence of mental health, 63% of those currently employed indicated that relationships with coworkers have a positive impact on their overall wellness, suggesting these social relationships are crucial. As the workplace is so crucial to consumers' social well-being, authenticity at work will naturally increase in importance, again contributing to consumer agency and desire to choose a "meaningful" career.

Building on this intersecting theme and holistic consumer insight across multiple markets, Meta was able to triangulate how some societies are nearing an inflection point where the generational meaning of work is shifting, uncovering the need for "future of work" strategies to evolve from a technology focus to people focus. In 2022, Mark Zuckerberg revealed Meta's new core work values, including remote work as part of the future. Then, in 2023, Meta shifted back to in-person work and return-to-office became a priority to encourage the human tendency to ideate, collaborate and communicate when in close physical proximity to others. Technology will be used to augment and enhance, but not replace in-person work.

Conclusion and next steps

As demonstrated by Mintel and Meta's collaboration, the inclusion of consumer survey research not only validated social listening findings, but also empowered Meta with understanding that otherwise would have been left undiscovered. Furthermore, the use of the methodologies in tandem allowed a more intelligently designed research project. Having clear indicators from social listening optimised the survey writing process to avoid irrelevant or biased lines of questioning, and discoveries from the 2021 survey research broadened Meta's perspective prior to revisiting themes for the 2022 research. However, client budgets aren't getting any larger, and timelines aren't getting any longer. While this case study highlights the benefits of dual methodology and iterative research, the reality is that opportunities to run such large-scale research projects are few and far between. Those willing to make the time and monetary investment are able to derive a

Copyright © **ESOMAR** 2023 CONGRESS 2023

greater level of insight than social listening or consumer survey alone. That said, the value of these projects does not lie in the scale, but rather the high quality, complex insights that result—which can still be achieved with a streamlined approach. In research design, social listening and consumer research are not necessarily in competition, but rather provide interlocking perspectives. Most importantly: combining the two methodologies results in much more than the sum of its parts.

Acknowledgements

Special thanks to the following teammates who contributed to this research: Fred Kim, Basak Durgun, Phil Tremenheere, Toma Beczak, Jeremy Williams, Emily Wright, Jacqueline Stratton and Shanida Younvanich.

About the authors

Cecily Mejia, Research Manager, Mintel, Chicago, USA.

Karl Joyce, Vice President, Research Consultancy, Mintel, Chicago, USA.

Hannah Pucci, Director of Primary Research, Mintel, Chicago, USA.

Digital DNA: If Your Data Could Talk?

Mapping the data genome and its surprising secrets using data ethnography and behavioural science

Patrick Fagan Vanja Ljevar

Introduction

Traditionally, when we think of research, we reflect on qualitative and quantitative techniques such as interviews and surveys. These techniques are invaluable; for years they have been providing rich bilateral streams of data and insights. However, they also come with a wealth of biases, and can exhaust entire departmental budgets. Despite the ubiquity of these approaches, their application in gathering insights in the data-rich world remains limited. This has particularly been the case when it comes to the investigation of large-scale psychological and "wicked topics" investigations, which are usually hindered by the questionnaire-based nature of assessment and a lack of generalisability.

Big data has come to the rescue by being especially well-suited for pattern recognition and analysis of large and unstructured data sets. These techniques often elevate traditional quantitative work as they offer insights into people's real behaviour (outside of the lab), and they have fewer issues with replicability or challenges that arise from small sample sizes. However, big data is often accused of treating people as nothing more than numbers, since it is assumed that we cannot access their individual contexts and perceptions. This was the motivation for the case study carried out in this paper: we claim that a diverse set of digital footprints are not only useful for extraction of invaluable insights about individuals—they can be a panacea for many traditional methodological limitations.

We already have research that demonstrates the power of individual big data sources, as well as granularity and variability in observing human behaviour that originates from big data. Big data sources enable us to not only "access" a large number of individuals' thoughts, emotional states and behaviours, but also to do so in a scalable manner. Some recent research has demonstrated that personality can be predicted from digital footprints on social media. These digital traces contain explanatory power and behavioural cues, and are able to provide valuable insights about "shades of meaning" similar to qualitative work. Simply put, just as it is possible to obtain an insight about a person based on an uncomfortable laugh during a qualitative interview, it is also possible to better understand a person based on how many friends they have on Facebook or based on the time they usually wake up. This work has been focused on extracting psychology from online behaviour and, so far, it has demonstrated that an algorithm using the average number of likes on Facebook can predict one's personality better than one's colleagues, friends or family members can (on average). However, we are motivated to take this work one step forward and start extracting psychological and behavioural insights not only from offline data sources, but also from their synergy, by connecting them and enriching the context of understanding one's human experience.

Why is this important?

Apart from gleaning interesting and actionable insights about behaviour, looking at digital footprints through a new lens can also provide tools for using big data for social good. Recent research has indicated that loyalty card data collected from over-the-counter purchases of medicine could be used to help diagnose ovarian cancer cases earlier. Namely, purchases of painkillers and indigestion treatments can be seen as a qualitative feature that serves as an extrapolation of an early warning sign. Another piece of research pointed that not being able to smell a candle—and consequently leaving a negative review about it—could serve as an implication that some complainers, actually, had COVID-19. Therefore, a sharp rise in negative reviews complaining of the famously pungent candles having no smell could be a sign of a COVID-19 wave. Finally, in our own prior work, we used a proxy of menstrual purchases from the data of a beauty retailer: menstrual purchases were defined as baskets that contain menstrual products such as tampons or sanitary towels. By comparing the patterns of these purchases with regional deprivation levels, we found indications as to where and to what degree menstrual poverty exists in England.

In summary, these alternative digital footprints are powerful tools that can provide a more sustainable and passive route to monitoring warning signs, early detections and help us extract insights from behavioural, social to psychological well-being. In this work, we wanted to demonstrate several of the proxies for various psychological and behavioural traits that exist as signals in big data, which are also called "features" in data science. These features enabled us to create measures for social constructs—i.e., we could combine the best of both worlds: we can get close enough to capture ethnographic signals and far enough to capture prevalence, context and changes over time. Secondly, having several data sources collected in relation to one person's behaviour can give us a much richer picture about them, rather than looking at individual data sources. However, as is usually the case, this kind of work on a mass-scale is obfuscated by the complexity of data gathering, privacy challenges and the lack of skills for the analysis of such big data sources. This piece of work aimed to make a first step in overcoming these obstacles and demonstrating the value of this synergetic approach.

Method

We had an ambitious goal: to collect and connect several data sources that contain personal information about one person, in order to extract psychological and behavioural features, and analyse them individually as well as in combination with features from other sources in order to obtain insights about personality and behaviour. The following data sources were used: Netflix viewing history; fitness data (including the number of steps, running activity and hours of sleep); Amazon purchasing history; Instagram and Facebook data about posts and activity; and, finally, financial behaviour data. Traditionally, data linkage is challenging because approaches focus on producing a single linked file upon matching individual identifiers, such as name and date of birth. There is usually a single file that represents the basis and other files that are secondary. The resulting file is created by an enhancement of the primary file where each record is associated with records from secondary files. In many cases this leads to errors and mismatching, as well as partial files.

Our approach focused on big data, originating from the activities of only one person. Therefore, no identification was needed and this person agreed for their data to be collected, analysed and presented. However, we can reflect on the fact that a key issue surrounding this approach is usually related to ethical and privacy challenges. Even though this work is based on one person's consensually obtained data, we argue that even if there were more people in this case study, rule-based or probabilistic linkage could be used as a replacement for personally identifiable information. This means that instead of using personal information to represent a match, we can give an estimate of probability that pairs of records belong to the same person—hence using anonymised data can still be a great asset.

Once the data sources were connected we applied the traditional descriptive data science techniques: we searched for patterns in data, particularly focusing on investigation of relationships between the behavioural features from different sources. To do this, we used data visualisation, correlation and other data science techniques. Our work demonstrates that if we knew nothing about the person, but had insights from their digital traces, we could describe their behavioural and psychological traits. Our methodology consisted of three stages of investigation:

- 1. **Using descriptive analytics**. We were able to obtain insights about frequency and types of categories of products, brands and content a person is consuming. Following the idea that we are what we buy, eat and watch, we could closely describe the person. Some of our insights include findings such as:
 - a) The subject is female;
 - b) They smoke and drink infrequently (based on the products they buy), and subsequently engage in "correctional behaviours" such as running and buying "healthy products" such as green tea;
 - c) Based on the types of cosmetic products and clothes purchases we could imply the person has an image and health-focused personality;
 - d) Watching Netflix during the workday (using times and content) informed us about the person's need for escapism and other coping mechanisms;
 - e) Based on the content and sentiment of Instagram posts we could indicate the person has an agreeable personality.
- 2. By **extracting features from the behavioural data**, we could get insights about one's life, personality and behaviour:
 - a) The subject's energy levels seem to be cyclical, wherein energy levels increase every three days;
 - b) The relationship between number of likes given and number of likes received implied changes in the need for external validation;
 - c) The person appears to be curious and neurotic based on their Netflix history (and additionally, their favourite product colour is black).
- 3. Combined data sources provided the context of one's life stages and life events:
 - a) Making Amazon orders is negatively correlated with calories consumed, while positively correlated with calories spent, walking and running;
 - b) Physical activity was negatively correlated with online activity.

Conclusion

Copyright © **ESOMAR** 2023 CONGRESS 2023

Our research demonstrates that a collaboration between big data and ethnography-inspired feature generation can provide a useful tool to analyse someone's digital DNA. In doing so, such analysis can help us understand their lifestyle, habits and even personality traits—even if we start with no external knowledge or even demographic information. This work suggests a novel methodology and a demonstration of the power of insights it carries. We conclude with the idea that a similar work, if replicated on a much larger scale, can help us provide powerful nation-wide implication of people's mind-sets, early warnings for negative behaviours that can be addressed in a more timely manner and, finally, a promise that if conducted in an ethical way, personal data sharing can creating the space for the research of the social world, with the depth and scope it requires and ultimately deserves.

About the authors

Dr. Vanja Ljevar, Chief Data Scientist, Kubik Intelligence, Nottingham. Patrick Fagan, Chief Behavioural Scientist, Kubik Intelligence, Harefield.

Uncovering the Human Voice for Deep Insights

Transforming online conversations into actionable insights with emotional drivers such as "brand love"

Bernard Brenner
Melissa MacGregor
Justin Schoen
Jasmin Fischer
Camila Angio
Lucas Henderson
Sarah Johnson
Kyle Stalcup
Michael Tapp
Jack Penzer

Introduction

Consumers naturally build relationships with the brands they interact with, and over time these interactions can turn into what is referred to as "Brand Love" (Sternberg, 1986). In this way, the manner in which interactions are structured holds significant implications for the potential success of any business, and provides all the necessary justifications for a further study. Robert Sternberg developed the *Triangular Theory of Love* (1986) that researchers have adapted from relationships between people to explain the phenomenon of relationships between brands and consumers. Hence: brand love. By looking at how consumers express their love for a brand, this study collected social media conversations from consumers focused on a range of technology brands. These conversations were then segmented into topics using Latent Dirichlet Allocation (LDA) topic modelling, to determine the topics most related to how consumers express their love for technology brands. Consumers' brand love leads to desired outcomes for companies, such as brand loyalty, willingness to pay a premium and willingness to forgive. With these topics, a content analysis was conducted to determine what drives consumers' feelings of brand love. This study aims to define mediators of brand love that drive outcomes of this phenomena, which are loyalty, forgiveness and willingness to pay a premium.

Literature review

Our journey begins with Sternberg's Triangular Theory of Love (1986), which originally defines three elements that make up loving relationships between two individuals; i.e., intimacy, passion and commitment. His theory

goes on to explain eight different types of love (non-love, liking, infatuated love, empty love, romantic love, compassionate love, fatuous love and consummate love), by examining the observed level of "intensity" of each of these three elements in different experimental settings. Notably, consumers have various types of interactions with a brand that will lead to the relationship described as brand love. As we look at the landscape of modern literature regarding brand love, we see brands that are perceived as high-quality and customer satisfaction can also be essential contributors to brand love (Carroll & Ahuvia, 2006). Positive user experiences creating brand love have been found to lead to consumers' loyalty to the brand, as well as consumers are more willing to forgive missteps by the brand, or be resistant to believing negative information about a brand they love (Batra, Ahuvia & Bagozzi, 2012).

From these pieces of literature alone, we note that brand love has an impact on how consumers interact with a brand. However, Sta and Abbassi (2018) take this a bit further, discussing the actual outcomes of a consumer's love of a brand: brand loyalty, word-of-mouth and premium price, upon which we have formed the basis of our research's conceptual framework. To illuminate our understanding of these concepts in a more direct way, one can turn to Figure 1, displaying the creation of brand love in the eyes of Heinrich, Albrecht and Bauer (2012) and the outcomes from a consumer's affinity towards a brand.

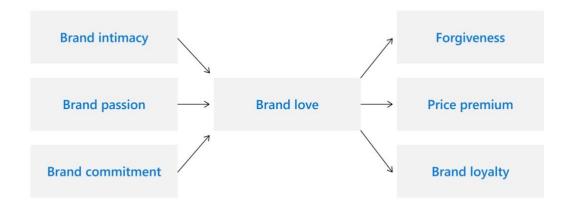


Figure 1: Conceptual model from Heinrich, Albrecht and Bauer (2012) and Carroll and Ahuvia (2006).

In view of these ideas, this study aims to answer the following research questions:

- What are the topics of conversations surrounding technology brands and love?
- · How do these topics drive love for technology brands?
- Are there any technology brands that consumers have a high affinity towards?

Method

To begin, a data-set from October 2021 to April 2022 was collected from social media posts (Facebook, Twitter, Reddit, YouTube and blog posts), reviews and video comments using social listening tools. More specifically, a Boolean query (a string of words connected with operators to broaden or narrow a search) was created to capture conversations related to brands of interest, containing expressions of love and affinity. Promotional posts, adult content, repetitive promotions, giveaways, irrelevant topics (e.g., stocks, crypto, hacking, etc.) and a global list of spam accounts were all excluded from the initial data-set to maintain the relevance of the data. Following this, the raw volume of the data-set before initial cleaning was found to be more than 1.1 million posts, which was then cleaned using the R package LimpiaR to remove stop words, spammed posts, URLs, etc. (Penzer, 2023), resulting in the data-set examined here of approximately 300,000 posts.

This data-set alone, however, is unstructured and difficult to interpret; to address this, an LDA was chosen to uncover the most important topics within the data-set. To elaborate on the methodology, LDA topic modelling groups text documents together under the premise that "each document is a function of a latent variable called topics" (Buenano-Fernandez et al., 2020). This assesses the probabilities of every word across every mention in the data-set, in order to create groups from which meaning can be inferred.

Breaking this down, LDA is a process used on a set of documents (or social media mentions) to identify the main topics of discussions, which starts by assuming that each document contains a mixture of various topics and that each topic is characterised by a certain distribution of words. Then, LDA randomly assigns every word in every document to one of the topics (the number of which has been determined beforehand). At this stage, the accuracy of these topics is low. However, we can improve on this initial topic assignment by asking two important questions of each word in the data-set:

- 1. "How often does this word appear elsewhere in the entire data-set?" (i.e., is the word more likely to be associated with certain topics or not);
- 2. "How common is each topic in the rest of this document" (i.e., LDA analyses the distribution of topics in the document, excluding the current word being evaluated, which allows the algorithm to determine which topics are prevalent in the document and whether the word under consideration is likely to belong to these topics).

By iteratively going through these questions for each word, the LDA adjusts its assignments to better reflect the underlying structure of the data, with topic assignments updated based on the likelihood that words belong to specific topics given their frequency of co-occurrence and general distribution within the data-set. As the algorithm progresses to the final stage, these assignments become incredibly refined and the LDA outputs coherent groups of words that represent distinct topics (Tapp, Penzer & Pegler, 2023). In our analysis, we then take these groups of words and examine the underlying mentions that are contained within each group, in order to assign an overarching topic name to each. The outcome of this process is found in Figure 2, where the eight groups of words emerging most prominently within discussions of brand love (and their underlying mentions), have been qualitatively assigned to the eight major topics of: gaming, social connections,

enhanced home experiences, sound quality, laptop performance, wearable tech, tech for creativity and online shopping.

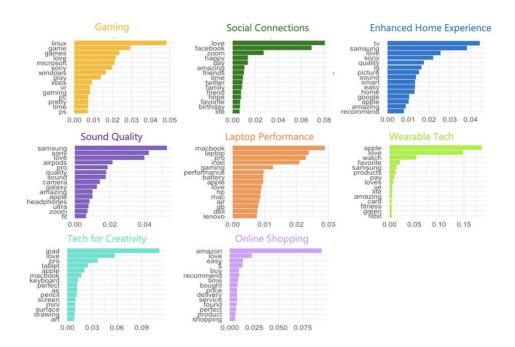


Figure 2: Emerging topics in tech brand love.

With the topics defined, our attention turns towards the drivers of conversation, or the drivers of brand love. To study this, we looked deeper into the similarities and differences between discussions of brand love across all topics identified in Figure 2, comparing the culture of different conversations by analysing patterns within verbatim quotes, distributing the collected mentions across a timeline to understand trends, exploring the proportion of positive and negative sentiments and even observing the quality of engagement. This provided a more concrete view of the distinguishing features of each topic, and the links between them. To bring this to a place of relevance within the contemporary technology marketplace, the lens of branded conversation was also added—segmenting the data along the lines of users mentioning specific tech brands in their discussions of brand love. This allowed an elementary outline of the entire "tech brand love" conversation to be built, and deeper comparisons to be made.

Using this as a guide, and with an emphasis on the newly added lens of tech brands, we continued to compare the culture of discussions. As a result of the similarities found in the most prominent mentions and themes across brands and topics, five drivers were gradually defined:

- 1. [brand] makes my life easier;
- 2. [brand] allows me to stay connected with loved ones;
- 3. [brand] helps me to be better;
- 4. [brand] takes experiences to the next level;
- 5. [brand] gives me peace of mind.

It is important to note, however, that the analysis has yet to be fully integrated as an extension of the contemporary discussions in this area, as explored earlier within the literature review. To solidify the ideas emerging across the analysis, mentions, topics and brands had to be re-organised in light of these drivers, and an attempt needed to be made at creating a hierarchy of contributing factors within each driver. In the ensuing exploration, a grounded theory was put forward, bringing these ideas together in one model as shown in Figure 3.

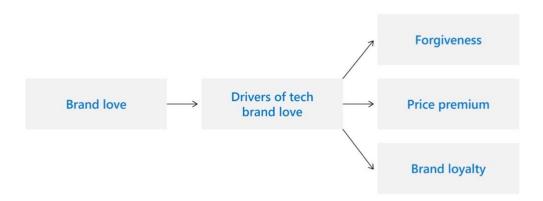


Figure 3: Proposed conceptual model.

To elaborate on this concept, Figure 3 illustrates the observed path of public behaviour within our experimentation; from the feeling of loving a brand to the mediating factor of the five drivers, to the outcomes, notably: forgiveness, willingness to pay a premium and brand loyalty. We find these drivers to sit in between brands and the outcomes they desire, making any influence over them critical.

Results

The most pertinent results of this study are the five drivers and the conceptual model just described. However, turning to the data behind this model allowed us to gain even greater insight by looking at the eight topics previously outlined more granularly. Although each remains specific to certain segments of the technology industry (leading to their synthesis into five general drivers), all still apply to tech brand love and offer new insight. We observed that the topic of social connections (see Figure 2) has clear links to "[brand] allows me to stay connected with loved ones", and brings in the most discussion out of any topic (19% of conversation). Looking at this interaction, we can derive not only that it is one of the primary drivers, but that it is one that is already being widely offered to consumers. Building on this notion, ideas like monopolising

the least frequently addressed components of brand love begin to emerge, which can be directly applied to business decisions.

These relationships become even more relevant in light of observations that these five drivers reinforce the outcomes of loyalty and willingness to pay a premium that Heinrich, Albrecht and Bauer (2012) and Sta and Abbassi (2018) previously explored. To elaborate, we see willingness to pay emerging strongly in conversations surrounding "[brand] takes experiences to the next level", exemplified in this archetypal comment regarding Microsoft's purchase of Activision Blizzard: "Microsoft acquiring Activision and the next iteration being set to be under Microsoft has me more confident than ever in the future of the game. Not saying it isn't bad right now at all though". The tangible experience of a brand having delivered something totally different and premium in the past reinforces the idea of brand love, and this plays a major role in the formation of future purchase decisions (as well as in keeping positive perceptions of any brand top of mind).

This is even taken a step further as we look at drivers like "[brand] helps me to be better", or "[brand] makes my life easier". Within our study, we observed these drivers to relate heavily to the topics of "wearable tech" (13% of conversation), "online shopping" (15% of conversation), "tech for creativity" (12% of conversation), "Laptop performance" (10% of conversation) and "enhanced home experiences" (9% of conversation), indicating broad appeal, and the power these drivers hold when combined. Wearable tech offers a peak into the discussions inspired (which are often centered around the concepts of health and mental wellness within this topic) and, notably, consumer mentions put the personal utility of the product front and centre: "I love the Apple Watch's 'breathe' function. It combines paced breathing with mindfulness and is really great for acute #anxiety. Not sponsored. I just love it". This is reminiscent of the ideas explored by Uncles, Dowling and Hammond (2003), Carroll and Ahuvia (2006), as well as Batra, Ahuvia and Bagozzi (2012), as we see that drivers of tech brand love push consumers to express loyalty completely unprompted. When expressed in public spaces like this, it only helps to reinforce the idea that a given brand is worthy loyalty.

Looking at the data more directly, we note that of the brands explored Apple reports the highest "level" of brand love across topics, and is currently reaping the rewards of inspiring love around wearable tech and laptop performance. Microsoft, in contrast, sees strong appreciation and loyalty within the realm of gaming (17% of their conversation), where the consistent delivery of a next-level experience has led to a deep sense of user trust in the brand to deliver better products. However, perhaps most importantly is the intersection of these ideas, which no brand monopolises (as seen in Figure 4; the number of mentions each brand captures, within each topic previously outlined in Figure 2). Brand love is not created in isolation; it is the consumers' expression of a sense of harmony between the many components that make it up.

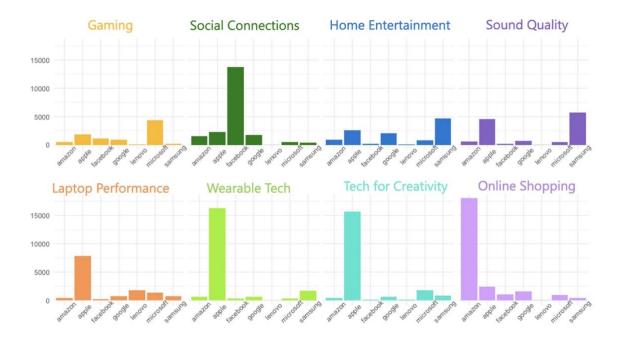


Figure 4: Topics by brand for tech brand love.

Although each driver remains important on its own, the most significant successes come from understanding the interplay of these ideas. Making one's life easier often provides peace of mind, a next-level experience can help one improve and so on. The world just needs the right nudge to make the links that lead to lasting appreciation.

Conclusion

When examining what drives brand love for technology brands, we see that consumers value convenience. Products that make life easier, whether that is to connect with loved ones, provide assistance in mundane tasks or enhance experiences, consumers are looking for brands that understand how to bring convenience into their lives. Technology brands have a tremendous opportunity to gain the loyalty of their consumers by understanding these drivers of brand love. With love for tech brands, consumers are much more willing to pay higher prices because of the value they perceive coming from the brand; they are also much more willing overlook forgive missteps brand to or а may make.

References

Batra, R., Ahuvia, A., and Bagozzi, R. P. (2012). Brand Love. *Journal of Marketing, 76*(2): 1-16. Available: https://doi.org/10.1509/jm.09.0339

Buenano-Fernandez, D., Gonzalez, M., Gil, D., and Lujan-Mora, S. (2020). Text Mining of Open-Ended Questions in Self-Assessment of University Teachers: An LDA Topic Modeling Approach. *IEEE Access, 8*: 35318-35330. Available: https://doi.org/10.1109/ACCESS.2020.2974983

Carroll, B. A., and Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. *Marketing Letters*, 17: 79-89. Available: https://doi.org/10.1007/s11002-006-4219-2

Heinrich, D., Albrecht, C.-M., and Bauer, H. H. (2012). Love actually? Measuring and exploring consumers' brand love. In Fournier, S. (ed). *Consumer-Brand Relationships*: *Theory and Practices*. Routledge.

Sta, N., and Abbassi, R. (2018). Brand love: Antecedents and outcomes. *Journal of Business and Management Research*, *11*: 300-313.

Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review, 93(*2): 119-135. Available: https://doi.org/10.1037/0033-295X.93.2.119

Uncles, M. D., Dowling, G. R., and Hammond, K. (2003). Customer loyalty and customer loyalty programs. *Journal of Consumer Marketing*, *20*(4): 294-316.

R-Packages:

Penzer, J. (2023). LimpiaR: LimpiaR. R package version 0.0.0.9000. Tapp, M., Penzer, J., and Pegler, R. (2023). SegmentR: SHARE's R package for clustering and topic analysis. R package version 0.0.1.

About the authors

Bernard Brenner, Senior Director, Microsoft, Redmond, USA.

Melissa MacGregor, Senior Research Manager, Microsoft, Chicago, USA.

Justin Schoen, Director Social Intelligence Practice, Microsoft, Redmond, USA.

Jasmin Fischer, Senior Research and Insights Director, SHARE Creative, London, UK.

Camila Angio, Head of Research and Insights, SHARE Creative, London, UK.

Lucas Henderson, Research Manager, SHARE Creative, Phoenix, USA.

Sarah Johnson, Sr. Insights Analyst, SHARE Creative, Columbia, USA.

Kyle Stalcup, Sr. Insights Analyst, SHARE Creative, Seattle, USA.

Michael Tapp, Data Director, SHARE Creative, London, UK.

Jack Penzer, Senior Data Scientist, SHARE Creative, London, UK.

Creating the Beauty Insights that Move Africa

AfriLab: How mobile digital communities are co-creating the future of beauty experiences across the continent

Kambe Mwaba
Christine Laurenssen

Introduction

L'Oréal's vision is to create beauty that moves the world, and to be the most inclusive beauty leader by creating products for all people. Consumer needs are at the heart of L'Oréal's innovations, however, historically there has been limited understanding of the unique beauty needs of African consumers. To create the beauty that moves Africa, there has been a strong business drive within L'Oréal to explore, develop and test product experiences that are most relevant for consumers across the African continent. This must be achieved in a manner that provides quick turn-around results whilst withstanding last minute methodological adaptations, in line with changing and evolving business requirements, without compromising the integrity of research results.

In 2022, L'Oréal decided to collaborate with Mobile Digital Insights (MDI), a research agency specialised fully in mobile digital research. This collaboration resulted in the creation of AfriLab: fully mobile digital consumer research communities in Nigeria and South Africa, facilitating in-the-moment feedback from African consumers for the first time. The power of MDI's mobile research platform is that it captures the "real voice of the consumer" through photos, videos and verbatims in addition to survey and chat data. Thereby, this allows for a more in-depth understanding by L'Oréal's stakeholders of African consumer beauty needs, and so accelerating the development and delivery of products that meet these needs, with greater efficiency and effectiveness. This paper outlines the power of the AfriLab consumer community from both an agency and client-side perspective, and provides insight into how research outputs have directly impacted product launch communication and product developments.

The challenge / opportunity

Founded over 110 years ago, L'Oréal has become the largest cosmetics and beauty company in the world, creating a portfolio of beloved beauty brands (including L'Oréal Paris, Maybelline, Lancôme, Yves Saint Laurent, La Roche Posay, Cerave, Kérastase and Redken). The company's mission is to be the most inclusive beauty leader; "creating beauty that moves the world and products for people of all identities, cultures, and backgrounds". In this light, L'Oréal aims to offer products that are increasingly suited to different skin and hair types, thus adapting to diverse regional beauty cultures. To realise this ambition, L'Oréal's Research and Innovation (R&I) centres worldwide continuously strive to deepen their knowledge, in order to address all customer needs in their infinite diversity.

L'Oréal expansion in Africa

Sub-Saharan Africa (SSA) is a fast-growing region for L'Oréal, posting very strong sales growth in Q1 2023 and progressing faster than the rest of the market. In 2015, a new R&I centre was established in Johannesburg, South Africa focussing on the specificities of melanin rich skin and curly hair textures types, and developing beauty innovations tailored for the African consumer. This R&I hub is the group's seventh hub globally, adding to the regional centres in France, the US, Japan, China, India and Brazil. In 2021, L'Oréal announced the change in scope of some of its geographical zones, including the creation of a new sub-SSA zone. This new corporate structure allowed the organisation to better respond to consumer diversity by providing products and services that are relevant to local realities. To create beauty that moves the region, L'Oréal has established a strong business drive to explore, develop and test Africa-specific product experiences within the shortest amount of time possible.

Digital research shift

Traditional face-to-face research has typically been used for insight gathering in African markets: this in comparison to the global average where tech-enabled research (53%) surpasses traditional (47%). Reluctance to utilise newer digital approaches was driven by various concerns ranging from compromised data integrity, poor internet connectivity and lower research participation. As a result, quick project turnaround and providing real-time research results has been challenging, ultimately impacting timely market entry and responsiveness to consumer needs.

When COVID-19 raged across the globe in 2020 and 2021, there was a significant increase in digital adoption overall, including the way consumers engaged with brands and services. In South Africa, for instance, there has been a 16% increase in online shopping since lockdown and hybrid shopping has become the country's new normal, with IBM Research showing that this is the primary buying method for over one-in-four consumers. The market research industry similarly experienced accelerated change; research agencies were "forced" to interact with consumers and gather data by non-face-to-face methods. As a result, research clients accelerated their adoption of digital methodologies and, in doing so, overcame a long-standing reluctance to deploy fully digital methods.

Smartphone penetration growth

The power and representativeness of this methodological pivot is highlighted by mobile and smartphone penetration in the region: Nigeria's smartphone penetration leads the continent with over 80 million smartphone connections, followed by South Africa with over 22 million. These figures are projected to grow exponentially by 2025. Simultaneous to device penetration increase, mobile network operators have made a tremendous push over the last 12 months in the expansion of 5G networks across both markets: four telecommunication operators currently provide 5G coverage across most major metropolitan areas in South Africa, while in Nigeria two 5G providers offer coverage in major metros across six of the country's 36 states, as well as the Federal Capital Territory (FCT, Nigeria). These developments are particularly pertinent to L'Oréal, with smartphone penetration amongst their addressable target market being close to saturation, enabling them to

take advantage of the opportunity to shift to mobile digital research approaches, and leverage the greater speed and depth of insights that the technology facilitates.

Research aligned with consumer interaction

Mobile Digital Insights' (MDI) ethos is based on the premise that market research should be aligned with the way in which consumers interact: with each other, with brands, with how they shop and how they access information. In line with global shifts, the primary manner in which African consumers interact with each other, brands, shops and service providers is via their phone. For instance, telecoms giant Vodafone recently reported that 75% of their customers expect to be able to interact with the brand anytime and anywhere via their digital services. Besides a straightforward communication tool, the mobile phone has become a conduit to express oneself, provide feedback, check facts, read books, order products, listen to music, take pictures and more. Conducting market research via mobile devices, when and where it suits the consumer, therefore, is not only a natural progression, but also a smart one. The key benefit being that the mobile device allows corporations to get much closer to their consumers than previously possible, and obtain an in-the-moment view of how consumers actually use and interact with products and brands, in addition to how they consume advertising.

The ability to obtain in-the-moment consumer feedback overcomes what is arguably the biggest weakness of market research: an over-reliance on measuring claimed as opposed to actual behaviour. It is irrefutable that in-the-moment research increases data accuracy as we no longer ask consumers to recall past behaviour but rather ask them to tell us what they are doing "in-the-now". Furthermore, the mobile device enables researchers to collect consumer feedback "in-their-own-words" by asking them to record short video or voice notes on how they are feeling, their thoughts or their feedback about a specific product at a specific point in time. Mobile digital research, a methodology that previously had seemed so out of reach, particularly in SSA, has suddenly become a very real method by which to survey consumers.

The solution

Over the last few years, L'Oréal Global has driven a worldwide Consumer Digital Acceleration programme, which includes an online co-development platform between consumers and internal partners named "Beauty CoLab". This tool has been part of a "real-life, real-time" digital initiative of remote testing, with the aim of reaching "more and more-diverse" consumers at scale and with more depth, to further guide inclusive innovation. The L'Oréal global standard for these online research communities has traditionally been via PC or laptop. However, in SSA, low household PC penetration (<10% at the end of 2019) was a significant consideration to L'Oréal partnering with MDI to roll out "AfriLab"—L'Oréal's first 100% mobile app-based digital consumer community in Nigeria and South Africa, making it a pivotal technology leapfrog for the business.

The power of AfriLab

AfriLab, through deployment via the MDI mobile research platform, is extremely agile and creates ongoing "real-life, real-time" dialogue with consumers, ensuring rapid feedback on topical business questions and, importantly, providing pertinent information to support in-market executions. Research is facilitated by a bespoke app (see Figure 1), designed in partnership between MDI and L'Oréal. After face-to-face recruitment

to the community, each community member is invited to download the app, register and log in. The app sits on the home screen of members' phones, like any other app, and a personalised log in with a password keeps app access private and secure. When a survey becomes available, "AfriListas" (Afrilab members) receive a push message alerting them of a new task and the opportunity to participate. On the app's task screen members can select a survey of interest, and (depending on whether they comply with screening criteria) will be asked to complete a number of survey related tasks, such as questionnaire completion and sending in pictures or video content related to a specific topic, all dependant on the research methodology. AfriListas earn points for each survey they participate in. These can be saved up and redeemed at the end of the month (or even after several months) for a cash amount.



Figure 1

AfriLab community profile

AfriListas comprise the main addressable target market for L'Oréal SSA: Black women between the ages of 18 and 40 years, within the socio-economic segment ABC1, residing in major urban areas of South Africa (Johannesburg and Durban) and Nigeria (Lagos). As Africa's two largest economies, representing 44% of the continent's GDP, understanding these consumers specifically is critical to L'Oréal. In each of the markets, the community of AfriListas consists of 150 to 200 active members who participate in various, predominantly qualitative, research activities throughout the year.

Research conducted with AfriListas

Two main types of research studies have been conducted on the Afrilab platform thus far: engagement studies and product testing. Quick turnaround activities such as short, topical engagement studies of between three to five questions with a picture or video submission element are conducted in each market on a bimonthly basis. These studies are open to participation by the entire community, and the results provide

L'Oréal with consumer information regarding a wide array of topics ranging from perceptions around hair growth to the alternative beauty uses of toothpaste, all within a matter of days. This capability is extremely valuable for business decision-making, and currently no other research partners are able to share results so quickly.

Since early 2021, over 24 engagement studies have been conducted across both markets and study results have been used to validate new product claims and demonstrations for haircare. For instance, feedback on the meaning of hair softness, as illustrated in Figure 2, provided inspiration for the media communication for a curl elongating treatment launched in 2022 (Dark & Lovely Dream Big), which gives consumers softer, stronger and bigger hair.



Figure 2

Next to topical engagement tasks, the AfriLab community, with the app as research facilitator, has been extensively used across both markets for in-home, in-the-moment product testing. This methodology allows a select set of AfriListas (criteria for study inclusion are generally based on product/brand usership and/or hair or skin profiles) to test a face or hair care product in their natural setting, and as part of their usual personal care routine. Test periods can vary from four to 14 days, or more where required. The research design is structured to allow for daily consumer feedback on different product attributes. Additionally, consumers are asked to take "before" and "after" pictures of their face or hair to assess the potential visual impact of the product, as well as to provide a video on the first day of usage, covering initial impressions, and a final product review video. Thus, L'Oréal receives a "before and after" view of product results, whilst simultaneously bringing the voice of consumers into stakeholders' offices, laboratories and meeting rooms.

Methodologies can be deployed across multiple markets simultaneously, and target samples can include consumers that would typically be hard to reach geographically. Turnaround of top-line results are generally within a week from completion of fieldwork, allowing for the re-creation of a consumer journey in a quick and agile manner. The fundamental power of the AfriLab tool is derived from the fact that consumers enjoy providing feedback—they enjoy making their voices heard and being part of a community. Moreover, they genuinely are interested in sharing their opinions. The AfriLab platform imbues every "AfriLista" with the power that they are a content/product creator and influencer.

AfriLab business application

Since its launch in early 2022, AfriLab has been used extensively by L'Oréal SSA, and insights provided have been directly applied to support in-market executions and shape marketing communications. The Garnier Charcoal Serum project that was run in August 2022 is a prime example of how insights helped shape product launch communication.

Case study: Garnier AHA+BHA charcoal serum

Background

Acne is a major skin concern in SSA, with on average one-in-three consumers saying that they suffer from acne manifestations (particularly pimples and acne marks or scars), according to a 2021 U&A study conducted in Kenya, South Africa, Nigeria and Ivory Coast. Within SSA, Garnier has been on the rise as a face care brand, specifically within the acne market. The Garnier Pure Active range is currently Africa's number one acne range. This range offers various cleansing and moisturising products, however, an opportunity to offer more advanced care products to fully optimise skin care routines was identified during the course of 2022.

Serums have been identified as a fast-growing format within the global skin care market, globally valued at 3.5 billion USD in 2021 and forecasted by Allied Market Research to reach 5.6 billion USD by 2031. This trend is reflected in SSA, with the face serums category in South Africa almost doubling in market value from 2020 to 2022. Serums are skin care products that are especially designed to deliver a high concentration of active ingredients to treat different types of skin-related issues, including acne. They are typically clear, liquid or gel-based products that are thicker than moisturisers and able to hydrate more effectively than creams. As a result, L'Oréal decided to make a serum the lead face care product for the next launch in the Garnier Pure Active range in 2023.

This new serum was specifically targeted at consumers with acne prone skin, and the business considered two colour options for this formula. One was transparent in colour and aligned with the market norm of white or clear serums, while the other was black in colour, due to inclusion of charcoal as an active formula ingredient (see Figure 3). The black colour would potentially be quite disruptive to the market, and given the strategic importance of this serum launch, it was considered key to explore consumer reactions and preference of the colour options.

Research approach

A two-phased research approach was executed:

1. In phase 1, the concept of a charcoal serum was explored. As charcoal in face serums was a new concept in South Africa, it was key to observe whether the suggested communication was well understood and was felt to be believable. Four digital focus groups were conducted, with four consumers each (quads) from the AfriLab community. Small, intimate groups such as these generally drive higher levels of engagement as each respondent is able to more actively participate and provide their perspective on the concept presented, as well as any excitement it generates or reservations they may have around the idea. Additionally, this methodology allowed for clients from South Africa,

France and beyond to dial-in and view the sessions (facilitated on the Zoom platform), seeing consumer reactions first-hand.

2. In Phase 2, 16 AfriLab consumers were asked to blind-test the two serums in an in-home sequential monadic product test over a period of five days. Consumers were asked to use the serums as part of their normal face care routine, and discontinue the use of their regular serum during the testing period.



Figure 3

Consumers were asked to provide video footage for each product on the first day of product application, initial impressions and (at the end of the five-day trial period) provide an overview of the testing period alongside their final verdict on the product in question. Additionally, consumers completed a daily touch-point survey covering specific sensory attributes, such as overall application experience, texture, colour, consistency, smell and ease of use of packaging. After testing both products, consumers were asked to choose which one (if any) they preferred and why, which product was the best fit with the concept they were shown and whether product performance reflected the concepts communication.

Results and learnings: Research partner perspective

L'Oréal previously conducted numerous product test studies in SSA markets via face-to-face interviewing techniques, and by making use of a standard questionnaire that adhered to global protocol. A face-to-face session would be scheduled at the end of each testing period, during which all sensory product attributes would be reviewed by the interviewer and consumer in one sitting. As the interview would generally be conducted at the end of the product testing period, all responses were based on consumers' recall of their experience with the product. The questionnaire was lengthy; approximately 47 questions per product, of which 14 were open-ended questions.

This protocol was sub-optimal in the mobile world, therefore, requiring pertinent adjustments to ensure it remained viable. Working in unison with the L'Oréal consumer evaluation team, MDI grouped the questions from the global protocol document into buckets of sensory attributes, essentially bringing feedback of the product usage closer to the actual moment of experience. These buckets were then divided between the number of testing days; i.e., on day 0 (before product testing started) the consumer answered a number of classification questions regarding her skin, the type of serum she was currently using, how satisfied she was with her regular product, what benefits she was specifically looking for from a serum and what other types of products she used in her face care repertoire. This provided a comparison baseline against which the AfriLista could then compare the test product, and whether it performed better or worse than her current face serum.

Next, for each day of product testing (1 to 5) the consumer would answer a few key questions about one or two specific product attributes: for example, ease of use of the packaging and product texture. Where possible, all open-ended questions were tackled in the video feedback element rather than being typed, thus ensuring that daily touch-points were kept short, to the point and enjoyable to complete. In order for the analysis and reporting to be as user friendly as possible across various L'Oréal departments, it was imperative that consumer feedback was brought to life. This was achieved in two ways: by creating a short video of consumer feedback during and after product testing, highlighting key take-outs, findings and the overall conclusions and recommendations of the research (see Figure 4).

Research results are at their most powerful when heard in consumers' own words. Sub-titles played a key role in ensuring the video output could be understood by non-native English speakers and English speakers from other markets who may struggle with South African accents. Survey results were brought to life by creating infographic style output for each sensory attribute tested: a single slide per attribute with a clear conclusion on each, leading up to a final summary slide with the test results.

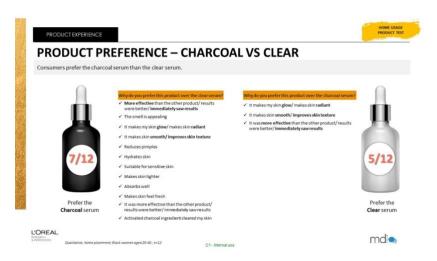


Figure 4

Results and business impact: Client perspective

• Business decision: The research findings from AfriLab showed the majority of consumers voiced a preference for the black serum versus the clear serum (through product usage), hence the business

- decided to launch the black formula. Emphasis was placed on the efficacy of the formula due to the dermatological ingredients, including 4% AHA+BHA, niacinamide and, the hero ingredient, charcoal.
- Marketing communication: The consumer concerns raised about the dark colour helped shape launch communications, and were directly incorporated into the messaging (e.g., "Rubs in clear, leaves no black residue on skin"). Feedback from internal stakeholders was that this was mainly driven by the ability to get the raw, unfiltered reaction from consumers in their own words. In addition, the quick turnaround of results enabled them to incorporate the findings into the launch communication plan in a timely manner.
- Launch: In Q2 2023, the Garnier AHA+BHA Charcoal Serum was launched in Kenya and South Africa, via launch events with consumers, partners, influencers and key opinion leaders. As of June 2023, it is still early stages of the launch and the products are just entering the retail environment. Therefore, market performance data is not currently available, although strong performance is anticipated.

The next steps for AfriLab

In January 2023, after a year of AfriLab studies, L'Oréal and MDI reviewed the successes and potential areas of growth for the platform. Various technological, methodological and scope opportunities are under exploration. From a technological perspective, several key improvements are being implemented over the course of the year, such as the incorporation of:

- Image recognition, which will optimise screening capabilities and ensure the correct consumer targets are recruited and surveyed in each study.
- Facial emotional AI, which will prove particularly relevant when analysing consumer feedback videos, and will allow us to go further rather than relying solely on what AfriListas are saying in order to actually delve into the feelings products elicit. This will further drive insights and actionability whilst streamlining analysis.
- A wide range of other methodologies, both quantitative and qualitative, can be deployed on the community via the AfriLab app, and the aim is to incorporate a number of these into the various testing protocols conducted through the community. Specifically, mobile self-ethnography, which is of particular interest when aiming to better understanding consumer usage journeys, and uncover engaging beauty experiences and services.

In terms of approach, AfriListas would be asked to participate in a variety of tasks, centred around a specific topic over a period of two to three days. For example, the decision-making process around buying a new brand of shampoo. Starting in-store, consumers may take pictures and/or video footage during their shopping occasion, allowing L'Oréal a view of the product trade-offs consumers make as well as the in-store advertising and promotions they encounter. After the shopping trip, AfriLista's would be asked to leave voice or video recordings answering key questions around the specific occasion or usage of the product, whether it lived up to expectations or fell short and why. More structured survey data can also be gathered through the app. After data and image analysis has been conducted, it is possible to recontact consumers via the app to probe for additional qualitative information surrounding issues pertinent to L'Oréal's business.

Additionally, L'Oréal sees the potential to increase AfriLab's footprint in SSA by extending the number of communities to other markets (e.g., Kenya is of particular interest), as well as increasing the number of

Copyright © **ESOMAR** 2023 CONGRESS 2023

members in each community to allow for quantitative studies with more robust sample sizes. These improvement to the AfriLab platform and community have, as an ultimate aim, to ensure the co-creation of products that matter and make a difference to African consumers, thereby addressing L'Oréal's business needs to create beauty that moves Africa.

About the authors

Kambe Mwaba, Head of Evaluation Intelligence, Research & Innovation, L'Oréal, Sub-Saharan Africa. Christine Laurenssen, Business Director Africa, Mobile Digital Insights, Johannesburg, South Africa.

Growing Up Together

Redefining motherhood as a transformational journey, not a role

Francky David Nathalie Coste

Introduction

This paper aims to shift perceptions of early years motherhood. Instead of seeing motherhood as a fixed role that we suddenly inhabit, we argue that motherhood is in fact a transformational journey—one that is full of ever-changing pressure, tensions and surprising new experiences. This research, conducted in collaboration between Lovebrands and Nestlé, has led us to another way of looking at motherhood: that it is not motherhood that defines the mother, but the mother who defines it for herself. Through sharing some of the insights from our work, we hope to build a greater sense of collective empathy with mothers of babies and toddlers worldwide today.

This paper shares key findings of an extensive, in-depth qualitative study: an online diary over three weeks, across seven markets (Brazil, China, Indonesia, Saudi Arabia, Mexico, the Philippines and the UK), interviewing a total of 200 mothers. We will take you through the transformative journey mothers go through, the types of pressures they are experiencing and the nine key tensions in their lives. In doing so, we draw on insights from the key output of our research: Nestle's *Toddler Reference Book*. This book offers a cross-category blueprint for Nestle's business, and has formed the basis of product innovations, revised pack designs and new communications.

These insights and implications could be applied across any brand seeking to connect with women in this stage of their lives. By understanding that each mother defines her own way to be a mother, by realising that there are as many ways to be a mother as there are babies, we can help free new mothers from the pressure to conform to certain expectations. Moreover, through this, they can more confidently build their own way to be, suited to their needs and those of their child.

Background

Today, in society, motherhood is widely seen as a role. There is growing recognition across cultures of the hidden emotional labour and domestic load that many mothers carry. Additionally, the sheer difficulty of raising small children, with tongue-in-cheek social media content pointing out that parents fulfil a job with no official description, no paid time off, no HR department to safeguard their well-being, as well as irrational small bosses. There's an emergent narrative in parenting culture which seeks to show empathy with mothers who feel under pressure: "self-care isn't selfish". This narrative sometimes alludes to the passenger safety demonstration on flights, where parents are instructed to put on their own masks first in case of an emergency, so that they can better protect their children. This metaphor for the experience of parenting

young children is accepted by many mothers around the world today. Of course, if I do not look after myself then I will not be able to look after my child. Nevertheless, there is still a problem with this idea. At a fundamental level, it suggests that mothers need to look after themselves primarily so that they can better look after their children.

This latter point comes back to the common perception of motherhood as a job, wherein we fail all too often to see mothers as complete individuals with more to them than cleaning diapers and navigating tantrums. It is convenient in research and marketing to reduce mothers to their roles as parents of young children, and to consider them solely through the lens of their parenting attitudes, behaviours and choice drivers. However, looking at motherhood as a role creates a barrier to real insight, and this in turn prevents us from truly meeting the needs of mothers today, because this limits our ability to understand a mother's real lived experiences. We are implicitly denying the complexity of real life as a whole, and can fail to understand the true needs and challenges that lie beneath the surface.

By considering motherhood as a specific additional role, we fail to identify the friction points: the challenge for mothers lies mainly in how they blend and combine motherhood with the many layers of their identities, as well as with their everyday lives. Thus, we run the risk of missing opportunities to meet those needs better, and to deliver the right solutions for them. What is worse: we can risk adding to that pressure, rather than meaningfully alleviating it. Instead, we need to build empathy for the rounded lives of mothers as fully dimensionalised human beings. We need to understand the deep changes that occur at a rapid pace in their inner selves, and the complexity of the pressures they are experiencing. Adaptation to parenthood (or parenting more than one child) creates profound changes in the mother's sense of self. These changes are never reconciled, because of the pace of change experienced in early years parenthood. Motherhood, specifically, is a transformational journey; along the way, we find much messiness and duality—i.e., conflicting ideas, turbulent experiences, constant learning and adaptation.

The pressures that mothers experience is fluid, from one day to the next, as well as from one stage of baby and toddlerhood to the next; even in a single moment, pressure can shift and morph. However, while the experience of pressure varies by individual and over time, it is clear from our research that a sense of pressure in early motherhood is widespread. Therefore, let's move away from "self-care isn't selfish", because of course it's not—motherhood is a selfless act. Let's drop the "ish" and instead re-focus on the self, in order to delve into what motherhood truly means today. These insights (and more) have been fed into Nestlé's business across product lines and categories globally, but we seek to share some of these learnings with the ESOMAR community. We believe that when we collectively see mothers as complete human beings, rather than as people merely fulfilling a role, we can be more empathetic to their needs and experiences. This, in turn will benefit us at a human level, as well as at a business level.

We will show you how our research has understood this motherhood journey, and what insights and implications could be applied across any brand seeking to connect with women in this stage of life.

What we did

Nestlé commissioned this research in order to develop a deep, contemporary and exhaustive understanding of mothers and toddlers aged one to five years old. The intention was to put together a Toddler Reference

Book that all relevant Nestlé brands could access across different categories. The aim was to map out in intricate and intimate detail the one-to-five-year-old toddler and parent journey, to deep-dive into the overall journey and daily life, to identify the needs, the high points and pain points, from overall parenting to nutrition to milk usage. This work set out to inform communications and to identify opportunity territories, and related needs gaps for products and services.

We reached these key learnings through an extensive, in-depth qualitative study across seven markets: Brazil, China, Indonesia, Saudi Arabia, Mexico, the Philippines and the UK. Mothers were asked to contribute to a three-week online individual diary, with a minimum of 12 hours' contribution time for each participant across the three weeks. Therefore, this was a total of 200 mothers and their toddlers, as well as some 2,400 hours of mothers' visual and textual input to analyse, digest and interpret. The individual diary approach enabled us to create a deep connection with our participants, in order to reveal and truly empathise with their lived experiences. Crucially, our research considered our participants holistically: we explored not just their relationships with and views on the needs of their children, but a myriad of other aspects in terms of what makes them who they are as people; i.e., their hopes, fears, hidden tensions and unspoken inner conflicts. We gathered their thoughts on higher-level subjects such as the pandemic and environmental sustainability, delved into their relationships with social media and had conversations around themes such as health, bonding and socialising. Moreover, we left space open for mothers to express what really mattered to them.

What we found out part 1: Redefining oneself as a person through the motherhood transformative journey

Through this research, we have understood the depth and implications of the transformational journey of early motherhood. Leading to a fundamental re-orientation in mothers' assessments of the world and sense of self.

Reshaping her identity, and making do with reality

One of the key identity shifts that mothers witness is how much motherhood becomes core to who they are, and this can come as a surprise for some! While some are very happy to be "all mum", others want to shout to the world that they are not "just a mum". Many are actually struggling with the exact perceptions we are trying to address here: that they are seen by people around them as "just a mum". Thus, this starts a fight to preserve personal space, whether it is via going to work, pursuing hobbies or simply going out with friends. Whatever the case may be, these ideals come head-to-head with the complexities of day-to-day life: access to medical care, financial resources, impact of working status on everyday life, health complications, not to forget the impact of the child's character.

Therefore, in addition to women wondering how they can maintain a sense of self when they have little expendable time and under constant and shifting pressure, they also have to work out how to manage conflicts between their ideals and the realities of life.

Transforming herself through her relationship with her child in her many roles

There is never a steady state of being a mother. It is an experience of flux from one day to the next, governed by the developmental stage and moods of the child, curve balls such as toddler illnesses, milestones to navigate (teething, weaning, crawling, walking) or shifts such as returning to work, to say nothing of the unpredictable flux of sleep deprivation. A mother becomes a mother through these experiences, as well as through the relationship(s) she develops with her child(ren). As the child develops and grows, so does she. Independently of how much mothers use Google, they all tell us that they learn to be a mother as they go along, through processes of trial and error.

Thus, rather than motherhood being a static role, in fact the mother needs to adopt a wide range of roles, and different ones at different moments. As she is most commonly the baby and/or toddler's primary provider, in charge of all aspects of the their life, she needs to adapt to the fast-changing needs of her child. As the toddler's protector, she needs move from the first year where she can fully physically protect her baby, to a stage where she needs to find indirect ways to protect her toddler as s/he goes to playschool and (eventually) school. Meanwhile, as the toddler's playmate, she adapts various games and activities to her child's age and character, in terms of types, length and/or objectives. Always seeking joy and togetherness, but also seeking to avoid boredom and (for some) thinking about the educational values of gaming. As one of her child's first friends, she will make sure she remains a friend while still trying to guide and teach basic skills or rules.

Since mothers both guide and teach their children, they are often torn between imposing rules and avoiding conflicts to preserve connection and love. Also, as the toddler's communication evolves from crying to talking, mothers learn to read the signs and to communicate with them. It is no wonder that many mothers tell us that they are surprised by what they have been able to accomplish, and are proud to have risen to the challenge! Furthermore, as she learns and applies herself in her many roles and interactions with her toddler, a mother's sense of self takes on a new form.

Reconsidering the wider world

The mother of a young child will look at the world around her with fresh eyes—a reconsideration of what really matters in a wider world. The bigger world is no longer just a place that she inhabits; it's also the place that her toddler will grow into. The wider world is both something her toddler will experience now and a source of possibilities for her/him in the future. Additionally, whilst mothers imagine that the big wide world is full of opportunities, thinking about what it means for her child today and in the future also brings with it feelings of pressure and insecurity.

The toddler will evolve from a baby she can easily protect at home to a child that other people will care for (with the risk of others not doing as well as she does—at least not in her eyes), to a child socialising with other kids (and not wanting to share her/his toys). Further, the child will go to school where they may be exposed to the new risks such as bullying, temptation and/or bad influences. Her instinct to protect needs to adapt and drastically shift as the child ages, leading to a reconsideration of the world through a new spectrum: protection.

She will also look at the world as an opportunity for her child to grow, socialise and succeed. As the child evolves, she will scrutinise potential socialising issues and hope for a confident child. For all mothers around the world today, good social skills as a toddler in the early years are seen as a key factor in the child's success and happiness as they grow up.

Reassessing the meaning of time

Suddenly, time is very short for a mother, but her baby's future is her priority and this starts now. Her whole relationship with time changes-there are 20 hours during the day, the toddler takes up 15 of those hours, and perhaps she works eight or more-something is not quite adding up here! Thus, whilst going back to work can be necessary, desirable, essential for oneself and important as a role model for the child, it can also create a lot of anxiety of things to come. In addition, the mother now takes a more long-term approach to time. She is really aware that what she does now will impact her child's future in years to come. She will now consider her child in the immediate future, seeking health and safety, wanting her/him to be full of life and ready for school. In the medium-term, she will wish to see her child develop a "positive" character, be self-confident, polite, amenable and display empathy, while focussing on their schooling and studies. Finally, in the long-term, she has already considered what success and happiness could look like for her child. Therefore, she will have re-shaped her identity, considered the gap between reality and ideals, transformed through the relationship with her child in her many roles, changed her relationship to time and, most importantly, developed a strong emotional bond with a new human being. This transformation occurs in the eyes of others-i.e., she now feels others are looking at her as being "just a mum"-but "becoming a mum" is a huge and fundamental shift with her reshaping the essentials of who she is and how she lives and loves.

What we found out part 2: Under pressure

Our research also demonstrates the different degrees of pressure that mothers are under. The more intense the pressure, the less joy and happiness they experience. Nonetheless, one thing is for certain: the pressure surrounding women who become mothers is far from waning. Being simultaneously more connected, more individualistic and forever more inclined to impose its diktats, today's society is exerting heavy expectations on the shoulders of women who are constantly seeking to get their bearings among a growing number of constraints.

Needless to say, depending on their personality and past experiences, women also place high demands on themselves to ensure their child is happy, and integrates and succeeds in an increasingly complex world. In 2021, Nestlé released its Parenting Index—a survey investigating how easy or difficult it is to be a parent today in various countries. The results of this index corroborate what we found during our research (see Figure 1), by highlighting a range of pressures from the role of financial constraints and access to health and well-being resources, to the importance of work and having a support system, without forgetting the all-important "child factor".

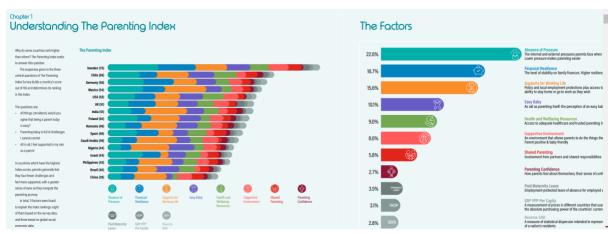


Figure 1

In mapping mothers around the world, the way in which mothers feel the pressure they are under is the key dimension around which they differ. Pressure is a polymorph notion, coming from a myriad of extrinsic and intrinsic factors.

Pressure from extrinsic factors

Work/life balance, society, family and peer group

It can be difficult juggling work and home life demands, being confronted by judgemental opinions on social media and feeling stigmatised for one's choices by friends or family. The country and area she lives in can add additional pressures, linked to fears around proficiencies of the various health systems, educational systems or environmental factors. In countries or areas where there are more pronounced issues across any or all of these factors, this can amplify her own sense of pressure in creating a safe and positive learning environment for her child.

However, culture also strongly impacts on the sense of pressure, especially where society imposes a strict motherhood model. While some mothers might feel comfortable with a normative model of motherhood, others may resist it and find it inhibiting, thereby creating tensions that some mothers really struggle with. In some cultures, there is a dominant expectation that mothers devote themselves exclusively to their child and observe set norms around parenting. In these cultures, it follows that a child's behaviour will directly impact on how good a mother—hence a person—they are seen to be. In other cultures, mothers suffer from the "super mum" syndrome: they can feel they are expected to juggle work, motherhood and their role as a spouse, all while keeping up with their social life.

Mothers are also constantly being judged by their close circle, whether that be friends or family members. They are judged on what they do and on what they don't do; on the boundaries and rules they put in place; on their attitudes and approaches to feeding; on how they get their child to sleep; on how they play and on how they teach. When going through difficulties, if a mother dares to seek advice, there will inevitably be a variety of view-points, often conflicting, for her to consider.

Social media pressure

Social media has not helped to bring a more balanced view of motherhood that would comfort mothers. There is clearly a gap between the picture-perfect views on motherhood shared online and the harsher reality of motherhood, which can lead to a sense of inadequacy among some. In addition, it is top-of-mind to all mothers that their child will need to perform in a competitive society. Thus, whether mothers like it or not, whether they try to preserve early childhood from excessive competitiveness, they still feel it is their role as mothers to prepare their child for the future—and it is a demanding world. While some will start taking this for granted from birth, all feel the pressure when their child gets closer to starting daycare. In this way, mothers are torn between preparing their child for the future and protecting them from an adult world they will unavoidably have to confront at some stage.

Work/life balance

None of the mothers we talked to felt they have achieved work/life balance, and a vast majority are clearly dissatisfied with their work/family balance. They are forced to tread a fine line, which is often thought to be simply impossible to avoid. Thus, the term "work/life balance" can feel like a misnomer to mothers of toddlers, because there is very rarely a sense of balance—just stressed juggling.

There is a widespread sentiment amongst the women we spoke to that they feel as though they are not doing quite well enough in their jobs, or in managing their households, or in parenting. Let alone in looking after their health, relaxing, investing time in their relationships (i.e., with friends, families and/or partner). Many report simply too many demands on their time, and a struggle to prioritise and draw boundaries. Working places a further mental and emotional burden on their daily lives, especially if they do not do so fully out of choice. Indeed, some women must work to survive financially, thus adding to their daily concerns. On the other hand, some women work to achieve personal emancipation and preserve a degree of independence, yet feel guilty about not devoting more time to their child and may suffer from the separation entailed. Most of those who are not required to work due to financial circumstances, or who feel the role of a mother is to be devoted to child-care, complain of solitude and a form of frustration. Part-time and remote jobs come across as a good compromise and are highly sought after, but remain difficult to obtain in most societies.

Support systems

In relation to the impossible satisfaction in terms of work/life balance, this study sheds light on the fact that financial, physical and psychological support, as well as time spent with a young child and assistance with their upbringing makes all the difference during the first few years of motherhood. This simply can make or break a mother's well-being, happiness and ability to look after her child with confidence. In Western countries in particular, families frequently end up divided, resulting in numerous mothers being left without support, as opposed to their counterparts in China and Brazil, where grandparents play a crucial role and help ensure that women may continue working and have some time for themselves.

Pressure from intrinsic factors

Pressure from the mothers themselves...for a good reason

For all women, independently of their personality and past experiences, the very function of motherhood is inextricably linked to a heavy sense of responsibility that comes with wanting to become the best mother they can be. No pressure! Most mothers commonly remain the primary care-giver, the protector, the provider of unconditional love, the best friend and playmate, the main confidant, the guide, the teacher and the family anchor. Furthermore, they want to be their best selves in all of these roles; in this way, whatever the meaning of a "good mother" is, there is always pressure.

While the role of the father is slowly changing, looking at the world overall, "the role of dad" (if present) predominantly remains traditional, especially if the mother is not working. His role is described most often as "he helps me" rather than "we share it", especially in early infancy. Many claim this is slowly changing, and we are seeing a more balanced role emerging in most countries among higher socio-economic grades, with the pandemic being an awakening to the fact that fathers could play more of a role in their children's lives. While the pressure points are different for each mother and occur in different proportions, it is obvious that for all there is a need to alleviate this pressure. This sense of "never doing quite well enough" can really damage their self-esteem, but "never doing quite well enough" by whose standards? Here, we see the pressure mothers experience in trying to live up to impossible ideals projected on to them by wider culture.

While it might be more difficult to act on extrinsic pressure factors like the state of the country, some action can be taken to alleviate the pressure linked to general attitude and judgement. A shift in attitudes needs to occur with understanding and empathy at the heart of it. As marketers, understanding the pressures mothers face means understanding the real needs of mothers in today's world. Thus, we cannot only better meet these needs, but hopefully also alleviate some of them. Simply put: let's be more empathetic towards mothers as both people and brands.

What we found out part 3: Some tensions-actually nine!

This research has helped us to summarise the tensions mothers are under, and some of them we have already touched on. The nine key tensions identified apply globally—if your brand targets mothers of toddlers, you should find one or several of these points of particular relevance to you. That said, each mother is unique; some of these tensions will be more or less relevant, and more or less important.

- 1. Mothers are seeking independence in order to preserve a part of themselves, for their own well-being and self-esteem, but also to demonstrate to their kids the value of self-care and independence. For this, they have to delegate some childcare in the early years, but this means losing control over the way they want their child to be educated. Therefore, they have to compromise on their preferred approach to education. This is especially true in China, where the gap between the grandparents' view on education and that of new parents is the broadest.
- 2. For working mothers, there is the frustration of not spending more time with their toddler. Working mothers around the world either have no other choice financially and/or proactively choose to work because it gives them some independence, and helps them to keep in touch with the wider world. This unavoidably puts pressure on their schedule with many working mothers wishing they could spend more time with their little ones. The "in-between" solutions, such as part-time or even working from home, are not widely available in many countries today.

- 3. There is no doubt that all mothers want their kids to develop well every step of the way. However, it is not that easy, since children are unique. Some develop faster than average, others at their own pace, so mothers need guidance. They need to be reassured that their child is developing well physically, but they also wonder how to monitor and develop the all-important mental and social skills, as well as how to establish rules with their toddler.
- 4. Most mothers face the following dilemma: Should I let my toddler grow at their own pace or push her/him to better equip her/him for the future in order to get an early advantage in life? Some mothers adopt a more a child-led parenting style, while others find a parent-led approach to be more appropriate. This depends on what the dominant parenting model is in their country, but also on their conviction and/or instinct. That said, the closer the child is to starting school, the more top-of-mind this question becomes. The result of this pressure can influence the choice to offer the child extracurricular classes, and even filters down to the types of games and leisure activities parents tend to favour.
- 5. All mothers aim to be a loving teacher. They aim to establish boundaries and good behaviour, but it can be difficult when the toddler does not listen or pushes the boundaries. We all know about the two-year-old tantrums, for instance! This can lead to conflict and upset, which is heart-breaking for the toddler and for the mother. Thus, a mother's concern is how to help her child learn what is right and wrong, while maintaining a close loving connection.
- 6. All mothers aim to give all their toddler the attention she/he needs, and know that patience is required; in fact, patience is seen as an essential quality to being a good mother. Still, most admit it can be really tough, especially with difficult behaviour, such as tantrums, anti-social behaviour and rule-breaking. Therefore, mothers can lose patience and get irritated, unpleasant or even physical. They know it is not right, but there are times when they simply cannot help it. Most, however, regret it afterwards and feel that they have failed to be "a good mum".
- 7. As mentioned earlier, mothers feel there is the ongoing need to fight the pressure from other, be that from society and the extended family, or in terms of ongoing comparisons and contradicting advice, both on and offline. This can be quite overwhelming, and mothers therefore need to build the confidence to deal with this.
- 8. Despite all recognising that their child is unique and developing at her/his own pace, there is always a motherly fear of their child is lagging behind. On the one hand, it is so exciting for them to see their toddler grow, discover the world and gain new skills. On the other, this comes with concerns that her child might fall behind with their physical, mental or social development, and that this can have an impact on their future. Once again, mothers are always short of the reassurance that things are going well, and that their child is on track.
- 9. Mothers feel it is their duty to protect their child so she/he can feel cared for, and learn the right values. However, as the child is becoming more exposed to wider society, it becomes more difficult to protect them against the dangers and temptations of the outside world, such as bullying and bad behaviour. This tension is clearly more palpable in some countries than others, depending on the level of safety concerns.

We hope this gives you an interesting structure to help you navigate the large and complex emotional map of motherhood.

Conclusions

- 1. Here, we recognise that there are myriad ways to be a mother, informed not only by the role mothers are fulfilling but also by who they are, who their child is, as well as by a wide range of contextual factors such as their culture, family support system, financial circumstances, employment situation and much more. There are 134 million of babies born every year (4.2 per second!), and there are 134 million ways to be a good mum.
- 2. Further, crucially, we have identified that motherhood should not be seen as a fixed role. It should be seen as a part of our identities, rather than the whole; i.e., as a fluid part of our identities.
- 3. We have understood that mothers often struggle to live a serene and positive motherhood, because of the material pressure, but mainly also because of the psychological pressure to be "a good mum". Expectations are high, established as if motherhood is the core (even only) job to be done, and everybody has a word to say about it. There are counter narratives out there, calling out the impossibility of these ideals for mothers today, but the tired and stressed mother may not know where to turn to listen to them, or have the confidence to do so. By understanding the pressure mothers are under, we can make sure that we are not adding to the pressure, and we can potentially even aim to alleviate it.
- 4. Thus, mothers can feel more confident in their ability to build their unique path with motherhood, make their own choices, suited to their individual needs and wants—and those of their toddlers. We can simply be more empathetic towards mothers, as both people and brands.

Impact on business

This revelatory work has enabled Nestlé to further plan the optimisation and expansion of its line of products and services, to better serve children and their parents in this critical phase of toddlerhood, where good nutritional habits are not always present, picky eating is a reality for many and nutritional deficiencies are frequent. This work has also been informing how the business could optimise its interaction with its target audiences across categories and brands, through better communication and touch-points. By the time ESOMAR Congress: Super Charge takes place in September 2023, we will be able to share a few examples of product innovations, like the launch of Ascenda, revised pack designs or communications derived from the *Toddler Reference Book* work.

About the authors

Francky David, Global Consumer & HCP Insights Manager, Nestlé, Switzerland. Nathalie Coste, Founder, Lovebrands, France and the UK.

When Sparks Fly: Thunberg vs Tate

A story on trust, reputation and responsibility

Anneke Quinn-de Jong

Introduction

At the close of 2022, a blaze of sparks ignited as Greta Thunberg and Andrew Tate engaged in a head-to-head clash on Twitter.

"Former kickboxer, professional misogynist and online entrepreneur Andrew Tate, 36, sent a boastfully hostile tweet to climate activist Greta Thunberg, 19, about his sports car collection. 'Please provide your email address so I can send a complete list of my car collection and their respective enormous emissions,' he wrote. He was probably hoping to enhance his status by mocking her climate commitment. Instead, she burned the macho guy to a crisp in 9 words. Thunberg replied: 'yes, please do enlighten me. email me at smalldickenergy@getalife.com.' Her reply gained traction to quickly become one of the top 10 tweets of all time", (Solnit, 2022).

Shortly after this exchange, both parties got arrested in unrelated cases to the above event. While these two individuals couldn't be more different, being arrested is one thing they have in common. Nonetheless, Thunberg and Tate share more commonalities; they are both public figures with reputations that influence public opinion on a large scale. Moreover, they have both utilised social media to express their views and engage with their followers, challenging mainstream narratives and norms. In this paper, I will unpack the concepts of reputation, trust, influencing and public opinion, drawing a parallel between individual reputation and brand reputation, ultimately calling out the responsibility that comes with being a public entity.

Reputation, influencing and public opinion

Let's first of all have a closer look at the meaning of each of the relevant terms. This is what the Oxford dictionary gives us:

opin*ion

A view or judgement formed about something, not necessarily based on fact or knowledge

pub·lic opin·ion

Views prevalent among the public

repu^{*}ta^{*}tion

The beliefs or opinions that are generally held about someone or something

In flu ence

The capacity to have an effect on the character, development, or behaviour of someone or something, or the effect itself

While these concepts are intriguing on their own, the true fascination lies in how these terms' dynamics unfold in reality. The connection between reputation and influence is undeniable; a strong reputation provides a solid foundation for effective influencing of public opinion. The glue that holds it all together is trust; trust serves as the crux of emotional bonds and loyalty, building reputation and, therefore, the ability to influence. Applying this to the examples of Thunberg and Tate, we can observe that both of them have built strong, very public reputations, and by doing so have created a platform to influence. In this paper, I will refrain from any personal comments on Andrew Tate, both as an individual and in his actions (though I can guarantee you I have a strong opinion on him). Nevertheless, the fact is that his reputation, albeit not necessarily positive, creates the ability to influence, and that's exactly what he has been doing—appealing particularly to the mind-sets of teenage boys. Similarly, Greta Thunberg has used her reputation and has had a significant influence on society. Her ability to galvanise and empower young individuals to speak up and take action on climate change has been particularly profound.

Thus, Thunberg and Tate have both been incredibly good at appealing to certain groups of people, tapping into two themes that are currently dominating societal discussions. For the purposes of simplicity, I will refer to these big, complex themes in broad terms: climate and gender. Greta Thunberg's activism on climate change has sparked discussions, inspired movements and driven change in various ways. Andrew Tate's appeal to "male youth" drivers (fame, fortune, freedom, fight and fun) has directly played into the "alpha male" code of teenage boys. His opinions and advice on masculinity and self-improvement have (sadly) given hope to a relatively large following (for a very good analysis on this, I refer to Steven Lacey's post from the Outsiders on LinkedIn). What is the reason for bringing this all up? Well, just like Thunberg and Tate have a reputation and the ability to influence, so do companies.

Company reputation

A positive company reputation builds trust, which is a fundamental driver of long-term consumer and customer relationships, fostering loyalty. Reputation has a distinct correlation with business outcomes. A strong positive reputation stimulates:

- Willingness to invest/partner with (corporate brand stakeholders);
- Willingness to buy/recommend (consumers / customers);
- Willingness to work for ((potential) employees).

This makes reputation extremely important for businesses and organisations. Figure 1 illustrates the benefits of an excellent reputation, and the cost of a poor reputation:



Figure 1 (RepTrak, 2023).

While company reputation extends to the overall character and behaviour of the organisation as a corporate entity, brand reputation is closely tied to the perception of the brand's offerings. Both aspects are critical for building trust, loyalty and a positive image in the eyes of consumers, investors, employees and the public. Branding is typically the reputational arena where businesses can exert most control. This is where it gets really interesting; we are at a time where businesses have never been more central to society and brands have never been more central to business. According to RepTrak (2023), one of the most notable developments is the ever-growing ask from "the public" for brands and/or companies to have a point-of-view:

- 51% of the public believes it is essential for corporations to provide both actions and words in response to cultural issues;
- 63% of global consumers prefer to buy goods and services from companies that stand for a purpose.

The Edelman Trust Barometer even goes as far as to say that societal leadership is now a core function of business. They believe that it is the ultimate currency in the relationship that all institutions—business, governments, NGOs and media—build with their stakeholders. The figures and stats that Edelman portray in their 2023 *Trust Barometer Report* are staggering; businesses are the only institutions that reach the trust threshold of 60 to 100, making businesses the only trusted institutions. Thus, as trust in governments continues to spiral, we see an even greater expectation of businesses to lead; people want more business leadership, not less.

Societal leadership

The Edelman Trust Barometer report talks about a fundamental low in trust in societal institutions; "a lack of faith in societal institutions triggered by economic anxiety, disinformation, mass-class divide and a failure of leadership has brought us to where we are today—deeply and dangerously polarized" (see Figure 2). Amidst this weakening social fabric, business is the only institution seen as competent and ethical (see Figure 3).



Figure 2

Business Only Trusted Institution

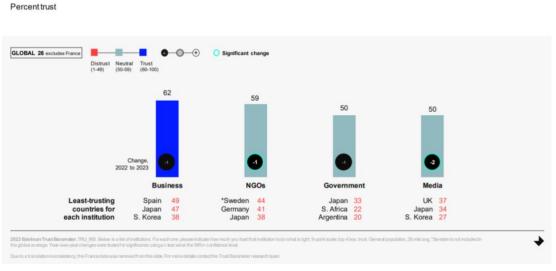


Figure 3

Given its status as the most trusted institution, business carries the weight of higher expectations and greater responsibility, and as we saw earlier the majority of the public want corporations to actively speak out and act on socio-cultural issues. In short, societal leadership is the new responsibility of brands. On paper, it seems pretty straightforward; invest resources in building a good reputation and take a point-of-view on topics that matter. It answers the ask from the public to have a point-of-view, it creates talkability and, in the long-term, it builds a strong reputation which generates trust, creates loyalty and eventually results in better business outcomes. Easy, done!

The tricky bit

However, as we have seen with Thunberg and Tate, just like the potential to influence is big, the potential to (mis)use trust is major and this in turn comes with a huge responsibility. If you, as a brand or company are taking a stance on cultural issues, who and what are you trying to influence? Do you even know what the reach and risk of the influence is? How are you sending the right message? Even more importantly, how are you following through on your promises? It is a topic that occupies the mind space of many a brand manager, particularly because the reaction of "the public" is merciless and can reach huge proportions in no time. We only need to think about the Pepsi ad in 2017, which featured Kendall Jenner and more recently the Bud Light collaboration with Dylan Mulvaney to understand the scale of public backlashes.

The 2017 Pepsi ad featuring Kendall Jenner was an attempt to reach out to millennials, trying to project a global message of unity, peace and understanding. However, following intense social media criticism the ad was pulled. A spokesperson declared: "Clearly we missed the mark, and we apologise". What was the controversy? Both Pepsi and Jenner where accused of trivialising Black Lives Matter and police brutality. The ad was widely seen as an example of "cause marketing" gone wrong (Handley, 2017).

A more recent example is this of Bud Light. Across the US, Bud Light sales have plummeted since April after a furious conservative backlash to the brand's collaboration with transgender TikTok personality Dylan Mulvaney. Kid Rock, the rap-rock star, filmed himself shooting cases of the beer. Ron DeSantis, the Republican presidential contender, told customers at the bar of a Veterans of Foreign Wars post in Nevada he would "serve them anything—except Bud Light. I can't do that". Furthemore, On August 10th 2023, parent company Anheuser-Busch InBev revealed the financial toll: the Belgium-based group said its US revenues had fallen by 10.5 per cent in the second quarter (Financial Times, 2023).

There are also some examples of "taking a stance" that have had positive societal and business impact.

For instance, Nike's collaboration with Colin Kaepernick is a prominent example of a brand aligning itself with a social and cultural issue. In 2018, Nike unveiled an advertising campaign featuring Colin Kaepernick, a former NFL player known for his protests against racial injustice by kneeling during the national anthem before games. This collaboration generated significant attention and discussion. Despite initial speculation that the campaign might negatively impact Nike's sales, the company reported an increase in sales following the campaign's launch. The campaign resonated with many of Nike's target consumers, who appreciated the brand's stance on social issues (The Guardian Sport, 2019).

Additionally, in 2016, Heineken-owned Tecate beer took a purposeful approach in Mexico that was both commercially and societally effective. It implored Mexicans not to buy its brand if they were violent against women. In its campaign to end violence against women, the brand used its reputation as a "man's beer" to speak out against domestic abuse. The stance Cerveza Tecate takes demonstrates how a company can use its influence for social good (Aitken, 2018).

These are very powerful examples that illustrate the impact (both intended and unintended) that "taking a stance" or "purpose" can have. Thus, how can you effectively manage brand reputation and ensure that your words and actions yield both a positive societal impact and a positive business impact?

Managing brand reputation

Brand reputation management has evolved from a reactive approach to a proactive and ongoing effort. It's no longer just about mitigating damage; it's about building and maintaining a strong, positive reputation that aligns with the values and expectations of modern consumers. This means that there's a lot for brands to consider. First of all, there is the growing demand for brands to actively engage in societal matters. Second, we saw in the examples above that the very act of taking a position can elicit powerful responses from the public; it can either generate polarised reactions (think of the Bud Light example), and/or be dismissed as green or rainbow washing. Third, there still is that reactive element of brand reputation management; there are unanticipated events that can potentially bring major blows to a brand's reputation.

A brand that recently has gone through some stormy weather is of course Philips. In June 2021, after discovering a potential health risk related to the foam in certain CPAP, BiPAP and mechanical ventilator devices, Philips Respironics issued a voluntary Field Safety Notice (outside US) and a voluntary recall notification (US only). Share prices plummeted after this. Whilst patient safety was and is the most important focus for the company, we are obviously also asking ourselves the question what impact this all has on our reputation. The foundation of trying to understand the dynamics of our reputation lies in data and insights. Our Brand & Customer Experience Insight Team is closely collaborating with our Brand Strategy Team in a consolidated effort to keep the finger on the pulse, and provide insight that feeds into brand strategy. Over the last years we have stepped up our efforts to connect with our customers and understand the factors that influence brand perception and, ultimately, brand performance.

Our brand and CX insight programmes

To this extent, we run two major insight programmes:

- 1. Brand strength (brand strength analysis is based on an evaluation across 10 factors that constitute a strong brand);
- 2. Customer experience (NPS).

Through these programmes we connect with 1,000s of consumers and customers all over the world. The first programme gives us a view on our brand performance in a competitive context, the second gives us first-hand feedback from our customers on their experience with us. This way, we continuously collect and generate consumer insight to inform our brand strategy. Whilst both programmes track the performance of key KPI's, I would like to stress that the real value is not in the actual KPI's, but in two crucial and

interrelated elements that form the fabric around these KPI's. Without these two elements, there is little value in performance tracking:

- 1. The diagnosis that sits underneath (the why);
- 2. The ability to take action based on the data and insight:
 - a) Actionable insights;
 - b) An organisational structure and/or process that enables us to act.

With regards to the latter, we like to refer to "closing the inner and outer loops". The inner loop is being able to respond to and solve individual cases (case management), which is particularly relevant for our NPS programme (e.g., if a customer leaves feedback regarding a health risk, this is immediately turned into a hot alert that needs to be responded to as soon as possible). The outer loop refers to making customer centricity and continuous improvement the beating heart of the organisation. The outer loop is a macro level process that seeks to make systemic change. It involves distilling bigger themes that need to be addressed by the company. Whilst that all may sound quite obvious, the reality shows that it is not always straightforward.

Our learning

In our efforts to create true customer centricity, we have encountered three things that are worth calling out:

- 1. Translating abstract data—no matter how interesting—into clear actions, is an underserved job. We, as an industry need to become much better at this; agencies need to put more effort in the "so what", and clients need to become much better at offering business context.
- 2. With a growing focus on performance management and a growing array of tools that can quantify everything, we run the risk of being blind-sided by numbers. Whilst numbers are essential to track performance, we need to continuously challenge ourselves and remind ourselves—and all those around us—that there are people behind the numbers.
- 3. You can measure and listen all you want, but if there is no solid organisational backbone to respond, all the listening falls onto deaf men's ears. Having the right infrastructure to respond is crucial, and we should have the courage to stop collecting if we can't respond.

Therefore, my call-out to all client and agency businesses is:

- Stop just collecting and start listening;
- Translate what you hear into actions and be prepared to act;
- Take responsibility for your words and actions.

With respect to the last point, we all need to be aware of the complexities that come with a greater responsibility and an increasingly polarised world.

Navigating a polarised world

Businesses' societal role is here to stay. As the most trusted institutions, there is an expectation to leverage comparative advantage to inform debate and deliver solutions across topics such as climate, diversity and inclusion. This marks a significant change for the role of brands. As Manfredi Ricca from Interbrand puts it very clearly: "Brands need to create a functional connection with their audiences, they need to create an emotional connection, but also increasingly they need to create a moral connection". Figure 4 makes this even clearer.

68%

Of people believe that brands celebrating what brings us together and emphasizing our common interest would strengthen the social fabric (Edelman Trust Barometer).

Figure 4

Thus, whilst we should continue to put our efforts on closing the inner and outer loop, should we also start looking at a third loop beyond that: the moral loop. This starts with listening to what society is saying, engages with social issues and ultimately strengthens the social fabric. Is that a responsibility we have to take to avoid further polarisation? The more cynical part of me does wonder: can a business avoid being political (and therefore stimulate polarisation) when it addresses contentious societal issues? It is something to keep considering. However, most of all, I am optimistic and excited about the role that brands can play and am hopeful that humanity and empathy will prevail in these efforts.

Referen	ces									
Aitken,	L.	(2018,	May	3).	Don't	buy	our	brand.	WARC.	Available:
https://www	v.warc.c	om/newsan	dopinion/	opinion/d	ont-buy-c	our-brand/e	n-gb/270	2		
Financial ⁻	Times. ((2023). Bud	Light tra	ans conti	roversy c	omes amic	d shifting	US beer	tastes. Finar	ncial Times.
Available:	https://w	www.ft.com/	content/d8	33cc096-	2bfc-402	1-961e-b10	c46308f5	59		
Francis, E.	. (2016,	August 14)	. 'Cervez	a Tecate	' Defines	Men By H	ow They	Treat Wor	men in This C	commercial.
Trend Hur	nter. Ava	ailable: http:	s://www.tr	endhunte	er.com/tre	ends/cervez	a-tecate			
Handley, I	L. (201	7, April 5).	Kendall	Jennar's	s Pepsi	ad pulled	after T	witter back	dash. CNBC	. Available:
https://www	v.cnbc.c	om/2017/04	/05/kenda	all-jenner	s-pepsi-a	id-causes-t	witter-sto	rm-labeled-	-	
disrespectf	ful.html#	:~:text=The	%20ad%2	20was%2	20an%20a	attempt,the	%20mark	%2C%20a	nd%20we%20	Japologize.
Heineken.	(2017,	December	14). TE	CATE, fo	or a Mex	xico withou	ıt violend	ce against	women. The	e Heineken
Company.	Av	/ailable:	https://v	www.theh	neinekend	company.co	m/our-su	ıstainability	-story/our-pro	gress/case-
studies/tec	ate-mex	cico-without-	violence-	against-w	vomen					
Lacey, S.	(2023).	Why do wo	rking-cla	ss boys	adore An	drew Tate	? Tate is	horrible, b	out he works	on multiple
levels.	1.	D	&	is	m:	ainstream.	[Po	ost] L	inkedIn.	Available:

Philips. (n.d.). Voluntary Recall Information: Philips Respironics Sleep and Respiratory Care devices. Philips.

https://www.linkedin.com/feed/update/urn:li:activity:7019369678699384832/

Available: https://www.usa.philips.com/healthcare/e/sleep/communications/src-update

Copyright © **ESOMAR** 2023 CONGRESS 2023

RepTrak. (2023). 2023 Global RepTrak 100 Most Reputable Companies. Available: https://ri.reptrak.com/hubfs/GRT2023_X%20(5).pdf

Solnit, R. (2022, December 31). Greta Thunberg ends the year with one of the greatest tweets in history. *The Guardian.* Available: https://www.theguardian.com/commentisfree/2022/dec/31/greta-thunberg-andrew-tate-tweet

The Edelman Trust. (2013). 2023 Edelman Trust Barometer: Global Report. Available: https://www.edelman.com/trust/2022-trust-barometer

The Guardian (2019, September 16). Nike's 'Dream Crazy' advert starring Colin Kaepernick wins Emmy. *The Guardian Sport.* Available: https://www.theguardian.com/sport/2019/sep/16/nikes-dream-crazy-advert-starring-colin-kaepernick-wins-emmy

About the author

Anneke Quinn-de Jong, Head of Brand & Customer Experience Insight, Philips, Amsterdam, The Netherlands.

Can AI (Compute Vision) Help Us to Evaluate Creatives at Large Scale?

A research framework for meta-analysis of video ads by combining machine learning and human encoding

Minh Nguyen

Abstract

Can artificial intelligence/machine learning help us define what bad or good ads are in terms of driving business results? We demonstrate a hybrid methodology of computer vision and human encoding to conduct large-scale creative meta-analysis at a low cost. We also show how to design good prompts (input into a Generative AI model) to generate high-quality advertising. This new approach has the potential to help advertisers generate thousands of creatives to test for their campaigns. This could lead to significant improvements in advertising performance and ultimately help businesses achieve their marketing goals.

Introduction

Who isn't sick of bad ads on the internet? A HubSpot Research study¹ of ad-blocking tool users found that 77% agree with the statement "I wish there were a way to ad-filter instead of ad-block completely". This indicates that consumers do not hate ads; they simply hate bad ads. Bad ads can be irrelevant, annoying or simply poorly created. What does this imply for advertisers? Even with a perfect media plan, bad creatives can have a negative impact on campaign success. It not only creates a bad experience for consumers, but it can also damage the brand. It is critical for every advertiser to know what creative elements or patterns can help drive brand performance or direct sales/install response.

Creative lab tests with eye-tracking glasses have been used to learn which creative features drive ad engagement. In these tests, people are invited to a lab and asked to watch ads while wearing an eye-tracking device. The device tracks where people look on the screen, and the data is then analysed to see which creative features people are most likely to look at. This can help advertisers to understand which features are most effective at grabbing attention and driving engagement.

However, lab tests are expensive and time-consuming, and they can only be conducted with a limited number of people. Another approach, A/B testing, is more scalable, but it can be difficult to run A/B tests on thousands of creative variations. In A/B testing, two versions of a creative are shown to different groups of people, and the results are compared to see which version is more effective. This can be a very effective way to test different creative features, but it can be difficult to manage and analyse the data when there are thousands of variations to test (The number of variations needed to be created is two to the power of n, where n is the number of creative features).

In order to have practical application in business, creative analysis has to solve the following three problems: i) scalability: ability to scale to thousands or millions of creatives; ii) cost efficiency: analysis cost must be

 $^{^{1}\ \}text{https://blog.hubspot.com/marketing/why-people-block-ads-and-what-it-means-for-marketers-and-advertisers}$

reasonable to accommodate for thousands of creative across many industries and countries; iii) compelling: the analysis outputs must be compelling and actionable for creative directors, producers and advertisers.

Generative AI is a rapidly developing field that has the potential to revolutionise the advertising industry. By creating unique and engaging content, generative AI can help brands stand out from the competition and connect with consumers on a deeper level. Here are some of the ways that generative AI is being used in advertising today:

- Creating personalised ads: Generative AI can be used to create personalised ads that are tailored to the
 interests and needs of individual consumers. This can be done by using data such as demographics,
 purchase history and browsing behaviour to create ads that are more likely to resonate with each viewer.
- *Generating creative content:* Generative AI can be used to create all sorts of creative content, such as images, videos and text. This content can be used in a variety of ways, such as in social media posts, display ads and product descriptions.
- *Testing ad performance:* Generative AI can be used to test different versions of ads to see which ones perform the best. This can be done by creating multiple versions of an ad and then using Predictive AI to predict how each version performs in terms of engagement, click-through rate and conversion rate.

Generative AI, however, necessitates a detailed prompt in order to generate high-quality content. This research paper demonstrates how to design a good prompt for generative AI to create high-quality ads that drive business results. We achieve this by leveraging computer vision and machine learning techniques to gain insights from a large dataset of display ads. These insights are then used to design good prompts for the generative AI model to create new display ads. We can then test these new creatives in new advertising campaigns and measure their marketing effectiveness.

Methodology

First, we gathered a large data-set of display ads from the automotive industry in Japan and their performance in terms of driving customers to dealerships. Google Ads has a feature called *store visits conversion tracking* that helps you learn how your ads influence store visits. This feature works by tracking anonymous, aggregated statistics about customers who visit your store after seeing your ad. We chose automotive vertical to work with for following reasons: a) consumers at different stages of the funnel (non-remarketed vs. remarketed) have very different goals and behaviours, and b) dealership visits are measurable.

Here is how a dealership visit works in more detail:

- A customer signs into their Google account and opts into location history in their account settings.
- The customer sees an ad and interacts with it.
- The customer then visits one of those dealerships' physical locations.
- Google connects the customer's visit to the store to their engagement with the ad in a privacy-safe way.
- Google then uses this data to provide automotive advertisers with anonymous, aggregated statistics about how many customers visited their dealerships after seeing their ads.
- This data can be used to improve ad campaigns and make them more effective at driving store visits.

Second, we combined human-based labelling with computer vision technology (AutoML) to generate many features of the display ads. These features include, but were not limited to, the interior, exterior, price and safety features of cars. The features were then pre-processed and fed into machine learning models. We trained these machine learning models to predict the store visit conversion rates of those display ads. More details are provided in the following section, *Using machine learning models*.

Third, we interpreted the results of the machine learning models to gain insights into which features could help drive customers to dealers' shops. We divided customers based on remarketing targeting on Google Ads, remarketing targeting and non-remarketing. For more details about customer segments, see the section: *Interpretation of model results*. We assumed that people who visited the website were more committed to buying and hence going to the store than people who did not. The baseline conversion rates of the two customer segments, remarketing and non-remarketing, were distinguished, which proved the hypothesis. Therefore, we built two separate models for non-retargeting and non-remarketing and compared the differences between the two. These insights will be provided in the section on interpretation of model results.

Finally, after analysing the important features from the meta-analysis, we use a large language model chatbot to generate detailed prompts to put into generative AI-based image generation tools. This allows us to create new high-quality advertisements. These new display advertisements can then be put into advertising campaigns to do A/B testing, which will help us find the optimised creatives.

Using machine learning models to predict store-visit conversions

We collected over 1,400 unique display ads/creatives of the automotive industry in Japan, each associated with its store visit conversion data. This data included whether or not a customer visited the dealership after seeing the ad. We collected data of non-retargeting and non-remarketing campaigns separately. Note that both have the same geo-targeting specifications. We used computer vision to scan through these ads and extract insights about the ads, such as the presence of certain products or features. In this meta-analysis, we only collected static display ads. We then validated these insights with human eyes to ensure that the computer vision was accurate. The features were then pre-processed and fed into machine learning models. We trained these models to predict the store visit conversion rates of the display ads.

The overall framework is illustrated in Figure 1.

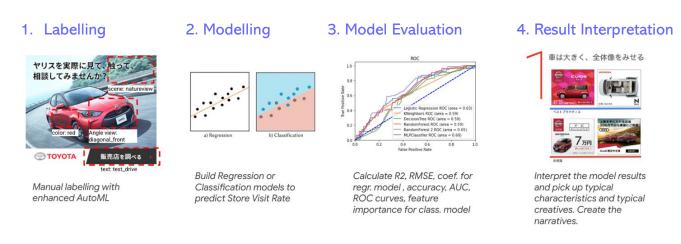


Figure 1: Overall research framework to generate creative insights from display ads

The analysis steps are described as below.

Step 1: Loading the required libraries and modules.

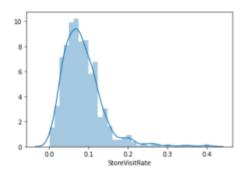
In this analysis we use popular machine learning library scikit-learn and models.

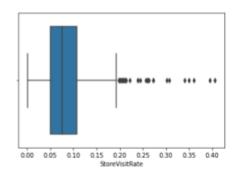
Step 2: Loading the data and performing basic data checks.

Check distribution to detect outliers, clip outliers or normalise the data.

Check data types, check mean, standard deviation, etc., of continuous variables.

Figure 2 illustrates the distribution of the store visit conversion rate.





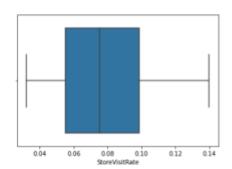


Figure 2: Distribution of store visit conversion rate of all the display ads (left). The same distribution displayed in boxplot (middle). The distribution after outliers were removed (right). We cut the lower values at the 10th percentile and cap the higher values at the 90th percentile.

Step 3: Creating arrays for the features and the response variable. We transform creative features into categorical variables, for example, presence and absence of people in the ads is coded as 1 or 0 for the variable PeopleInvolved.

Step 4: Create the Training and Test data-sets. We split data-set to train and test data, with the ratio of 80%: 20%.

Step 5: Binning the Store Visit Conversion Rate into two categories: higher than mean and lower than mean. We then move the bin column to the first column to create a data-set for prediction. The reason for binning the data and using classification models to predict the performance of the ads is that predicting the true value of the conversion rate is very challenging. There are many factors that can affect the conversion rate besides creative, such as targeting, advertising budget and pacing, optimisation point and learning period. To take account of targeting in the model, two separate models were built for two targeting strategies: non-remarketing and remarketing.

Step 6: Fit multiples classification models and compare AUC Score and plot ROC curves. The result is plotted in Figure 3.

An ROC curve, or Receiver Operating Characteristic curve, is a graphical plot that summarises the performance of a binary classifier. It is used to evaluate the performance of a classification model at different thresholds. The ROC curve plots the true positive rate (TPR) against the false positive rate (FPR) at different classification thresholds. The TPR is a measure of the proportion of positive instances that are correctly classified, while the FPR is a measure of the proportion of negative instances that are incorrectly classified.

The following are some of the key features of an ROC curve:

- The closer the ROC curve is to the top left corner, the better the performance of the classifier.
- The area under the ROC curve (AUC) is a measure of the overall performance of the classifier. A higher AUC indicates a better performing classifier.
- The ROC curve is not affected by the class imbalance in the data.

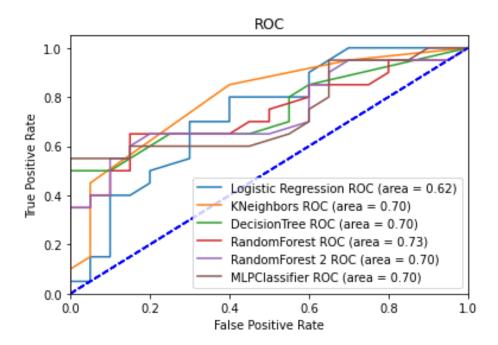


Figure 3: ROC curves and AUC scores of different classification models.

Step 7: Compute the importance of features and rank the features which had positive importance in descending order. The result is shown in Table 1. Positive importance features in classification models of creative performance prediction are the features that are most important for predicting the success of a creative.

Importance Rank	Feature Name	Feature Description
1	StylingTop	The view position is from the top of the vehicle
2	Eco	The text inside the ad mentions electrical vehicle
3	ColorBlack	The main colours in the advertising are dark colours
4	CashPlan	The text inside the ad mentions pricing/loan plan of the vehicle
5	NonBackground	The background of the ad has no background view, such as a city or nature view
6	MarketShare	The text inside the ad mentions the market share, e.g., No.1
7	PeopleInvolved	The ad has one or more person in it
8	Interior	The advertising shows the interior of the car
9	AutoDrive	The text inside the ad mentions the auto-pilot feature
10	Driving	The text inside the ad mentions comfort or driving-feel, e.g., easy to control

Table 1: Feature importance of the best fit machine learning model for the remarketing customer segment. This table lists the top ten features which have positive importance scores. We interpreted these results into practical creative hints in the next section.

Display ads have fewer creative features than video ads. In previous work, we built machine learning models to predict the click-through rate (CTR) and brand lift of video ads in the gaming industry in Japan. Figure 4 illustrates the methodology. We combined labels from computer vision and human encoding. We used the same approach of using classification machine learning models to distinguish two classes: creatives that performed above the mean and creatives that performed below the mean. As those models have much richer features, the models

performed much better than models of display ads. Figure 5 shows the area under the curve (AUC) scores and model accuracy of predictive models of video ad performance. Compared to models of display ad performance (Figure 3), the AUC scores in Figure 5 were much higher. However, in this research we would like to explore the potential of combining Predictive AI with Generative AI to generate new high-quality advertisements. Generative can currently create good images but it is still very challenging to generate high-quality videos based on user inputs.

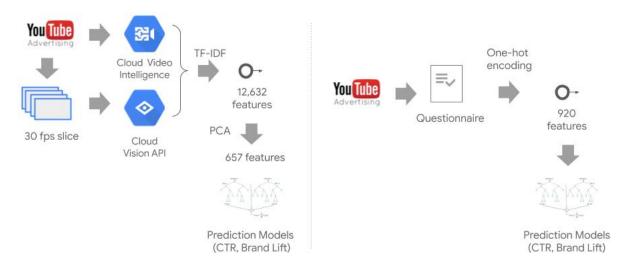


Figure 4: Research framework of creative meta-analysis of YouTube video ads. Left: creative features are automatically collected by computer vision models, such as object detection, logo detection, text detection, colour detection, scene duration, etc. Right: creative features are collected by human encoding, such as background music feelings, key messages, call-to-action types, incentives, etc.

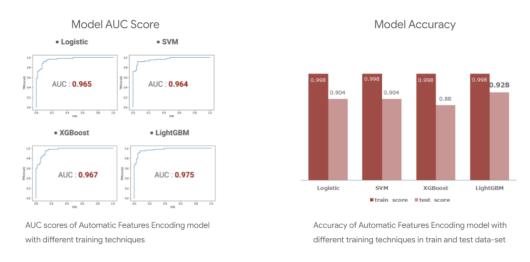


Figure 5: Predictive metrics of classification models of video ads meta-analysis.

Interpretation of model results

In the previous chapter, we have described how we built machine learning models to predict the quality of display ads in the automotive industry in driving customers to dealer's stores. In this chapter, we interpret the results of the champion models to provide practical hints for building good creatives of display ads. We focus on two customer segments: customers who have visited the website and customers who have never visited the website. The intuition behind this segmentation is that if a customer has been visiting the website to check information

about the car, they may want to see an ad which shows the interior rather than the exterior of the car. We divided customers based on remarketing targeting on Google Ads.

Remarketing targeting and non-remarketing targeting are two different ways to target your ads in Google Ads. Table 2 summarises the difference of the two targeting methods.

Feature	Remarketing targeting	Non-remarketing targeting
Audience	People who have visited your website or	People who have not visited your website or
	арр	арр
Effectiveness	More effective	Less effective
Cost	Can be more expensive	Can be less expensive
Goals	Reach people who are already interested in your products or services, increase conversions	Reach new customers, generate awareness

Table 2: The key differences between remarketing targeting and non-remarketing targeting.

Figure 6 summarises the differences between important creative features for the two customer segments. For example, potential customers are more likely to be interested in seeing a full-length view of the vehicle, while customers who have visited the website are more likely to be interested in seeing the interior. This is because potential customers are still in the early stages of their decision-making process and are trying to get a general sense of the vehicle, while customers who have visited the website are more likely to be ready to make a purchase and are interested in seeing the details of the vehicle. By understanding the differences between these two customer segments, advertisers can create ads that are more likely to appeal to each group.

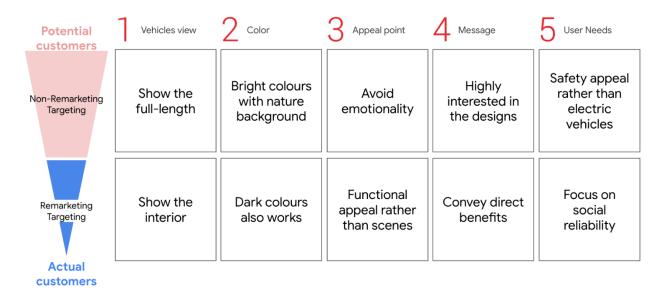


Figure 6: Differences between important creative features for the two customer segments.

We summarised the creative insights for the two targeting methods based on the results of the machine learning models. The images of those ads are not shown here due to copyright issues.

Creative insights for non-remarketing targeting

1. Vehicle view

- How to show vehicles when designing ads may be an important element for the brand image of the model. In this research, we saw that ads which led to store (dealership) visits showed vehicles occupying a lot of area of the screen, such as vehicles being shown large or in such a way that the full length could be grasped.
- Also, what was characteristic is that images of the side, top, and back of the vehicles were more effective than images of the front or diagonal front.
- Ads with the intention of leading Non-Remarketing target audiences to dealerships should focus on the vehicles themselves, and it seems more effective to use designs that allow customers to easily grasp the image of the vehicles.

2. Background and colour

- Due to the characteristics of display ads, it is not easy to engage consumers with the ads at a glance. Therefore, whether the colour of the ad is likely to attract the interest of consumers is a major factor that affects the performance of the ad itself.
- In this research, approaches which were effective on Non-Remarketing target audiences could be largely classified into two types.
 - First, instead of colourless or single-colour backgrounds, images of nature or the city led to more dealership visits.
 - Second, instead of dark colours such as black vehicles, performance of brightly coloured vehicles was better
- In addition, the two types mentioned above are trends seen only among Non-Remarketing target audiences. There were no large differences in performance due to colours among Remarketing target audiences.

3. Engagement drivers

- In cases of video ads, results show that users identify with emotional stories containing people. However, in this research, the results pointed to the complete opposite for display ads.
- Display ads are still images with limited space so trying to appeal with scenes or stories do little for dealership visits. Results show that simply using vehicles leads to better performance.
- Of course, from the standpoint of activating the brand, using scenes that inspire strong images of brand and concept models are effective. However, from the standpoint of dealership visits, the scenes do not necessarily have to contain people. This result applies both to Non-Remarketing and Remarketing target audiences.

4. Messages

- In this research, we learned that prospective buyers first focus on designs of vehicles when considering purchase in order to judge whether the vehicle matches their lifestyle.
- In contrast, results show that interest in driving performance and capacity is low.
- For example, customers consider purchasing by actually imagining driving the vehicle and assessing if the design is in line with their lifestyle needs (i.e., seating, luggage capacity, etc.).
- Of course, financial incentives such as interest rate support and payment plans are effective messages, and these approaches work more for Remarketing target audiences who have actually started considering purchase than for Non-Remarketing target audiences.
- Also, Non-Remarketing target audiences focus on and show interest in designs more than Remarketing

target audiences, so we think it is effective to focus more on showcasing the car design in the early stages of purchase consideration.

5. Customer needs

- In this research, we came to understand that among the people who start considering the purchase of a vehicle, few initially look for electric vehicles.
- Consumers are interested in safety features such as automatic brakes and driving support, and the type of engine does not seem to be a matter of priority.
- As we have touched upon before this page, consumers try to decide whether the vehicle matches their lifestyle in the early stages of consideration. They narrow down their choice of vehicle by actually imagining driving it, and they are more interested in safety and risk reduction for themselves and their than in whether the vehicle should be electric or not.
- Remarketing target audiences do not tend to focus on safety features, and this seems to be an important judgment criterion for those in the early stages of purchase consideration.

Creative insights for remarketing targeting

1. Vehicle view

- This research analysed creatives for Non-Remarketing and Remarketing target audiences. The analysis showed that displaying the interior of vehicles instead of the exterior led to more dealership visits for Remarketing target audiences.
- This is likely because consumers who are already familiar with the exterior of a vehicle are more interested in seeing the interior, which is what they will be spending most of their time in.
- Additionally, consumers who are close to making a purchase are more likely to be swayed by the
 interior of a vehicle, as it is a key factor in their decision-making process. While showing the exterior is
 not completely ineffective, it is clear that the interior is more important to consumers who are about
 to make a purchase.

2. Background and colour

- Background images of nature or the city were effective on non-remarketing target audiences, but not on remarketing target audiences. Dark colours were not effective on non-remarketing target audiences, but slightly better on remarketing target audiences.
- This may be because consumers who are in the final stages of purchase are more interested in details such as features, convenience, and price than brand messages. Therefore, it is more important to show ads that are relevant to the model the consumer is interested in, rather than the colour or background image.

3. Engagement drivers

- One common trend between non-remarketing and remarketing target audiences is that appeals to
 emotions using people in images are ineffective. The effectiveness of marketing messages varies
 depending on where the consumer is in the purchase consideration process, but this was a common
 trend.
- Incentives such as purchase support and cashback are effective messages for both non-remarketing
 and remarketing target audiences. These are more effective for remarketing target audiences than for
 non-remarketing target audiences.
- As consumers proceed through the purchase consideration stages, their interests become more specific, so it is natural that messages about features and benefits lead to more dealership visits in the final steps of consideration.

4. Messages

- In order to lead consumers who are actually considering a purchase to visit dealers' stores, the effective message is specific incentives for that consumer. For example, ads with messages such as "interest rate support", "optional gifts" or "we are holding a fair" lead to specific actions that show high performance for dealership visits over ads appealing to design or driving performance.
- Additionally, promoting test drives does not seem to be an effective way to drive traffic to dealerships, as many consumers purchase vehicles without taking them for a test drive.

5. Customer needs

- Messages regarding electric vehicles and phrases of social assessment such as "No. 1 in the industry" were found to be effective on Remarketing target audiences. This is because electric vehicles are not considered in the early stages of purchase consideration, but as consideration proceeds and electric vehicles are chosen, they contribute to the process leading to dealership visits. At the same time, the long-term effects of driving the electric vehicle are considered as well, so interest in social reliability of the vehicle and brand are heightened, which led to this result.
- This is a notable characteristic which shows that effective messages differ for each consideration process.

Creative generation with generative AI

Generative AI is a quickly developing field with the potential to transform the advertising industry. By creating unique and engaging content, generative AI can help brands stand out from the competition and connect with consumers on a deeper level. However, generative AI requires a detailed prompt to generate high-quality content. In the previous chapters, we have shown how to use computer vision and machine learning techniques to gain insights from a large dataset of display ads. In this chapter, we will explore how to design a good prompt for generative AI to create high-quality ads that drive business results.

Generative AI can create high-quality, engaging, and personalised display ads using generative AI models. These models can be used to generate images, text, and other content that is tailored to the specific needs of your target audience.

Here are some tips for designing a good prompt for generative AI:

- *Be clear and concise.* Prompts don't need to be long or complex, but most good prompts are descriptive and clear.
- *Be specific.* The prompt should provide enough information for the AI to generate the desired content. For images, you should structure your prompt with a style, such as a photo or a sketch; then a subject, such as a sport car; then the context, such as a nature background.
- *Be relevant.* The prompt should be relevant to the target audience and the desired business results. For example, to drive the Non-Targeting customer segment to the dealer's stores, the prompt should show the full body length of the car, with bright colours.

The following steps are some ideas to creative new display ads with generative AI.

- Use LLM chat bot to create prompts to generate images with generative AI-based image generation tools. For example, based on the insights from the meta-analysis we can ask the chat bot to give us a detailed prompt with the input: "Create a prompt to generate displays ads for automotive customers. The ads need to show the car at full-size length, in bright colours, with a nature view as background and focus on the exterior and design of the car."
- The chat bot will provide several drafts of appealing headline, image, body copy and call-to-action. It

also may give you some additional tips for creating effective displays ads for automotive industry.

- Use generative AI-based image generation tools to write the text prompt that the chat bot provided to generate new images. For example, we can provide the tools with a detailed prompt such as, "Generate a display ad for [car name]. The ad should show the car at full-size length, in bright colours, with a nature view as background. The focus of the ad should be on the exterior and design of the car. The ad should be eye-catching and visually appealing, and it should make the viewer want to learn more about the car."
- Review the generated content and make any necessary adjustments by selecting on the image. You
 can use prompts to change the colour of the car or change the background or make many other
 modifications to the image, such as upscaling the image to get higher resolution.
- If you have images of your car, you can upload those into the tools and kick off fine-tuning jobs. After the fine-tuning job is done, you can reference your car by name in the prompt to generate new images with it.
- You can also access all of these features via an API, which allows you to integrate image generation technology directly into your applications.

Conclusions and future work

In this paper, we have demonstrated how to leverage computer vision and machine learning techniques to get insights from a large data-set of display ads. We then use these insights to create prompts that can be used by generative AI models to generate high-quality images for new ads. This new approach has the potential to help advertisers generate thousands of creatives to test for their campaigns. This could lead to significant improvements in ad performance and ultimately help businesses achieve their marketing goals. For future work, we would like to pilot this approach with advertisers/advertising agencies in some potential industries.

Computer vision is a powerful tool that can be used to extract a lot of information from images, but it is not perfect. There are some creative features in advertising that computer vision cannot extract. For example, computer vision cannot extract the meaning of an image, or the emotional impact it has on the viewer. This is why it is important to combine computer vision with human work when conducting creative meta-analysis. Human workers can provide the context and meaning that computer vision cannot, and they can also identify creative features that computer vision might miss. By combining the strengths of both computer vision and human work, we can create a more comprehensive and accurate understanding of creative advertising.

This work is limited in that it only investigated the automotive vertical, and only two segments. Investigating consumers with different motivations, behaviours, or affinities to the automotive sector could lead to different results. Changing the data-set, feature engineering method and model selection could also lead to different results. Additionally, looking at different verticals (fashion, travel, home electronics) could yield different ad optimisations. To test this approach, we plan to pilot it with advertisers/advertising agencies in some potential industries, such as fashion, travel, home electronics, and so on. We will work with these partners to generate creatives for their campaigns and track the results. This pilot will help us to further refine our approach and demonstrate its effectiveness.

We believe that this approach has the potential to revolutionise the way that advertisers create and test ad campaigns. By leveraging the power of computer vision and machine learning, we can automate the process of generating creatives, which will save advertisers time and money. Additionally, by using generative AI models, we can create high-quality images that are more likely to resonate with consumers. We believe that this approach has the potential to significantly improve the performance of ad campaigns and help businesses achieve their marketing goals.

About the author

Minh Nguyen, Ph. D is Senior Marketing Research Manager, APAC Consumer and Market Insights, at Google Japan G.K., Tokyo, Japan.

The New Marketing Renaissance

The merging of creative work and scientific evaluation of communication

Karin Haglund
Cajsa Wirén
Oliver Engist
Hugo Englund
Thomas Berthelsen

Introduction

Is content still king? It is widely recognised that a well-defined media strategy is not enough to be effective. The message needs to be delivered via creative content that grabs a consumer's attention, to build favourable brand associations that will influence future purchases. In addition to this, creatives also play an important part in differentiating a brand from its competition, by helping to build to a clear brand identity. Klarna has long been a brand-driven business, with its distinctive creatives an important factor to the company's success. Compared with the traditional serious banking industry characteristics, Klarna use their vibrant pink colour, clever copy and quirky visuals to create an emotional connection with the modern consumer. Founded in 2005, today they now have 150 million active consumers across more than 500,000 merchants in 45 different countries (Klarna, 2023). Creativity continues to be an important tool for Klarna's marketing communications as they look to expand to more countries, and new challengers enter the industry.

A new playing field

The digital age has resulted in an explosion of new media channels, providing marketers with an abundance of communication opportunities. This has set new requirements on content creation. To be relevant and effective, creative content now needs to be tailored for each channel. It needs to suit the format and context, be tailored for each specific audience and take advantage of the features available, such as the possibility for interaction or personalisation. Despite these new options, it is becoming increasingly difficult to cut through the noise and gain effectiveness. Binet and Field's 2017 publication *Media in Focus: Marketing Effectiveness in a Digital Era* illustrated that advertising effectiveness had been declining over a 10-year period. They argued that this loss was due to an overemphasis on short-term sales activations, and not enough focus on long-term brand building. At the same time, marketers are faced with an increasing use of ad blockers by consumers, with users reaching 763.5 million in Q4 2019 (Statista, 2020).

The resurgence of creative

With so much advertising noise there seems to be a hunger for good content. Video streaming and contentdriven social media platforms are more popular than ever, with YouTube and TikTok sitting at 2.5 billion and 1 billion monthly users, respectively, as of January 2023 (Statista, 2023). In fact, many marketers claim that consumers would be more receptive and less avoidant of advertising content if they were of higher quality and more relevant. This concurs with results from Binet and Field's 2012 publication *The Long and the Short of it: Balancing Short and Long-Term Marketing Strategies,* where they demonstrated that creatively awarded campaigns are more efficient in driving growth in market share. They also showed that campaigns with emotional messaging are more effective in driving long-term business impacts, when compared with the more rational messaging typically associated with sales focused advertising (Binet & Field, 2012).

New skills for the marketing department to master

All of this means that there are high demands on marketers today. They need to produce content of such high quality that people actively want to consume it, whilst understanding the technicalities of tailoring content to the multitude of different channels. They also simultaneously need to not get lost in all the choices, and overlook the fundamentals for a successful campaign, be it objectives, measurement KPIs or execution: a true DaVincian feat!

Holistic measurements require a holistic toolbox

Klarna has long seen the benefits of working in a data-driven fashion when it comes to marketing decisions and content development. In the early days of the company, decisions were often based on instinct and experience. However, over the years Klarna has implemented several tools to analyse their marketing. They evaluate the effectiveness of their media investments through various methods, including marketing mix modelling (MMM). They also use survey-based insights to evaluate the quality of their creatives. The current economic uncertainties have supercharged Klarna's use of data and insights, as they want to ensure that they are making optimal marketing investments and their creative content is delivering the most bang for their buck.

Klarna collaborated with marketing intelligence company Nepa to help advance their data-driven insights. The case study in this paper focuses on enhancing Klarna's MMM analyses by connecting the measurements of their creative quality with marketing effectiveness.

Methods and tools for evaluation marketing effectiveness

There is an abundance of data and KPIs to help marketers make decisions on their different campaigns and channels. Digital media platforms such as Facebook, Instagram and YouTube provide detailed figures to help marketers see how their creatives are performing. However, over time these platforms have become "walled gardens" where data cannot be exported, and metrics are only available on an aggregated level. This has made it difficult to track campaign performance across the multiple channels it has been launched on, and get a holistic view of campaign performance. In addition, the depreciation of third party cookies and regulations such as GDPR in Europe (ICO, 2018) means the possibility to connect campaign exposure to business outcomes though digital attribution is limited.

MMM has traditionally been regarded as the gold standard for measuring the effectiveness of advertising on sales or market share across different channels. The technique relies on aggregated data, and thereby avoids the issues associated with digital attribution, making it a highly relevant tool in today's media landscape. Through the application of different statistical techniques such as time-series regression, MMM provides

marketers with direct apples-to-apples comparison of the return on investment (ROI) from different marketing inputs. Klarna uses MMM to make informed decisions on how to deploy their marketing investments across their different media channels. Using the results their media team can set a truly data-driven media strategy, with collaborations with local marketing teams and media agencies based on hard facts about media effectiveness and efficiency.

A drawback of MMM

One aspect that most MMM analyses do not account for is creative content. They typically provide results on each media channel's contribution to sales or market share, and the ROI. However, the marketing input is often limited to media investments. In reality, the quality of the creative likely also has an impact; any experienced MMM practitioner knows this, and will take it into consideration when interpreting model outputs and drawing conclusions. However, these recommendations are usually based on experience and gut feeling, rather than data. In modern marketing organisations such as the one at Klarna, data-driven KPIs are what steer most of the brand's decision-making. Thus, when the impact of creative quality is unknown, sub-optimal decision-making may occur. For example, a high-quality creative may require a lower media investment to have the maximum effects. Or perhaps the marketing team could increase the ROI of their current investments if their creative execution was better. These are difficult insights to collect without connecting creative execution with marketing effectiveness.

Methods and tools to evaluate creative quality

What constitutes a good creative execution is, of course, a matter of subjective opinion and taste. Many professionals would probably claim that their best creatives are often unexpected, stemming from free thinking and out-of-the-box suggestions. It is, therefore, difficult to develop a set of guidelines or standards for exactly how creatives should be executed, and what they need to focus on to be effective. This means when evaluating the quality of a campaign, the focus should be on the response it elicits from consumers rather than the elements it includes.

A common way to describe a consumer's response to advertising is a hierarchy of effects model. They have been applied throughout marketing history to describe the stages a consumer passes through when they interact with advertising. Each uses advertising as a stimulus that aims to elicit a response from consumers, typically in the form of a purchase. These models are sequential and assume that consumers move through a number of steps after being exposed to advertising. There are many variations, but most cover at least a cognitive (thinking) step, an affective (feeling) step and a behavioural (doing) step. One of the most famous hierarchy of effects model is the AIDA framework. Dated back to the late 19th and early 20th centuries, US advertising pioneer E. St. Elmo Lewis is said to have formulated the foundation of the model (Strong, 1925). It breaks the process consumers go through into four steps: attention, interest, desire and action (see Figure 1).

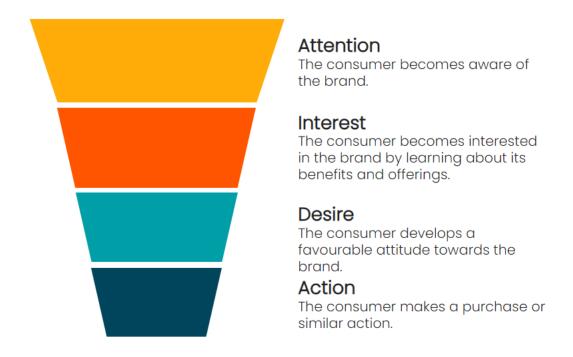


Figure 1: The AIDA framework visualised as a funnel.

As depicted in Figure 1, the AIDA framework is often visualised as a funnel, where each step is contingent on the previous; in order to be interested in a brand, the consumer must first become aware of it. Furthermore, the consumer's perception of the brand needs to be positive for the consumer to act on their interest. Thereby, the total number of consumers diminishes with each step in the funnel. A large share of all consumers may become aware, but a smaller share will be interested—and so on.

At Klarna the AIDA framework is consistently used in the evaluation of creative content from their brand campaigns. Together with Nepa, they conduct survey-based post-tests that are collected via online panels, along with survey-based "always-on" ad tracking. The latter is conducted on a weekly basis, whilst the former is performed on an ad-hoc basis in markets where the tracker is not available. In these surveys, respondents are exposed to creative material from Klarna campaigns. It is anonymised by masking the company's logo and name, so brand attribution can be captured. The questionnaires measure campaign metrics based on the AIDA framework, as outlined in Table 1, and are intended to capture the creative's effectiveness in converting consumers along the funnel.

Step in AIDA framework	Survey metric	Explanation
Attention	Observation	The share of respondents who remember seeing the campaign before

Attention	Sender recall	The share of respondents who can identify Klarna as the brand in the campaign
Interest	Message clarity	The share of respondents who perceive the message in the campaign as clear (answering 5-7 on a 7-point scale)
Desire	Liking	The share of respondents who have a positive perception of the campaign (answering 5-7 on a 7-point scale)
Action	Impact	The effect of the campaign (metric dependent upon the campaign objective)

Table 1: Steps in the AIDA framework with corresponding survey metrics in Klarna's surveys.

A drawback of creative evaluations

While the survey-based AIDA measurements have provided Klarna with valuable insights around improving their creative content, the brand has lacked the tools to fully understand the financial value of their creative quality. There was no data on how their creatives linked to marketing effectiveness and efficiency. Creating this connection would help the brand further explain the effects of their marketing and fuel their creative decision-making.

The organisational value of connecting creative with effectiveness

The marketing profession can sometimes seem divided into two camps: those that are data-driven and those driven by creative. In many organisations, including Klarna, media planning and creative execution sit in separate teams, with different skills, profiles, backgrounds and priorities. They tend to speak different languages, where creative teams often struggle to find the link between hard metrics and their content, whilst media teams lack the information on the creative's impact on their marketing success. Media teams can use the results from MMM or other ROI analyses to defend their budgets or motivate increases. Creative teams often lack this data-driven ammunition that links their work with business KPIs. Connecting creative quality to MMM insights does not just offer better quality insights. It can also contribute to bridging the gap between media and creative teams by providing them with a common language, placing them on equal footing in today's data-driven companies.

Bayesian MMM to build granular models

Klarna and Nepa have developed a Bayesian MMM that is able to capture campaign-specific ROIs from granular media investment data. It builds on standard MMM methodology, where the outcome variable follows a linear or log-line model of the media investment, seasonality and external variables such as the macroeconomic situation. MMMs can be estimated in a Bayesian or Frequentist way. Both approaches have their advantages and disadvantages, and both have been implemented in several popular libraries, such as Facebook's Robyn (frequentist), Uber's Orbit (Bayesian) or Google's LightweigthMMM (Bayesian). Klarna and Nepa opted for the Bayesian approach since it offers more flexible functional forms, whilst also allowing the model to be constrained if the data has a high variance. By using Markov Chain Monte Carlo simulation techniques, non-linear parameters (such as decay rates) can be estimated internally. Furthermore, choosing appropriate prior distributions of the ROI parameters allow the inclusion of domain knowledge about media effectiveness directly into the model estimation.

Being able to inform the model with existing knowledge about media effectiveness is crucial when estimating many parameters from highly granular data. In this case, the aim is to estimate different ROIs for campaigns that last only a few weeks. Setting priors based on historical results from similar campaigns allows for ruling out implausible values, such as negative ROIs, in a rigorous and transparent way. The MMM borrows modelling techniques from a variety of established approaches, and then combines them in an innovative way. Seasonality is estimated by a combination of a Fourier series and a trend component, as adopted by Taylor and Letham (2017) in the widely used Prophet library. In addition, the model features simultaneously estimated parameters for carryover and shape effects (Jin et al., 2017), and it allows the media effects to vary over time using a kernel regression approach, as outlined by Ng et al. (2021). The latter is particularly relevant to detect changing ROIs over time in media spend that are not a part of Nepa's tracked campaigns, to avoid wrongful attribution.

To estimate the model, weekly aggregated media spend from the UK over the years 2021 to 2023 are used, for both online and offline channels. Weekly total revenue is used as the outcome variable. External variables that are controlled for include the monthly consumer price index, the weekly average closing price of the GBP to USD exchange rate, the number of reported COVID-19 cases and the number of downloads of Klarna's competitors apps from the Apple App store. Nepa further controlled for internal lending policy changes by including the credit approval rate. The performance of the model was evaluated by showing the out-of-sample performance of the baseline specification with total weekly media spend as the sole media variable. In Figure 2, the mean model prediction with an 89% highest posterior density interval (HPDI) is visualised along with the in-sample (orange) and out-of-sample (green) actuals. The model captured seasonal patterns as well as campaign-driven revenue spikes well, without overfitting.

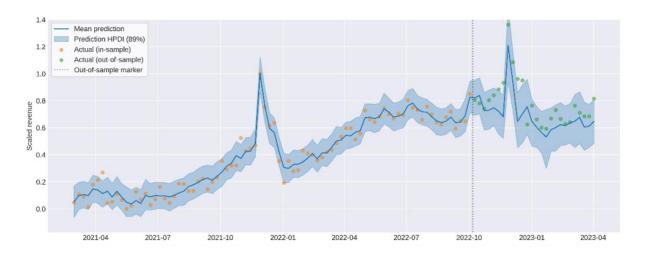


Figure 2: Baseline model mean prediction with an 89% HPDI, long with in-sample (orange) and out-of-sample (green) actuals.

In Table 2, the co-efficient of determination (R2) and mean absolute percentage error (MAPE) are presented for the baseline model, in-sample and out-of-sample respectively.

	In-sample	Out-of-sample
R ²	0.97	0.41

MAPE	0.04	0.10
------	------	------

Table 2: Baseline model metrics, in-sample and out-of-sample.

This baseline model was then extended by separating media spend into their respective tracked campaigns. From this, separate ROIs for each of Klarna's campaigns were estimated. Due to the large number of untracked campaigns, all untracked spend was aggregated into one variable. This had a negligible effect on the model's in-sample fit, but greatly reduced the noise in the estimated ROI parameters.

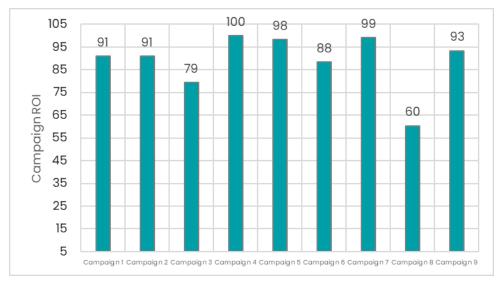


Figure 3: Campaign ROI. Indexed. Highest = 100 Ix.

The results: Connecting ROI to campaign metrics

To connect creative execution with marketing effectiveness, the relationship between the campaign ROIs derived from the MMM and the AIDA campaign metrics collected for the corresponding campaigns was explored. The analysis focused on four key campaign metrics that derived from Klarna's survey-based campaign measurements:

- 1. Observation-Have you seen this campaign before?
- 2. Sender recall-Which company do you think is behind the campaign?
- 3. Message clarity-How clear do you think the message of this campaign is?
- 4. Liking-What is your overall impression of this campaign?

The relationship between each campaign metric and campaign ROI was analysed using linear regression, with the dependent variable being campaign ROI.

	Beta	ROI increase with 10 pp. increase in metric
Observation	0.05	5%
Sender recall	0.09	9%
Message clarity	0.01	1%
Liking	0.00	0.00

Table 3: Effect of campaign metrics on ROI. 2=0,40 using Shapley value regression (Grömping, 2015; Lipovetsky, 2006).

The betas are scaled so that 1 percentage point improvement in each KPI results in the corresponding increase in campaign ROI index. As an example, increasing message clarity for a campaign with 10 percentage points would result in an increase in ROI with one campaign ROI index units. When the beta values in Table 3 were compared, it was evident that the campaign metrics differ greatly in how they affect ROI. Sender recall and observation respectively have the highest beta values. Message clarity and liking, on the other hand, have a weaker relationship with ROI.

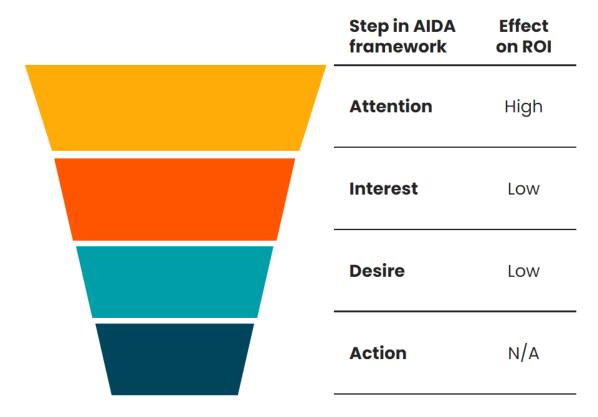


Figure 4: Illustration of AIDA framework and effect on campaign ROI.

As illustrated in Figure 4, the findings suggest that attention is the most important step in driving campaign ROI. This indicates that to maximise ROI through creative execution, campaigns should primarily be designed to capture consumers' attention and clearly convey the brand, as measured by the observation and sender recall metrics. Conversely, building interest and desire is less important from a campaign ROI objective. However, it should be noted that the dependent variable campaign ROI is a short-term measurement. Whilst of course being an important objective, it is also important to consider longer-term goals such as brand building strength. It is, therefore, relevant to also explore how the campaign metrics relate to this objective to fully capture the role of creative.

Comparing short- and long-term effects

To investigate the link between campaign metrics and brand strength, data from Nepa's database of campaign post-tests was analysed. It included 508 post-tests over the period 2021 to 2022, spanning a wide variety of brands, countries and media channels. All the campaign post-tests were measured via online surveys based on the AIDA framework. Purchase intent was used as the dependent variable, measured as the share

of respondents who state they will buy from the advertised brand in the future (answering five to seven on a seven-point scale). As the main goal of brand building is to generate future sales, purchase intent is a good proxy for the long-term effects of the campaigns. Linear regression was again used to analyse the link between campaign metrics and the dependent variable.

	Beta
Observation	0.00
Sender recall	0.00
Message clarity	0.25
Liking	0.44

Table 4: Effect of campaign metrics on future purchase intent, R2=0.447 using Shapley value regression (Grömping, 2015; Lipovetsky, 2006).

The analysis of long-term effects indicate an opposite relationship compared with the short-term results. Liking, and to some extent message clarity, have the strongest relationships with purchase intent. This indicates that generating interest and desire for the brand are still important factors for Klarna's team to consider when putting together their creatives, but they mainly serve the purpose of building brand strength.

Step in AIDA framework	Short-term effect	Long-term effect
Attention	High	Low
Interest	Low	High
Desire	Low	High
Action	N/A	N/A

Figure 5: Illustration of AIDA framework and effects on short- and long-term ROI.

Figure 5 summarises the findings on how campaign metrics relate to both short- and long-term effects on campaign ROI via future purchase intent. Attention has the strongest impact in the short-term, whilst interest and desire play a more important role in the long-term.

Balancing short- and long-term in creative executions

This analysis demonstrates that several campaign metrics are important to consider in order to yield high ROI, both in the short- and long-term. Thus, which metrics should Klarna and other brands focus their efforts on to move the needle? When looking at the variation across different markets and industries from best to worst performing campaigns, there's a clear pattern. Sender recall is by far the single metric that has the largest variation, so it represents the greatest opportunity for improvement with the right creative execution.

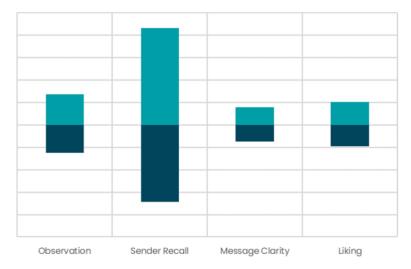


Figure 6: Variation in campaign metrics from Nepa's campaign database. The figure shows inter-quartal range for each metric.

To some extent sender recall is a hygiene factor that often gets lost during the creative process. A possible reason for this might be that it has a weak relationship with future purchase intent in survey-based campaign measurements. However, when the MMM data is combined with the campaign measurements, it is clear that sender recall has the highest potential to drive short-term sales amongst the four metrics evaluated.

The implications: How Klarna can use the insights from this expanded MMM

For Klarna, the campaign metrics from the AIDA framework are crucial puzzle pieces in understanding campaign performance, and should be adjusted to improve creatives in the future. For example, their distinctive brand identity is a key factor in their success, and sender recall lets the Klarna team know if this is clear enough in their campaigns. A low score could be an explanation for poor campaign performance, as the effects would be limited if the campaign could not be correctly attributed to Klarna. In such cases, adding more branding elements in the future could be a remedy.

An important task for Klarna's creative communications is educating consumers about their products and offerings, especially in markets the brand is less established. The message clarity metric helps the brand understand if the benefits of the offering are being communicated in a comprehensive way, or if it needs tweaking. The emotional connection consumers feel towards Klarna is a factor that has helped them win over users from more traditional payment companies. The liking metric offers a way to ensure that the creative content is contributing to that emotional connection. A low liking score would indicate that it is not resonating with the target consumers on an emotional level, and that adjustments are required—e.g., in

production or tone of voice. The insights presented in this case study provide further support for Klarna's established way of working with survey-based campaign evaluations, and the importance of the AIDA campaign metrics.

	Highest vs. lowest performing Klarna campaigns, potential uplift in campaign ROI
Observation	10%
Sender recall	22%
Message clarity	3%
Liking	0%

Table 5: Percentage difference in campaign ROI between highest and lowest performing Klarna campaigns for each metric.

Furthermore, the expanded MMM enables Klarna to quantify the impact of creative quality in terms of short-term sales ROI from the campaigns. Table 5 displays the difference in campaign ROI between the brands' best and worst performing creatives. These figures can be used to quantify the potential available in improving those that perform the worst. For example, improving message clarity from the lowest level to the level of the top performing campaign has the potential to yield a 3% increase in campaign ROI. The results in Table 5 also indicate that Klarna's specific campaigns follow Nepa's benchmark campaigns, demonstrating that sender recall has the highest leverage on campaign ROI, further proving the importance of this metric for Klarna.

In summary

This paper details a case study on how Bayesian MMM techniques can be applied to connect MMM analysis to measures of creative quality, thereby providing insights on how this quality relates to marketing effectiveness. The findings for Klarna highlight the value of quantitively measuring the creative quality, as improving creative content yields positive effects on campaign ROI. The case study from Klarna, alongside the meta-analysis of Nepa's campaign database, also provides valuable insights on the dynamics of different campaign metrics and marketing effectiveness. Sender recall and observation show a stronger impact on the short-term sales activations, while message clarity and liking contribute to long-term brand strength.

Additionally, the findings in this paper shine a light on the importance of the sender recall metric. It has a clear association with campaign ROI and offers the most potential for improvement both for Klarna and the wider campaign database. Correct brand attribution is a fundamental aspect that a campaign needs to deliver. Regardless of how strong the creative is in other aspects, if the campaign is not attributed to the correct brand, the investment will not provide the desired effects. The analysis underpins the importance of measuring sender recall, and the need for a stronger focus on clear branding for campaigns in general. Modern marketing departments need to be true renaissance organisations; they need to be experts in the complex technological world of media, whilst at the same time delivering attention-grabbing creativity. These skills often sit in different teams that have a limited understanding of each other's worlds. This paper shows how

creative quality can be linked to marketing effectiveness, and thereby bridge the gap by establishing a common language between creative and media teams.

References

Binet, L., and Field, P. (2012). The Long and the Short of it: Balancing Short and Long-Term Marketing Strategies. Institute of Practitioners in Advertising.

Binet, L., and Field, P. (2017). *Media in Focus: Marketing Effectiveness in the Digital Era*. Institute of Practitioners in Advertising.

ICO. (2018). Guidance and Resources. *Information Commissioner's Office*. Available: https://ico.org.uk/fororganisations/uk-gdpr-guidance-and-resources/

Grömping, U. (2015). Variable importance in regression models. WIREs Comput Stat 7: 137-152.

Jin, Y., Wang, U., Sun, Y., Chan, D., and Koehler, J. (2017). Bayesian Methods for Media Mix Modeling with Carryover and Shape Effects. *Google Research Publications*. Available: https://research.google/pubs/pub46001/

Klarna. (2023). About Klarna. Klarna. Available: https://www.klarna.com/international/about-us/

Ng, E., Wang, Z., and Dai, A. (2021). Bayesian Time Varying Coefficient Model with Applications to Marketing Mix Modeling. *Cornell University: Arxiv.* Available: https://arxiv.org/abs/2106.03322

Lipovetsky, S. (2006). Entropy Criterion in Logistic Regression And Shapley Value Of Predictors. *Journal of Modern Applied Statistical Methods 5*(1): 95-106.

Statista. (2020). Number of adblock users worldwide from 2013 to 2019. *Statista: Advertising & Marketing.* Available: https://www.statista.com/statistics/435252/adblock-users-worldwide/

Statista. (2023). Most popular social networks worldwide as of January 2023, ranked by number of monthly active users. *Statista: Social Media & User-Generated Content*. Available:

https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

Strong, E. (1925). The Psychology of Selling and Advertising. McGraw-Hill Book Company.

Taylor S. J., and Letham, B. (2017). Forecasting at scale. *PeerJ Preprints.* Available: https://peerj.com/preprints/3190/

About the authors

Karin Haglund, Consumer Insights Manager, Klarna, Stockholm, Sweden.

Cajsa Wirén, R&D Manager, Nepa, Stockholm, Sweden.

Oliver Engist, Data Scientist, Nepa, Stockholm, Sweden.

Hugo Englund, Data Scientist, Nepa, Stockholm, Sweden.

Thomas Berthelsen, Head of R&D, Nepa, Stockholm, Sweden.

Breaking the Fourth Wall: Future Formats for Effective Advertising

Identifying the trends that will define the future of business and public relationships

Lisa Speck Steve Silvers

Introduction

How we as humans connect, communicate and create has permanently changed, and the future lies in breaking the fourth wall—the wall behind us, the wall we can't see. From the metaverse to TikTok challenges, the public is clamouring for blended, immersive experiences both in their personal lives and in their interactions with businesses. These environments create breakthroughs, and have the power to bring people and technology closer together than ever before, if used correctly. Many brands and marketers have adopted digital advertising strategies to ensure they are present in these new spaces, and while digital advertising is traditionally less expensive than other channels, it can be hard to measure the true impact and value of a brand's efforts. Brands and advertisers are often left wondering what really drove performance and impact, and whether the "last click" attribution truly shows what drove purchase behaviour and brand preferences. Even though digital advertising has been around for quite some time, marketers still have countless questions about their efforts and whether or not these tactics are truly driving results. Some of these include:

- Am I reaching the right people?
- · Is my targeting working; i.e., am I reaching the intended people?
- · Are people really seeing my content?
- Do people engage with my brand after being exposed to my content?
- Am I driving category engagement, or is it directly affecting my brand?
- · Is it leading to additional revenue?
- Am I bringing in new customers, or am I increasing frequency by being top-of-mind?
- What content and messages resonate best?

Leveraging Qrious Insights rich-behavioural data (which passively captures consumers' actual digital behaviours instead of asking about recall of behaviours) and Kantar's historic brand trend data, we've proven that brands can understand the impact of their digital advertising efforts directly and see the correlative effects on overall brand perception and power against competitors. Moreover, it is not just the impact on brand affinity or brand preference that traditional surveys measure, but the impact on actual purchase.

The history of digital advertising measurement

Cookies have long provided brands with a way to measure conversion and collect engagement statistics for site properties and digital advertising. However, these signals were never a perfect measurement solution, as depreciation has always been a concern for marketers. Additionally, many environments never leveraged cookies, creating gaps and barriers to true universal measurement. Social media platforms provide the advertising brand with key metrics, which include impressions, click-through rates and conversion rates. They also provide brands with the ability to measure purchases within their own properties (site, app, or social media page). Their blind spot is understanding competitive comparisons, if their own advertising is driving them to a competitive brand within the category, as well as offline store visits and purchases. Just because someone was exposed, or even clicked on an advertisement, it does not reveal if the ad contributed to additional revenue for the brand. Metrics are often aggregated and don't identify a specific individual's path. Traditional brand and advertising tracking surveys balanced from wave-to-wave on demographics, often ask unaided and aided recall of advertisements and then measure brand perceptions, brand intentions and recall of brand engagement, as well as if they purchase after seeing the advertisements. Brands leverage these surveys to track and measure brand and advertising health, but they rely on consumers to recall what they saw and what they did as a result of it. With consumers' busy lives paired with the complexity of the world we live in, we can't expect consumers to accurately recall what they did. This is not because they don't want to tell us the truth, but because with everything someone is doing, it would be hard for any of us to recall exactly what we did yesterday (let alone last week or last month) with precise detail.

Recently, the industry has improved upon straight recall by surveying people who actually saw the advertisement, identified through cookies or passively collected behavioural data, and asking them questions about the brand. These approaches then survey an exposed and unexposed cell of consumers to measure brand perception, intentions and shopping and purchasing behaviours with the brand. Most of these trackers are a good proxy, but don't tie the advertising exposure to actual observed brand purchase; rather, they are related only to a recalled past purchase behaviour or purchase intent question in the survey. Kantar data finds 45% of the internet is collectively represented by Safari, Firefox and Microsoft Edge, and they are cookieless. CTV and mobile in-app are also cookieless and experiencing signal reduction. Chrome is the last browser to remove the cookie–so soon enough these imperfect signals will be put to bed for good. Moreover, the erosion of cookies creates a unique opportunity for the advertising industry to make some decisions about which measurement systems are the best to work with and leverage better, clearer, more accurate and meaningful deterministic measurement tools and insights.

Behind the walls

Passively collected behavioural data has been around for many years, but many of these data sources still are not able to provide behaviours behind all the "walled gardens". However, levering behavioural data that captures behaviours behind the walled gardens, we've been able to break down that fourth wall, revealing everything people are doing online, ultimately connecting social media ad exposure to actual purchase and understanding what they are doing before and after the ad exposure. All behavioural data throughout this research is from Qrious Insights, a permission-based source (consumers opt-in and agree to their data being collected), and includes digital and physical behaviours including app usage, website visits, search terms, social media ad exposure, web and in-app media consumption, web and selected in-app product purchases and brick and mortar visits. Long-term activity impact is measured through Kantar's BrandNow brand

performance tracker, which examines brand equity, brand power against competitors and activity impact across key metrics—like advertising awareness, positive buzz, negative buzz and consideration. Kantar BrandNow data also provides long-term impact data including demand, pricing and brand power through Kantar's Meaningful Different and Salient (MDS) framework. The MDS framework underpins the long-term measures of value growth for a brand, and is based on the insight that strong brands have deeper mental connections with consumers.

The challenge of multi-touch attribution, as consumers change from one digital channel to another and from one device to another, can only be answered if one has data across all touchpoints of the consumer journey. Combining PC, mobile, tablet and offline data (location and purchases) provides a much more comprehensive picture of where consumers go, how they engage with the brands and, most importantly, what those critical points are in their journey where a brand can have the biggest impact. For this research, we leveraged 11,378 consumers in the US who have opted in to have their digital behaviour tracked. We chose to measure social advertising's impact on actual purchase for two major brands. We also leverage Kantar's BrandNow data to uncover the long-term impact these marketing strategies have on brand equity.

The first brand, Wayfair, is a large online-only retailer of home furniture and décor. Based on observed behaviours, most of the shopping of this brand is happening on a web browser versus in-app, which provided the opportunity to see actual purchases made. It was also observed that this brand leverages social media advertising quite a bit.

The second brand, McDonald's, is a quick service restaurant with a strong app/mobile presence. With instore location data available alongside the advertising exposure and brand interactions, it can be inferred that if one visits a McDonald's they are ultimately making a purchase, since most people don't visit and "shop: at McDonald's and do not make a purchase.

Social advertising exposure in-app on Facebook, Instagram, Twitter and YouTube was identified for both brands for the first three months of 2023. Prior brand engagement (website visitation, app usage, website and in-app purchases, and in-person visits) between January 2022 to prior to the advertisement exposure was identified. Brand equity data was also examined to understand how these digital strategies impacted longer-term brand performance, and was collected from April 2023 to June 2023. Those exposed were analysed and profiled to understand who was being exposed to the advertisements. This included profiling on key demographics (age, ethnicity/race, gender, region and income), but also on prior engagement with the brand (digital engagement identified as shopping, and digital purchases or in-person location visits where purchase can be inferred).

Those not exposed to the brands' social advertising were compared to the exposed cell. Because brands aim to target different types of consumers, the exposed and unexposed cell of consumers typically will look quite different on demographics and also on prior brand engagement (see Figures 1 and 2). To remove this bias, the unexposed cell was balanced to look like the exposed cell. Both demographics (age, gender, region, ethnicity/race and income), prior brand interactions (shopping online: website and apps and visiting the brand's locations in-person), as well as prior purchasing behaviours with the brand were used in balancing the cells. Not only were the cells balanced to if they shopped or purchased, but also to the frequency of

shopping and purchasing. Balancing was done through stratified sampling matching the unexposed cell to look like the exposed cell. Checks were in place to ensure that no significant differences existed between the two cells at a 90% confidence interval. Without balancing you could over or underrepresent an audience. There are many different opinions in the industry on the "right" way to balance; the more differences you can isolate, the stronger your ad impact measurement will be. If the two cells match on both demographics and behaviours, the lift can't be contributed to a difference in the samples. As part of this research, we compared results if balancing was completed only on demographics, which is how many traditional surveys are balanced today. When balancing only on demographics, we observed a large inflation in the numbers, which could be misinterpreted by a brand as doing better or worse than they actually are. A similar result occurs when only balancing by behaviours.



Figure 1

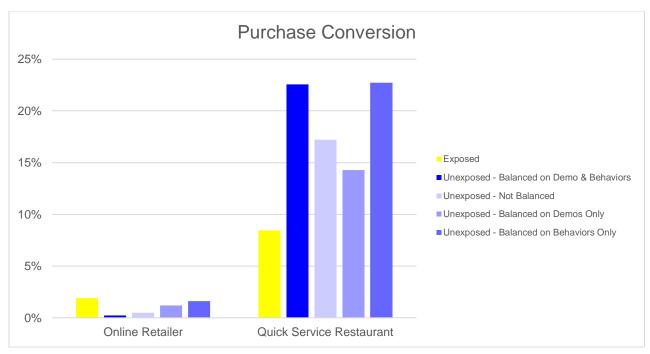


Figure 2

In addition to measuring the lift in brand engagement and actual purchases, behavioural data analysis can reveal much more about what a brand is doing, how well it's working and, specifically, if advertising is working. In our research, we not only compared the exposed and unexposed cells, but we dug deeper to reveal the full truth of what was happening. This included comparing the overall group of those shopping and purchasing to those exposed. This reveals who a brand is reaching with their advertising, and how it differs from those already engaging and purchasing from a brand. Going further to explore who the purchasers are, we can see if advertising is bringing in the same type of customer or new customers. If you're measuring your own brand, this provides a check to understand if your targeting is working as intended. If you're comparing competitive brands, you now have a glimpse into their targeting strategy and effectiveness, showing you who their customers are today and who they are trying to bring into their brand through targeted digital advertising. Behavioural data can also help to measure if advertising is driving consumers to other brands, where they see an advertisement for a category that triggers them to engage with a competitive brand that they prefer better. Brand level data can help understand how specific activities and events impact consideration, awareness and overall brand health compared to competitors. It can also indicate what future performance may look like.

There is no place like home: A Wayfair case study

Retail is one of the industries that has undergone the biggest disruption in the past decade, with omnichannel now becoming a necessity to survive in this blended world. Kantar 2023 monitor data finding that 17% of people prefer to buy appliances (e.g., dish washer, food processor, vacuum, etc.) and 15% prefer to buy furniture online. Furthermore, when looking at younger generations, this digital-first mentality increases with 44% of Gen Z preferring to buy appliances online and 45% preferring to purchase furniture online. Millennials also follow similar patterns, with 39% preferring to buy appliances online and 42% preferring to buy furniture online. Outside of purchasing preferences, online retail presence is key for consideration and to connect with consumers, overall. Digital window shopping is typically for consumers of online-only retailers,

as the digital nature allows shoppers to add things to their cart and reflect on how well that purchase would work in the home, or wait for favourable promotions. Additionally, 58% of people tend to do research before deciding what to buy, and 24% of people like to connect with retailers and brands on social media, with Gen Z (35%) and Millennials (37%) leading the charge.

To better understand the future of this category, and specifically how social advertising is impacting performance, we chose to focus on an online-only retailer, Wayfair. When it comes to Wayfair, consumers are shopping from the convenience of their own homes or on-the-go from wherever they are. Wayfair offers a variety of furniture and home décor products, but what is driving purchase for the online retailer? Of those shopping the brand (regardless of ad exposure), we observed only 5.39% making a purchase; so the brand has a lot of window shoppers at any given time. Their social advertising includes showing eye-catching products, highlighting shipping offers such as free shipping, 60% or 70% discount offers, as well as including catchy sayings about "updating your style" or "creating a space that's perfectly fit for you". In Q1 of 2023, we observed 10,390 unique ad views for this brand among 957 consumers. The average person saw 10.9 ads, and was exposed on an average of 3.6 days over the quarter (see Figures 3 and 4 below).

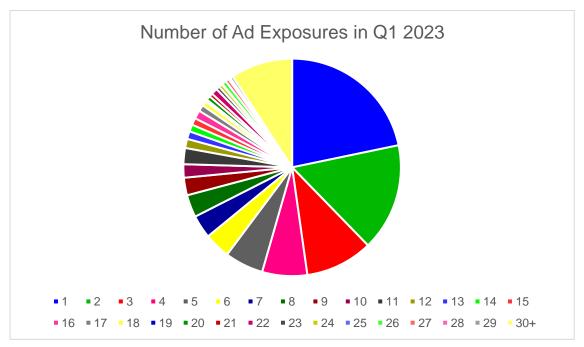


Figure 3

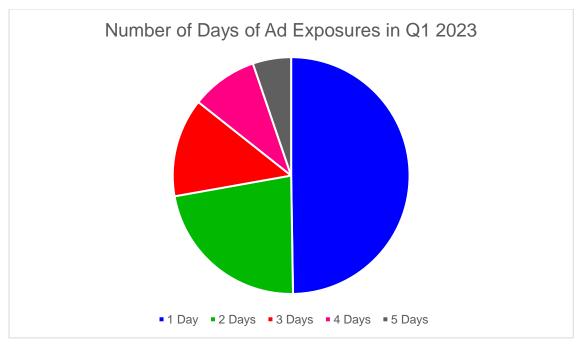


Figure 4

Comparing those exposed to those shopping for the brand (regardless of exposure), you can discover who the ads are reaching, versus who is shopping for the brand. When you reveal differences between who is shopping and who is being exposed, you can uncover a brand's strategy and targeting. For this retailer, shoppers of the brand are less likely to be Gen Z and from the southern region of the US. However, seeing who is being exposed to the advertising, we can infer that the retailer is targeting these audiences with their current social advertising, likely trying to bring in new customers. Comparing those exposed to a non-balanced cell of those unexposed, it appears the ads are driving shoppers to explore the brand, and are ultimately more likely to purchase (See Table 1). Nevertheless, when the data is balanced to look like the exposed cell on both prior behaviours and demographics, we discover the advertisements have a larger impact on purchase, but are not increasing shopping (See Table 1). This means the ads are helping narrow the gap between those who are already shopping on Wayfair, with those making purchases and "close the deal" so to speak. Simply put, social advertising is helping drive sales for Wayfair among their current digital window shoppers.

	Exposed	Unexposed not balanced	Unexposed balanced on behaviours and demographics
% Shopping	13.47%	10.22%	13.56%
% Purchasing	1.9%	0.49%	.24%
Purchase conversion – among shoppers	14.08%	4.81%	1.77%
T 11 1 21 1			1 111

Table 1: Shopping and purchasing after being exposed was measured within 1 week of seeing the advertisement for this category.

Even though the overall cell of those exposed to advertisement and the cell of those who were not exposed to an advertisement are balanced overall on demographics and behaviours, looking at only those who were shopping and/or purchasing in each of the two cells you can understand who the advertisements are most

effective with. For this online retailer, comparing the profile of those exposed and shopping and/or purchasing to those who are not exposed and are shopping and/or purchasing, it was discovered the retailer is not bringing in a different demographic profile of customers with their social advertising. Ultimately, their social advertising is helping to convert previous customers to making a new purchase, and not necessarily bringing in new customers. When it comes to brand impact, there is a significant increase in salience for Wayfair after Q1 activity, especially when looking at competitors (see Figures 5, 6 and 7). Salience is the degree to which your brand is thought of or noticed. Overall, since Q1 activity, Wayfair has seen a positive uptick (+4) in salience across total population, while competitors like Amazon (-2) and Home Goods (0) see negative or neutral changes in salience. Also, while competitors like Home Depot (+1) and IKEA (+2) saw a positive increase as well, Wayfair still outperformed all competitors when examining salience.

Salient (1) Wayfair				
Change metric				
Brand name	13 Apr ?	13 Jul ?	Change ?	
Wayfair	60	64	+4	
Amazon	156	155	-2	
Home Depot	224	224	+1	
Home Goods	69	69	+0	
IKEA	69	71	+2	

Figure 5

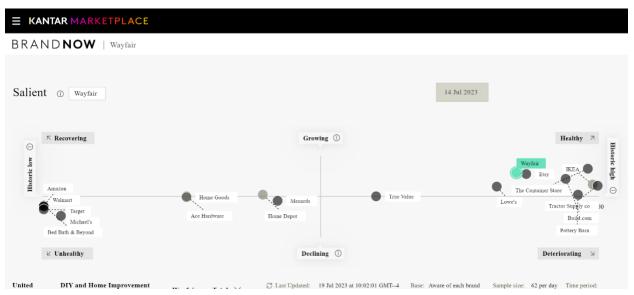


Figure 6

Salience for Wayfair among folks ages 18 to 34 increased by +9 percentage points, and there are even bigger gaps in terms of how well Wayfair is performing in salience compared to competitors. Amazon decreased by 3 percentage points, Home Goods stayed the same and Home Depot increased by +1 as well

as IKEA +6. There is growing in consideration and brand awareness amongst younger generations. Additionally, the effects of social media bridging the gap between digital window shoppers and purchases continued through the following months, with an increase of 5.4% trying and/or using Wayfair between April and July, compared to a decrease of .3% for Amazon during that same period of time.

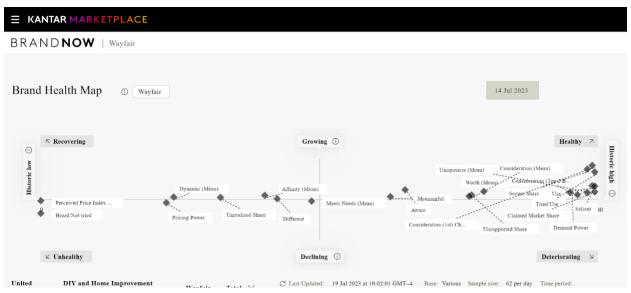


Figure 7

Overall, across the total population, we see positive increases in consideration (+2), positive buzz (+2) and a decrease in negative buzz—which is a good thing (see Figure 8). When taking a deeper look at the consumer perceptions for people between the ages of 18 and 34, we see increases across the board, with a lift in advertising awareness (+1), positive buzz (+3) and consideration (+1), as well as a decrease in negative buzz by (-4). Thus, while Gen Z may not be actively buying on Wayfair yet, the brand is growing in consideration and positive brand attitudes among this generation as well as Millennials. Given the overall category trend data we see and understanding the journey of the average Wayfair shopper, we can expect consideration to eventually translate into sales and for Gen Z to follow a similar journey as Wayfair shoppers overall, maturing from digital window shopping to loyal shoppers.

Activity Impact (i)

View how specific activities or events impact your brand across specific metrics.

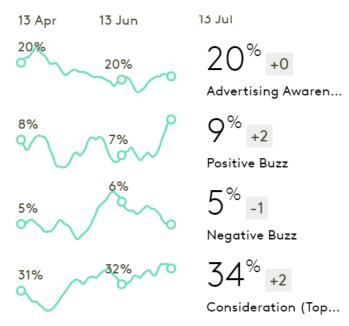


Figure 8

Fuelling US bellies: A McDonald's case study

From the emergence of ghost kitchens to robot deliveries to TikTok-fuelled food trends to branded collaborations, disruption has come from all angles in the food and beverage industry over the last few years—especially quick service restaurants (QSR). Tech is always helping dining and grocery companies level up all parts of their business, and the latest innovations are helping them elevate (and humanise) service, a smart move given that 83% of US MONITOR respondents tell us that, when choosing a restaurant, the quality of service is very or extremely important. Innovative restaurant brands are finding new ways to reward their customers through gaming and web integrations, appealing to the 51% of US MONITOR respondents who consider loyalty and rewards programmes to be a very or extremely important factor when deciding where to shop. It is no surprise given the industry's propensity for adopting new technologies and marketing levers that QSR are no strangers to social media. Nonetheless, how is social media impacting both short-term sales and long-term brand attributes for QSR giants like McDonald's?

In this second case study, we explored the impact of social advertising for McDonald's, a large QSR in the US. With a popular brand like this, it's top-of-mind and many consumers are purchasing from it already on a regular basis. Therefore, creating a significant impact is actually much harder due to McDonald's domination in the space and the margins it is working with. Behavioural analysis began with a total of 11,378 consumers, where 5,339 were observed shopping the brand, of which 4,828 made a purchase (i.e., a 90.4% purchase conversion among those shopping the brand). We observed 11,959 social advertising views among 1,184 people in Q1 2023; the average person viewed 10.1 ads over an average of 5.9 days (see Figures 9 and 10).

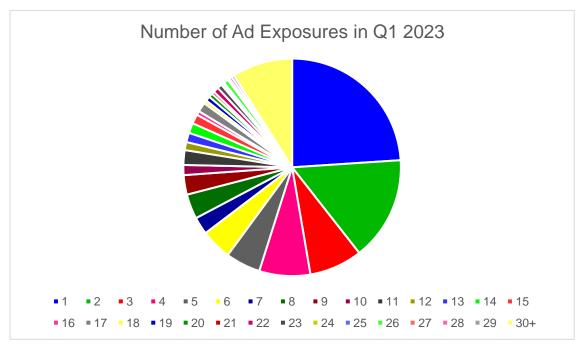


Figure 9

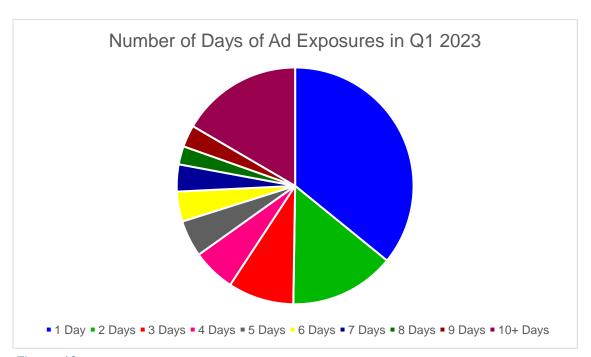


Figure 10

McDonald's has a variety of social advertising, ranging from specific offers, hinting at rewards and discounts in the app ultimately to motivate people to download the app and catchy phrases like: "what's your favorite mcnugget shape", "make ur lunch dreams come true", "make a fries run. u deserve it" and more. Comparing those individuals who were exposed to advertising from the brand to those who did not see advertising, purchase conversion was compared within 36 hours after seeing the advertisement. Analysis revealed the advertising was not providing a positive brand lift. In fact, the shopping and purchase rates among those exposed to advertising were significantly less than those not exposed (See Table 2).

	Exposed	Non-Balanced Unexposed	Unexposed Balanced Behaviour + Demo
% Shopping	23.07%	42.67%	54.91 %
% Purchasting	8.46%	17.2%	22.55%
Purchase Conversion - Among Shoppers	36.66%	40.3%	41.07%

Table 2: Shopping and purchasing after being exposed was measured within 36 hours of seeing the advertisement for this category.

While this analysis compared the exposed cell to both a non-balanced unexposed cell and a balanced unexposed cell, the results were the same. In this case, so many individuals are purchasing from this brand already that the unexposed and exposed cells were relatively similar on demographics and behaviours before balancing. We still highly recommend always balancing both demographics and behaviours for a true brand engagement measurement. With no impact on shopping and purchasing from McDonald's, we sought to understand if the advertising was having a different impact. We know within 36 hours of seeing the social advertisement, 23% shopped McDonald's. However, we also observed another 13% shopping at a competitive QSR. This included Burger King, Taco Bell, Starbuck's and Dunkin' Donuts among others. In this case, the advertising may be triggering consumers to want to satisfy a craving, but not necessarily driving them directly to McDonald's.

If we had stopped there, we would have said that our advertising is not necessarily increasing shopping for the brand, but digging deeper, we can see that social advertising is in fact having an impact on the brand. We profiled who is shopping for this brand and who is purchasing the brand, based on looking at who the shoppers and purchasers are among a census representative sample of consumers. Comparing who is shopping today to who was exposed to advertising, you can see where the brand may be focusing their efforts; looking at those exposed, shopping and purchasing we can see if they are in fact successful (See Table 3). Exposure to social advertising for McDonald's tends to reach consumers that are more diverse, younger and (mostly) women. The composition of those exposed and shopping and purchasing also skews higher on these same demographics, showing that social advertising does have a lift among these specific demographics. Without looking at the brief and objectives for these campaigns, we cannot definitely say whether or not this was the objective. Nonetheless, we do know that many brands today are hot on Gen Z and are trying to understand how to build deep, long-term relationships with this consumer demographic, which is also more diverse and gender balanced than any prior generation. Additionally, diversity, equity and inclusion (DEI) is a core focus for McDonald's as a brand, so it's not surprising to see this focus reflected in its social media strategies.

	Shoppers	Purchasers	Exposed (ALL)	Exposed shoppers	Exposed purchasers
Men	43%	43%	35%	35%	34%
Women	57%	57%	64%	64%	65%
Gen Z	11%	10%	20%	21%	21%
Millennial	46%	47%	58%	58%	59%

Gen X	28%	28%	19%	19%	18%
Boomer	15%	25%	3%	2%	2%
White/Caucasian	77%	77%	67%	69%	70%
Black/African American	13%	13%	19%	18%	18%
Asian/Pacific Islander	4%	4%	4%	3%	2%
Native American	2%	2%	2%	2%	2%
Other/Multi- Racial	3%	3%	8%	8%	8%
Hispanic	18%	18%	15%	17%	17%
Midwest Region	23%	23%	24%	25%	25%
Northeast Region	12%	12%	13%	12%	11%
South Region	41%	41%	47%	49%	48%
West Region	24%	23%	14%	14%	15%

Table 3

For McDonald's, the overall brand engagement lift on shopping and purchasing did not increase when someone was exposed to social advertising. However, we discovered that the advertisements have some impact on the overall category, and do increase shopping and purchasing for specific demographics. Additionally, when looking at longer-term brand metrics, we see that McDonald's campaigns do provide a significant increase in Kantar's MDS framework in the "different" category (See Figure 11 and Figure 12). "Different" is defined by how well the brand feels different from other brands in its category, and sets the trends for the category. Different also correlates to premium status. Between April and July 2023, we see McDonald's increase by 5% points while competitors Dunkin (1%) increased at a much lower rate, Arby's staying neutral, and Chipotle (-2) and Jersey Mike's (-2) decreasing in difference.

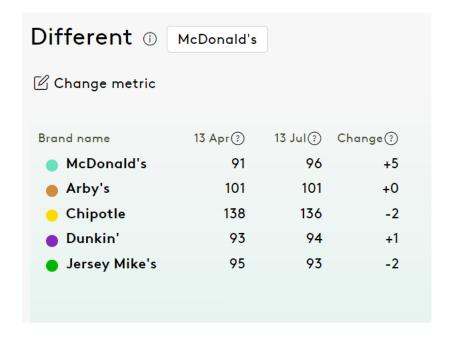


Figure 11



Figure 12

When looking at people aged 18 to 34, "different" is ranked even higher, with an increase of 11 percentage points, compared to Chipotle (+5), Arby's (+1), Dunkin' (+1) and Jersey Mike's (-2). In examining brand health for McDonald's, there are a few key metrics that are at a historic high, including "great advertising factor", "everyday factor", "use" and "distinctive specialist" for people, overall. When looking at the 18 to 34-year-old demographic, we also see a historic high of "positive buzz", "pricing power", "aware" and "brand purpose" (See Figure 13).



Figure 13

Therefore, clearly the tactics McDonald's is using are driving significant long-term brand performance, especially among younger consumer demographics. Given McDonald's dominance in the QSR category already, social media is helping maintain market share, and ensuring the brand continues that traction among younger demographics and future buying power groups.

Conclusion

With marketing budgets tightening and cookies going away, it's never been more important for marketers to understand their campaign performance and how different channels and tactics are impacting both short-term

sales and long-term brand power. With many marketers gravitating to social advertising due to its cost benefits, it's important for a brand to understand the true impact of social and if it is achieving what the brand desires. As shown in our two case studies, social advertising does not always increase sales activity across the total population, but it can be very effective at gaining traction with new demographics and building sales receptivity and driving future behaviour. Social media also can drive a different type of impact for the brand (like brand sentiments) and depending on the objectives of a given campaign, brands may be ok with that. When thinking of how to get the most out of social advertising, our results show that social is really great at targeting new consumer demographics, but it's important for marketers to remember that perception and behaviour change take time and consistent investment.

To create the strongest results and the desired impact, we recommend a variety of measurements and analyses to truly understand if the goal of the advertising is being achieved as well as the related positive and negative impacts. Leveraging both rich behavioural data available and long-term brand data, brands should consider replacing traditional recall methods, and looking at some of these more robust systems of measurement. Behavioural data should be paired with and analysed alongside a survey, asking about brand perceptions and general attitudes to fuel marketers to uncover deeper and more meaningful insights into what is ultimately driving performance and making a difference for the brand. Digital behavioural data can change the way brands understand their connections and impact to consumers. It can provide more accurate and detailed measurement around digital advertising over asking about recall and behaviours. Moreover, it can guide strategic brand decisions to ensure advertising is allocated most efficiently.

About the authors

Lisa Speck, SVP Behavioral Insights & Sales, Qrious Insight, USA. Steve Silvers, EVP Global Creative & Media, Kantar, USA.

Going Beyond Insights

Building strategies for brands in tough times

Sally Joubert Georgia Phillips

Times are tough, and that is a bit of an understatement. We are being bombarded with news headlines about the interest rate hikes, increased costs of living, shaky stocks and bonds, the lingering pandemic, the energy crisis, the war in Ukraine and a string of natural disasters around the globe. While the Ipsos *Global Consumer Index* shows an increase of one percentage point from last month, beneath this average there is a lot of variation and many countries who are still in decline. Year-on-year the largest declines are in Sweden, Hungary, Australia, France, South Korea and Argentina. In other words, consumer confidence in many countries is still shaky. To understand this further, we have undertaken our own research in the US, UK and Australia over the last few years, in order to look at the consumer impact and what it means for brands and their advertising. We investigated both the attitudinal impact as well as behavioural changes.

Our research has focussed on advertising as we know that this is one, if not the most important lever brands can use to help them grow at this time. In all three markets, we undertook hundreds of interviews in the lead up to the last two Christmas seasons. We evaluated advertising from the key players, as well as looking at outlook perceptions and changes in spending behaviour. We also evaluated over 70 of the Super Bowl ads in the US in February 2023, February 2022 and February 2021. Combined with the Christmas studies, this provided us with thousands of data-points about the advertising and also additional data on perceptions and behaviours. In addition, we undertook regular ad intelligence reviews in Australia—again looking at advertising effectiveness, perceptions and spending behaviour.

To measure ad effectiveness, we used the add+impact® ad intelligence framework. We have identified from measuring advertising for over 30 years that to make a brand grow you need advertising that gets noticed and leaves people feeling good. The key effectiveness metrics are salience (attention to the ad and link to the brand) and brand feelings (bonding to the brand). Our ongoing global validation study confirms that strong performance on these metrics is linked to success in market. Brands can drive salience with creative assets that use humour, casting, storytelling or music to attract attention and engage the viewer. This helps to build mental availability for the brand. Branding can be driven by using strong and distinctive brand assets, and ensuring they are closely linked to the creative and the message. Brand feelings are driven by relevance of what you say and how you say it. This is how we build emotional resonance with our consumers to grow equity.

Attitudinally, in line with the lower levels of consumer confidence, our data show that there are also parallel declines in positive feelings about our futures. We have been monitoring peoples' feelings about their futures (i.e., is it bright, OK or are they worried?) across a nationally representative sample in all three markets for

a number of years. In all three markets, the levels of agreement with feeling that the future is bright has dropped year-on-year over the last few years (see Figure 1).

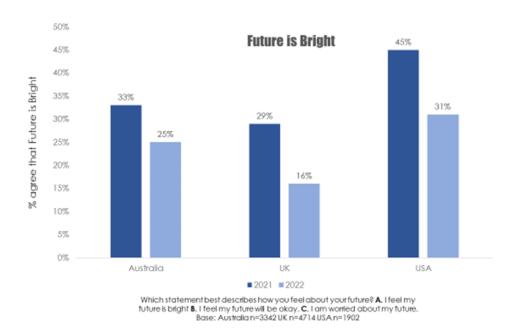


Figure 1: How bright is our future?

While this is nice to know and probably not that surprising, what is most important is how we use this to help us shape our marketing and advertising. If consumers are feeling low, what is the right tone to use when we talk with our consumers? How can brands empathise and show their support in these tough times? How can brands use this as an opportunity to get people to like them more? As stated by John Wooden: "Hardship brings people closer together if you share it". Of course, unless you hold a crystal ball, no one really knows what is going to happen next. However, if we look at the data we can see that behaviourally, consumers are curbing their spending and are focussed on ways to save money and stay safe; they are bunkering down for the storm. Our research of more than 6,000 people between December 2022 and May 2023 in Australia, the UK and the US showed that over 60% of those in Australia and the UK, and 45% of those in the US have already made cuts to their usual spending. The most common areas people are making savings are on entertainment (going out less), driving less, using less heating and looking for cheaper alternatives. People are now willing to consider value brands in areas that they once wouldn't (see Table 1).

	Australia %	UK %	USA %
T2B	67	61	45
I have already had to make cuts to my			
usual spending, and expect to have to	44	35	30
make further cuts			
I have already had to make cuts to my			
usual spending, but do not expect to make	23	26	16
further cuts			
I have been able to maintain my usual			
spending so far, but expect to have to	11	15	15
make cuts soon			
I have been able to maintain my usual			
spending so far, and expect to be able to	21	20	37
continue to do so			

Table 1: Changes in consumer spending. (Thinking about the cost of living, which of the following comes closest to your situation? Please select one. Base: Dec22 - May23 n=6456).

This is a huge issue; it is impacting consumers' attitudes and behaviour and also the way people feel about brands and ads. Across Australia, the US and the UK the expectations are high. In fact, well over 80% believe that brands should show they understand how consumers are feeling (see Table 2).

		Want brands to show
		they understand how I
		am feeling T3B
	2021	79%
Australia	2022	83%
	2023	92%
	2021	88%
UK	2022	85%
	2023	n/a
USA	2021	84%
	2022	81%

2023 89%

Table 2: Brand expectations—understanding. Source: During a crisis I want brands to show they understand how I am feeling (6-point scale Strongly Agree to Strongly Disagree) Base: T3B Dec21 - May23 n=29,593.

This is not surprising since we know from our modelling of behaviour how important empathy is. When people can relate to the ideas in our ads, to our messages or feel an affinity or alignment to our brand, the bond becomes stronger. Thus, if brands can show they understand how people are feeling, they will be better able to build this trust and connect with the emotional resonance that brands are all striving to achieve. Our research confirms that the most effective ads score particularly well on "empathy" and "identification" (i.e., when people relate to what is being shown and also feel that people like them will use and/or buy the brand). To do this we need to understand what is important to consumers. Obviously, these preferences change and we need to ensure we stay up to date with consumers' sentiment and drivers.

When it comes to purchasing, people prioritise what is critical versus what is just important, remembering that this will be different for everyone. For one individual, a Netflix subscription may be more crucial than private health insurance, and it might be the other way around for someone else. Nonetheless, for brands to succeed they need to show how their product and services are critical and relevant to people's needs. If they are not able to do so, they will be substituted for generic brands or dropped all together. Our research confirms that consumers not only would like brands to show they understand how they are feeling, but to also be community-focussed and show that they are supporting the public interest.

		Brands need to serve the public interest to show they are
		supporting T3B
	2021	84%
Australia	2022	86%
	2023	94%
	2021	89%
UK	2022	88%
	2023	n/a
USA	2021	88%
	2022	83%
	2023	90%

Table 3: Brand expectations—support for the community. Source: Brands need to serve the public interest to show they are supporting (6-point scale Strongly Agree to Strongly Disagree) Base: T3B Dec21 - May23 n=29.593.

These changing times are proving to be an enormous challenge for organisations who continue to set large growth targets with a status quo mind-set. Most brands we work with these days are striving to build mental availability and emotional resonance with their marketing activities. Many of these brands assume that what has worked for them in the past will work again in the future—but is this right? Therefore, what should these

big brands and organisations do to plan their way through these tough times? Should they continue as they have done before: "It worked before so why change it?" Or should they lean into the challenge and draw on research, insights and strategies more than ever before, in order to help navigate the way? We think we all know the answer, but sometimes change like this is difficult as it is unfamiliar and requires bravery and a bit of risk.

Of course, we need to lean into this challenge, and this is where data and insights comes into their prime. We can take away some of the risk and fear by looking back to previous tough times, in order to see what we learnt and how brands managed in the past. In other words: what went well and where did they go wrong? For this paper we looked back at 30 years of our own consumer research about brands and ads. This spans several financial crises, property booms and busts and, of course, the recent COVID-19 health pandemic (see Figure 2). We have tracked advertising effectiveness over time using our add+impact® ad effectiveness metric (commitment = % of people who are both attentive to the ad (i.e., the ad cut-through) and bonded to the brand (left people with a good brand feeling)).

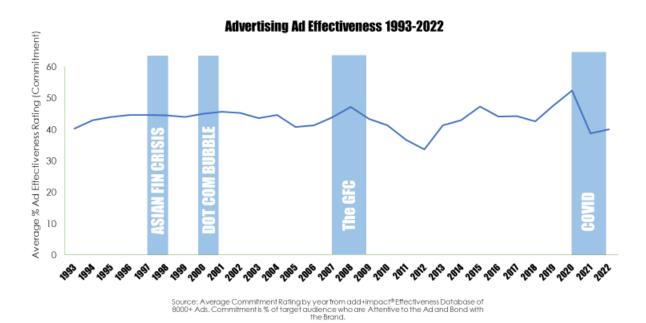


Figure 2: Advertising post-crisis.

What we found from looking back over this longitudinal data was really interesting, and something that all brands should take note of. What we see is while advertising effectiveness remained stable after the Asian financial crisis and the dot-com bubble, there was a significant drop in the effectiveness of advertising post the global financial crisis (GFC). In fact, the average advertising effectiveness was in decline post-GFC until 2012, when it began to improve. We hypothesised that this would happen again with COVID-19 and it did. The drop in effectiveness happened more quickly with the major drop in effectiveness in the first year of the health crisis. Why do we see this drop? It seems from looking at the data that many of the ads didn't take

into consideration the broader market landscape and context of how consumers would be feeling. Brands forged ahead with spending on ads, but they were tone deaf and irrelevant, and consumers didn't believe what brands were saying. This to us is a red flag, but also a learning opportunity. We can learn from the ads that were effective at that time, and also from the ones that weren't.



Figure 3: Still from Cadbury 2009 "eyebrows ad".

One of the challenges of advertising through a crisis is how to get the tone right. Should we be serious? Should we show hope? Should we just distract people from the harsh realities with some light humour? If we go back to the year of 2009 at the time of the GFC, people were stressed, the market was tight and brands were struggling to engage with consumers. Cadbury used a clever approach to make people laugh and distract them from the harsh realities of the world. Following on from the famous Cadbury Gorilla ad, Cadbury launched the "eyebrow execution" (see Figure 3) to show the joy that comes from eating their chocolate. At the time, this ad cut-through and engaged the audience, achieving above benchmark scores on the predictive attention score across the UK, US, Australia and Singapore. It was also on strategy; our research at the time showed the ad to have reached our effectiveness benchmark, placing it in the top 15% of all ads tested in the UK. People felt more positive about the brand and it helped Cadbury be top-of-mind. It was a great example of insights and marketing working together to achieve the best outcome.

However, this was not the case for all the ads on TV during the time. Our longitudinal data also shows that there was a significant drop in the effectiveness of advertising post the GFC. One of the reasons for this was that believability and credibility of the advertising dropped. Perhaps this was because consumers struggled to grapple with the changing economic times, and were cynical about the messages communicated. Or perhaps the messages were just not right for the time.

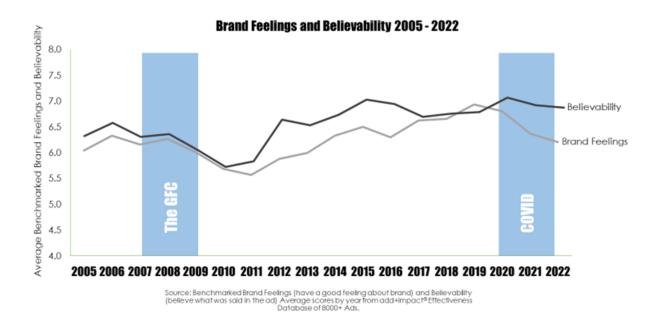


Figure 4: Brand feelings and believability.

Here is an example of an ad that was not as successful at the time: the Evian "skating babies" achieved above benchmark scores on attention in the US at the time, indicating that it was entertaining. However, it wasn't able to generate strong brand feelings and it lacked credibility, achieving low scores on both those metrics at the time. This placed it in the lowest quartile for ad effectiveness in the US. Buying expensive bottled water, which on the face of it is trying to tell us that if we drink this water we will look and feel young. Really? Would we believe that?



Figure 5: Evian 2009 skating babies ad.

Brands that thrived in the past adapted quickly and developed marketing strategies and campaigns with clear, relevant and believable messages.

Another area of interest from our longitudinal study is that we saw advertising likeability drop after the GFC, and the same thing happened during COVID-19. Looking back, it is easy to see that brands tended to play it safe rather than create original and engaging advertising. As a result, we saw increasing numbers of consumers viewing the new ads as "the same old thing".

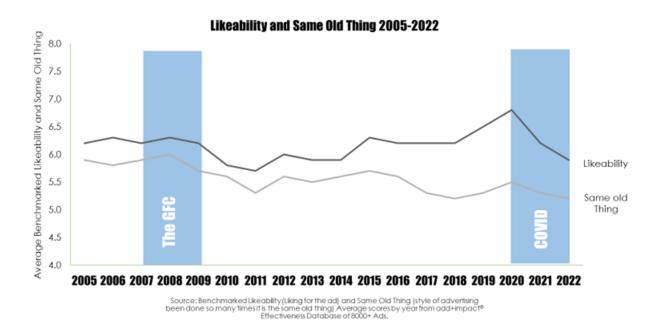


Figure 6: Likeability and the "same old thing".

Importantly what does this mean for 2023? In our recent studies, one of the key insights was the benefit for brands in getting it right. People are more likely to feel favourable about brands that show their support. Difficult situations can also provide an opportunity to build connections with our audiences; these bonds can last long-term and show consumers we are relevant to them and their lives (see Table 4).

		Feel more positively towards brands that show their support of the community T3B
	2021	80%
Australia	2022	86%
	2023	95%
	2021	93%
UK	2022	86%
	2023	n/a
	2021	88%
USA	2022	84%
	2023	90%

Table 4: Brand impact. Source: I am likely to feel more positively towards brands that show their support of the community during a crisis (6-point scale Strongly Agree to Strongly Disagree) Base: T3B Dec21 - May23 n=29,593.

Looking at consumer responses to the 2022 Christmas advertising, we saw some great examples of brands leaning into this to strengthen their bond with their customers (see Figure 7).



Figure 7: Kroger Christmas Magical Cookbook ad (US).

The Kroger Magical Cookbook ad is highly effective (top 10% of all US ads). Creatively, the ad achieved this with a heartwarming story, brilliant music, relevant messaging and, importantly, by leaving people with strong feelings toward Kroger. By communicating the importance of food in celebrating and creating memories with our loved ones, it reinforced the economic reality of cooking more at home. Strategically, the ad communicates with their loyal customers who are much more likely to spend more, thus helping to grow the brand.



Figure 8: John Lewis Christmas ad, "The Beginner" (UK).

While not one the most effective UK Christmas ads in 2022 (top 30% of all UK ads), the John Lewis "The Beginner" (see Figure 8) is a great example of pivoting to lean into customers' mind and mood. Moving away from their typical high budget epic Christmas ads, Beginner highlights the important differences foster care can make and builds the brands community and/or caring credentials. Interestingly, our study showed that this ad was more successful than their two previous Christmas ads at driving these positive brand feelings.

Thus, what does this all mean and how can we go beyond these insights to help brands navigate the current economic situations?

Continue to advertise

One of the most important learnings is that brands need to continue to advertise. If managed properly, crises can present brands with opportunities to gain the trust and respect of consumers, shareholders and employees. When we surveyed people during COVID-19, 86% of consumers expected brands to continue to advertise and that there can be strong gains for brands that show their support for the community. There is also evidence from previous recessions that shows longer periods off air will weaken brand health and impact market share. In other words, brands need to take a long-term view to think about how we want our brand to be perceived once the world turns back to "normal".

Lean into the times

Being sensitive to the changing economic conditions means that focussing on perceived value is important. Do we have an offer, benefit or cost saving we can provide? Can we suggest ways to save? How do we build our perceived value? As already documented, the consumers are sending us a clear message that they want brands to serve the public interest and show their support. It isn't enough to talk-the-talk-people want brands to show rather than tell how they care. Many of the 2022 Christmas add did just this by highlighting their partnerships with charities and the work they are doing in communities.

Show you care

Another way to ensure you maximise the impact of your advertising and connect with your audiences is to demonstrate your understanding and empathy. This can help to build a feeling of relevancy for your brand, and leave people feeling that you are the "brand for them". This means being genuine, authentic and showing you understand how people are feeling during uncertain times.

Our research on this years' campaigns shows that the brands that have already pivoted are reaping the rewards. To succeed, they are ensuring they are believable, credible, likable and not "the same old thing". These ads are doing what they need to do for their brands at this time. Importantly, they have been developed from strong insights. In this paper, we set out to highlight how important it is to go beyond insights. If we restrict our thinking to current views or our current projects, we potentially miss the important

Copyright © **ESOMAR** 2023 CONGRESS 2023

and possibly brand changing insights and thinking we need. Whenever we are advising brands, we need to consider the full picture. What do we already know? What can we learn from the past to help here? We challenge you to ask these questions before you embark on any new project. This is the equivalent of recycling research, but it makes sense. Why do we need to go out and necessarily ask new questions when we may already have the answers?

About the authors

Sally Joubert, CEO Luma Research, Melbourne Australia. Georgia Phillips, COO Luma Research, Melbourne Australia.

Virtual Frontiers

Assessing the potential of the metaverse for qualitative research

Rupert Sinclair Faye Soares Katrin Scheibert

Introduction

"The metaverse is here, and it's not only transforming how we see the world but how we participate in it – from the factory floor to the meeting room."

Satya Nadella, Chief Executive Officer of Microsoft

This paper outlines learnings from our groundbreaking exploration and assessment of the metaverse as an opportunity for qualitative research.

In this paper we will share conclusions around the practical role of the metaverse at the present time and over the coming years. We will also share projections around how researcher skill sets will need to evolve in order to thrive in this new space.

On a more practical note, we will outline how we constructed a programme of research in this rapidly emerging landscape. Readers will come away with a set of technical and methodological suggestions on how to run a successful metaverse research study, and key pitfalls to avoid. We hope the learnings shared in this document contribute towards smoothing the path for those who choose to conduct metaverse research in the future.

Finally, we hope this paper shares a vision of the role that the metaverse can be expected to play in the qualitative research landscape of the mid-twenty-first century.

Background

Virtual reality in the public consciousness

Virtual reality has played a central role in creative representations of the future for decades. From James Tiptree Jr.'s 1973 story *The Girl Who Was Plugged In* to Charlie Brooker's *Black Mirror*, virtual reality (VR) has never been far from our screens and pages.

It is also a category which has consistently failed to fulfil its promise. Nintendo, Sega and Apple's attempts to bring VR into people's homes in the 1990s could charitably be described as a flop, disappointing the public and shifting relatively few VR headsets.

Following these expensive and unsuccessful forays into virtual reality, its application was restricted mostly to professional use for many years, finding use in diverse but well-funded fields, from NASA's training of astronauts to medical students simulating operations.

The emergence of the metaverse

In recent years there has been a renewed push into this area. Major investment has poured into virtual reality from the likes of Meta, Microsoft and Apple. The result has been the emergence of a range of high-quality VR headsets at accessible price-points, bringing these devices into millions of homes and workplaces across the globe. Alongside the hardware, resources are flowing into software for virtual environments, with use cases including gaming, socialising and workplace collaboration.

Collectively, the virtual environments have been named the metaverse. While the phrase has only recently found its way into common language, it was first used in a 1992 science-fiction novel titled *Snow Crash* by Neal Stephenson. Generally speaking, the metaverse is taken to refer to a vision of the internet connected by virtual or augmented reality. Instead of clicking and scrolling through the modern web, you can walk around the metaverse.

In Mathew Ball's Wall Street Journal Best Seller, *The Metaverse*, he offers the following definition:

"...a persistent and interconnected network of 3D virtual worlds that will eventually serve as the gateway to most online experiences, and also underpin much of the physical world. For decades, these ideas have been limited to science fiction and video games, but they are now poised to revolutionize every industry and function, from finance and healthcare to education, consumer products, city planning, dating, and well beyond."

Many of the recent developments were initiated during the pandemic. With the world's office-based workforce largely restricted to remote work, and attending online meetings, the concept of a virtual space for professional collaboration began to seem less alien and more compelling. A similar acceptance of virtual socialising also emerged from the pandemic, with many growing familiar with online tools for spending time with family and friends.

In October 2021, Facebook CEO Mark Zuckerberg presented his vision for the future of the social media giant, formalising the company's focus on the metaverse. Addressing the company's annual conference, Zuckerberg announced the company was rebranding as Meta and detailed how his company aimed to build a new version of the internet: "We believe the metaverse will be the successor to the mobile internet, we'll be able to feel present – like we're right there with people no matter how far apart we actually are."

This attracted widespread attention and prompted animated conversations around how the metaverse could be expected to disrupt and revolutionise our lives. Following this, the metaverse received endless references in vision and strategy statements for major companies. However, there was minimal talk within the research industry of how, if at all, this would impact us and potential opportunities.

With a shared curiosity around the impact of emerging technology on our industry, Kadence International and the Dow Jones' Customer Insights team took this opportunity to explore the topic for ourselves. Specifically, we collaborated to examine whether the metaverse can serve as an effective tool for qualitative research either now or in the future.

What were we looking to learn from the pilot?

Ultimately, our goal was to determine whether or not the metaverse can serve as an effective tool for market research, a topic which had attracted little attention at this point.

Breaking this down further, we were keen to explore a number of elements:

- 1. Identify the opportunities presented by the metaverse in the specific context of market research;
- 2. Explore opportunities, challenges and limitations at the current time;
- 3. Assess opportunities in the medium-term, as consumer access to hardware widens and investment continues to be ploughed into the space from tech-giants such as Facebook, Google and Apple;
- 4. Determine how we, as insight professionals and as an industry, should prepare for the future.

Overall, these factors would help to determine whether the metaverse is the future of our industry or simply a passing distraction.

The Dow Jones' Customer Insights team had a keen interest in exploring these factors in the context of user experience (UX) testing and co-creation for media products. This informed our decision to focus on testing these methods during our research pilot.

Copyright © **ESOMAR** 2023 CONGRESS 2023

Finally, we were keen to gather our learnings from the pilot in order to help others who followed a similar path in future.

Cutting through the hype - our initial forays into the metaverse

When we started on our journey, investment appeared to be pouring-in from all angles. In June 2022, McKinsey reported that "more than \$120 billion [had been invested] in the metaverse in the first five months of 2022".

The almost breathless excitement emerging from the business and technology worlds led to a degree of scepticism about the practical applications within our team. Meanwhile, news coverage was typically accompanied by stylised imagery of legless avatars floating in a sterile-looking virtual corporate environment. The avatars bore little resemblance to real people and the whole set-up appeared strangely awkward and intangible.

Our initial forays in the metaverse did little to assuage our doubts. At this point, our approach involved accessing virtual worlds without VR headsets, as we had not yet invested in these (many metaverse apps can be downloaded to a regular computer and accessed in 2D rather than 3D). Our 2D expeditions were rather uninspiring and left us with low expectations around potential upsides for the research industry.

However, by this point we had committed to the pilot and decided that, despite our early experiences, we would persevere with buying the VR headsets. This would allow us to experience the metaverse in the optimal and intended way and give us a true read on how beneficial it could be for our industry.

Building a programme of research in the metaverse

Finding our way

Starting from a point of minimal technical knowledge, we were aware that we had a lot of learning to do before we could run an effective programme of research that was not dogged by technical issues. Familiarising ourselves with the hardware and software was critical given that our primary objective was to establish whether the metaverse can be an effective tool for research and not to test our own familiarity with the technology. We were aware that the whole pilot could easily come unstuck if we were not proficient in using the necessary technology.

As a first step, we were keen to identify the VR headset that would be most suitable for the research pilot. A range of options were available on the market from various manufacturers and at different price-points. Each headset offered access to its own ecosystem of apps, which could be downloaded to the device. Lack of compatibility between the devices, and associated apps, meant that we needed to select our option carefully as participants in the pilot would be drawn from existing owners of the same device.

Having considered the options, we agreed to proceed with the Meta Oculus Quest 2. This had the lowest price-point of the available headsets, around £300, and offered access to a fairly developed app store. While VR headset ownership is restricted to a fairly tech-forward minority, the lower price-point meant it was more accessible to mainstream consumers and ownership was less skewed towards affluent early adopters. Driven by the lower price-point, the Oculus Quest 2 was also by far the most popular headset on the market, meaning the recruitment process would be most straightforward.



Figure 1: The Oculus Quest 2

Having selected our hardware, we next needed to identify software which would offer a suitable environment in which to conduct our research pilot. Browsing the Oculus app store, we found a large number of apps designed for people to congregate and socialise. There were also a number of apps apparently designed for workplace collaboration. We quickly realised that the latter were best suited to our needs. Many workplace collaboration apps offered customisable options in terms of room layouts, seating arrangements and visual backdrops. Crucially, they also provided the opportunity to easily share and annotate stimulus, an element that would be of key importance for the UX testing element of our pilot.

A number of the apps we tested offered stunning visual environments, for example, boardrooms with a panoramic view over Manhattan or an exquisite-looking beachside bar. Others offered functional but less inspiring corporate environments. All were customisable to a greater or lesser extent, allowing you to change variables like the room layout and visual backdrops to suit your needs.

While the aesthetic elements were often pretty impressive, the usability and intuitiveness of the apps differed wildly. Some apps offered tools which, in theory, could be incredibly valuable in the context of co-creation but were so unintuitive they were rendered useless. For example, one popular app offered a fantastic selection of environments and a wide set of annotation tools, however, the tools were near to impossible to manipulate when we tested them.

We experimented with a range of apps using our Oculus Quest 2 headsets, and eventually settled on Horizon Workrooms from Meta as the most evolved in terms of usability, functionality and intuitiveness. Horizon Workrooms describes its platform as "an immersive virtual office where you can meet teammates, brainstorm ideas, share presentations and get things done".

While the visuals were less striking than some of the competitors, the usability was far more evolved and we hoped this would lead to a smoother experience for our pilot and, by extension, free us up to assess whether or not the metaverse can serve as an effective tool for research. The following intuitive and easy-to-use elements of functionality were crucial in deciding to use Workrooms:

- A virtual whiteboard which could be used for the co-creation elements of our pilot;
- Ability to project your laptop screen into the virtual room in order to explore navigation of live websites with the group;

- A range of annotation tools to mark-up stimulus, including markers and "sticky notes";
- A variety of seating plans, which could be changed during a session to suit individual tasks (e.g., round-table for co-creation moving to auditorium when viewing live website projected at the front).



Figure 2: Horizon Workrooms

Research design

In order to address our project objectives, it was important to test a range of research exercises with a view to identifying where strengths and weaknesses lay for metaverse research. A key interest lay in understanding tasks related to UX testing and co-creation for media products.

Against this backdrop, we prepared a series of research tasks. These included the following:

- Group discussion based around screenshots submitted by respondents prior to the session (and annotation of these);
- Navigation of a "live" news website as a group, including using menus and searching for content;
- Co-creation task to create an "ideal" news website landing-page with the moderator building a prototype page in the session based on the group suggestions.

A range of stimulus types were used in the groups with a view to understanding what worked well. This included:

- Static screenshots from news websites that had been shared by respondents as a pre-task. These were
 displayed by the moderator to prompt discussion around likes and dislikes from a visual and navigation
 point-of-view, when accessing news. Screenshots were annotated by using virtual marker-pens and
 "sticky notes" to reflect feedback from the group. Annotated screenshots were later extracted from the
 session for analysis.
- "Live" news websites were accessed and shared with the group. This allowed respondents to navigate the site and identify likes and dislikes.

Research sessions were designed around the involvement of three research team members, in order to limit technical issues and leave us free to focus on the methodology. We allocated team members to the following roles:

- *Moderator:* lead all discussions with respondents
- *Scribe:* capture outputs from co-creation sessions using markers on a virtual whiteboard and annotate screenshots from live websites with respondent feedback

Copyright © **ESOMAR** 2023 CONGRESS 2023

• *Technical support:* provide tech support to respondents entering the group and during the session. Also switch room-layout at specific points and operate video-recording.

Our topic guide included a detailed "choreography" of what each team member would be required to do throughout the sessions to minimise confusion and overlap.

Respondent recruitment and sample composition

Given our limited budget, we were not in a position to supply a £300 headset to each respondent. Therefore, it was necessary that our sample be composed of tech-forward, existing owners of Oculus Quest 2 devices.

Within this narrow universe, we focused on drawing a sample of respondents that was as diverse as possible. Our achieved sample ranged in age from twenty-three to fifty-five years with a good gender mix. Additionally, participants possessed a range of competence levels in using their headset: some were frequent users and others had only used their device once or twice.

We were also keen to draw individuals from a range of professional backgrounds, given the business-focus of much of Dow Jones' content.

Our final sample included individuals drawn from a range of professional backgrounds, including:

- Professor of journalism
- Data scientist
- Actuary
- Social media manager
- Technology company employee
- Secondary school teacher
- University student

Respondents from across the UK were invited to participate in the pilot. The achieved sample comprised participants from Sussex, Northumberland, Essex and Yorkshire. A dispersed sample was an important dimension of the research design since it would help us to understand the role the metaverse could play in bringing together geographically dispersed respondents in a single space: a key advantage over traditional methods.

Respondents were invited to participate in one of three ninety-minute sessions scheduled over a two-week period. We varied the number of respondents per group to help us understand the impact of different numbers on the group dynamic in a metaverse environment. Groups were comprised of four, three and two respondents.

As mentioned, owing to financial and practical considerations, the sample was comprised of UK respondents and existing owners of the Oculus Quest 2 headset. While steps were taken to ensure a diverse range of respondents within these parameters – for example, geographic location, job roles and levels of tech competence – learnings should be considered in the context of the sample composition.

Onboarding

Given the unfamiliar nature of the task for respondents, we were concerned that the sessions could be plagued by technical issues which distracted us from actually assessing the methodology. With this in mind, we placed a focus on ensuring participants were as prepared as possible before entering the sessions.









Figure 3: Onboarding

Participants were sent an engaging onboarding document. This shared details on:

- Step-by-step instructions on how to download Horizon Workrooms to their headset
- Step-by-step instructions on how to enter the session on the day

- What to expect from the research session
- Information on the incentive they would receive
- Details of a pre-task, inviting them to submit screenshots from preferred online news sources (these would be used by moderators as stimulus during the sessions)

What did we learn?

Initial reactions to the VR experience

Our early explorations of the metaverse in 2D, using only our computer screens, were thoroughly uninspiring and led to low expectations around what value it could reasonably bring to our industry.

Having set up our Oculus headsets, we were surprised by our first experiences, which were incomparable to what we had encountered in 2D. We were quickly struck by the genuinely immersive and compelling nature of the experience, starting from the very first tasks designed to calibrate the headset to our environment. Some of this can be attributed to the novelty of the experience. However, even after extensive use during the pilot, our team was left with the sense that there was definitely something substantial and important here which could be leveraged by our industry. Below we will explore some of the key benefits as well as limitations.

In this section we will first examine elements which worked well. These are divided out into general positives followed by elements which compared favourably to heritage techniques, both digital and non-digital. This section will also examine key limitations for metaverse research.

What worked well in our pilot?

First, we have outlined a number of areas where the metaverse-approach exceeded our expectations as an environment for research.

Personal expression using avatars. These legless graphical representations of the user are easy to mock, something we did ourselves when we first saw coverage of the metaverse. However, they offer respondents a platform for personal expression which can be used as part of a deeper contextual understanding of who participants are. Some respondents appeared to have spent considerable time constructing their avatar and, in many ways, these seemed to offer a greater insight into personalities than the clothing, hairstyle or jewellery worn by respondents attending a focus group on their way home from an office job. The anonymised nature of the environment also meant there was no need for conformity, which gave respondents the opportunity to express themselves as they wished. This is definitely an area which merits greater exploration in future metaverse research.

3D audio for realistic sound. "Spatial audio" means that sound appears to travel to your headset from various angles depending on the virtual origin of the noise, or voice. While this sounds like a technical formality, it leads to a realistic sense of occupying the same physical space as the other participants. This is turn makes conversations feel far more authentic and closer to a face-to-face group than we had imagined possible.

Personal expression via non-verbal communication. We all know that non-verbal communication is a crucial element of our interactions with others. Gesticulation of avatars worked far better than we had anticipated with respondents able to communicate with their hands and move their heads, for example nodding approval or nodding to demonstrate they are listening. Respondents could also easily move their bodies towards the speaker to show they were listening. While the non-verbal communication could not capture all elements of bodylanguage it was sufficient to make conversations feel largely natural and authentic. It also offered a sense of personality in many cases, again offering an insight into the respondent.

Authentic participant rapport. The above elements helped to contribute to a connection between participants, with respondents often appearing to build authentic and natural rapport during the sessions. Discourse between

respondents felt much more similar to traditional, face-to-face focus groups than digital ones. At times, respondents splintered off into sub-groups to chat off-topic about something of mutual interest.

Intimacy. In addition to rapport, participating in the groups felt rather intimate at times. When swivelling to talk to the person next to you, you sometimes felt compelled to shuffle away slightly to avoid being in their personal space. Eye contact also felt very realistic to the point of being uncomfortable when maintained for too long. These dimensions of human interaction made the sessions feel more akin to a face-to-face focus group than other heritage digital techniques.

A number of additional positives emerged when comparing the approach to tried-and-tested qualitative methods, both digital and non-digital.

Firstly, we will examine positive comparisons with face-to-face focus groups.

Sampling from across the globe. A key drawback of face-to-face focus groups is the limited area that respondents can be realistically sampled from. Our sessions benefited from many elements of face-to-face groups but with a widely dispersed UK audience. This could easily be expanded to a global sample, with respondents drawn from any continent into a single virtual space.

Switching room layouts. The opportunity to effortlessly switch room layout between, for example, a collaborative roundtable set-up and lecture-style auditorium meant we could optimise the ways in which participants interacted with each other and the stimulus, depending on the task at hand. For example, co-creation tasks worked well at a round table but when trialling a live website it made more sense to project the website onto a large screen at the front of a single row of respondents, with all facing towards the front. Occasional changes in layout also seemed to revive more lethargic respondents.

Sharing stimulus. Sharing stimulus in a face-to-face focus group can sometimes pose a challenge, with participants, for example, unable to clearly view stimulus displayed at the opposite end of the room. On other occasions, participants may have to wait for stimulus to be passed between respondents before having a moment or two to consider it. In the metaverse research sessions, respondents were able to clearly view stimulus projected directly in front of them, enabling them to consider it fully and offer feedback. They could also easily annotate stimulus, without the need to leave their seat. We believe this functionality is a particular benefit in the context of UX and co-creation research.

When compared to digital qualitative techniques, for example digital depth interviews, online focus groups and online communities a separate set of benefits emerged.

Undivided attention. In digital qual, moderators regularly compete with interruptions from family members and pets as well as distractions from phone calls, email and social media. These distractions lead to fractured attention and impact on the quality and depth of insights gathered. Due to the immersive nature of the VR headset, respondents typically appeared to provide their full attention for the session, with few taking the headset off to attend to other tasks. This is a key benefit and makes metaverse research more akin to face-to-face focus groups than digital equivalents.

Non-verbal communication. In our experience, positioning of web cams often means that gesticulation is missing from digital qual. This is not the case in this metaverse, where avatars mirror the body movements of the respondent, delivering a layer of non-verbal communication.

Familiarity with respondents. As alluded to above, the research team ended the pilot focus group sessions feeling far more familiar and acquainted with respondents than in a digital qual session of a similar duration. Again, the quality and depth of interactions felt closer to face-to-face groups than digital equivalents. Clearly this is a benefit when seeking to understand individuals and their behaviours.

What were the key limitations and challenges?

In many ways, the experience of conducting research in the metaverse exceeded our expectations. However, we also encountered a number of factors which made the experience frustrating and challenging.

Below we have outlined the key factors that we encountered.

Technical challenges entering sessions. Despite our efforts to supply detailed instructions to respondents, we encountered technical issues with respondents gaining access to sessions. At the time when the pilot was conducted, gaining access was far more complex and convoluted than typical video meetings. The issues associated with this mundane element of hosting a session were frustrating and time-consuming and should definitely be considered by those seeking to conduct research in the metaverse. We understand that Horizon Workrooms plan to introduce a Zoom and Microsoft Office integration which should make this element less problematic.

No viewing facility for clients. For the purposes of the pilot we used Horizon Workrooms, which is primarily positioned as a tool for workplace collaboration. Unsurprisingly, this did not include functionality for a viewing-facility or "back room" where clients can observe unobtrusively in real time. For this reason, the Dow Jones Customer Insights team watched videos afterwards, which meant they were unable to discuss insights with the moderator or alter direction of discussions during the session. While this limitation can be addressed by building a research-oriented virtual platform, at the current time it presents a notable disadvantage over traditional face-to-face and digital methods.

Limited recording options. At the time of the pilot, the only option for filming sessions was to record from the perspective of one of the participants. This meant that a single member of the research team needed to act as a camera operator for the entire session, facing in the direction of anything that needed to be captured. In order to record reasonable quality footage the camera operator needed to keep their head still and avoid quick movements or nodding their head. Again, this is a limitation which could be addressed with third-party camera angles but the current options make it far more difficult to capture quality footage than would be the case with heritage methods, both face-to-face and digital. Additionally, recordings are limited to a 30-minute duration which means that the camera operator must remember to stop and start recording several times during each session.

Restricted battery life for headsets. The battery life for the Oculus Quest 2 is limited to around 90 minutes. Our instructions to respondents included the recommendation to fully charge their headset prior to the session and have a charging cable available. While battery life is not an insurmountable problem, and likely to improve with new generations of devices, it adds a practical inconvenience which is not present with heritage digital and face-to-face methods.

Sample heavily skewed towards early adopters. As highlighted earlier, the profile of those who own an Oculus Quest device, or any VR device, is currently heavily skewed towards early adopters. This poses a major challenge in drawing a sample which reflects a target audience, as would be required for most research exercises.

Potential application for the insight industry at the current time

While we were impressed with the overall experience, a number of logistical and practical factors conspired to make executing our programme of research in the metaverse challenging and at times frustrating. Individually, no single element posed an insurmountable challenge, and none alone would be sufficiently off-putting, but on aggregate, they make the experience one that requires extensive planning, trouble-shooting skills and some technical know-how.

Looking to the near future, many of these challenges can be expected to be remedied. For example, from a general technology perspective, it seems certain that Meta will make improvements to battery life, address technical difficulties entering sessions and expand recording options. Meanwhile, from an insight industry perspective, it would probably require a fairly modest investment to build a platform which includes the functionality we need or add this to an existing platform. For example, adding a viewing facility option.

At the same time, the universe of headset owners is likely to broaden dramatically with the arrival of Apple on the scene. As consumer take-up gradually increases, so will the feasibility of selecting a sample not solely comprised of early adopters.

However, this does not change the fact that at the current time you would need to be exceptionally motivated and determined to select a metaverse-based qualitative approach over other alternatives. Simply put, the benefits do not currently outweigh the inconvenience.

Recommendations for those who wish to undertake metaverse research at the current time

Designing and executing our programme of research was a learning process. As we moved from group-to-group, our approach evolved to incorporate learnings and reduce friction-points, both for the benefit of the research team and our respondents.

Below, we have outlined key elements which we believe should be included in the research design for those seeking to use the tools currently available to undertake research.

- The Oculus Quest 2 headset in combination with Horizon Workrooms offered the best solution for UX-focused qualitative research at the time of our pilot. Note: given the rapidly evolving hardware and software landscape this can be expected to change.
- In the days leading up to the session, provide clear and detailed instructions to respondents on what to expect. Ideally, send an engaging document which covers the following topics: 1) apps to download ahead of the session; 2) how to join the session; 3) what will happen during the session; 4) any pre-task "homework"; 5) information about respondent privacy; and 6) who to contact with any questions.
- Discourage respondents from including their full name above their avatar, to maintain confidentiality and ensure safeguarding.
- On the morning of the session, remind participants to fully charge their headsets and ensure a charging cable is available.
- Include a team of three researchers on the day: 1) a moderator; 2) a person responsible for sharing stimulus and annotating stimulus based on discussions; and 3) a person recording. Additionally, person 2 or 3 should be responsible for helping with any tech issues encountered by respondents.
- Restrict sessions to one hour to avoid fatigue resulting from eye-strain and weight of the headset. This will also side-step issues around device battery life.
- Include detailed "choreography" in the topic guide. This should clearly state when the room configuration changes and when recording should end and restart (due to the 30-minute recording limit).
- Allow 5 10 minutes at the start of each session for respondents to gradually filter in. This process will likely take longer than expected due to technical hiccups. Include an informal group chat to engage those who have already arrived.

Considerations for safeguarding respondents in a metaverse environment

Reflecting the pioneering nature of the research, we were unable to follow existing industry guidelines on topics like respondent confidentiality and safeguarding in the metaverse.

Below we have outlined a range of considerations. These considerations have also been discussed with the Market Research Society Standards Committee, with a view to incorporating into future industry guidance.

Consent for capturing avatar footage. Metaverse avatars are a graphical representation of a user, created during the set-up process. Sometimes these resemble mythical beasts, but they can also be constructed to resemble the creator quite faithfully. With this in mind, it should become best practice to obtain consent to capture footage of an avatar.

Respondent anonymity. Avatars typically appear with a name floating above them. In some cases, a respondent's full name appears as a default. In order to maintain respondent anonymity and safeguarding, it is important that steps are taken to ensure use of a first name only or a pseudonym.

Cross-cultural misunderstandings. Bringing respondents from across the globe together into a single realistic-feeling space brings many exciting opportunities and advantages for the research world. It may also bring some challenges around behavioural norms. Expectations around personal space and body language differ widely across the globe, for example. When hosting individuals from a range of cultures in a single space it makes sense to establish acceptable behaviours and unacceptable behaviours at the outset of each session to ensure nobody is made to feel uncomfortable.

Harassment. In the past year there have been many media reports surrounding harassment in the metaverse, an environment that is simultaneously intimate and anonymous. Again, it is important that the moderator establishes acceptable behaviours and unacceptable behaviours at the outset of each session to minimise the chance of unpleasant scenarios.

The future of metaverse research

Earlier, we discussed the opportunities presented by the metaverse at the current time, in the context of qualitative research. While metaverse research is workable, we concluded that a range of technical and logistical frustrations, combined with a lack of VR sample, mean that heritage techniques remain preferable at present. Simply put, the benefits do not currently outweigh the inconvenience. However, many of the current challenges can be viewed as teething problems that are likely to be addressed by manufacturers in the near future.

While existing niggles are being ironed-out, Apple's entry into the space will inevitably lead to an acceleration in innovation. Writing in the Wall Street Journal on 6 June 2023, tech reporter Meghan Bobrowsky described Apple's new mixed-reality headset as "a bet that the future of computing is the *metaverse*".

Based on information shared at the product launch, Apple's premium Vision Pro will represent a substantial upgrade on the Oculus Quest 2, used in our pilot. This device will also offer access to a high-quality ecosystem of apps from the Apple App Store. This is likely to lead to an arms race with existing market leader, Meta, resulting in more innovation, higher-quality user experience and more choice for consumers.

The arrival of Apple's legendarily loyal customer-base coupled with increased activity from Meta is likely to lead to a dramatic increase in headset owners as the category matures. This, in turn, will make recruiting a non-early adopter sample feasible, opening up many opportunities for our industry.

Based on our experiences during the pilot, we believe considerable potential exists for metaverse research once the category has had time to mature. The foundations are already in place, but the devices and software must reach a point where these can fairly effortlessly be deployed in research. When we arrive at this point, straightforward exercises like the pilot sessions we undertook will become routine and unremarkable. VR and the metaverse will become a core element of the researcher tool kit.

Fast-forwarding five years, we can imagine mixed-reality headsets such as the Vision Pro (combining AR and VR) being used to convene co-creation sessions during which new products are formulated. Virtual prototypes can then be seamlessly transported into consumers' homes for virtual trials using AR. The technology already exists for this.

With the pace of technological change, it's also easy to imagine more extraordinary use cases. For example, scientists have found that you can use electrical or thermal stimulation to induce a sense of taste. These approaches are still in the very early phases, but suggest that at some point we may be able to conduct food or drink taste tests in a metaverse environment.

It is impossible to predict which direction metaverse research will take but it seems certain that the metaverse and VR will form an important component of qualitative approaches of the 2030s and beyond.

How can our industry prepare for the future?

For the industry to harness opportunities presented by the metaverse, skill sets and approaches will need to adapt and evolve. Some responsibility will land with pioneering agencies, and other elements will be down to individual researchers. There may also be a role for the industry more broadly to collaborate in developing platforms that can be deployed in research.

A crucial element will be development of a platform which includes critical elements required to host a research session. At a minimum this would include a "backroom" to enable unobtrusive viewing by clients, a waiting-room to accommodate respondents before they enter the session and mechanisms to prevent respondents displaying their full names. It may also include a library of room formations suitable for research exercises and functionality for paying respondent incentives. Development of such a platform could be led by a single agency or perhaps a group funding this together under guidance of an industry body, like ESOMAR or MRS.

Individual researchers will also need to adapt in order to thrive in this space. Familiarity with the hardware and research platforms will be crucial, but a range of additional skills will also be needed. New techniques will be required to skilfully moderate qualitative sessions in these environments, including methods to encourage fluid conversation between participants and ensure voices are not excluded. Meanwhile, new types of research exercises will be built leveraging virtual co-creation tools which are not available in real-life settings. New skills will also be required to understand and interpret virtual tools of personal expression, such as avatars.

Additionally, a new tranche of adjacent skills will be required for building virtual assets. For example, virtual shops, bars or restaurants in which consumer behaviours can be observed and understood. Skills may also be helpful in building virtual products to insert into virtual environments for consumer testing.

Above all, researchers will require curiosity and adaptability to thrive in this new space. These qualities allow us to blend existing skill sets with new ones and leverage the opportunities for evolving qualitative techniques in the metaverse.

Conclusion

In summary, our pilot suggests that the metaverse presents compelling opportunities for the research industry. This includes strong advantages when compared to traditional techniques. The immersive nature of the experience, the quality and depth of human interaction and powerful opportunities for collaboration and cocreation are key benefits.

In the short term, a range of technical and logistical teething problems will make research of this type challenging. Consumer adoption of the technology also remains in its infancy, posing a barrier to sampling outside a small universe of early adopters. In combination, these factors mean that the benefits do not outweigh the inconvenience at this moment in time.

Looking to the near future, many of these challenges can be expected to be remedied from a technical perspective. At the same time, the universe of headset owners is likely to broaden dramatically with the arrival

Copyright © **ESOMAR** 2023 CONGRESS 2023

of Apple and their Vision Pro headset. As consumer take-up gradually increases, so will the feasibility of selecting a sample not solely comprised of early-adopters, opening-up many possibilities.

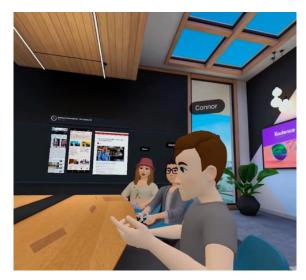
At this point, we believe a major opportunity will present itself for the research industry. To thrive in this new environment, agencies and individual researchers will require a degree of adaptability and creative thinking. Those who embrace this new landscape will go on to build the dominant qualitative research tools of the twenty-first century.

About the Authors

Rupert Sinclair is Head of Insight at Kadence International, London. Faye Soares is Customer Insights Manager at Dow Jones Customer Insights Team, London. Katrin Scheibert is Head of Design at Kadence International, London.











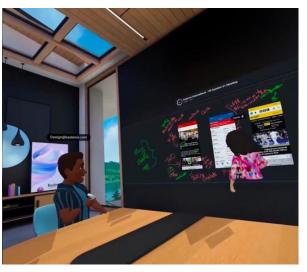


Figure 4: Images from the pilot study

The Metaverse as a Research Laboratory

Leveraging virtual worlds to harness the power of human insights

Alejandro Prieto Larissa Aieta Rodrigo Alagón

A pixel in a haystack

The metaverse—what a broad and fascinating concept. It is represented as a paradoxical blend of expectations as well as uncertainty, optimism and skepticism, technology and, also, human motivations. Nevertheless, in organisations like The Coca-Cola Company (already embedded in the culture), these innovative environments represent an open source to learn from humans in a new form of culture in permanent creation. Hence, given that we take our human-centricity seriously, we firmly stepped into this "unknown ring of insights", repeating our mantra: how can we enhance our people's understanding to serve them better today and in the future? We are very clear that embarking on studying and learning from humans in the metaverse is a huge bet, with a strong "pioneer" conviction behind it, but still a bet at the end of the day. As Al Pacino thrilled us with his three-minute monologue from Oliver Stone's *Any Given Sunday* by remarking: "you find out life is a game of inches", in the case of this heroic feat of doing market research in the metaverse, we engaged, "you find out life is a game of pixels". Thus, we invite you to witness how Coca-Cola (along with its partner in crime Estadística Aplicada) put the metaverse to the test through a series of research experiments, challenging its own actual capabilities and evaluating its ability to become an arena for understanding new human behaviour, just "one pixel at a time".

The first meta-visions

To begin exploring this new environment, back in 2022 we took our first knowledge steps by running a study that helped us understand how the metaverse phenomenon was impacting and influencing people. To this end, The Coca-Cola Company LATAM OU joined forces with BAMM Global to explore the human impact of "going digital", understanding hardware and software predictions and their likely impact on people, as well as building on learnings to explore the implications for future metaverse activity and human behaviour. In this first adventure, we learned four powerful statements and their implications, which worked as a launching pad for this current journey called "The metaverse as a research laboratory":

- 1. The improvement in the quality of remote connections will increase diversity and inclusion, people will be able to live further away from each other while maintaining deep and meaningful relationships and this will be a great opportunity for brands to connect with specific communities and audiences.
- 2. The boundaries of individual identity are stretching, giving people more opportunities to express their way of being and control how they are perceived by others. The physical world is no longer a limiting factor for the way of being, behaving and being perceived.
- 3. Digital worlds allow people to develop new skills and translate them into the physical world, helping them to resolve historical differences and increasing the possibility of training in high-impact and stressful situations, which do not happen often enough in the physical world.
- 4. The digital world will eventually be fully woven into people's life experiences without stops, pauses or transitions, making brands think and behave more broadly and interconnected between worlds, creating more 3D spaces for people to spend time in, always considering the younger generations first (i.e., natives in this interconnected world).

The findings of this first study gave us the nudge to move forward and disembark on the lands of the metaverse. With some certainties, though still with a lot of intrigue, we continued "one pixel at a time", but with our curiosity going full steam ahead.

A universe of questions and hypotheses

After having finished the aforementioned predecessor study, and having identified the metaverse as a fertile space to learn about human behaviour, it was time immerse ourselves in it. Until the beginning of this project, we had merely been "methnographic" observers; then it was time to get our feet wet. The first step to enter the metaverse was to map out what we wanted to do there, and which previous hypotheses, indicators and initial thoughts we were going to test in this huge—though little explored—environment. As researchers, the first thing we did was to put those deep questions that came to our minds into words:

- Will people (consumers in the metaverse) through their avatars be willing to explore and uncover identities, behaviours and relations?
- How will these insights, gathered in the metaverse, compare to information from more established sources of market research?
- Does the metaverse have the potential for upending the way we interact with consumers?
- Is this one of the paths forward for human insights?

This led us to create precise indicators that helped shape, design and define what we wanted to learn from this metaverse experience. Some of the main indicators with which we started this adventure were:

- Understanding how easy it is to recruit a valid, true and representative sample in the metaverse;
- Establishing which research methods are more feasible, and which are more complex to experience in the metaverse:
- The level of participation and engagement generated in the different dynamics;
- The completion rate and time to gather responses from the designed sample;
- The possibility to design effective virtual scenarios and/or worlds required for each research objective;
- The plausibility to pose questions and enthuse conversations that would allow the team to gather meaningful data;

- The declared satisfaction with their experience as respondents inside the metaverse;
- The validation and comparison of the data gathered inside the metaverse, versus data gathered in more established research methodologies (i.e., face-to-face or online surveys).

Having determined the "playing field", we stepped another pixel forward. Now that the game was set, we needed to put a team together.

Experimental plans require experimental thinkers

Once we knew where to direct our exploration it was time to embark on a journey towards new frontiers, and there is no better way to begin exploring the unknown than to assemble the perfect crew for it. Therefore, created an elite multi-disciplinary team from two countries (Brazil and Mexico). we Leading the way was The Coca-Cola Co LATAM OU and Estadística Aplicada (with a partnership spanning over 25 years), complemented by Offerwise (the online panel in charge of the recruitment and follow-up of the respondents' participations) and Lumx (the developer in charge of building the virtual worlds where the experiments took place), using Roblox as the platform of entrance to the metaverse. All together, we designed one of the "most futuristic and daring action plans" market research has ever seen.

MetaHub: Welcome to our insights village

With the whole multi-disciplinary team having their actual "avatar feet and minds" in Roblox, and with all the predecessor hypotheses on the table, we created MetaHub: a virtual village for market research experimentation in the metaverse, which consisted of a plan including four initial experiments. Each experiment had specific goals, but they all shared a general objective: to validate the potential of the metaverse as a platform where market research can be conducted in a way that can eventually substitute established methodologies (i.e., face-to-face or online interviews). As we certainly know, not every story is a fairytale, so the team set out to explore and understand not only the advantages and strengths, but also the areas of opportunity and challenges the metaverse presents whilst conducting research in it. The four experiments were conducted in our "insights village" in the metaverse. This village is composed of scenarios which are exactly like those one can find in an ordinary neighborhood (see Figure 1).

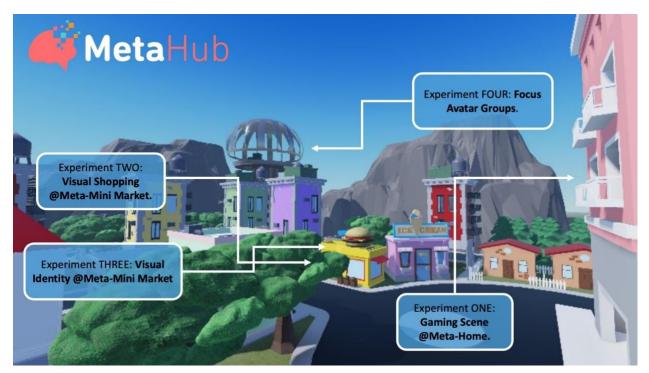


Figure 1

Within each space, a different experiment took place. Below we explore the dynamics and the results in each experiment.

Experiment 1: Gaming scene @Meta-home

Understanding usages and attitudes among gamers

In this first attempt to gather human insights inside the metaverse, the team touched on gamers' usages and attitudes while playing video games (see Figure 2). We sought to gain insights about the gaming platforms they use, the physical locations where they play, motivations for playing, engagement in single or multiplayer modes and factors driving their choice of snacks and beverages during gaming.

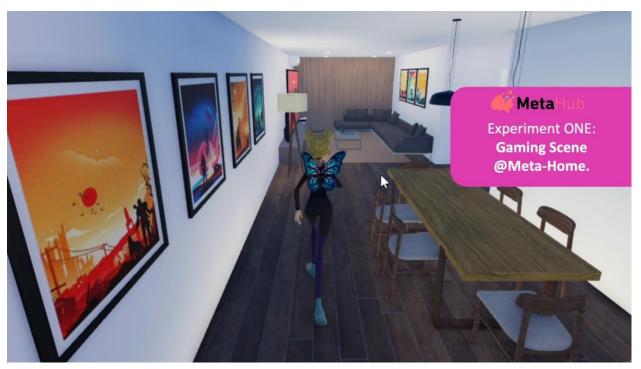


Figure 2

Hacking the gaming scene experiment with A/B dynamics

To enhance the depth of our findings, we employed an A/B testing format in which participants played two different dynamics (dynamic A and dynamic B) in each country (see Figure 3). Both dynamics raised the same questions, but dynamic B included sensory stimuli such as visual icons and audio tracks, as well as pre-codified answers for some questions. Meanwhile, dynamic A did not include these stimuli and required open-ended answers for certain questions. Participants completed both dynamics in a randomised order on two separate days. To make it more interactive and playful, questions to the participants were interspersed with

The flow of the "gaming scene" experiment is shown in Figure 3 below.

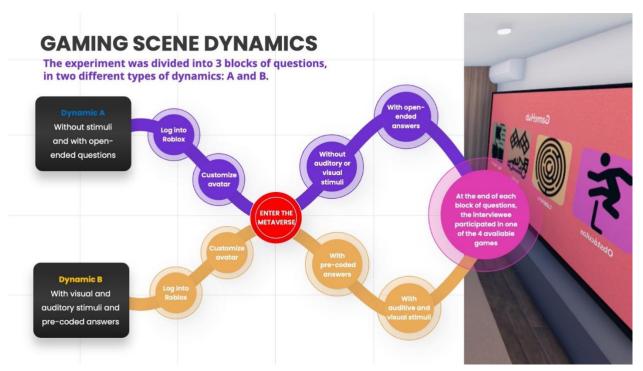


Figure 3

From this specific gaming scene experiment inside the metaverse, the team found out the following aspects regarding gamers' attitudes and habits, as shown in Figure 4.

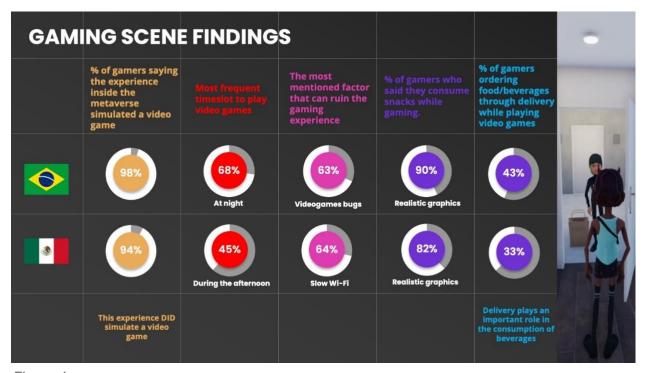


Figure 4

Experiment 2: Visual shopping @Meta-mini market

Grasping the effect of POS communication on shoppers' decisions

After finishing the gaming scene experiment, in this second experiment the team re-created convenience stores inside the metaverse (see Figure 5) where branded products, each with its own price (measured by fictitious virtual tokens) and POS material distributed within the store were exhibited. Participants in this phase had to fulfill a specific purchase mission: use 50 virtual tokens to buy products for a small gathering with friends at home. We analysed which products they took, in which spot within the store and whether the different POS materials had an impact or not on their purchase decision. To assess whether these POS materials had any impact, the team asked questions regarding their findability, attractiveness and call-to-action, among others. Also, we evaluated which brands had ads and communications in the virtual stores, versus which brands respondents decided to buy.

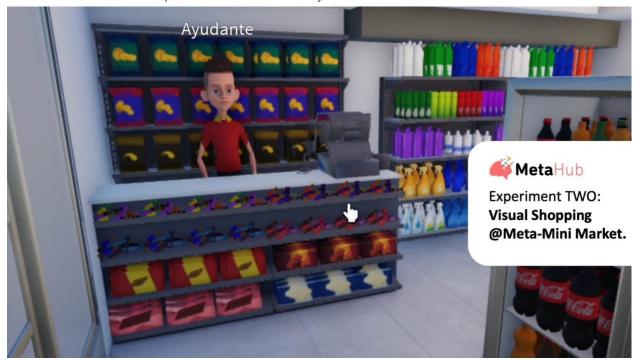


Figure 5

Similar but different

To add a layer of complexity to the analyses, in each country the team created two different convenience stores, each with a different arrangement (products, equipment layout and POS communications). The aim of having two similar yet different stores was to establish, with better accuracy, if the metaverse can be a good place to conduct shopping research within the channel. These stores, to increase the sense of reality, were built based on real stores that can be found in each of the countries where this experiment took place: Brazil and Mexico. Local products, based on a real-life layout, were put in place in each virtual store. The flow of the "visual shopping" experiment is shown in Figure 6.

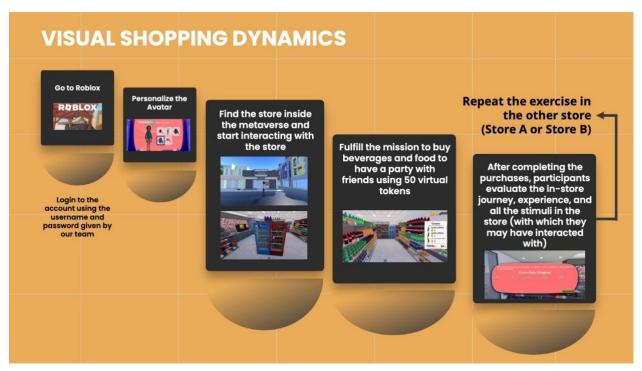


Figure 6

Inside each store, there were different stimuli to replicate how brands communicate with shoppers in this kind of environment. It's important to note that the only POS communication included in these stores belonged to The Coca-Cola Company (see Figure 7). Nearly 20 POS materials were put in place and evaluated.

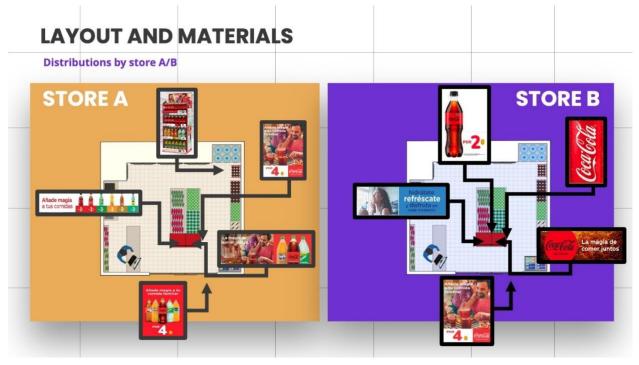


Figure 7

With this specific visual shopping experiment inside the metaverse, the team found out the following aspects regarding the shoppers' journey, each seeking to fulfill a specific purchase mission inside the virtual stores (see Figure 8).



Figure 8

Comparing pixels with flesh and bones

The team also learned that research inside the metaverse can be used to contrast and compare data obtained through established methods of conducting research (i.e., face-to-face or online interviews) as shown by Figure 9.

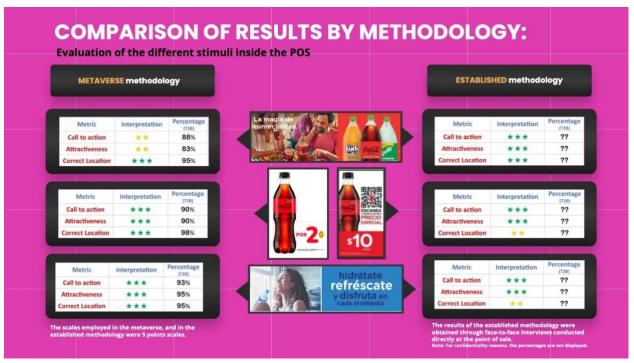


Figure 9

Experiment 3: visual identity @Meta-mini market

Identifying and rating the visual cues of the different packaging proposals

In this third experiment, which was conducted after completing the previous visual shopping @Meta-mini market experience, we aimed at evaluating different beverage packages, analysing the performance of Ades' (a plant-based beverage brand from The Coca-Cola Company) new visual identity proposal, versus its current package design, as well as versus other products in the category of juices and plant-based beverages (see Figure 10).

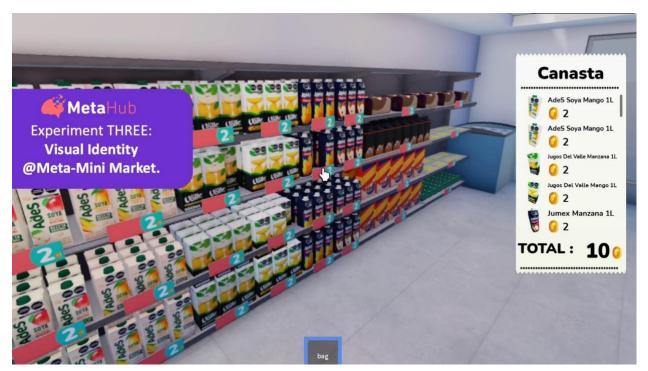


Figure 10

Behold the efficiency and the breakfast's "occasion-verse"

On one hand, for this experiment we made small rectifications and/or tweaks to the virtual convenience stores created in the previous one, which translated into great efficiency in terms of resources and time. On the other hand, the products placed inside the store were more "breakfast-occasion-oriented", including different brands of juices and plant-based beverages. Thus, the avatar participants' specific mission was to select and buy "ingredients" for a typical breakfast, using their 20 available virtual tokens. Afterwards, we analysed which products they chose plus their evaluations of the different packages. Overall, the package evaluation included a shelf test, assessing attributes such as attractiveness, modernity, brand fit and price perception.

An experiment where you always get a second chance

The experiment was conducted in two different cells for each country, and avatar participants were asked to do the exercise twice, one in cell A and another in cell B (the order of the cells was assigned randomly). In both countries, cell A evaluated Ades' current package versus the packages of the competitors, while cell B evaluated Ades' new VIS design versus its competitors. The flow of the "visual identity" experiment was as shown in Figure 11.

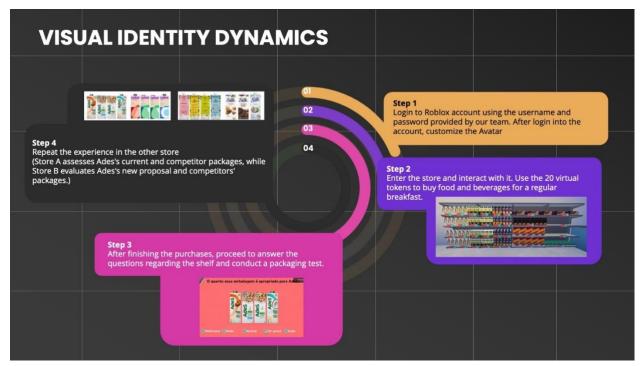


Figure 11

Learning about the world from outside the world

With this experiment, we obtained very concrete and precise results and input on this occasion and packaging designs (see Figure 12).

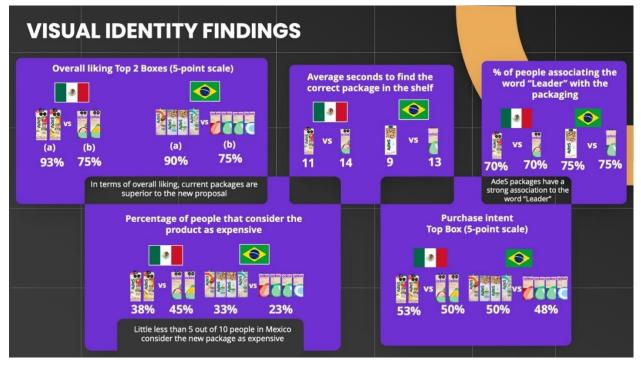


Figure 12

A super enhanced packaging test

Testing packaging and products for a particular daytime or occasion is something we do traditionally and historically in our realities as researchers. This experiment and its results showed us that there are not so many differences when doing this type of test. On the contrary, the experience, the interactivity and the dynamics in the metaverse allowed us not only to obtain very similar results to those of a more traditional established study, but also to multiply the amount of stimuli and variants tested (see Figure 13).

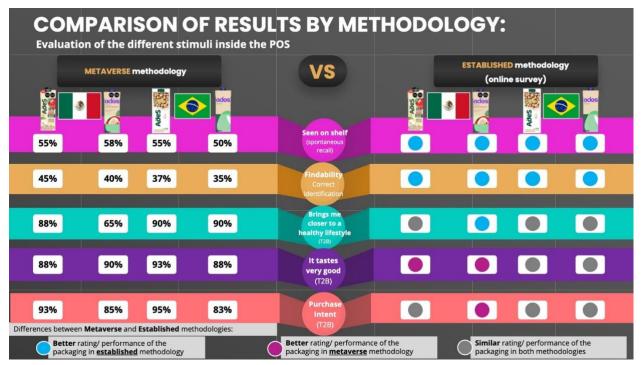


Figure 13

Experiment 4: Focus avatar groups

The qualitative aspect of research inside the metaverse

In one of our most prominent attempts to evaluate its status as a promising space for developing market research, both quantitatively and qualitatively, we conducted two focus "avatar" groups (one per country). Participants from Mexico and Brazil, aged 20 to 29, shared an activity embodying their avatars, exchanging opinions within the space we designed for this purpose—our own "Meta-Gesell hall" (see Figure 14). This represented the first interpretations of what would be going through the hearts and minds of these human beings on the other side of the screen, (still) without the ability to observe their expressions while they are stating something, but making the effort to understand some of those unique sensations and insights. To enhance the experience, we incorporated interactive elements—e.g., brand logos popping up and floating whenever a brand was mentioned in the talks. Considering that Apple has just launched Apple Vision, which they called "Apple's first spatial computer", it is very likely that these "one-pixel-at-a-time" breakthroughs will have more importance in the future of overall qualitative market research than we currently think.



Figure 14

Qualitative first "pixel" steps

These focus "avatar" groups let us have a privileged observation spot to investigate crucial aspects around the metaverse, encompassing:

- The perception it currently generates in people and their actions within this environment;
- Its benefits (attributes) and drawbacks;
- Its overall potential as a vehicle to obtain relevant consumer and shopper insights;
- The performance of brands in this digital world and/or platform.

In this experiment, in addition to evaluating the classic and well-known "focus groups" methodology, we also tested human beings and their way of expressing themselves and exhibiting their thoughts and behaviours in an out-of-body experience.

Avatar centrism

Therefore, once we celebrated the first focus groups in the world without coffee, snacks or drinks, where the famous mirror was transformed into screens, where the room left the walls, tables and chairs behind to become an interactive 3D experience, we obtained powerful insights. As this experiment was aimed at discussing the metaverse itself with people, its potential as a space for conversation and exchange of ideas and how brands can play an important role in it, the insights we obtained were very concrete and first-hand from users (see Figure 15).



Figure 15

Facing research challenges "one pixel at a time"

As in almost every transcendental creation throughout history, the first steps encounter several challenges and setbacks, but also opportunities for improvement and evolution. That is why, from researcher to researcher, we recommend you acquire the following learnings, which will probably help you in your future explorations of the metaverse; future metaverse researchers' generations will probably find them important, too.

Recruitment

In these four experiments, the recruitment of the sample was conducted outside the metaverse. This represented the following challenges.

- Respondents need to be tech-savvy. Not experts, but knowledgeable enough to be able to log in to
 the Roblox app, find the game or dynamic in Roblox and then be able to navigate inside the
 metaverse with ease. Thus, recruitment is limited, for the moment, to people who meet these "tech-savvy" criteria.
- The focus group experiment also encountered challenges of this sort, since being able to use voice communication inside Roblox needs proof of identification. Participants initially hesitated to verify their

ID data by submitting ID photographs, but after assuring them that there would be no misuse of this information and hearing the name of a reputable company such as Roblox, their concerns diminished somewhat.

- Another challenge was that Roblox did not accept all the IDs as valid documentation, and in some
 cases, the platform blocked the accounts. Furthermore, activating voice and/or audio required multiple
 steps, leading to confusion. Additionally, a lack of welcome messages and clear instructions within
 the platform further complicated the experience.
- Recruitment can be more expensive since there needs to be a closer follow up. Resources need to
 be set aside in order to have effective control over who is responding, who's having trouble doing
 the dynamic inside the metaverse and to make sure everyone is participating as needed for each
 experiment.
- Controlling that the intended research is carried out in a reasonable time (similar to established methods of market research) is also an important element. For this, follow ups to participate in the dynamics are essential.

The abovementioned challenges are important to consider and prepare for, while recruiting the sample work against the possibility of having large sample sizes. Without the due representation of different populations, market research inside the metaverse will remain limited in terms of statistical validity and representation of target populations. For each of our experiments, we had 40 to 50 respondents participating, except for in the focus groups, which consisted of eight people in each group. To be able to determine, with statistical validity, if the results gathered inside the metaverse match the ones obtained through traditional research methodologies, larger and more representative samples are needed.

Data collection

Collecting data using traditionally established methodologies in a fully new metaverse environment had its challenges as well. Based on the fact that the dynamics of the metaverse itself are linked to gaming and having fun, it was very important to complement the research activities (which perhaps were not so fun) with games and entertaining experiences, precisely to respect these dynamics. Roblox is a very powerful and well-developed app that allows researchers to programme questions with a close resemblance to survey platforms. However, if the industry of market research is going to take the metaverse as a tool to conduct research, then further advances need to be made. If this aspect is not considered, then the complexity of programming question flows inside the metaverse can lead to compromises in the design and number of research methodologies available. For example, being able to conduct conjoint analyses, max diffs or other important methodologies that are already well established in other places.

It is also very important that the design of the questions or probes, and the dynamic inside the metaverse in general, is simple to understand and navigate. Once the respondent is transformed into an avatar and lets loose inside the metaverse, they need to be able to provide the researchers with the intended insights in a way that is comprehensible and, very importantly, fun and interactive for them. Data collection must be

meaningful and broad, without forgetting that the metaverse is intended to be easygoing or light in spirit. Even if we already work in teams that speak different languages (in this case, beyond our own countries), the whole team must speak the language of the metaverse, or at least be predisposed to immerse itself in this new world of codes, expressions and behaviours. The need to coordinate between different partners and ensure the seamless integration of various components, such as programming the different questionnaires, requires good project management.

Meta-learnings: Insights from the end of a beginning

Having gone through each of the experiments in detail and seen the challenges we faced, it is now time to look at what we learned about the metaverse as a platform for market research. Therefore, it's time to get into the meta-learnings: i.e., insights on the metaverse as a platform to conduct market research. As humans evolve alongside this technology, brands and their ways of understanding humans need to adapt as well. In an ever-changing environment, it can be difficult to arrive at conclusions carved in stone, but if there is one thing we know at this point it is that we have already learned a lot, and that this adventure of knowledge has just begun. After advancing these first "pixels", we have been able to glimpse the following insights.

Exponential potential

The metaverse is widely recognised as a significant technological transformation, offering users immersive experiences that transcend the limitations of physical reality. It is seen as a promising space for individuals to freely express their identities, passions and interests, unrestricted by the constraints of the physical world. With its potential to deliver new forms of knowledge, social interaction and entertainment, the metaverse holds great appeal for users seeking more immersive experiences, and a sense of liberation from their everyday lives. Every time we compare experiments and results in the metaverse with studies carried out in the physical world (see experiments 2 and 3), lessons come to light that allow us to affirm that the metaverse, with due consideration, has the potential to replicate market research that has already occurred in the real world, using the established methodology.

Not just a fairy tale

Despite its potential, the metaverse encounters several challenges in its current state of development. Security concerns emerge as a central issue, encompassing issues such as handling personal data on the Roblox platform, managing the risks associated with digital social interaction and establishing content regulations that safeguard users, particularly in relation to child protection and hate speech. Furthermore, the metaverse faces the challenge of limited sensory input, as it lacks the full range of physical contact and sensory experiences found in the real world. Additionally, ensuring sustained user interest poses another hurdle, as the metaverse needs to continually innovate and offer dynamic and engaging experiences to avoid becoming monotonous or stale. The quality of the connection is not minor; the instability of the internet connection can put the timings and how people live and go through the experience at stake.

Brands in the metaverse

The metaverse presents a compelling opportunity for brands to establish their presence and engage with users in meaningful ways. To succeed in this virtual realm, brands must adapt their strategies and content to align with the metaverse's dynamic environment. The ability to continually renew and refresh content becomes paramount, as attracting and retaining users' attention requires brands to remain agile and prompt in their content creation. Moreover, brands need to seamlessly integrate their metaverse presence with their physical counterparts, creating a bridge between the virtual and physical worlds to enhance user experiences as well as purchasing interactions, by addressing them in the exact moment where our products are needed. By leveraging the metaverse's potential, brands can offer unique shopping experiences, deliver interactive brand experiences and foster collaborations with other industries, providing users with compelling reasons to engage beyond mere commercial transactions.

Time to metaverse

Overall, study length is a concern because the environment development is not a fast task yet, and as the quality of that environment has a direct impact on the information collection process, the speed and fast testing could represent a threat for trustworthy insights or results. Regarding recruitment, experiments that had a shorter gap of time between recruitment and the experience tended to take less time to complete the desired number of interviews. This may suggest that minimising the time between recruitment and the experience can help to increase participant engagement, and reduce potential sources of drop-outs or delays.

Experience evolution

Doing research inside the metaverse can be much more fun than in a face-to-face or online survey interaction. Participants can give their input and feedback regarding consumers' choices and, at the same time, have a playful experience, with different stimuli intended to make it more enjoyable. They also could give their input as consumers in a shared environment, where more people are also doing the same (i.e., virtual communities). People in the metaverse can actually be exposed to real and tangible mockups, concepts and stimuli reducing the need to imagine things. The downside is that this could limit the researcher's ability to tweak stimulus on the go (sequential recycling) due to the technology and/or development component. For example, the mini-meta-market experiments were more realistic when compared to a choice task on a computer or smart device. Experience is getting closer to the real buying situation, and this will have a direct impact on result validity and quality. The number of options that we would be able to evaluate is exponential versus in-store research, allowing us to do many comparative evaluations in a simultaneous way.

Missing qualitative texture

While the metaverse shows promise as a research tool, it presents both opportunities and limitations in the realm of qualitative research. Participants acknowledge its innovative nature, but note its partial immersion and lack of dynamic contextual elements. Avatars provide a safe space for expressing opinions and ideas, but participants often require additional instruction and support to navigate the metaverse effectively. As the metaverse evolves, challenges exist in harnessing its full potential for qualitative research. Traditionally,

qualitative research relies on comprehensive communication and contextual signs that may be absent in the metaverse, potentially affecting the depth of understanding and engagement. Overcoming these challenges requires careful consideration and adaptation of research methodologies to ensure that the commitment to meaningful and insightful responses is maintained within the metaverse environment.

New for everyone

Experiences in the metaverse are new for many—even for us—so it is vital to accompany and guide the participants of this type of experiment with great clarity. Providing clear instructions to participants on how to log in to Roblox, pre-creating accounts, providing detailed lists of the tasks needed to complete the study and fluid communication with the participants were very helpful to improve user experience during the study.

Avatars' representative samples

Statistical validity has yet to be tested, as recruiting larger and more representative samples to compare these studies in the metaverse with more established studies is still difficult, making them statistically insufficient.

Experiment's satisfaction

Participants provided positive evaluations of the surveys and the dynamics conducted inside the metaverse, across the different experiments (see Figure 16).

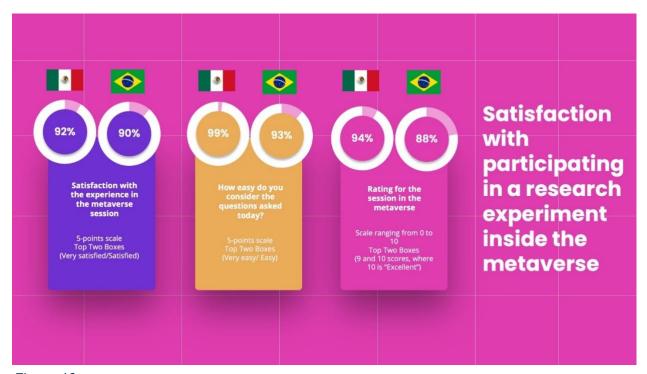


Figure 16

"Hasta la vista" skepticism, hello meta-research!

Copyright © **ESOMAR** 2023 CONGRESS 2023

With this first approach, we have laid the "foundational pixel stones" to continue building and developing research in the metaverse. All the insights that we shared in this paper make us believe that the metaverse, despite being surrounded by uncertainty and challenges, has proven to be a space that opens the door to a new dimension of human behaviour and identity, and that also offers us the flexibility to carry out our most rigorous or challenging ideas as researchers.

About the authors

Alejandro Prieto, Human Insights Senior Director Latam OU, The Coca-Cola Company, Mexico. Larissa Aieta, Human Insights Manager Latam OU, The Coca-Cola Company, Brazil. Rodrigo Alagón, Analysis Director, Estadistica Aplicada, Mexico.

Augmented Reality: A Critical Part of Your Toolkit

Boosting engagement, influencing purchases, and creating goodwill among audiences

Aarti Bhaskaran Heather O'Shea

Introduction

Technology has given us new ways to engage with consumers beyond traditional media and retail channels, and marketers are grappling with how to strategically use emerging tech to drive their businesses. Capturing consumer attention is harder than ever – but the right augmented reality (AR) strategy can change that. This paper will explore the methodology and results of several in-depth research projects that show how AR drives sustained emotional engagement, immersion and purchase behaviour among key audiences and provides marketers with insights on how to use augmented reality as part of their omnichannel strategy.

Augmented reality (AR) is defined as the digital overlay superimposed on real world elements for a user, augmenting their real-world experience. Its usage is growing at a record pace, with the latest statistics predicting 1.73 billion global mobile AR users by 2024 – up from a mere 1 billion in 2022. Brands and marketers can no longer ignore this rapid adoption trajectory, especially as their audiences also have increased expectations surrounding AR solutions and features. AR needs to become a critical part of the marketer's toolkit. In an environment where capturing consumer attention is at a premium, our research found that AR can deepen engagement in the ways that really matter.

In this session, we will explore recent research that illustrates the importance of augmented reality strategies among today's audiences, highlighting its power when brands wish to:

- Deeply engage with audiences: Using agile neuroscience that measures physiological cues indicating response to content, experiences and products (resulting in an "Immersion Score"), we found that AR is an emotionally engaging experience. Across platforms, the average Immersion Scores for AR experiences were higher than industry benchmarks for entertainment across TV, film, music, gaming and sports. Because we know that high Immersion Scores can predict future consumer action with 80% accuracy, this makes a compelling argument for implementing an AR strategy.
- Influence purchase decisions: Consumers are seeking AR during their shopping experiences, and it is driving decision-making. Branded AR experiences increase the likelihood of purchase (e.g., home décor 73%; product personalisation 73%; virtual try-on 72%). In addition, two in three who say they would use branded AR for shopping also agree they are likely to purchase after a branded AR experience. We also found that buyer confidence is a critical unmet need that brands need to overcome and AR can help with that, since 80% of AR shoppers feel more confident in their purchases as a result of using AR. AR helps shoppers have a streamlined, entertaining shopping experience, reducing the likelihood of returns (two-thirds less likely).
- Reach Gen Z: AR will be vital in engaging this generation. Our research showed that these complex digital natives have very high expectations when it comes to the content they consume and from the brands with which they do business. Reaching Gen Z is one thing, but to effectively connect and engage with Gen

¹ Top 5 Augmented Reality Trends of 2023: \$60 Billion & 1.4 Billion Users https://tryon.kivisense.com/blog/ar-trends-of-2023/

Z, brands need to take an intentional approach – and AR is one path to success on this front. As this generation seeks authentic, values-driven interactions with brands, we found that Snapchat, a platform rooted in AR, had the highest immersion ratings for "brand purpose messaging" among this group.

This paper examines research that dives into the consumer impact of AR on multiple fronts and gives a window into the future of AR for marketers, brands and their most important audiences.

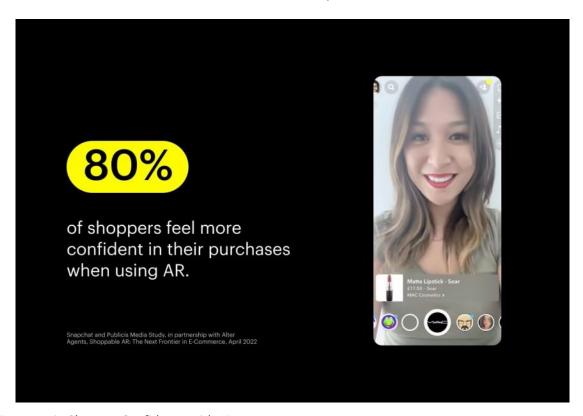


Figure 1: Increase in Shopper Confidence with AR

Sustained emotional engagement with AR

As brands seek to better engage consumers, they are looking to new forms of communication and commerce channels to break through all the noise. Because augmented reality (AR) is highly immersive, it represents the next big opportunity for brands.

Our research indicates that people show high levels of immersion when engaged with an AR experience. When we talk about "immersion", we're referring to a neurological state based on a person's relative level of attention and emotional connection. When people are highly immersed, they are paying attention, emotionally engaged, and actively committing information to memory. To put it differently, they are "in the zone", and the experience is resonating with them on a fundamental level, to the point that it can predict future behaviour.

We measure immersion using an agile neuroscience approach that measures physiological processes, such as variable heart rate – indicators that ultimately lie behind emotions, actions, and decisions – to indicate what's going on in the brain. Using Immersion's platform,² we collected data surrounding changes in heart rate pattern from respondents via smart watches. Depending on these distinct patterns, we used the platform's proprietary technology to assign an "immersion index" from 0 –100. In fact, according to a recent scientific research project published in the *Psychology & Marketing* journal, heart rate variability was shown to be "a promising tool for

² Immersion: Neuroscience for Normal People (getimmersion.com)

identifying and evaluating consumer psychophysiological responses to marketing stimuli ... broadening opportunities for marketing researchers to improve real-time consumer experiences".³

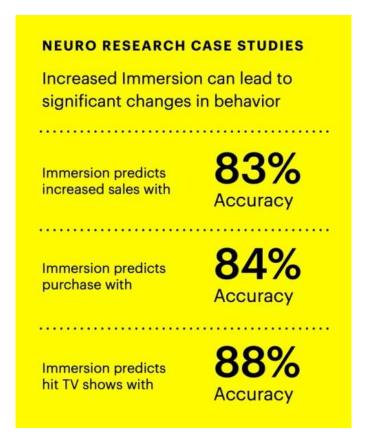


Figure 2: Neuro Research Case Studies

AR and advertising

For one study, we compared immersion with AR against more traditional advertising, using international, multicell study of consumers. Participants were recruited to participate in virtual, individual research sessions during which they were asked to use specific media platforms and watch online videos in a randomised order. During the session, immersion metrics were captured, representing results from Germany, Netherlands, France and the UK. The results of the study clearly show that, overall, AR is an attention-grabbing, emotionally engaging experience. From AR experiences across Snapchat and TikTok to Facebook and Instagram, respondents' average scores on the Immersion Index were much higher than industry benchmarks for the Entertainment category, which includes 350 experiences across television, film, music, gaming and sports.

Because we know that people who have a more immersive experience with a piece of content are more likely to recall and take action on it later, AR experiences are a prime opportunity for marketers and advertisers to target audiences and deliver their messages. Advertising to highly immersed, attentive individuals shows positive implications for an ad's effectiveness. These research findings are meaningful to advertisers planning campaigns and present a point of differentiation for AR experiences, such as those found on Snapchat, compared to other platforms.

³ Heart rate variability in marketing research: A systematic review and methodological perspectives - Kakaria - 2023 - Psychology & Marketing - Wiley Online Library https://onlinelibrary.wiley.com/doi/full/10.1002/mar.21734

70 AR Immersion average across platforms

44
Entertainment Benchmark

The entertainment benchmark is a cross-industry global average from the last 5 years, and includes content from movies, television, gaming, and music

Source: Alter Agents research commissioned by Snap, Inc. 2022 & 2021 Arrows indicate significance at a 95% confidence level.

Figure 3: AR and Immersive Experience

AR and consumer shopping

In several other research projects, we examined the influence of augmented reality (AR) on the shopping landscape. Specifically, we examined the ways people shop and engage with brands; the new "path to purchase" and the future of e-commerce; and AR's influence on shopper decision-making.

Positive impact of AR experiences on shopping

One of the first projects in the shopping arena was a three-part study in the United States, United Kingdom, France and Saudi Arabia, which included in-depth interviews with AR experts to explore AR's evolving dynamics; mobile ethnographies with daily diary entries; and a quantitative survey among 1,000 people ages 13 - 49 in each market (n = 4,000) who were smartphone owners and AR non-rejectors. We found that AR adoption is on the rise, and that consumers – particularly Snapchatters – are seeking this technology out during their shopping experiences.

Key findings from the study included:

- Purchase decisions are spurred by AR: Branded AR experiences increase the likelihood of purchase, particularly in categories like home décor (73%), product personalisation (73%), virtual try-on (72%) and product demonstration (70%).
- High AR awareness and adoption: More than half of people aged 13 49 claimed to have used AR in the
 past, and nearly one-third have used branded AR. Snapchatters are 56% more likely than nonSnapchatters to have used branded AR.
- Increasing role of AR in the shopping landscape: More than three in four believe that AR technology will play a role in how people shop in the next five years. Two in three who say they would use branded AR for shopping also agree that they are likely to purchase after a branded AR experience.
- Consumers are looking for AR: 54% actively search for AR experiences, most commonly seeking out branded AR by searching within the camera on digital platforms like Snapchat.
- AR shareability heightens impact: 61% say the ability to easily share branded AR experiences is important to them.

The study indicates that branded AR experiences can positively impact and influence consumers at multiple points along the shopper journey, informing purchases, boosting positive brand perceptions and educating consumers.

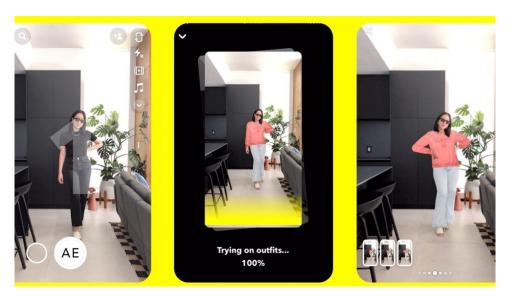


Figure 4: Consumer Shopping with AR

AR's place in the non-linear path to purchase

To learn more about the consumer's path to purchase, we conducted a quantitative and qualitative research study in several markets in Europe, revealing the extent to which shopping and purchase behaviour is influenced by close connections. It also illuminated the impact of Snapchat throughout the decision and purchase journey for key categories: Retail, Beauty, and Technology.

We found that today's path to purchase is more complex than ever before, with shoppers moving in and out of consideration and purchase quickly. Today's fast-moving shopping environment has dozens of touchpoints along the path to purchase, which is not linear. Most purchases, across several categories, are occurring within one week of initial product and brand exposure, with the average shopper taking two to three days. This study revealed that shoppers might start with discovery, where they are learning about a product or brand, then spend time thinking about a product in the consideration phase. They do specific research around product benefits and price and then they share with others, sometimes before and sometimes after they purchase. All of this happens in the lead up to them deciding on a product and making a purchase.

One of the specific points we explored was how daily Snapchatters are making purchase decisions. We found that 88% learn about products from brands on social or digital media apps, and 69% have purchased from a brand after a direct interaction on Snapchat. After seeing ads on Snapchat, two-in-five daily Snapchatters are inspired to follow up with different actions, including making a purchase, using branded AR lenses, exploring new products, using branded AR filters, sharing branded content, visiting a brand's website or store, following brands and recommending to a friend.

Virtual product testing and shopping

One of the outstanding findings in the path to purchase study was how virtual try-on tools are catching on with shoppers. Two-thirds of consumers are less likely to return a product after using an Augmented Reality feature, according to our survey of 4,028 shoppers aged 13 – 49 in the US, the UK, France and Saudi Arabia. Nearly three-quarters of respondents said that they were likely to buy clothing after using an AR experience in the future, followed by retail (70%), beauty (69%), travel (64%) and food and beverages (60%). 80% of survey respondents said that they feel more confident in their purchases when using augmented reality tools. Our findings indicate that AR features during the shopping journey can instil consumer purchase confidence and reduce product returns for retailers.

Gen Z's shopping priorities

During our research, we found that 92% of Gen Z shoppers prefer AR reality tools for e-commerce. That survey of 16,000 consumers across 16 markets found that Gen Z consumers favoured AR shopping tools more than millennials and Gen Xers.

Gen Z's Top Reasons to use AR for Shopping:

- Want to be able to identify the size/style that suits me
- Want to make the shopping process easier
- Want to have a more fun and social shopping experience online
- Want to ask their friends / family their opinions on what to buy

Defining the future of in-store shopping

A newly released 2023 shopping trends study conducted by Alter Agents and commissioned by Snapchat revealed the interest and importance of AR in transforming the in-store experience for shoppers. This quantitative study was conducted among over 15,000 shoppers in Australia, Canada, France, Germany, KSA, Netherlands, Norway, Sweden, UAE, the UK and the US.

- Six in ten shoppers are interested in utilising in-store AR shopping experiences
- Half of shoppers are interested in using AR mirrors to try on products in-store
- 44% of shoppers desire AR lenses to use within store



Figure 5: Two-Thirds Reduction in Shopper Returns with AR

Gen Z and AR

Identity, communication, commerce and connection

We continued our examination of Gen Z, surveying over 19,000 people across 16 markets to find out what's at the heart of this generation that is coming of age. Our goal was simple: to highlight the distinctive characteristics of Gen Z in three big areas; communication, commerce and connection.

- Communication: It's an era of visual communication and it's no surprise that 95% of Gen Z have used some form of visual communication when messaging friends. This generation is redefining communication and expressing themselves in more creative and interactive ways, to have fun and deepen their connections with others. Every use of AR is an opportunity to share the story of what's happening in their lives.
- Commerce: The way we shop is changing, and Gen Zs are expecting more immersive experiences. Snapchatters, especially, are getting inspired, trying on products via AR, and consulting with friends and family, all before purchasing. This is further defined in the newly released shopping trends study conducted by Alter Agents and commissioned by Snap Inc., which found that 66% of shoppers plan on using AR tools in the next five years. This figure is even higher among Gen Z (70%), and 46% of Gen Z expect to use AR detection features when shopping over the next five years.
- *Connection:* Connection matters more than ever, and Gen Z is looking for meaning and guidance from their friendships, brands and the broader world. This mindset means that brands should be connecting with them in new and innovative ways as well. The fact is, nearly half of Gen Z say using AR Lenses / Filters helps them feel more connected to brands.

Looking forward

Our research demonstrates that the full potential of Augmented Reality has yet to be realised. There is high consumer desire and demand for experiences that will improve their confidence in decision making, educate them about the world around them and allow them to engage more deeply with others and with brands. While Gen Z and e-commerce have led the way in bringing the utility of AR to the forefront, there is even more potential, beyond fun experiences with friends or for shopping.

Our latest joint study goes even further to quantify the impact of leveraging AR to create more sustainable brands. We conducted a quantitative survey in early 2023 among 7,500 AR users across France, India, KSA, the US and the UK to evaluate how consumers might react and respond to AR concepts that benefit sustainability. We found that there is a strong appetite among consumers to utilise AR to reduce their impact on the environment. In fact, sustainability is considered the top benefit of AR technology by AR users, when you account for the related applications (virtual sizing, reduction in returns, sustainable services offered, lowers the need for inventory, etc.). As a means of reducing carbon emissions, consumers would use AR for virtual try-ons, orders and customisation about 70% of the time, on average. Across categories, consumers are highly receptive to brands utilising AR for sustainability initiatives, but brands are not yet offering this widely. For a number of categories, including apparel, restaurants, entertainment, and auto, we tested AR sustainability concepts with consumers, as well as more general marketing concepts, such as TV advertising and coupons. We learned that AR sustainability concepts had significantly greater chances than the general concepts to result in consumers saying they would be more likely to purchase from the brand, they would buy more from the brand, and they would be less likely to return purchases. And, across categories, consumers are actually willing to pay more for brands that utilise these concepts. If brands authentically communicate these sustainability concepts and build them into what their business represents, not only will they benefit the environment, they stand to benefit from increases in trust, perception and action from consumers, ultimately growing revenue.

About the authors

Aarti Bhaskaran is Global Head of Ad Research & Insights at Snap Inc., New York, USA. Heather O'Shea is Chief Research Officer at Alter Agents, Los Angeles, USA.

ChatGPT, What's All the Fuss?

Understanding the evolving AI framework for market research

Tim Brewer Sandy Casey

Abstract

In just a few short months, access to revolutionary new Artificial Intelligence (AI) tools has fundamentally shifted the way that thousands of companies conduct business, and as a fundamentally technology-driven industry, market research is changing too. AI can super-charge insights as it continues to cause immense disruption worldwide.

As researchers in a constantly changing technology landscape, we need to understand the pros and cons of the newly released ChatGPT by OpenAI. ChatGPT has already proven it can write a questionnaire faster than humans, but can it do it better? In this paper, we uncover if ChatGPT can create surveys, create sampling plans, execute research, and conduct analysis at the same level of quality as a human researcher.

Introduction

Will content AI, specifically ChatGPT, supercharge the research industry? In this paper we will expose ChatGPT for all things research the good, the bad and the ugly. If this is going to be the next tool to help (or hurt) our industry, let's really understand how it works, what it is capable of and if it will help drive super truths in the data collection exercise, or is an open door to the super untruths.

This paper will uncover how ChatGPT works and discuss how it can help or hurt the market research industry. We will review survey results from AI-generated research and sampling plans compared to traditional human-written content and panel with research.

Due to these new pressures and unanswered questions, InnovateMR and KJT, on behalf of ESOMAR, have conducted research specifically into ChatGPT, a generative AI tool from OpenAI.

Guiding research questions:

- 1. ChatGPT has already proven it can write a questionnaire faster than humans, but can it do it better, or at least to the same level?
- 2. Does a ChatGPT-created survey yield insights that are on par with or even above what a human researcher can do?

Key AI-related terms, as related to the research study:

- *Generative AI:* this is the category of artificial intelligence that can produce content like text and images and perform very specific tasks like predicting outcomes.
- AI models: think about AI models as extremely large algorithmically driven mathematical equations.
- *Prompts:* these are the messages and/or questions you send to ChatGPT to get the information and data you may be seeking.
- *Prompt engineering:* this is the real "intelligence" of sending the exact question or message into ChatGPT, giving you the output you desire.
- Plugin: third-party add-on you can pair with an AI chat bot to extend its capabilities.

Two surveys were conducted to answer the core questions. The team used ChatGPT 3.5 during the course of this study, and no notable differences were found when testing ChatGPT 4.0.

Survey A:

- Created by traditionally trained market researchers
- Sampling plan developed by traditional human methods
- Online survey invitations developed as per current best practices and protocols
- Summary of results and key implications developed by trained market researchers

Survey B:

- Drafted and written by ChatGPT utilising prompts that have been validated for survey creation
- Sampling plan developed by ChatGPT
- Online survey invitations drafted by ChatGPT
- Summary of results and key implications drafted and refined by ChatGPT

The above A/B test has allowed us to explore a series of additional research questions:

- 1. How much time does it take to program a survey in a standard programming tool vs. utilising ChatGPT for the programming?
- 2. How close can it get to a working first draft, or even a final product?
- 3. What nuances in survey creation do we need to watch out for and what can we trust?
- 4. How does ChatGPT handle questions that are traditionally complex to answer?
- 5. Is it creating a more user-friendly survey, allowing for a positive respondent experience?
- 6. Are there any variances in the IR? Can the tool help find more targeted responders? Does ChatGPT create a shorter LOI based on the overall design of questions and responses?
- 7. Can ChatGPT be a saving grace for the supply chain? Or does it just open the door for bots to come in and attack our surveys?

Intended research outcomes

1. Will researchers lose work due to AI?

The first major output we're looking to explore is whether traditional market researchers and public opinion researchers will either be replaced or have the output they provide to their clients replaced either partially or fully. This paper will provide a deeper understanding of ChatGPT, as well as potential threats and opportunities to use ChatGPT as a tool to further improve upon the quality and quantity of work delivered.

2. Will AI just help researchers get their work done more easily?

The second major area of exploration is how ChatGPT and AI can benefit researchers and streamline the output from traditional market research or public opinion studies by reducing administrative and easily automated tasks. This automation could allow for more time to understand business situations as well as allow more time for strategic and critical thinking, ultimately leading to a higher-quality product.

Methodology description of the ChatGPT-based survey

To test our hypotheses, we created a business case that would simulate a real-world example, using a fictitious business objective that mirrors a common client need:

Measure the brand health of Claritin and key competitors in the seasonal allergy market.

Following that we developed specific research objectives to test within the survey:

Copyright © **ESOMAR** 2023 CONGRESS 2023

- Measure the awareness of OTC oral seasonal allergy medication used to treat seasonal allergies, including Claritin and key competitors
- Understand brand loyalty, including Net Promoter Score and the reasons for loyalty
- Measure the usage of OTC oral seasonal allergy medication, satisfaction, and drivers of use
- Determine brand perception across OTC oral seasonal allergy medication
- Measure experience and frequency of symptoms of seasonal allergies

Lastly, we ensured that four brands would be measured within the survey to ensure consistency to more easily allow for the comparison of results:

- Claritin
- Allegra
- Zyrtec
- Benadryl

Sample plan

We also set parameters that the survey would be ten minutes in length and include a base size of n=1000 respondents. The survey would be administered in English and Spanish (localised for Spanish speakers in the US to test the translation capabilities of ChatGPT) with a minimum base size among the Spanish-speaking audience of n=50.

We also utilised an identical screener and identical respondent survey satisfaction questions to ensure the results were as comparable as possible. In this instance, we utilised the human-created survey and respondent satisfaction questions. We decided that overly noticeable errors would be pointed out to ChatGPT with the opportunity for refinement, but ChatGPT would have to correct these errors if we were to allow the correction to stand in the final finished product. The rest was up to ChatGPT.

Overview of survey design

To begin, and as an experiment, we prompted ChatGPT to define a set of research objectives and basic principles to guide our project as a normal researcher would typically do on their own, in a group setting, or most commonly in tandem with their client. ChatGPT responded with a set of ten objectives, the details of which can be found in Appendix 1, Prompt 1.

This output provided comprehensive objectives to measure within a research study and is an excellent starting point to ensure that all major aspects of an engagement are considered prior to the development of a survey.

This list of objectives is large with a complicated system such as ChatGPT, but through natural decision-making and prioritising strategic objectives, we were able to create a much more manageable list of objectives.

We then asked ChatGPT to determine how long of a survey would be required to meet the study objectives, the details of which can be found in Appendix 1, Prompt 2.

ChatGPT responded that this would vary, with a variety of legitimate reasons on why it should, but 15-20 minutes was provided as initial guidance. Given what we know about similar surveys and the number of objectives ChatGPT was asked to achieve, 15-20 minutes is an appropriate survey length. The understanding that respondent burnout increases with survey time was surprising and an important consideration. Given that the survey is intended for a consumer audience, ChatGPT correctly identifies the need to use clear and concise language and minimise redundancy and unnecessary questions to keep respondents engaged, leading to higher-quality data.

We then asked ChatGPT which brands it would recommend measuring in addition to Claritin, the details of which can be found in Appendix 1, Prompt 3. ChatGPT did identify the four brands identified by humans at the start of the project. It also included Nasacort which we ultimately did not measure given the focus on over-the-counter (OTC) medications.

To create each individual survey, we tested three different levels of details across three baseline prompts. The first were the simplest and designed to test what a research-naïve individual might utilise if writing a survey without expert input:

Prompt:

• Write a 10-minute online survey measuring the brand health of Claritin and key competitors in the seasonal allergy market.

These results were inconsistent with testing and while some of the output had a marginal ability to be utilised, none was deemed worthy of fielding. With little guidance around the objectives of the study, we did not find it possible to create output that would even marginally meet a client's objectives.

We then tested a prompt with the same request to create a 10-minute online survey containing further clarity on the objectives:

Prompt:

- Write a 10-minute online survey exploring the following objectives:
 - Measure the awareness of OTC oral seasonal allergy medication used to treat seasonal allergies including Claritin and key competitors
 - o Understand brand loyalty including Net Promoter Score and the reasons for loyalty
 - o Measure the usage of OTC oral seasonal allergy medication, satisfaction, and drivers of use
 - o Determine brand perception across OTC oral seasonal allergy medication
 - o Measure experience and frequency of symptoms of seasonal allergies

The content was better but still was missing some key aspects of an appropriate survey. As our goal was to get as close to a finished product as possible, we continued our search for the best prompt for our situation.

Understanding that significantly more detail would be required, we engineered an even more in-depth prompt identifying the specific aspects we wanted to include within the survey and further detail surrounding the study objectives.

Prompt:

- Write a 10-minute online survey exploring the following objectives:
 - Measure the awareness of OTC oral seasonal allergy medication used to treat seasonal allergies including Claritin and key competitors
 - o Understand brand loyalty including Net Promoter Score and the reasons for loyalty
 - o Measure the usage of OTC oral seasonal allergy medication, satisfaction, and drivers of use
 - o Determine brand perception across OTC oral seasonal allergy medication
 - o Measure experience and frequency of symptoms of seasonal allergies.
 - o Measure the following brands: Claritin, Allegra, Zyrtec, Benadryl
 - o Allow for the survey to be taken in either English or Spanish based on respondent preferences
 - Be sure to include the following:
 - a screener ensuring that respondents understand and agree to participate in the study
 - live in the USA

- are 18 or older and have seasonal allergies
- Unaided and aided awareness.
- o Net Promoter Score and the reasons for being either a detractor, neutral or promoter
- o Perceptions of each brand being measured
- Brand attribute importance within this category and brand attribute performance across brands is being measured
- o Current seasonal allergy symptoms experienced and management
- Standard demographic questions
- o Lastly, please include a section on respondent satisfaction with taking the survey

This output worked well and was deemed best to proceed within our test case after additional refinement utilising the following prompt based on notable errors identified within the survey that were made:

Prompt:

• Check your work and provide a new survey with any necessary edits to improve overall quality and reduce bias

Upon creation of the initial survey draft and determining that this level of detail produced the highest quality result we had ChatGPT proof its work and look for areas of improvement and refinement.

Areas of improvement that ChatGPT focused on included:

- Providing further definition on attribute lists that enhanced clarity
- Corrected a few typos primarily focused on grammar and phrasing

Following this we approached the survey with a "Manager Review" perspective looking for overly obvious errors within the survey and allowing ChatGPT the opportunity to correct itself. We asked ChatGPT to correct specifically from a methodological perspective was Net Promoter Score or NPS. The original output for NPS is as follows:

Question 3: Net Promoter Score: How likely are you to recommend the oral seasonal allergy medication that you currently use to a friend or family member?

- 0-6 (unlikely to recommend)
- 7-8 (neutral)
- 9-10 (very likely to recommend)

There are a variety of issues with the creation of this question. First and foremost, Net Promoter Score is being asked of "the oral seasonal allergy medication that you currently use". This requires a separate series of questions to determine which medication(s) the respondent is currently using which is an aim of the study so technically manageable but doesn't allow us to differentiate between products for those who are actively using multiple medications leading to a subset of respondents whose data are not usable.

Second, ChatGPT provides an incorrect interpretation and usage of the Net Promoter Score scale, a validated instrument by automatically grouping response choices into detractors, passives, and promoters as well as mislabelling those groups as well. Proceeding with fielding this question would not provide relevant or usable data.

With this we provided ChatGPT with the following prompt to correct itself, the details of which can be found in Appendix 1, Prompt 7.

Chat GPT fixed the NPS scale that was originally incorrect but did not ground the brand in which respondents were measuring, instead only asking the brand they currently use. While ChatGPT has proven it can regurgitate exact information that you put forward. To prove our hypothesis, we wanted to be sure that we were not overly

leading it and that it would need to rephrase the question correctly itself. For these reasons we moved on with the question it provided.

At this point there were not any further overly glaring errors within the survey that would prevent it from functioning for the purposes of our experiment. We did however make two manual adjustments:

- 1) We utilised the same screener from the human designed survey to ensure that we had comparable sample groups. ChatGPT was able to create a functional screener but leaned heavily on yes/no answers making the survey easy to game and ripe for fraudulent responses.
- 2) We utilised the same set respondent survey satisfaction questions to ensure that we could compare data across both surveys in a comparable fashion to measure respondent satisfaction and see if ChatGPT can provide us with further guidance on how to improve (or not improve) our surveys.

The survey contained 22 questions overall and no loops. All respondents saw all questions, regardless of brand awareness and familiarity. The full survey can be found in Appendix 3.

Overall, the experimentation and creation of the survey took a total of two staff-hours spread across two individuals working in tandem (one hour each).

Methodology description of the human survey

The human-designed survey was completed prior to the ChatGPT survey to remove any bias that the reviewing the ChatGPT survey may introduce. We utilised the same approach as we would take to the development of any survey instrument for a client including developing multiple iterations and period for review.

The steps below summarise our approach to developing the survey:

- 1) Initial meeting to review and adjust the project objectives and finalise the overarching set of objectives as appropriate.
- 2) Meeting to discuss the initial outline of the survey including overall survey flow, questions to be asked within each section and an assured understanding of the methodologies to be utilised.
- 3) Initial first draft created by an associate then sent to a more experienced employee for manager review with a focus on any areas for improvement.
- 4) Feedback provided and survey adjustments made to the survey draft.
- 5) Full proof of the survey by two individuals before processing the survey to be programmed and fielded.

In total the human survey took approximately ten hours to complete, split across two researchers. Significantly longer than the process with ChatGPT.

Quality, however, was perceived as significantly higher and hypothesised to lead to higher quality output and a more pleasant respondent experience.

The survey included 25 questions with two loops for respondents aware of multiple medications increasing the maximum total number of questions to 34. The full human-created survey can be found in Appendix 4.

Utilisation of ChatGPT for survey targeting

To assist with targeting, we engineered several prompts to identify allergy sufferers as well as demographic, regionally based guidance and any job variances that could lead to a higher incidence of seasonal allergies. The full list of Prompt questions and responses can be found in Appendix 2.

We were very generic in our first ask:

Copyright © **ESOMAR** 2023 CONGRESS 2023

Prompt 1:

"I want to find survey responders who have seasonal allergies, who do you suggest I target?"

Note: this prompt gave a substantial amount of information, most of which was not useful, outside of tips on where to target media spend to find the respondent pool. Not once did ChatGPT mention reaching out to a sample provider, panel company, marketplace or research firm. We clearly have a lot to teach ChatGPT.

ChatGPT Response:

We were provided guidance on age, location, job roles, marketing tips and tricks as well as participant "care".

Prompt 2:

What ethnicity / race do seasonal allergies affect?

ChatGPT Response Summary:

"Seasonal allergies can affect individuals of all races"

Prompt 3:

Do seasonal allergies affect one gender more than another?

ChatGPT Response Summary:

"When it comes to the prevalence of seasonal allergies, there isn't a significant difference between genders. Both males and females can experience seasonal allergies, and the condition affects them relatively equally."

Prompt 4:

What regions in the US have a higher incidence of seasonal allergies?

ChatGPT Response Summary:

"Seasonal allergies can occur across the United States, but certain regions are known for higher incidences due to specific environmental factors".

Prompt 5:

Are there any jobs roles that can have an increased risk of getting / having seasonal allergies?

ChatGPT Response Summary:

In summary, many specific job roles were noted as creating a higher likelihood of having seasonal allergies; including those who work outside, hospital workers, veterinarians and many others; all of which can be seen in Appendix 2.

All the above tips led us to sample by having no hard gender quotas, natural fall in of race/ethnicity, targeting specific communities, and the job roles noted. This targeting resulted in the 36% increase in incidence and the 39% increase in those attempting the survey getting to the point of completion.

Using ChatGPT appropriately to guide your targeting without creating data biases will assist the insights industry in building a better user experience for survey respondent pools.

Overall survey comparison

The goal of a survey in most situations is to achieve the objectives initially outlined. For this reason, we reviewed the objectives that were set forth and determined which we felt that each survey would answer each objective fully while the ChatGPT survey would only answer each objective partially. The ChatGPT-generated survey had some initial oversights that we felt would not lead to optimal data responses or an optimal experience. Below is a list of specific findings by objective that led to these conclusions:

Objective: Measure the awareness of OTC oral seasonal allergy medication used to treat seasonal allergies including Claritin and key competitors

The ChatGPT survey correctly asks unaided awareness, although in a different format than the human survey. The human generated survey asks the respondent, "What is the first product to come to mind..." with a separate question to ask about any additional products that come to mind. While preferred in some scenarios, we did not feel it would have a significant impact on the results of this study- although it did make comparing the output more difficult. ChatGPT falls short in measuring awareness in the exclusion of a formal aided awareness question that follows, preventing us from measuring awareness in a complete fashion.

Objective: Understand brand loyalty including Net Promoter Score and the reasons for loyalty

While providing the correct 11-point scale to measure NPS, the text that ChatGPT utilised will not provide a clean read of NPS as previously discussed. The full text of the ChatGPT NPS question can be found in Appendix 3, Q210.

ChatGPT does however ask the reasons for respondents NPS rating for detractors and promotors utilising two separate questions as noted in Appendix 3, Q215 and Q220.

The phrasing of these questions is awkward in comparison to the human survey below and was banked on the same screen as the NPS question, as found in Appendix 3, Q225.

The ChatGPT version also asks this question in a closed ended fashion which we hypothesize is more prone to biasing results.

Objective: Measure the usage of OTC oral seasonal allergy medication, satisfaction, and drivers of use

The ChatGPT survey accurately measures seasonal allergy product usage in the past 12 months and how often they are used. It does not measure current usage in comparison to the human-generated survey. Upon reflection this oversight is less important than initially thought given that individuals experience seasonal allergies at different times during the year based on geography and their allergy triggers.

The ChatGPT survey includes data sufficient to understand some basic drivers of use but does not include enough appropriate data points to run a traditional full driver analysis as the human survey does.

Objective: Determine brand perception across OTC oral seasonal allergy medication

The ChatGPT survey does capture the importance and performance of medications on four attributes: effectiveness, minimal side effects, cost, and availability.

However, when asking about performance, it simply requests that respondents answer overall for each medication based on their prior responses, the details of which can be found in Appendix 3, Q235.

This formatting of questions does not provide enough or appropriate data for advanced analytical techniques to be conducted.

By comparison the human survey rated the following nine attributes across both importance and performance but individually for each brand allowing for advanced analytical techniques to be conducted: is affordable within my budget, has minimal side effects (e.g., drowsiness, jitters, etc.), established history/legacy treating seasonal allergies, provides long-lasting relief (works all-day vs. having to take multiple doses), my healthcare provider recommends the medication, someone other than my healthcare provider that I know recommends the medication, how often I have to take the medication, works quickly at treating allergies, scientific evidence that the treatment works.

Objective: Measure experience and frequency of symptoms of seasonal allergies

Finally, the ChatGPT survey does measure respondents' symptoms of seasonal allergies but fails to measure frequency. The human generated survey is designed to measure both.

Copyright © **ESOMAR** 2023 CONGRESS 2023

Other discrepancies were found between surveys but can be attributed to writing style. The ChatGPT survey was significantly more concise in the questions it asked but did not provide as much clarifying text than the human-generated survey.

Ultimately, we needed to field the survey and gather the data to understand if our assumptions on how well each survey could answer the guestions were correct.

Of note, as an experiment we also explored utilising an additional validated scale to understand the appropriateness of AI use in research studies requiring a more academic approach. ChatGPT was not able to correctly replicate these scales, the details of which can be found in Appendix 5.

Translations

Analysis of translations for the surveys

One hypothesis that we explored was around the quality of survey translations through ChatGPT. The human version of the survey was translated by a professional translator specialised in survey research while the AI-generated survey was translated by ChatGPT. Both surveys were translated directly into an excel translation file, standard within the industry, to ensure a proper overlay with the programmed English version. The text was translated from English to Spanish (for a native Spanish speaker in local to the US).

To translate the survey within ChatGPT as the format of the file is not indicative to use within the platform or with any known plug-ins at the time of survey design, the survey needed to be entered line by line. Given this method of translation and after experimentation, the following prompt was used balancing accuracy, efficiency and simplicity:

Prompt:

"Translate the text that I enter into each prompt to Spanish for a native Spanish speaker in the US."

Text to be translated was then imported into ChatGPT line by line and then copied back into the translation file to be uploaded into the survey. Ignoring timeouts, and message limits that were obtained three times (causing the need to restrict ChatGPT use temporarily) this process took approximately 1.5 hours and an additional 0.5 hours for the manual aspects of the process to be checked to ensure quality. There were also several instances where the phrasing of the translated text was not able to be translated as despite attempted training ChatGPT was not able to continue the task and instead reset the exercise as a new prompt. In these instances, the text was directly translated using Google Translate and the output was copied verbatim into the survey translation file.

As a comparison the average translator can process between 1,200-2,500 words per day depending on complexity and language. The ChatGPT generated survey had approximately 900 words that required translation.

Evaluation of translation accuracy and clarity

The human-translated version was validated by two parties and then an online check of the data was conducted.

The AI generated version was validated by a native Spanish speaker specialised in translations for survey research. The translations were deemed accurate when looking at the translations word-for-word. The main issues detected were that ChatGPT decided to use an informal tone, which may not always be appropriate depending on the audience and read very literal in many instances.

The natural flow of written language by humans has increased nuance and enables feeling and sentiment to flow which ChatGPT is not yet able to fully recreate, particularly cultural nuances. To obtain a fully elicit emotional response from a respondent, an AI only translation lacks many of the elements that are typically required to do

this. Conceding – if the intent of a study is to understand response to questions at the most literal level and not explore human emotions, ChatGPT provides a reasonable solution.

Timing of fielding the studies, Human, ChatGPT and sample targeting prompted

We wanted to note if the variance in survey design complexity would lead to any faster field timing. We tested the human survey, the ChatGPT study and the over-sample we executed to identify if using a prompt on targeting guided by ChatGPT would have any variances.

- On the surveys that were human and ChatGPT generated the timing in field was very much similar, n=75 per day.
- However, on the survey where we used specific ChatGPT prompts to help us understand some metrics of targeting the appropriate survey responder to minimise negative dispositions, we completed N=100 per day. This was a 25% lift in time in field.

After comparing these studies to the data from our ChatGPT prompted sample targeting, we noticed even further benefits to utilising ChatGPT on sampling.

On the ChatGPT prompted sample survey IR came in at 39% and the click conversion was 36%. This is a 56% and 44% improvement, respectively. These improvements are paramount in keeping our panels alive and engaged.

Data analysis

Upon analysis of the results from the survey, our previously stated hypotheses on whether the survey could measure each of the five stated business objectives was proven true. Based on the structure of the survey, the ChatGPT created survey left the gaps that we previously hypothesised in the earlier section of this paper. No further gaps were identified other than those that were expected to occur.

The human created survey did provide sufficient data to answer the study objectives which could be translated into actionable business recommendations. Given that we were left with one usable data set, we ran another experiment on human vs. AI analysis and insights. Using a third-party plug-in called "AskYourPDF" we uploaded a PDF version of the human survey data to ChatGPT and asked it to analyse and summarise the key findings of each research objective. The output can be found in Appendix 6.

We explored and validated ChatGPT's findings based on human analysis to be true/not true in the following situations:

Objective 1: ChatGPT states that Claritin Benadryl and Zyrtec are well-known which is correct, but fails to include Benadryl, which is (tied) the most well-known seasonal OTC based on the data captured within the survey. The actual data points provided are inaccurate stating that the most known products had an awareness level of 94 – 98% depending on brand when awareness actually ranges between 82% – 89%

The business recommendation provided is appropriate for the data that ChatGPT produced, and the original data set provided.

Objective 2: ChatGPT incorrectly calculates NPS. ChatGPT scores are provided in comparison to actual scores below:

Brand	ChatGPT	Human
Claritin	62	10
Benadryl	57	11
Zyrtec	59	0

ChatGPT not only incorrectly calculates NPS across each brand measured, but it also fails to identify the leading brand. The variance between ChatGPT and actual scores is alarming if no or inexperienced human oversight occurs.

The business recommendation on investigating Claritin's NPS and leveraging them to increase competitive brands is inappropriate and incorrect in the context of the study's overarching objectives.

Objective 3: The insight that ChatGPT provides in this scenario is not related to the objective it is measuring but the three data points that ChatGPT calls out are correct. It does neglect to include the leader (OTC oral medication), but this does show the first accurate data ChatGPT was able to process utilising this plug-in.

Objective 4: While there is no standalone efficacy metric that was measured within the survey, we can look to four brand attributes that can be associated with efficacy to calculate an overall efficacy composite score, something that we feel is appropriate in this type of study: established history/legacy treating seasonal allergies, provides long-lasting relief (works all-day versus having to take multiple doses), works quickly at treating allergies, scientific evidence that the treatment works.

When calculating the top efficacy scores Claritin and Benadryl are in the lead for the top spot followed by Zyrtec and Allegra, respectively. Claritin does edge out Benadryl by a composite score average of .01, but without the proper context that these results are statistically the same the overall finding is misleading, despite being technically accurate.

The business recommendation provided is appropriate but lacks the necessary context to be fully actionable.

Objective 5: ChatGPT's insights and business recommendation in this aspect are accurate and appropriate.

Overall, ChatGPT provides insights incredibly quickly but requires significant human oversight and validation to determine which findings are true and which are false. The vast majority of ChatGPT's insights were false. Where results were accurate, only a very simple single-variable frequency analysis was required to be conducted while those that required a more advanced analysis were universally false. While we did utilise a third-party plug-in that we felt would be appropriate, ChatGPT's base as a language learning model does not lead to an appropriate use case for analysing survey data.

Speed of completion strongly favours ChatGPT with only one hour required for analysis and approximately five – ten hours required by human counter parts (this does not include structuring of reports, etc.).

Comparison of respondent experience

The insights industry is constantly working to find ways to enhance the survey experience and create a better engagement for our respondent pool. In executing the surveys, we sought any engagement benefits of using a ChatGPT generated survey versus a human generated survey.

The key metrics we were seeking included better conversion, shorter LOI, any variance in respondent drop off and overall satisfaction ratings.

Parameter	Human Study	ChatGPT				
IR	25%	28%				
Click Conversion Rate	22%	25%				
Drop-Out Rate	4%	2%				
LOI Median	10.31	6.21				

All of the key metrics leading to a worse respondent experience improved on the ChatGPT version; LOI, IR, Dropout and Click Conversion.

At the conclusion of the survey, we provided five questions to determine respondent satisfaction to all participants with a sixth being asked of native Spanish speakers. The questions were identical between both surveys, and each were rated on a 5-point Likert scale with "1" representing "Not at all" and "5" representing "Extremely".

The mean calculations for each are found below:

This survey was	Human (n=901)	ChatGPT (n=918)
Relevant to me	4.47	4.54
Easy to understand	4.57	4.71
Well thought-out	4.33	4.43
Took the amount of time I expected it to	4.41	4.48
Enjoyable to participate in	4.29	4.44
	(n=51)	(n=68)
Appropriately written to my native language	4.82	4.65

Table 3

The ChatGPT survey provided higher respondent satisfaction scores across all metrics except for the quality of translations. It is important to note that only the differences between "easy to understand", "well thought-out", and "took the amount of time I expected it to" are statistically significant at a 95% confidence interval and can be reliably viewed as different.

We hypothesised that LOI has a large impact on these scores (10.31 median for human, 6.21 median for ChatGPT). For this reason, we regressed each of the respondent satisfaction variables and survey time against each of the survey satisfaction variables there was no correlation. From this, we infer that LOI did not have a measurable impact on respondent satisfaction scores.

In this instance we can directionally conclude that the ChatGPT created survey led to higher respondent satisfaction scores, but it is important to note that the ChatGPT generated survey did not provide data that could fully answer the studies objectives. You don't need to have ChatGPT to write your survey, but there is clear data noting an easier to understand survey is more enjoyable.

Conclusion

We can assess that while ChatGPT is efficient when it comes to speed, as far as accuracy goes, it is still in its infancy. That being said, ChatGPT, associated plug-ins and other AI tools are evolving rapidly on a daily basis. It has an astonishing ability to streamline daily processes, but ChatGPT won't be replacing researchers any time soon. As time goes on and we are able to provide less oversight over AI tools it will allow for more critical thinking around the data and its implications, leading to a higher quality product for all.

Summarised Positives of ChatGPT for Researchers:

- Great tool for initial brainstorming on business objectives (with thoughtful and correct prompting).
- Efficient method of providing content and initial first drafts allowing more time for technical experts to refine final copies.
- Ability to pre-test a survey to identify if the question framework and answer variables can be understood easily by the targeted responders. This can lead to better data quality.
- If research is not complex, the experience is far better for the responder.
- ChatGPT can assist in targeting lifting incidence rate and overall click to conversion.

Summarised Negatives of ChatGPT for Researchers:

- If this experiment was structured differently and we had allowed for further intervention, we hypothesise that we would end up with a similar finished product in less time, however the intent of our experiment is to understand how a research naïve individual may utilise this tool and if there are any associated dangers to our industry through its use.
- Inconsistent and incorrect use of validated scales.
- The risk of making business decisions from incorrect and inconsistent data increases without expert oversight.
- Confidently, but sometimes incorrectly, analyses data sets leading to incorrect assumptions.
- Quality risks and open ends can easily be copied and pasted from the respondent pool.

Implications for future research and survey design

While we are not there yet, ChatGPT and other AI models have the potential to significantly impact the future of market research. Some areas to keep your eyes peeled for (even if this is just a wish list for the researcher living inside in all of us):

- Data collection and analysis: Can AI tools assist in data collection by engaging with participants in real-time conversations, allowing for more dynamic and interactive surveys? Can they help automate data entry, coding, and initial analysis, reducing the burden on researchers and enabling faster data processing?
- Survey design and administration: Can ChatGPT aid in the design of survey questions by providing suggestions, detecting potential biases or ambiguities, and ensuring clarity and comprehensibility? Will it be able to provide real-time feedback?
- *Natural language processing:* Will language models like ChatGPT be able to accurately analyse and interpret open-ended responses in surveys, providing insights into participants' perspectives, emotions, and sentiments? Will researchers properly harness these capabilities to gain a deeper understanding of qualitative data and identify emerging themes or patterns?
- Accessibility and inclusivity: Can language models facilitate surveys for individuals with different abilities
 or language preferences without the need for pre-translated materials? Will multilingual capabilities help
 overcome language barriers, while text-to-speech and speech recognition capabilities enable surveys for
 individuals with visual or auditory impairments?
- *Real-time analysis:* Will AI analytical capabilities provide preliminary insights, enabling researchers to identify emerging trends during data collection?
- Experimental design and simulation: Can these models assist in experimental design by simulating survey scenarios and predicting potential outcomes? Can researchers leverage ChatGPT to explore different survey conditions, sample sizes or response rates to optimise survey design before conducting actual data collection?
- Continuous learning and improvement: Will ChatGPT and other models be able to learn from previous survey experiences and adapt their recommendations and responses based on accumulated knowledge?
 This continuous learning process could contribute to the refinement of survey design practices and the generation of more effective surveys over time.

It is important to acknowledge that the use of language models like ChatGPT in research and survey design also raises ethical considerations. Transparency, informed consent, data privacy, and potential biases in the training data are among the critical factors that researchers should address to ensure responsible and ethical use of AI technologies in the research process.

Copyright © **ESOMAR** 2023 CONGRESS 2023

ChatGPT will not be a replacement for market research professionals, not any time soon, at least. If used as a guide for best practices, targeting, pre-testing, etc., ChatGPT can be of great assistance to our industry. It can allow for faster turnaround time at the design, programming and fielding stages of a research project.

What it can't do is read someone's face when they taste a product, look at a new brand design or watch an ad, TV show or movie. It can't gauge the frustration of a Chief Technology Officer inputting a new server blade. It can't know "people and their emotions".

Will ChatGPT make a great impact on our industry? Absolutely. Can we use it to our advantage? ABSOLUTELY. Remember, we're just at the beginning.

Disclosures/other important notes

Research was conducted in May of 2023. Due to the ever-changing nature of these tools, it's important to note significant updates to the functionality and sophistication are expected to occur in the future. These technologies are evolving not day-by-day but hour-by-hour.

About the Authors

Tim Brewer is VP Strategic Accounts at KJT Group, Rochester NY. Sandy Casey is SVP Global Supply at InnovateMR, San Francisco CA.

Additional Assistance

Isabella Barbagallo, KJT – assistance in survey design

Nancy Hernon, Mauricio Gabilanes, Yelena Cherkasova, G3 Translate – provided human Spanish language translation

Dan Wasserman, Chris Claeys, KJT – aided in analysis

ThinkNow - Provided the Hispanic Sample

InnovateMR Marketing Team: Brittany Nicols, Molly Strawn, De'Launa Carriere, and Kaitlynn Schryer – consultation, research guidance, paper writing and editing

Appendix 1: Prompts and responses for designing the survey

Prompt 1:

• Write a set of research objectives to explore in an online survey measuring the brand health of Claritin and key competitors in the seasonal allergy market

ChatGPT Response:

- 1. "To determine the overall awareness levels of Claritin and its key competitors within the seasonal allergy market.
- 2. To assess the brand image and perception of Claritin and its competitors, including associations with specific benefits and attributes.
- 3. To explore the usage patterns and behaviours of consumers who use Claritin and its competitors during allergy season, including frequency and dosage.
- 4. To evaluate the satisfaction levels of consumers who use Claritin and its competitors and identify areas for improvement.
- 5. To identify key drivers of brand loyalty and preference among consumers who use Claritin and its competitors, including factors such as price, efficacy and side effects.

- 6. To investigate the impact of advertising and promotional efforts on brand awareness, consideration, and purchase intent for Claritin and its competitors.
- 7. To understand the role of brand trust and credibility in the seasonal allergy market, and how this impacts consumer perceptions and behaviour.
- 8. To compare the brand health of Claritin and its competitors across different demographic groups, such as age, gender, and income.
- 9. To identify opportunities for Claritin to differentiate itself from its competitors and strengthen its market position.
- $10. \ \ \textit{To track changes in brand health over time and assess the effectiveness of marketing and promotional initiatives".}$

Prompt 2:

How long of an online survey is needed to fully address these objectives?

ChatGPT Response:

"The length of an online survey needed to fully address these objectives can vary depending on the specific questions, design, and audience being surveyed. However, it is important to keep in mind that survey fatigue can be a significant issue, and respondents may not have the patience or attention span to complete a lengthy survey.

To balance the need for comprehensive data collection with the need for respondent engagement, a survey length of around 15-20 minutes is generally considered reasonable for most online surveys. However, this is not a hard and fast rule, and surveys can be shorter or longer depending on the complexity of the topic and the specific research objectives being addressed.

In general, it is recommended to focus on the most important research objectives and prioritize the questions that are most critical for achieving the desired insights. Additionally, survey designers should aim to use clear and concise language and minimize redundancy and unnecessary questions to keep the survey as brief and engaging as possible." Prompt 3:

• What brands would you also recommend measuring in addition to Claritin in the seasonal allergy market in an online survey?

ChatGPT Response

"When measuring the brand health of Claritin in the seasonal allergy market, it is important to include other key competitors in the survey to provide a comprehensive understanding of the competitive landscape. Some of the brands that could be considered for inclusion in the survey are:

- 1. Zyrtec
- 2. Allegra
- 3. Benadryl
- 4. Flonase
- 5. Nasacort
- •
- 0 (Not at all likely to recommend)
- 1
- 2
- 34
- _
- 6
- 7
- 8
- 9
- 10 (Extremely likely to recommend)

Appendix 2: Prompt responses on how to find the "ideal" survey participant

Prompt 1:

• I want to find survey responders who have seasonal allergies, who do you suggest I target?

ChatGPT Response:

"To effectively target survey responders with seasonal allergies, you can consider focusing on specific demographics and channels.

Here are some suggestions:

Age Group: Seasonal allergies can affect individuals of all ages, but they are more prevalent among young adults and middle-aged individuals. You may want to target age groups between 18 and 55, which would cover a significant portion of the population affected by seasonal allergies.

Geographic Location: Allergy prevalence can vary depending on the region. Consider targeting areas known for higher allergen exposure, such as regions with abundant pollen-producing plants or regions with specific climate conditions that promote allergies."

ChatGPT provided detailed information on where else to look for those that suffer from seasonal allergies. This data was not helpful nor requested.

"Local allergy clinics, hospitals, or community centres may help provide information on prevalent allergies in specific regions."

ChatGPT provided detailed information on where else to look find survey responders that suffer from seasonal allergies. This data would prove to be helpful if this was a large online recruit and the researcher was not utilising double opt in panels.

"Online Allergy Communities: Engaging with online communities focused on allergies, such as forums, social media groups, or allergy-specific websites, can help you find individuals who are actively seeking information and support regarding seasonal allergies. Ensure you follow ethical guidelines and obtain appropriate permissions when engaging with these communities.

Allergy Support Groups: Local allergy support groups or organizations often have members who actively manage their allergies. Contacting these groups can provide you access to individuals who are knowledgeable about seasonal allergies and may be interested in participating in your survey."

"Healthcare Professionals: Reach out to healthcare professionals such as allergists, general practitioners, or nurses who specialize in allergy treatment. They can help you identify potential survey participants among their patients or even share your survey with their network."

ChatGPT is not aware of HIPPA in the United States. Additionally, it is not a realistic request for a doctor to provide his patients as respondents to a survey that is not for higher-level medical research. This is not a scalable solution for any quantitative work looking for large n sizes.

"Social Media Advertising: Platforms like Facebook, Instagram, or Twitter allow you to target specific demographics based on age, location, and interests. You can set up targeted advertisements to reach individuals who are more likely to have seasonal allergies."

This was the most fitting guidance provided from ChatGPT, however, not mentioning the utilisation of a data collection sampling company was a miss.

"Remember to clearly communicate the purpose of your survey, ensure participant privacy and data protection, and offer appropriate incentives or compensation to encourage participation."

Interestingly ChatGPT knew to offer incentives and to be cautious with data protection, (even though it suggested physicians share their patient information). It also notates the number one rule in sampling, "Communicate clearly the purpose of your survey."

As we attempted to use ChatGPT to assist us with finding our target audience, we continued to pursue more details with the following prompts:

Copyright © **ESOMAR** 2023 CONGRESS 2023

Prompt 2:

What ethnicity / race do seasonal allergies affect?

ChatGPT Response:

"Seasonal allergies can affect individuals of all races. Allergies are not specific to any racial or ethnic group. The prevalence and severity of seasonal allergies can vary among different populations due to various factors, including genetic predisposition, environmental exposures, and cultural practices."

Prompt 3:

• Do seasonal allergies affect one gender more than another?

ChatGPT Response:

"When it comes to the prevalence of seasonal allergies, there isn't a significant difference between genders. Both males and females can experience seasonal allergies, and the condition affects them relatively equally."

Prompt 4:

What regions in the US have a higher incidence of seasonal allergies?

ChatGPT Response:

"Seasonal allergies can occur across the United States, but certain regions are known for higher incidences due to specific environmental factors.

Here are some regions that tend to have a higher prevalence of seasonal allergies:

The Southeast: The Southeastern United States, including states like Georgia, Alabama, Florida, and South Carolina, often experience high pollen counts and prolonged allergy seasons. This is due to the abundance of trees such as oak, pine, and cedar, as well as various grasses and weeds.

The Midwest: States in the Midwest, such as Illinois, Indiana, Ohio, and Missouri, can have significant pollen and mold allergies. Ragweed, a common allergen, is prevalent in this region during late summer and fall.

The Northeast: Northeastern states, including New York, Pennsylvania, Massachusetts, and Connecticut, have a notable presence of tree pollens like birch, maple, and oak. Allergies related to grasses and weeds are also common in this region.

The West Coast: Coastal regions of California, Oregon, and Washington tend to have milder allergy seasons due to the oceanic climate. However, inland areas can still experience seasonal allergies, especially related to grasses, weeds, and tree pollens such as cedar and oak.

Mountainous Areas: Areas at higher elevations, such as the Rocky Mountains or the Appalachian Mountains, may have lower pollen counts and shorter allergy seasons compared to other regions. However, allergens like mountain cedar or various grasses and weeds can still cause seasonal allergies in these areas."

Prompt 5:

• Are there any jobs roles that can have an increased risk of getting / having seasonal allergies?

ChatGPT Response:

"Agriculture and Farming: Farmers, agricultural workers, gardeners, and landscapers often work directly with plants, crops, and soil, which can expose them to a variety of allergens, including pollen, mold spores, and dust. This can contribute to the development or worsening of seasonal allergies.

Outdoor Workers: Jobs that involve significant outdoor exposure, such as construction workers, forestry workers, groundskeepers, or park maintenance staff, can expose individuals to various allergens present in the outdoor environment, such as pollen, grasses, and weeds.

Healthcare Workers: Healthcare professionals who work in environments with poor indoor air quality, such as hospitals or clinics, may be exposed to allergens like dust mites, mold spores, and chemicals used in cleaning products. These allergens can potentially trigger or worsen seasonal allergies.

Animal Care and Veterinary Workers: Individuals working with animals, such as veterinarians, veterinary technicians, and animal caretakers, may be exposed to pet dander, feathers, or other animal allergens. These allergens can contribute to allergic reactions, including seasonal allergies.

Forestry and Logging: Workers involved in forestry and logging activities may be exposed to tree pollens, mold spores, and other allergens present in forest environments. These exposures can increase the risk of developing seasonal allergies.

Food Processing and Culinary Industry: Individuals working in food processing, bakeries, or commercial kitchens can be exposed to flour dust, spices, or other food allergens, which may cause or aggravate allergies, including seasonal allergies.

It's important to note that while these occupations may have a higher incidence of seasonal allergies, not everyone in these roles will develop allergies. Individual susceptibility to allergies depends on various factors, including genetic predisposition, personal sensitivity, and cumulative exposure to allergens over time."

Appendix 3: ChatGPT-written survey

SECTION S: SCREENING QUESTIONS

ALL RESPONDENTS

Thank you for taking the time to participate in this important research. For your convenience we are offering this survey in multiple languages. Please select the language that you are most familiar with.

Gracias por tomarse el tiempo para participar en esta importante investigación. Para su comodidad, ofrecemos esta encuesta en varios idiomas. Seleccione un idioma con el que esté más familiarizado.

- 3. English / Inglés
- 4. Spanish / Español

ALL RESPONDENTS

Thank you for your interest in this survey. We appreciate your willingness to participate in this important research on healthcare issues.

Before participating, KJT requires you to review the following information:

- KJT is a global market research company.
- Your responses to this survey will help the sponsor design new products to meet patient needs.
- Your responses will be kept **strictly confidential** and will never be associated with your name (double-blind).
- We expect, on average, it will take respondents like yourself 10 minutes to complete this survey.
- Your **participation is voluntary**, and you may choose to stop participating at any time (withdraw consent).

Do you consent to these terms and wish to continue with the survey?

1. Yes CONTINUE

2. No

[IF AGREES TO DISCLOSURE STATEMENT (S1r1) ASK S3, ALL ELSE TERMINATE]

UNDERSTANDS DISCLOSURE STATEMENT (S1r1)

S3 In which state is your primary residence located?

[INSERT DROP-DOWN FOR US STATE]

99. I do not live in the United States [TERMINATE]

LIVES IN THE US (S3 NOT r99)

S4 How old are you?

[RANGE 0-120]

1. |_|_| years old **CONTINUE IF 18**+

[IF AGE 18+ (S4>17) ASK S5, ALL ELSE TERMINATE]

AGE 18+ (S4>17)

S5 With what gender do you most closely identify?

Please select one.

- 1. Female
- 2. Male
- 3. Transgender Female
- 4. Transgender Male
- 5. Gender Variant / Non-Conforming
- 6. Other, please specify: _____ [SPECIFY]

AGE 18+ (S4>17)

S6 Which of the following conditions, if any, have you been diagnosed with or do you suffer from?

Please select all that apply.

[ALPHA SORT; MULTIPLE SELECT]

- 1. Asthma
- 2. Chronic Obstructive Pulmonary Disease (COPD)
- 3. Depression
- 4. Anxiety
- 5. Seasonal Allergies [CONTINUE]
- 6. Type 1 Diabetes
- 7. Type 2 Diabetes
- 8. High cholesterol
- 9. Hypertension
- 10. Headaches
- 11. None of the above [ANCHOR] [EXCLUSIVE]

[CONTINUE IF SELECTED SEASONAL ALLERGIES (S6r5), ELSE TERMINATE]

SECTION 2: AWARENESS AND PERCEPTION QUESTIONS

ALL QUALIFIED RESPONDENTS (S100/1)

Q200 Hello, and thank you for your interest in participating in our survey! We are conducting this survey to better understand the awareness and usage of oral seasonal allergy medication among adults in the United States. Your responses will be kept anonymous and will only be used for research purposes. The survey should take approximately 10 minutes to complete.

ALL QUALIFIED RESPONDENTS (S100/1)

Q205 Please name any oral seasonal allergy medications that you are aware of.

ALL QUALIFIED RESPONDENTS (\$100/1)

Q210 How likely are you to recommend the oral seasonal allergy medication that you currently use to a friend or family member?

- 0 (Not at all likely to recommend)
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (Extremely likely to recommend)

RATED MEDICATION CURRENTLY USING 0-6 (Q210/0-6)

Q215 If you rated 0-6 in question 6, what are the reasons you are unlikely to recommend the medication? (Select all that apply.)

- 1. Ineffective
- 2. Side effects
- 3. Cost
- 4. Availability
- 5. Other (Please specify)

RATED MEDICATION CURRENTLY USING 9-10 (Q210/0-6)

Q220 If you rated 9-10 in question 6, what are the reasons you are likely to recommend the medication? (Select all that apply.)

- 1. Effectiveness
- 2. Minimal side effects
- 3. Cost
- 4. Availability
- 5. Other (Please specify)

ALL QUALIFIED RESPONDENTS (S100/1)

Q225 Please rate each of the following oral seasonal allergy medications based on your perception of them. (Select one for each)

- 1. Claritin
- 2. Allegra
- 3. Zyrtec
- 4. Benadryl
- a. Extremely negative
- b. Somewhat negative
- c. Neutral
- d. Somewhat positive
- e. Extremely positive

ALL QUALIFIED RESPONDENTS (S100/1)

Q230 Please rate the importance of the following attributes when choosing an oral seasonal allergy medication. (Select one for each)

- 1. Effectiveness
- 2. Minimal side effects
- 3. Cost
- 4. Availability
- a. Not at all important
- b. Somewhat important
- c. Very important
- d. Extremely important

ALL QUALIFIED RESPONDENTS (S100/1)

Q235 Please rate how well each of the following oral seasonal allergy medications performs on the attributes you rated as important. (Select one for each)

- 1. Claritin
- 2. Allegra
- 3. Zyrtec
- 4. Benadryl
- a. Poorly

Copyright © ESOMAR 2023

CONGRESS 2023

- b. Somewhat poorly
- c. Neutral
- d. Somewhat well
- e. Very well

SECTION 3: SYMPTOMS AND USAGE QUESTIONS

[BANK Q300 AND Q305]

ALL QUALIFIED RESPONDENTS (S100/1)

Q300 Which of the following oral seasonal allergy medications have you used in the past 12 months? (Select all that apply.)

- 1. Claritin
- 2. Allegra
- 3. Zyrtec
- 4. Benadryl
- 5. None of the above

ALL QUALIFIED RESPONDENTS (\$100/1)

Q305 If you use any of the medications listed above, how often do you use them?

- 1. Daily
- 2. A few times per week
- 3. Once a week
- 4. Less than once a week

ALL QUALIFIED RESPONDENTS (S100/1)

Q310 What symptoms of seasonal allergies are you currently experiencing? (Select all that apply.)

- 1. Runny or stuffy nose
- 2. Sneezing
- 3. Itchy eyes
- 4. Watery eyes
- 5. Scratchy throat
- 6. Other (Please specify)

ALL QUALIFIED RESPONDENTS (S100/1)

Q315 How do you currently manage your seasonal allergy symptoms? (Select all that apply.)

- 1. Oral medication
- 2. Nasal spray
- 3. Eye drops
- 4. Natural remedies (e.g., honey, herbal supplements)
- 5. Other (Please specify)

SECTION D: DEMOGRAPHIC QUESTIONS

ALL QUALIFIED RESPONDENTS (S100/1)

D10 Race/Ethnicity:

- 1. White
- 2. Black or African American
- 3. Asian
- 4. Hispanic or Latino
- 5. Native American or American Indian
- 6. Other (Please specify)

ALL QUALIFIED RESPONDENTS (S100/1)

D15 Education:

- 1. Less than high school diploma
- 2. High school diploma or equivalent

Copyright © **ESOMAR** 2023 CONGRESS 2023

- 3. Some college, no degree
- 4. Associate's degree
- 5. Bachelor's degree
- 6. Master's degree
- 7. Doctoral degree

ALL QUALIFIED RESPONDENTS (\$100/1)

D20 Annual Household Income:

- 1. Less than \$25,000
- 2. \$25,000-\$49,999
- 3. \$50,000-\$74,999
- 4. \$75,000-\$99,999
- 5. \$100,000-\$149,999
- 6. \$150,000 or more

SECTION 100: SATISFACTION QUESTIONS

ALL QUALIFIED RESPONDENTS (\$100/1)

Q100 In this final section, we will ask you a couple of questions about your overall experience taking this survey. Please rate this survey on the following attributes, using a scale of 1 to 5 where 1 = "Not at all" and 5 = "Extremely"

This survey was...

[ROWS]

- 1. Relevant to me
- 2. Easy to understand
- 3. Well thought-out
- 4. Took the amount of time I expected it to
- 5. Enjoyable to participate in
- 6. Appropriately written for my native language [ONLY SHOW IF SPANISH S0/2]

[COLUMNS]

- 1. Not at all...
- 2.
- 3. 4.
- 4.
- 5. Extremely...

ALL QUALIFIED RESPONDENTS (S100/1)

Q110 Is there any additional feedback you'd like to share regarding your survey experience?

1	Ī	\cap	F	P	- 1	V	Е	N	Г)]

Appendix 4: human-written survey

SECTION S: SCREENING QUESTIONS

ALL RESPONDENTS

Thank you for taking the time to participate in this important research. For your convenience we are offering this survey in multiple languages. Please select the language that you are most familiar with.

Gracias por tomarse el tiempo para participar en esta importante investigación. Para su comodidad, ofrecemos esta encuesta en varios idiomas. Seleccione un idioma con el que esté más familiarizado.

- 5. English / Inglés
- 6. Spanish / Español

ALL RESPONDENTS

S1 Thank you for your interest in this survey. We appreciate your willingness to participate in this important research on healthcare issues.

Before participating, KJT requires you to review the following information:

• KJT is a global market research company.

- Your responses to this survey will help the sponsor design new products to meet patient needs.
- Your responses will be kept **strictly confidential** and will never be associated with your name (double-blind).
- We expect, on average, it will take respondents like yourself 10 minutes to complete this survey.
- Your participation is voluntary, and you may choose to stop participating at any time (withdraw consent).

Do you consent to these terms and wish to continue with the survey?

- 1. Yes CONTINUE
- 2. No

[IF AGREES TO DISCLOSURE STATEMENT (S1r1) ASK S3, ALL ELSE TERMINATE]

UNDERSTANDS DISCLOSURE STATEMENT (S1r1)

S3 In which state is your primary residence located?

[INSERT DROP-DOWN FOR US STATE]

99. I do not live in the United States [TERMINATE]

LIVES IN THE US (S3 NOT r99)

S4 How old are you?

[RANGE 0-120]

1. |_|_| years old **CONTINUE IF 18**+

[IF AGE 18+ (S4>17) ASK S5, ALL ELSE TERMINATE]

AGE 18+ (S4>17)

S5 With what gender do you most closely identify?

Please select one.

- 1. Female
- 2. Male
- 3. Transgender Female
- 4. Transgender Male
- 5. Gender Variant / Non-Conforming
- 6. Other, please specify: ____ [SPECIFY]

AGE 18+ (S4>17)

Which of the following conditions, if any, have you been diagnosed with or do you suffer from?

Please select all that apply.

[ALPHA SORT; MULTIPLE SELECT]

- 1. Asthma
- 2. Chronic Obstructive Pulmonary Disease (COPD)
- 3. Depression
- 4. Anxiety
- 5. Seasonal Allergies [CONTINUE]
- 6. Type 1 Diabetes
- 7. Type 2 Diabetes
- 8. High cholesterol
- 9. Hypertension
- 10. Headaches
- 11. None of the above [ANCHOR] [EXCLUSIVE]

[CONTINUE IF SELECTED SEASONAL ALLERGIES (S6r5), ELSE TERMINATE]

SECTION 2: AWARENESS, NPS AND USAGE

ALL QUALIFIED RESPONDENTS (S100/1)

Q200 Congratulations! You have qualified to participate in this research. Thank you for your responses thus far, the remainder of the survey should take around 9 minutes to complete and will focus on your experience with seasonal allergies.

ALL QUALIFIED RESPONDENTS (S100/1)

AWARE OF AT LEAST ONE MEDICATION (Q215/1-4)

[END LOOP]

How likely are you to recommend [INSERT Q215] to a friend or colleague? O220

remely likely".

4
Please use a scale of 0-10 where 0 = "not at all likely" and 10 = "ext
0 Not at all likely
1
2
3
4
5
6
7
8
9
10 Extremely likely
AWARE OF AT LEAST ONE MEDIATION (Q215/1-4)
Q225 For what reason did you provide this score?
1[OPEN END]

AWARE OF AT LEAST ONE MEDICATION (Q215/1-4)

Q230 Using the scale below, please indicate your experience with each of the following over-the-counter oral medications to treat seasonal allergies.

By over-the-counter, we mean allergy medications that you can purchase at a retail location with no need for a prescription from your doctor.

[COLUMNS]

- 1. I use this medication currently (or the last time I experienced seasonal allergies)
- 2. I have used this medication in the past, but do not currently use it
- 3. I have considered this medication, but never used it
- 4. I have never considered using this medication

[SHOW ROWS AWARE (Q215) IN SAME ORDER]

STOPPED USING AT LEAST ONE MEDICATION (Q230/2 FOR 1 OR MORE ROWS]

Q235 You previously mentioned that you stopped using the following medications. For what reason(s) did you stop using each of the following oral medications to treat your seasonal allergies?

Please select all that apply for each medication.

[SHOW COLUMNS STOPPED USING (Q230/2) IN SAME ORDER; MULTIPLE SELECT PER COLUMN]

- 1. Didn't work as well as I had hoped
- 2. Stopped working as well as it did when I started taking it
- 3. Curious whether a different treatment would be better
- 4. My healthcare provider recommended a new medication
- 5. Too many side effects
- 6. Too expensive
- 7. No longer needed to take it
- 8. Another reason [ANCHOR; OTHER SPECIFY BELOW GRID]

[SHOW ROWS FOR USED IN PAST (Q230/COL 2) IN SAME ORDER]

SECTION 3: BRAND PERCEPTIONS

HAS USED AT LEAST ONE MEDICATION (Q230/COL 1-2 FOR ONE OR MORE ROWS)

Q300 Next, we'd like to understand more about your perceptions of oral medications specifically to treat seasonal allergies.

Considering the oral medications you use currently or have used in the past to manage your seasonal allergies, please indicate how satisfied you are with each.

Please use a scale of 1-5 where 1 = "not at all satisfied" and 5 = "completely satisfied".

[COLUMNS]

- 1. Not at all satisfied
- 2.
- 3.
- 4.
- Completely Satisfied

[SHOW ROWS FOR USE CURRENTLY OR HAS USED IN THE PAST (Q230/COL 1-2) IN SAME ORDER]

SECTION 4: DRIVER ANALYSIS

ALL QUALIFIED RESPONDENTS (S100/1)

Q400 In the following exercise we will present you with a number of items that may or may not be important to you when considering how to treat your seasonal allergies.

Please indicate how important each of the following attributes are to you when selecting a treatment for your seasonal allergies.

Please use a scale of 1-5 where 1 = "not at all important" and 5 = "extremely important".

[COLUMNS]

- 1. Not at all important
- 2.
- 3.

Copyright © **ESOMAR** 2023

CONGRESS 2023

4.

5. Extremely important

[ROWS; RANDOMIZE]

- 1. Is affordable within my budget
- 2. Has minimal side effects (e.g., drowsiness, jitters, etc.)
- 3. Established history/legacy treating seasonal allergies
- 4. Provides long-lasting relief (works all-day vs. having to take multiple doses)
- 5. My healthcare provider recommends the medication
- 6. Someone other than my healthcare provider that I know recommends the medication
- 7. How often I have to take the mediation
- 8. Works quickly at treating allergies
- 9. Scientific evidence that the treatment works

AWARE OF AT LEAST ONE MEDIATION (Q215/1-4)

Q405 Now, we'd like to understand your impressions of different oral medications to relieve seasonal allergies.

For each attribute below, please rate each medication's performance on the following attributes on a scale from 1-5 where 1 = "very poor" and 5 = "excellent".

Please answer to the best of your ability, based on what you know about each medication.

[LOOP EACH BRAND AWARE OF IN BRIGHT BLUE BOLD TEXT]

[COLUMNS]

- 1. Very poor
- 2.
- 3.
- 4.
- 5. Excellent
- 99. Not Sure

[ROWS; SHOW IN SAME ORDER AS Q400]

- 1. Is affordable within my budget
- 2. Has minimal side effects (e.g., drowsiness, jitters, etc.)
- 3. Established history/legacy treating seasonal allergies
- 4. Provides long-lasting relief (works all-day vs. having to take multiple doses)
- 5. My healthcare provider recommends the medication
- 6. Someone other than my healthcare provider that I know recommends the medication
- 7. How often I have to take the mediation
- 8. Works quickly at treating allergies
- 9. Scientific evidence that the treatment works

SECTION 5: SEASONAL ALLERGY EXPERIENCES

ALL QUALIFIED RESPONDENTS (\$100/1)

Q500 How do you currently manage your seasonal allergies?

By over-the-counter, we mean allergy medications that you can purchase at a retail location with no need for a prescription from your doctor.

Please select all that apply.

[RANDOMIZE; MULTIPLE SELECT]

- 1. Over-the-counter oral medication
- 2. Over-the-counter nasal spray
- 3. Over-the-counter eye drops
- 4. Prescription from my doctor (prescription oral medication, prescription nasal spray, or prescription eye drops)
- 5. Home remedies or non-medical symptom management
- 6. Other method, please specify____ [OPEN END] [ANCHOR]
- 7. I do not currently manage my seasonal allergies with any method [ANCHOR] [EXCLUSIVE]

CURRENTLY USING AT LEAST ONE MEDICATION (Q230/COL 1 FOR ANY ROW)

Q505 How long did you first start using the following over-the-counter oral medications to treat seasonal allergies?

Copyright © **ESOMAR** 2023 CONGRESS 2023

Your best estimate is fine.

[COLUMNS]

- 1. Less than 3 months
- 2. 3 months to less than a year
- 3. 1 year to less than 2 years
- 4. 2 years to less than 5 years
- 5. 5 years or longer
- 99. Don't recall

[SHOW ROWS FOR USE CURRENTLY (Q230/COL 1) IN SAME ORDER]

ALL QUALIFIED RESPONDENTS (S100/1)

Q510 Within the last 3 months, how often have you experienced symptoms of seasonal allergies?

- 1. Every day
- 2. Multiple times per week
- 3. Multiple times per month
- 4. Once per month or less

99. Not at all

SECTION D: DEMOGRAPHIC QUESTIONS

ALL QUALIFIED RESPONDENTS (S100/1)

D10 Are you Spanish/Hispanic or Latino?

- 1. Yes
- 2. No
- 3. Decline to answer

ALL QUALIFIED RESPONDENTS (S100/1)

D15 Are you...?

Please select all that apply.

[ALPHA SORT; MULTIPLE SELECT]

- 1. White
- 2. Black or African American
- 3. American Indian or Alaska Native
- 4. Asian
- 5. Other, please specify: _____ [TEXT RESPONSE] [ANCHOR]
- 6. Decline to answer [ANCHOR] [EXCLUSIVE]

ALL QUALIFIED RESPONDENTS (S100/1)

D20 Which of the following best describes the area you live in?

- 1. Urban
- 2. Suburban
- 3. Rural
- 4. Decline to answer

ALL QUALIFIED RESPONDENTS (\$100/1)

D25 What was your total household income in 2022?

Please answer to the best of your ability.

- 1. \$0-\$19,999
- 2. \$20,000-\$49,999
- 3. \$50,000-\$89,999
- 4. \$90,000-\$129,999
- 5. \$130,000-\$149,999
- 6. \$150,000+
- 7. Decline to answer

SECTION 100: SATISFACTION QUESTIONS

ALL QUALIFIED RESPONDENTS (S100/1)

Q100 In this final section, we will ask you a couple of questions about your overall experience taking this survey. Please rate this survey on the following attributes, using a scale of 1 to 5 where 1 = "Not at all" and 5 = "Extremely"

This survey was...

[ROWS]

- 1. Relevant to me
- 2. Easy to understand
- 3. Well thought-out
- 4. Took the amount of time I expected it to
- 5. Enjoyable to participate in
- 6. Appropriately written for my native language [ONLY SHOW IF SPANISH S0/2]

[COLUMNS]

- 1. Not at all...
- 2.
- 3.
- 4.
- 5. Extremely...

ALL QUALIFIED RESPONDENTS (S100/1)

Q110 Is there any additional feedback you'd like to share regarding your survey experience?

1. _____OPEN END]

Appendix 5 - validated scales (mini RQLQ)

In addition to NPS, as an experiment, we explored utilising an additional validated scale to understand the appropriateness of AI use in research studies where a more academic approach is needed, such as the capturing of real-world evidence for publication in the pharmaceutical industry, or the submission of patient data to government agencies for the approval of new product entrants (i.e., FDA). In this instance we explored utilising the Mini RQLQ (Rhinoconjunctivitis Quality of Life Questionnaire). The mini RQLQ is comprised of 14 questions on a 7-point scale (0-6) across the domains of activities, practical problems, nose symptoms, eye symptoms and other symptoms.

Upon determination that this scale would be a potential appropriate fit for the survey ChatGPT was given the following prompt:

"Provide me with the mini RQLQ guestionnaire."

And provided the following response:

"The mini RQLQ (mini Rhinoconjunctivitis Quality of Life Questionnaire) is a shortened version of the original RQLQ, which is a questionnaire used to measure the impact of allergic rhinitis (hay fever) on a person's quality of life. The mini RQLQ consists of 7 questions and is a quick and easy way to assess the impact of allergic rhinitis on a person's life.

Here are the 7 questions of the mini RQLQ:

During the past week, how much has your nose or sinuses bothered you?

During the past week, how much has sneezing bothered you?

During the past week, how much have your eyes bothered you?

During the past week, how much has wheezing or shortness of breath bothered you?

During the past week, how much has your sleep been disturbed because of your allergies?

During the past week, how much has your daily activity been affected by your allergies?

During the past week, how much has your overall quality of life been affected by your allergies?

Each question is scored on a 7-point scale, with 0 representing "not at all" and 6 representing "extremely".

The total score is the sum of all the scores, with a maximum score of 42."

ChatGPT can summarise the importance of the mini RQLQ, correctly identify that a 7-point scale is used and provide some simple instructions for administration.

What it is not able to do is correctly provide the scale for proper use. ChatGPT provides (with confidence) that the mini RQLQ consists of seven questions, as opposed to the 14 that the validated scale includes, but does not include questions within the validated domains; does not provide the correct question text; does not provide the correct scale end points (does not anchor each point within the scale which is required for a validated administration) and does not provide instructions on the appropriate way to analyse, nor indicate the need of a license to utilise the questionnaire.

These errors could be potentially dangerous in the wrong hands, and have the potential to lead to misuse of validated instruments and significant errors in the data collected in these situations.

Note: The scale was not included within the survey due to timing constraints, instrument licensing and the goals of the study.

Appendix 6: analysis prompts and output

Prompt 1:

**Measure the awareness of OTC oral seasonal allergy medication used to treat seasonal allergies including Claritin and key competitors: **

ChatGPT Response:

"Claritin, Benadryl, and Zyrtec are well-known among the respondents. Claritin has the highest awareness with 98% of respondents being aware of it, followed by Benadryl (96%) and Zyrtec (94%).

Recommendation: Given the high level of awareness for these brands, marketing efforts should focus on differentiating the brand from competitors and highlighting unique selling points."

Prompt 2:

**Understand brand loyalty including Net Promoter Score and the reasons for loyalty: **

ChatGPT Response:

"Claritin has the highest Net Promoter Score (NPS) of 62, indicating a high level of customer satisfaction and loyalty. Benadryl and Zyrtec have NPS scores of 57 and 59 respectively.

Recommendation: Investigate the factors contributing to Claritin's higher NPS and leverage these insights to improve customer loyalty for other brands."

Prompt 3:

**Measure the usage of OTC oral seasonal allergy medication, satisfaction, and drivers of use: **

ChatGPT Response:

"40% of respondents use over-the-counter nasal spray, 31% use over-the-counter eye drops, and 28% use prescription medication from their doctor to manage their seasonal allergies.

Recommendation: There is a significant portion of the market using over-the-counter products. Brands should focus on improving and marketing their OTC offerings to capture this market segment."

Prompt 4:

**Determine brand perception across OTC oral seasonal allergy medication: **

ChatGPT Response:

"Claritin is perceived as the most effective treatment for seasonal allergies, followed by Zyrtec and Benadryl.

Recommendation: Brands should focus on improving the perceived effectiveness of their products, possibly through clinical trials or customer testimonials."

Prompt 5:

**Measure experience and frequency of symptoms of seasonal allergies: **

ChatGPT Response:

"27% of respondents experience symptoms of seasonal allergies every day, and 37% experience symptoms multiple times per week.

Recommendation: Given the high frequency of symptoms, brands should emphasize the long-lasting relief provided by their products in their marketing materials."

Appendix 7: Prompting and output tips

Here are some tips to help you improve output when using prompts in your research:

Prompt Framework terminology:

- RTF (Role, Task, Format)
- CTF (Context, Task, Format)
- RASCEF (Role, Action, Steps, Context, Examples, Format)

There are two methods of prompting:

- *Mega-prompts:* this is one very large request that will include all the details you are looking for.
 - Example: "I want to find survey responders who have seasonal allergies, who do you suggest I target?"
- *Prompt Chaining:* This is when you break down the ask into smaller requests.
 - Example: "Can you give me an outline of a survey focused on seasonal allergies?" Then ask "Can you give all the survey questions you would have along with the answers to a survey based on seasonal allergies?" And, lastly, "Can you recommend the programming language for the survey?

Formatting prompts:

You have the ability to define the output as much as you desire. You can provide extensive guidance to help you get the most efficient result of your prompts, depending on the needed result.

Communication tips:

- Scolding: Make this better and more insightful
- Edit: Are there any key details you have missed
- Tone: Please make this casual, formal, firm, professional

Human or AI?

How to identify and protect surveys from Al-generated responses

Cecile Carre
Eva Wittmann

Introduction

The impact of AI on the future of the market research industry is a topic that is currently generating a lot of discussion, excitement and fear. The implications of AI for our industry are varied and cover a wide range of potential areas of application: there are possible efficiencies through the use of AI to streamline survey design, simplify data-related tasks like coding and data processing, as well as opportunities to enrich storytelling from data findings. There are even talks of potentially replacing traditional fieldwork entirely with AI. When it comes to data quality within market research, machine learning (ML) and AI models have proven quite effective to detect and combat fraudulent activities, even if implementing the necessary algorithms and training the ML models is a complex and resource-intensive process.

However, it is also increasingly clear that bad actors have been employing their own AI algorithms, primarily in the form of pre-programmed bots, in order to automatically generate survey completes. Compared to other industries (such as online advertising), ours has been somewhat sheltered: creating survey bots was a relatively ineffective process when weighing the trade-off between effort and reward (financial rewards in market research have historically been less attractive than those in other sectors). As a result, this has always been a smaller issue compared to human or "low tech" fraud. The advent of large language models (or LLMs), such as ChatGPT or Bard has, however, completely changed the game: AI is now easily accessible to everyone, eliminating the need for prior model training. This shift in prerequisites has significant implications. In this paper, we will explore how we evaluate the risk associated with artificially generated data using LLM models in survey data (particularly in open-ended responses), and provide examples of what such outputs might look like. Additionally, we will offer recommendations for how to assess data quality and protect surveys from malicious actors using LLMs. Finally, we will discuss the potential impact of this development on the future of quality systems in our industry.

The status of data quality in online market research

Ensuring data quality is a top priority for both market research agencies and their clients. The foundation of our business depends on reliable and trustworthy data. However, our current quality challenges are complex, and often intertwined. Therefore, it is essential to consider them holistically.

First, the share of online methodology in market research is consistently increasing. While this trend varies across regions and countries, the overall online business and global market research turnover have been growing steadily in recent years. Nonetheless, the availability of willing respondents is not limitless. With the proliferation of feedback opportunities given to consumers outside of market research studies, recruiting participants into traditional panels has become increasingly difficult whilst the demand for meaningful insights continues to grow. This places greater pressure on individual panel members, as they are presented with more survey opportunities than ever before. As a result, the potential rewards for engaging in fraudulent behaviour have grown. This increased exposure of respondents to our surveys has provided them with information about the respondent profiles we want to engage with, and those we aim to exclude from our surveys. They have become familiar with established quality measures and traditional screening processes, which has helped them learn ways to get around these checks.

Last but not least, tools that support poor-quality behaviours, tools that seek to bypass quality checks, have moved from more tech-savvy audiences, to mass markets. Examples include VPNs, device emulators, disposable mobile numbers and, more recently, LLM technology (e.g., ChatGPT or Bard). The ability to generate content quickly and efficiently through the use of Al is now easily accessible, and makes it easier to overcome the prevalent quality checks in online market research panels. Consequently, we cannot ignore the reality: this shift will impact our online data collection.

LLMs: Exploiting weaknesses in quality ecosystems

Quality checks in our industry have traditionally relied on three fundamental pillars. While the individual applications and/or details may vary across different players in the market research industry, these pillars are present in some form among most suppliers in online market research.

System variable checks

These involve the passive collection of data from the respondent's device, browser settings or IP address, in order to draw conclusions about the respondent's identity. They include checks on the respondent's geographical origin, device fingerprinting to detect duplication and analysis of the technical markers connected to the survey completion to identify potential bot activity (e.g., signs of text insertion in open-ends).

Pattern detection analysis

These quality checks leverage survey-based information to identify suspicious behaviour in respondents' answers to closed-ended questions. The checks can range from simple algorithms that detect speeding or straightlining, to more advanced evaluations of the coherence of respondents' answers throughout the survey. For instance, techniques like "max-diff" can be used to assess the consistency of responses.

Content detection

Content detection is traditionally focused on open-ended answers. These checks have been specifically designed to assess the quality and relevance of the responses provided in open-ended format.

LLMs have the ability to understand and generate human-like language, allowing them to perform various natural language processing tasks, including text generation, translation and conversation. LLMs can be used to overcome quality checks within the following two pillars:

- 1. Pattern analysis tools: Recent research has shown that LLMs are capable of generating responses that closely resemble those from real respondents, displaying distributions aligned with established statistical theories. This poses a challenge to our conventional quality checks: they become less effective in differentiating between genuine and fraudulent responses.
- 2. Content analysis tools: Open-ends have traditionally been a great source to evaluate the quality of our respondents. Historically, the focus had been on identifying less engaged participants whose answers lacked depth and/or meaning. With the use of LLMs, malicious actors now have the capability to generate highly detailed and meaningful responses in open-ended questions at virtually no cost, in any language and across a wide range of topics (including topics that typically require specialised knowledge).

Identifying and managing risks in online projects

Theoretically, this poses a significant threat to quality. However, the risk of compromised quality is not evenly distributed. When considering the use of Al-generated responses as a strategy to bypass our quality checks, not all studies are created equal. The probability of quality issues varies across different countries. For instance, our global panel data reveals a significantly higher percentage of potentially low-quality respondents in the US and India. When compared to the overall quality indicators across our broader business, Indian respondents, in particular, trigger nearly twice as many quality flags. In the US, we see a 25% gap versus the "normative" reference point (according to P12M Ipsos global business data). Interestingly, these countries also have the highest number of ChatGPT users, with the US at 15% and India at 6.32%, as reported by Similar Web. Consequently, we anticipate that these countries will be more susceptible to the integration of LLM technology into surveys, making them the first to adopt such technology to overcome quality checks.

Quality issues are correlated to the nature of the project. Projects with complex targeting or lengthy questionnaires risk being affected by suspicious respondents to a disproportionate degree. It's a matter of simple math: low-quality respondents are very unlikely to abandon, they have no qualms about providing inaccurate information during screeners and complete long or repetitive questionnaires without hesitation. By contrast, real respondents either get screened out because they answer truthfully or leave the survey in frustration. In short, a concise and straightforward questionnaire aimed at the general population is less susceptible to the influence of low-quality respondents, compared to a 30-minute questionnaire with extensive repetitive loops that targets a niche audience with a low incidence rate. Not all sample sources are protected against fraud in the same way. While all suppliers are affected by this problem, there are differences in how they guard against it.

Exploring our data

At Ipsos, even though we routinely review hundreds of projects, so far we have seen few projects that showed significant evidence of respondents that seemed to be relying on LLM technology to overcome our checks. When we did see red flags, these situations were clear examples of the situations we described above: niche target studies, in markets already known to be dealing with significant fraudulent pressure and from suppliers that had less advanced quality control measures in place. To better understand how respondents may currently be using these tools, we created an artificial project to act as a trap, maximising our chances following the outlined principles. To gain insights into the potential impact of LLM-generated data, we conducted the project in a higher-risk country, targeting a specific sample representing less than 10% of the general population. We worked with multiple suppliers, employing different sourcing methods and implemented a lengthy and repetitive questionnaire (40 minutes) in the US and the UK, aiming to attract fraudulent responses.

In our analysis, we manually reviewed the open-ended responses and considered factors such as length, structure and the likelihood of certain words being used in spoken versus written language (e.g., "affluent", "bespoke"). This approach provided us with a preliminary understanding of which open-ended responses could be coming from LLM models. In addition to our automated checks, we implemented manual traps, i.e., hidden traps embedded within closed-ended questions designed to test logic and consistency of responses. This allowed us to evaluate whether our existing quality checks effectively addressed the potential threats posed by LLM-generated data. Here is what we learned:

- Even in our high-risk project, we found that a very low percentage of responses were generated by LLM tools. Most suppliers had minimal instances of LLM-generated responses, ranging from 0% to 3%
- The likely Al users appeared to be connected to each other, and to use a specific, targeted "fraudulent strategy". The majority of LLM-generated responses were received through one panel, primarily in the US.
- The demographic profile of these LLM-generated respondents differed from both the current profile of known fraudulent respondents, and unengaged respondents.
- None of the traditional quality measures we applied were able to detect a significant number of these fraudulent LLM-generated responses. In fact, the majority (81% of manually coded LLM-generated responses) went undetected by our hidden traps.

Safeguarding our data: Best practices for protection

LLM-generated responses, while not prevalent yet, should be considered to be a new strategy for bad actors, likely to gain steam in the near future. The overall percentage of such responses in our experiment fell within a range where the overall data and/or findings were not impacted significantly. However, we acknowledge that the likelihood of these types of issues, and the weight they will have across projects, will continue to increase, particularly for specific project types such as those targeting niche audiences or specific countries. To address this, we have developed an Ipsos-owned tool that safeguards our studies.

We beat them at their own game: respondents are primarily humans, and our questionnaires are designed to create an informal setting. As a result, it's common for our respondents to make mistakes, such as typos. In fact, they tend to write like they speak. This aspect is crucial in helping us differentiate humans from Al. We have developed an Al algorithm, whose goal is to help us identify real human answers, with their mistakes, their informal language, their occasional signs of laziness or emojis used to express their feelings. For example, see Table 1, which features responses to the question: "If you were to design your own luxury brand, what name would you give it? What would it be? Why would you want to buy it? Please enter your response below".

AI response		
"Opulence Fine Dining- Luxury dining		
experience that offers exclusive, high-end dining		
experiences featuring bespoke menus and		
unparalleled service, appealing to affluent		
consumers seeking unique and luxurious		
culinary experiences."		
Shows several signs of Al responses:		
Very long open end		
Full sentences		
High syntax and vocabulary complexity		
Full punctuation		

Table 1

While it is impossible to ascertain whether an answer was generated via AI, we believe that AI can be leveraged to triage and assign probabilities. In our research on research study, by using this approach we identified about 40% of the responses we had manually identified as most likely AI-generated answers (with 7% false positives). Nevertheless, ensuring accuracy and avoiding the exclusion of respondents who share specific characteristics or high engagement levels is crucial. We need to make sure we are not creating biases by systematically excluding respondents who, for example, are more educated or are more involved with the survey topics. Therefore, we enrich our framework with the addition of a combination of system variables. Through a combination of variables collected passively (which go beyond the traditional copy and paste detection), we can identify more sophisticated text insertion methods. This increases our detection rate to 50%, while false positive rate drops to around 3%.

This combined approach has proven successful at finding large "chunks" of the responses most likely to be Al-generated. Combining these checks with our standard quality checks and the use of customised hidden traps, 89% of responses suspicious to Al could be detected. Obviously, no system is perfect, but we believe that with sustained efforts, monitoring and evolution we will be able to decrease the risk of poor-quality data leading to wrong business decisions.

The future of quality data: A glimpse ahead

It often feels like we are playing a giant game of hide-and-seek, with bad actors in our sample ecosystem finding ever more creative hiding spots. Using AI to generate open-ended responses is one example where changes in technology are shaking the foundation of our quality landscape, and this is just the beginning! The integration of LLM into our daily lives is imminent. Companies like Microsoft are already working on incorporating ChatGPT into various applications through their "Copilot" programme. As AI-based tools and LLMs become integrated into programmes we use daily, like text predictors or grammar correctors, usage will extend beyond a small group of malicious actors. Once LLM technology automatically corrects or extends respondents' expressions, and refines syntax and punctuation in open-ended responses, the predictive value of response quality in open-ends diminishes. Consequently, we need to consider how to recalibrate our systems once the value of content-based analysis decreases.

Our ecosystems are continuously changing. We will never be able to confidently state that: "We have applied all cutting-edge quality systems. We are done. Our data is safe". Respondents are demonstrating more than ever that they are adaptable humans who can learn how to circumvent most systems. As a result, our industry must be prepared to continuously learn and adapt in order to stay ahead. To safeguard the future of online research quality, we must adopt a multi-layered approach that extends beyond simply removing suspicious respondents. It is crucial to address the issue at its source. By enhancing our standard processes, redesigning questionnaires and revaluating how we scrutinise existing data, we can effectively mitigate the risk of fraud. These measures collectively contribute to reducing the overall risk in our industry.

This is a herculean task: success in this field cannot be achieved by a single player, nor by one single measure. We believe in the importance of transparency, and willingly share our learnings and approaches in this domain. By openly discussing and exchanging these findings, we aim to collectively advance and overcome the challenges our industry is currently confronting.

About the authors

Cecile Carre, Vice President Respondent Quality and Research on Research, Ipsos, France. Eva Wittmann, Director Respondent Quality and Research on Research, Ipsos, Germany.

Your Attitude is Not Sustainable!

Driving our clients' sustainability efforts to new heights

Ben Liang
Will Goodhand
Chris Wallbridge

Introduction

We approached this study with the intention of understanding how market research is currently being utilised by clients when making sustainability decisions, and identifying what room there is to optimise regarding how both clients and agencies interact and perform. Our observation and hypothesis for deeper examination was that whilst market research has gained a seat at the decision-making table and prominence in many areas, its influence over the sustainability agenda has been comparatively weaker.

What we uncovered is there exists a vast knowledge shortfall amongst agencies, and even sometimes the marketing teams setting briefs for agencies, as to the requirements corporates are facing and the actions they are taking. These are driven by the requirements of compliance on the one hand, and investment on the other. "Sustainability" (and we'll expand on why this is too broad a term later) is firmly a c-suite decision. The research industry has been somewhat left behind as the pace of regulation and demands from investors have accelerated. Integrated financial and sustainability reporting, e.g., the CSRD that came into force in 2023, shows the criticality to the highest levels of management of decisions taken regarding sustainability, in the short- and the long-term. Without a strong grasp of sustainability reporting frameworks, new regulatory requirements (or those adopted voluntarily) for reporting on sustainability—and the ability to quantify the business impact in dollars and cents—market research lacks teeth. As it is currently being applied, it tends to contribute to decision-making relating to discrete choices, rather than holistic strategy, and has a limit in terms of how far up the hierarchy the results will ascend.

For the study, we consulted stakeholders from different countries, with different remits within and beyond market research and, indeed, sustainability, too. The names of those who wished to be listed are included at the end of this paper; others have kindly contributed under conditions of confidentiality given the highly sensitive nature of the interview subject matter. Accordingly, we feature their verbatims throughout this paper.

Through the consultations it became clear there was a huge amount of regional variation, down to the national level, in sustainability and how it is viewed, talked about (or not) and by whom. Our starting point was the UN's definition of sustainability from the 1987 Bruntland Commission: "Meeting the needs of the present without compromising the ability of future generations to meet their own needs". Whilst our consultees were aligned that this definition remains valid, there are two pertinent builds they added:

- 1. The future is "now", we are seeing the visceral effects of climate change today. "Last year was the first time we could smell the forest fires all the way to our city and heatwaves killing people, because homes weren't built for a warm climate".
- 2. Sustainability is too broad and needs more specificity; companies need focus. "I'm a bit sick of people saying they're doing everything. If anyone says they're addressing all 17 SDGs, that's absolute nonsense".

Alternative definitions have also been put forward: reflecting that looking at society from a systems-based perspective, which acknowledges that businesses have a key role to play within this interlinked society, profit is a necessary part of the equation. One of our consultees says a more appropriate definition of sustainability is "responsible capitalism", and underlined the importance of the triple P concept: people, planet and profit. One very common factor across all of our discussions was the role of financial measures when considering sustainability strategy, which came through in different ways time and again. If research is unable to answer the question: "how will this decision affect our financial performance?", then the business is unable to integrate sustainability planning (and indeed potentially reporting) with financial planning and/or reporting. Consequently, market research becomes confined to operating within a narrow corridor of the business. It would seem that if purchase intent and claimed appeal ever were sufficient, then they certainly are no longer. What surprised us was how quickly the decision-making process at top management levels had shifted with regards to sustainability, and how little we (the authors) were aware of this as well as the major complexities involved with playing a more meaningful role in something as meaningful as sustainability!

Comparing developed nations with emerging economies revealed stark contrasts. Although sustainability may have broader awareness and resonance in developed economies, in emerging markets it has been much less considered at a consumer or policy level, and even at a corporate level, especially if that company is homegrown rather than originating from a developed nation. Particularly striking was the lack of political will to leverage sustainability as a platform for support: "I've never met a politician who has spoken about sustainability. It's not a popular topic. Sustainability doesn't appeal or resonate to the general population."

It isn't just a case of one-size-doesn't-fit-all-nations, it is even the case that sustainability barely makes it onto the radar of vast swathes of our planet's population. For corporates in one country or region, there are different resources and opportunities available to drive decision-making in pushing a sustainable agenda compared to another. It should also be noted that even those decision-makers in those different markets may hold different values and mind-sets to those in other countries or regions. The implication for market research, therefore, is that even within regions we need to be hyper-customised when examining which specific sustainability topics are approached, as well as how, whilst being sensitive to mind-set differences within consumers and clients in that country compared to others. Asking the same questions, or even running the same study, in two countries with different landscapes and perceptions relating to sustainability simply does not make sense. Topics need to be tailored for the market; whilst HQ may have a global sustainability vision, covering the same content in different countries will lead to a loss of relevance and impact for local teams. Whatever the nature of a study, one thing we learned was, especially in emerging markets where

sustainability is less top of mind: "It's hard to talk to a farmer with an empty stomach about sustainability". Care must be taken to relate the subject matter to the daily lives of consumers, without making assumptions.

"We know a key priority is decarbonisation, but then what's essential about consumer insights is it keeps us in check. We found out consumers aren't thinking about carbon when doing their shopping, the top priorities were animal welfare and recyclable packaging".

In developed economies, where there has been more awareness built over time and we could assume the consumers are more informed, there is a classic "say-do" gap. Even for this deeply emotionally-charged subject where in the media we see the effects of climate change ravaging the natural planet, consumers may want to, or at least say they want to, make "the right choices" that are best for the planet, but this doesn't play out in practice. "People say they intend to reduce their meat consumption, but meat consumption in terms of both value and volume is soaring."

It is also clear that policymakers' and consumers' priorities have shifted in the past 12 months. In the West, there is a cost of living crisis, geopolitical tension with China and war on the doorstep. In China, the country is rebounding from COVID-19, but will take time to find its feet in spite of promising macroeconomic indicators. In less developed countries, there is a clamour for economic development and prosperity that other nations have already achieved and/or perennial political and societal instability. Bluntly put, people and politicians have had more on their plates to deal with. As we will now discuss, it has been the corporate sector that has led, and will continue to lead, the charge.

What role for the corporation?

Considering then the role of corporates in more detail, we found consistency across our consultees. For change to happen, the c-suite and top management have to believe a change that is positive for the planet is not only the right thing to do, but that there is a business case for it. In developing markets, corporate leadership is understandably very market driven; re-framing how sustainable change will make money is the route to pursue.

"Market research could have a role in raising awareness about how the consumer thinks and the sustainability issues that matter to them...e.g., my farmland is being lost, the fish catch is declining...and how a company can help them solve these problems and in doing so generate more sales for themselves...even amongst the few shining stars of CEOs who are championing sustainability in our country, if they can't make a business case— even if they know it is the 'right thing to do'—then they won't do it".

Another key finding linked to the above is that first the business case needs to be constituted and validated: i.e., if there is a problem to solve or an opportunity to seize relating to sustainability, generating the business case that will underpin it from a financial point-of-view. Research can then be the guiding light in how to implement it successfully. Unfortunately, it often happens the wrong way around: a brief is devised which is related to sustainability, a project undertaken which has yielded results and then an attempt made to put a business case based on what we have heard from our research participants and from collaborating with our direct insight clients in formulating the recommendations. However, this is not appropriate for sustainability,

with unique hurdles to overcome and especially in different countries where the economics of exactly the same business problem and/or opportunity are not consistent. Major differences in the commercial realities and implications in separate markets that multinational corporations operate in mean that some geographies will lag behind others in how much change can be implemented, as well as at what pace. "I believe that those that can, should. But this sustainability journey, it is not for everyone".

The conclusion from one consultee was that there has been a lot of sustainability research conducted at their company, but it doesn't reach everyone. Nor does it resonate with everyone, as there are different cross-departmental metrics, and the only one language of business is money. Moreover, market research all too often fails in its reporting to incorporate financial measures or proxies thereof in these types of studies. "The insights we want are operational and business decision orientated. Market research sits within marketing, which has struggled to provide its value. If you cannot demonstrate your ROI then a company like ours won't prioritise it in decision-making".

Simultaneously, businesses have moved at pace. Investors and regulators have demanded change and industry has responded by filling a vacuum of indifferent consumers—or those with at least some degree of "say-do" gap—and policymakers (beyond those who are constructing more robust regulation). "It is a perfect storm; the legislation is changing, as is what all the big players are demanding. And the pressure is on". With due acknowledgement to Harvard University, Figures 1 and 2 are examples of the proliferating range of sustainability and/or social and environmental standards.

Global Reporting Initiative (GRI)	 Three Universal Standards; users could choose from 34 relevant Topic Standards within the economic, environmental, and social areas to prepare reports for specific users or purposes The first sustainability reporting standard in the world (1997) One of the most widely used (> 13,000 organizations in 90 countries)
Sustainability Accounting Standard Board (SASB)	Focused on sustainability issues expected to have a financially material impact on the company; aimed at serving the needs of most investors and other providers of financial capital (narrower in scope) SASB recommended topics and metrics for 77 different industries across 5 dimensions Also provided guidance on how companies gather standardized data
The Carbon Disclosure Project (CDP)	•Supported users to measure their risks and opportunities on climate change, deforestation, and water security of Took information supplied through its annual reporting process and scored companies based on their environmental transparency and action. These scores and rankings, along with CDP data, were used by investors to inform their decisions •Focused primarily on climate impacts such as carbon emissions, water usage, and deforestation
Task force for Climate-related Financial Disclosures (TCFD)	Provides 11 recommendations across four pillars: governance, strategy, risk managemen and metrics & targets for climate-related financial disclosures Gained momentum among the financial sector as TCEP-based reporting became mandatory in 2020 for all asset owners and managers signed on to the UN Principles for Responsible Investment Principle-based; Not a constantly-evolving framework
Integrated Reporting Framework (IRF)	•First released in 2013, it put an end to the numerous, disconnected corporate reports and replaced them with an integrated approach that would explain "how an organization creates, preserves or erodes value over time" especified the key content elements to be included in reports, including governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, basis of preparation, and presentation *Estimated that 1,600 companies across 64 countries were working toward integrated reporting as of 2021
International Sustainability Standards Board (ISSB)	 Created by IFRS (the international accounting standard setter), it consolidated CDSB and the parent organization of SASB and IIR in 2022 Aimed to build on the work of existing investor-focused reporting initiatives — including CDSB, TCFD,IRR, SASB, and the WEF Stakeholder Capitalism Metrics to become the global standard-setter for sustainability disclosures for the financial markets

	ISO 14001	Global Reporting Initiative	e SA	8000				
Origin	1996	1997	199	1997				
Scope	Environmental management standards	Economic, environmental, social sustainability		Improved working conditions through eight core labor eleme				
Governance	ISO council, technical management board, technical committees	directors, technical advisers, tsakeholder councils		SAI multi-stakeholder advisor board—experts from business NGOs, government, and trade unions			board—experts from NGOs, government, a	
Participants	ISO member countries, environmental NGOs, technical experts	Businesses; United Natior human rights, environmen labor groups; industry associations; government	tal, trad	de associati	their suppliers, ns, unions, IGOs, government			
Funding	ISO member dues, document sales, volunteer efforts	Foundations, companies, Dutch government	inc	Foundations, government gr income from services and programs				
	ISEA AA 1000	United Nations Global Compact	ISO 14063		ISO 26000			
Origin	1999	1999	2001		2010			
Scope	Help organizations to become more accountable, responsible, and sustainable, emphasizing low carbon and green economy	Business operating principles: human rights, labor, environment	Guidance of environme communic	ntal	Seven core subjects of social responsibility			
Governance	ISEA; business members; nonprofits, academic, and consultancy organizations	UN Secretary General, Global Issues Network, ILO, stakeholder groups	ISO techni committee group		ISO technical management board, working group			
Participants	Multi-stakeholder membership	Businesses, labor organizations, NGOs	countries of business, I standards organization	SO member ISO countries experts: countries experts: countries, NGOs, and standards secongarizations, consultants				
Funding	Membership income, commissioned research, foundations	Voluntary government and foundation contributions	ISO member document volunteer e	sales,	ISO member dues, document sales, volunteer efforts			

Figure 1 and Figure 2

The complexity in corporate sustainability

Sustainability can be a complex topic for the general public, because it involves different terminology and concepts. It can refer to reducing emissions in the mobility industry or reducing waste in other industries. To overcome this challenge, it is crucial to simplify the messaging around sustainability. By presenting information

in a clear and accessible way, the public can develop a better understanding of sustainability principles, and become more involved in sustainable practices. Corporations and market research agencies can both play a key role here. The alcohol industry, particularly the beer and spirits sectors, relies heavily on glass bottles for packaging. This choice of packaging material has sustainability implications, as it is directly tied to the industry's carbon footprint and overall environmental impact. Consumers recognise the considerable reduction in energy consumption when recycled glass and bottles are used to create new products, or refilled with liquid rather than being disposed of.

- Glass and bottle recycling: Glass is infinitely recyclable, meaning that it can be melted down and remade into new bottles endlessly without any degradation in quality. When glass bottles are recycled, they are crushed into cullets, melted and moulded into new bottles. This process requires significantly less energy compared to creating new glass from raw materials. Recycling can save a big amount of the energy needed to make glass from sand, soda ash and limestone. Furthermore, every ton of glass recycled prevents the quarrying of tons of raw materials. Therefore, recycling can significantly reduce the industry's environmental footprint.
- Carbon creation in empty bottle transport: Yet, despite the benefits of recycling, transporting empty bottles for recycling is a complex issue. The transportation process generates carbon emissions, contributing to the industry's overall carbon footprint. The longer the distance, the higher the emissions. Thus, local recycling (where the recycled glass is used within the same geographic region as its source) is much more beneficial from a carbon emission standpoint.
- Challenges in glass and bottle recycling: Global brands which sell products across different markets face more challenges in recycling. Recycling standards, protocols and processes vary from country to country. What can be recycled in one country might not be recyclable in another. In many developing countries, recycling infrastructure is either insufficient or non-existent. Without an efficient collection and sorting system, recycling becomes challenging or even impossible. Recycling and waste management regulations differ significantly among countries. Some have robust laws that encourage or mandate recycling, while others have little to no regulation at all. In certain places, regulation may not specifically target glass recycling, which can result in glass waste being ignored.
- Greener glass and bottle: The production of new glass bottles is energy-intensive, resulting in high
 carbon emissions. The process involves extracting raw materials and manufacturing the glass at high
 temperatures. The alcohol industry is exploring various technologies to create more sustainable glass
 bottles. The focus is on reducing energy consumption, cutting CO2 emissions, creating lighter
 packaging and evaluating the product's life cycle assessment.

Addressing consumer expectations in sustainability

"In the future, what answers will you give your customers when they ask you what have you done about sustainability over the past few years? How will you approach travellers with the same question? And how authentic will your answers be?"

Mohit Lal, Chairman and CEO at PR GTR.

An increasing number of consumers are now environmentally conscious and seek out ethical behaviour and transparency from the companies they engage with. Therefore, businesses need to communicate their

sustainability efforts effectively to their customers. Further, given the complexities outlined above, businesses also need to simplify and educate about what is truly the sustainable choice. Being clear is the first step in helping consumers make sustainability-positive choices, though not the only one. While they are aware of sustainability, consumers often fall short in their willingness to pay for it or to change their behaviours significantly. Moreover, there is a challenge for research to get to the truth. While we will discuss corporate "greenwashing" later in this paper, if we are honest, consumers too can "greenwash" their choices. In a recent Harvard Business Review survey, 65% said they want to buy purpose-driven brands which advocate sustainability, yet only about 26% actually do so. This presents a challenge and an opportunity for corporations to make sustainability both appealing and accessible, as articulated by one of our corporate leader interviewees:

"Although a European consumer may be more 'developed' from a sustainability perspective, actually what they do versus what they say is different. When we look at behavioural research and ethnography, we've seen this gap widen in the past six to 12 months with the cost of living rise. In reducing food waste, and increasing shelf life, we are trying to be very visible and clear to consumers in what we are doing. We need to make it real from a consumer perspective and make it easy for them to make the right choice. I do believe it needs to come from business, it needs to come from policy. I don't think we can leave it up to the consumer".

Brands must recognise their power to enable consumers to make sustainable choices effortlessly. This can be achieved through initiatives such as providing recyclable packaging or promoting energy-efficient products. Companies must work to make the "right" choice (i.e., the sustainable choice) into the easy choice for consumers, rather than relying on complex environmental jargon, which often serves to confuse consumers. For example, consider the usage of plastic in product packaging. Plastic has been cast in an unfavourable light for its detrimental implications for the environment. However, it must be noted that not all plastic is the same. Recycled plastic, in particular, offers a decidedly more environmentally-friendly alternative to fresh or virgin plastic. Tote bags are often viewed as the most environmentally-friendly choice because they are reusable. They are usually made from materials like cotton, canvas or jute. However, the environmental impact can vary greatly depending on the material used and the frequency of use. For example, a conventional cotton tote bag needs to be used thousands of times to off-set the environmental costs (particularly water usage) in its production, compared to single-use plastic bags.

Given that the demand for packaging in certain situations (such as gifting) remains constant, simply eliminating packaging from the brand's end touch-point might inadvertently lead to a surge in waste production, if retailers resort to repackaging to meet the needs of consumers. This is just one challenge, as the needs of consumers vary among countries and cultures. Therefore, it's also important for businesses not to detract from the consumer experience while pursuing sustainability. They should not provide a sustainable package at the cost of product quality and experience, as this would position sustainability as a trade-off rather than an added benefit. Most likely, such a move would not be sustainable, given the negative commercial consequences. Emotional benefits can also enhance consumer engagement with sustainability. Brands can effectively communicate the environmental impact of consumers' choices, helping them understand their role in promoting sustainability. Storytelling can be a powerful tool for this purpose; by creating compelling

narratives around their sustainability efforts, companies can help consumers feel that they are part of a larger cause. This emotional connection can foster loyalty and satisfaction, as consumers feel happy knowing their choices contribute to a more sustainable world.

Alipay, a leading online payment and lifestyle platform, has introduced Alipay Ant Forest, a digital initiative to scale up climate action. Users are encouraged to reduce their carbon footprint by biking to work, going paperless and choosing sustainable products. They earn "green energy points" for these actions, which grow a "virtual tree" on the app. Alipay collaborates with local NGOs to plant real trees or protect conservation areas to match the virtual trees. Over 500 million users have participated, resulting in 100 million trees planted and 12,000 hectares of conservation land protected in north-west China. Alipay Ant Forest demonstrates the power of digital technology and collaboration in driving sustainability efforts, and engaging individuals in addressing climate change.

Vision is the key

According to a recent study by the European Commission, more than half of the sustainability-related claims made by brands are either misleading or can be categorised as "greenwashing". This misuse of the sustainability concept has diluted its meaning and impact on consumers. Joanna Yarrow, Founding Partner at M&C Saatchi LIFE and former Head of Sustainable & Healthy Living at IKEA, emphasises the need to demonstrate that sustainability is an integral part of a company's core business values, not just a way to avoid accusations of greenwashing. Profitability remains a requirement; convincing a farmer on the brink of survival to embrace sustainable practices is undoubtedly challenging. Nevertheless, the importance of sustainability lies in its being viewed as an investment in our future. Quantifying progress in this domain is inherently difficult, as sustainability should be "the right thing to do" by nature. Rather than merely being a goal, the underlying foundation of sustainability should form the foundation of all business operations.

During the experts' interview, Uber is recognised as the company dedicating a lot of effort to sustainability, aspiring to become "the cleanest platform on Earth". Sandrine Ricard, Deputy Director of Sustainability & Responsibility at Pernod Ricard, insists that companies should give back more than they take from the planet to achieve sustainability. A company's perspective on sustainability and its messaging are largely influenced by the leadership's values. If the core ethos of the company is seen as purely profit-driven, employees are likely to see through it.

Partnerships and collaboration are key drivers

Successful collaborations require a foundation of trust, open communication and shared values. Corporates must foster a culture of collaboration by encouraging cross-functional and cross-sectoral engagement. Internal collaboration within the corporation is also vital, as it allows employees to contribute their diverse expertise and perspectives to sustainability initiatives. Transparency and accountability are essential for maintaining trust and ensuring that partnerships deliver tangible results. Collaboration also extends beyond industry boundaries; corporates are increasingly recognising the value of engaging with stakeholders from diverse sectors. By partnering with experts, NGOs, governments and academic institutions, companies can tap into a wealth of knowledge, experience and perspectives. This collaboration brings fresh insights and innovative ideas to the table, leading to more comprehensive and effective solutions. Furthermore, collaboration with

competitors can be particularly impactful. While competition is inherent in business, there are areas where collaboration can outweigh rivalry. By setting aside competition and focusing on shared sustainability goals, companies can collaborate to address industry-wide challenges. Such collaborations not only benefit the participating corporation, but also drive positive change within the entire sector.

Food and beverage giants are setting a positive example. In Malaysia, for example, leading brands such as Nestlé, Coca-Cola, Mondelez, F&N and Unilever are partnering to advance the sustainability agenda. This new alliance will address concerns related to plastic food and beverage packaging. The alliance's goal is to achieve a minimum recycling rate of 25% of its members' packaging volumes by 2025. "Although we can be fierce competitors in the market, we also know that working together is necessary to address the plastic challenge that faces us...together we manufacture daily products for millions of consumers". Juan Aranols, CEO of Nestlé Malaysia.

The role of researchers

Given the intelligence and intuition of research industry readers, it will already have become increasingly clear at this point that researchers have a key role to play here. In this concluding section, we consider the implications and imperatives for research agencies, and indeed client-side researchers, in creating the briefing, the conditions and the follow-through to ensure true impact. An inevitable conclusion from the authors' experience of researching across the globe, and particularly from the interviews conducted with senior executives and sustainability leaders, is that collaboration between brands and market research agencies is essential. The stronger the collaboration the better for brands to understand consumer needs and behaviours, and successfully deliver sustainable initiatives to their target audience. We saw earlier in this paper how corporations need expert guidance in storytelling around sustainability, in this otherwise often "tick-box" arena. Valuable insights are therefore essential—not only for developing products, but also communications which really resonate with their customers and potential customers. Often, these may be insights which challenge the business to do things differently, or at least to do them better.

Yet, it's also implicit in some of what we heard from our interviewees (and sometimes explicitly, too) that to provide these insights we need also to challenge ourselves to do our job differently and better. At a time of pressure on the corporation to adapt, evolve or die, research projects client-side are responding to more demanding requests that require a shift in mind-set.

"Overall market research has improved within sustainability; I get more requests from the executives. We need to think beyond surveys and focus groups. We've exhausted these techniques. Most proposals I receive follow quite a traditional methodology. But I don't look just from a consumer view, I have to look at the macro, top-down forces that are shaping the world as well the view of the consumers bubbling up. Research cannot just look at consumers".

Firstly, are typical research methods fit for this purpose? Can they faithfully identify and call-out a say-do gap in consumers? Can they accurately define the implications of this particular dissonance and its consequences? Also, increasingly, can they quantify it and quantify its value? This is merely at the level of methodological specification. What about the strategic overview, not to mention the mastery of detail in

sustainability requirements, in order to set all of this in context. Clearly the client-side researcher and the agency have crucial roles to play here—an opportunity perhaps to mutually up-skill each other. Moreover, is there the budget to do the business questions justice? Is there the convincing pitch from the agency to arm the client-side researcher to ask for and win that budget? The better the level of mastery of the multifarious elements involved, then the more positive impact can be achieved, by both client-side researcher and by the agency. Amongst other things, this means understanding:

- The pressure and pace of change to which corporates are subject (17 UN SDGs) as well as multiplying (and growing compulsoriness in) sustainability reporting requirements;
- Specifics regarding sustainability reporting regulations and annual statement protocol (integrated reporting), and standards to shareholders;
- The specific action areas, including the individual SDGs which the specific corporation has selected to focus on (or to guide them in doing so, if they have not already done so);
- Devising and delivering on methodologies which can integrate the above understanding with outcomefocused reporting, which includes financial projections or impact estimates.

Furthermore, this is just as much about guiding corporations to the opportunities which exist as it is about reminding them, or even enabling them, to meet their responsibilities. From a financing perspective, there is presently an evolution with some lending institutions offering lower interest rates for companies achieving better ESG scores; i.e., there is the opportunity to guide corporations towards superior sustainability performance, which in turn generates superior financial outcomes. Additionally, as researchers, we must embrace the principle that we comfortably apply in most of our other work (and which is arguably our raison d'etre): one size does not fit all. However challenging it may be to acknowledge the ramifications of this principle in relation to sustainability, we must do so if we are to deliver on our immense potential to support corporations in this area.

The implication for market research, therefore, is that even within a geographical region we need to be hyper-customised when examining which specific sustainability topics are approached, as well as how to approach them. We must be sensitive to mind-set differences within consumers and clients in that country, compared to others. Uncomfortable as it may be from a margin, or at least a budget perspective, asking the same questions or even running the same study in two countries with different landscapes and perceptions relating to sustainability, may risk a total waste of budget and opportunity. Topics need to be tailored for the market; whilst HQ may have a global sustainability vision, covering the same content the same way in different countries will lead to a loss of relevance (and crucially impact) for local teams.

As ever, we must not lose sight of the value of what we already know. We are close to the strengths and weaknesses of the brands for which we work. We often understand not only the intended positioning of the brand, but also those aspects which have landed with, and which resonate with, their target consumers. We are thus ideal counsellors in guiding brands on the "how" of executing their sustainability messaging, in a way that is supported and therefore amplified by their brand positioning. Thus, this approach then further supports their brand. For instance, how Dove would talk about sustainability and the ways in which it would execute communication is radically different from how Nike would do so. Between these two highly disparate

brands lie a thousand tonalities and themes—ones we have worked with in relation to the brands who are our clients. We are, therefore, especially well-placed to advise when our clients are leaning into their existing equity, and when they are leaning away.

In addition to this, we should do what we do best: bringing not only an external perspective but a "joining up of the dots" approach. We saw earlier that there is hope, energy and traction in the fact that none of us, not even the corporation, is alone in this quest for progress on the sustainability front. All manner of bodies are engaged in driving forward in this area: universities, incubators, NGOs and governments to name but a few. Corporations do not have to solve this on their own (though they have a potent role to play), nor are researchers and agencies alone in supporting these corporations. However, researchers can bring immense value by being well-briefed in the collaborative and creative ways in which corporations may be able to work to achieve these goals. Reports which debrief research, which is appropriate to the level of sustainability challenge in each specific market, can be enhanced by citing relevant collaborations between the likes of P&G and Nestlé, or between corporations and NGOs. Every one of us can become more immersed step-by-step in the sustainability landscape, the requirements on the corporation and the array of cross-functional, cross-category and cross-sector collaborators and initiatives, which can set our corporate clients up for success, whether we serve them from an internal or external position.

Our insights can equip marketers to know how to nudge consumers in order to make the right sustainability choices. It's not a criticism to say that it is a rare consumer who really will know what is best, but we can help them. As researchers we shouldn't overestimate our knowledge, although we also must not underestimate our ability to make an impact. As agencies, every time we immerse ourselves a little more into the dynamics of the sustainability space, we further develop a prepared mind to bring to our clients, learning from across categories and insights regarding collaboration. As client-side researchers, we can develop a more detailed and sensitive perspective in respect to the challenges and constraints facing internal colleagues. The more we know, the more we can support, and the more the corporation can achieve and the more progress the world makes towards sustainability goals. If we do all this, then our industry, our world and our attitudes will be ever more sustainable.

Acknowledgements

A special thanks to our expert consultees, without whom we would have not uncovered nearly as many findings and perspectives. Each of the following has freely given their time and expertise for which the authors are most grateful for:

- Professor Felipe Calderon, Executive Director, Gov. Jose B. Fernandez Centre for Sustainable Finance, and Head of Washington SyCip Graduate School of Business, at The Asian Institute of Management, The Philippines
- David Deeley, European Market Insights Manager, Kerry, Europe
- Sibéal Bird, Global Sustainability Lead, Kerry, Global
- Anonymous, Strategy, Tech, Latin America
- Sandrine Ricard, Deputy Director of S&R, Pernod Ricard, UK
- Liya Zhang, Vice President Marketing, Pernod Ricard, UK

Copyright © **ESOMAR** 2023 CONGRESS 2023

- Anuj Roy, Strategy, Market Intelligence and Insight Director, Pernod Ricard, UK
- Tim Austen, Insight & Intelligence Lead, Pernod Ricard, UK

About the authors

Ben Liang, Senior Insights and Intelligence Manager, Pernod Ricard, UK. Will Goodhand, Founder, Insight Team, UK. Chris Wallbridge, Founder, Chris Wallbridge Consulting, The Philippines.

Innovation Takes the Wheel

Transforming the future of transport through research

Clare Palmer Rebecca Posner Lucy Farrow

Introduction: using novel approaches to explore views of emerging technologies

Future transport technologies, like self-driving vehicles (SDVs), have the potential to deliver a range of economic and societal benefits, from reducing congestion to increasing mobility for those with disabilities. But these benefits will only be realised if people use the vehicles once they become available. Understanding public preferences for future technology is a huge challenge for policymakers, with the risk that hypothetical views and intentions expressed now aren't borne out when the technology comes along. For researchers, the challenge is to bring the technology to life with specifics, while maintaining a broad enough perspective that findings are applicable across the range of possible futures.

To address this challenge, Thinks Insight & Strategy collaborated with University College London (UCL) and Aurrigo, an SDV manufacturer, on a complex research programme commissioned by the UK government's Centre for Connected and Autonomous Vehicles (CCAV). The overarching aim of this research was to explore the public's views of SDVs and how, if at all, they want them deployed.

To shift people from thinking about SDVs in the abstract to engaging with them as a potential part of their future day-to-day lives, we used traditional deliberative and quantitative techniques in combination with four innovative methodological approaches:

Experiential

First-hand experience of SDV technology to bring the technology to life and shift the concept of SDVs from the abstract to the real world. This helped participants imagine themselves using the vehicles in a more realistic way, leading to actionable feedback.

Place-based

SDV technology deployed in novel and challenging places, to explore the practicalities of its deployment within local transport systems outside the test environment. This allowed us to understand use cases, needs and expectations for local deployment if indeed it was desired at all.

Experimental

Electroencephalography (EEG) measurements to overcome social desirability bias, allowing us to compare reported and observed emotional reactions to SDV technology. This enabled us to understand how people experience self-driving journeys to ensure any deployment and communications about SDVs meets users' needs.

Projective

A bespoke 'scenario exploration' game, to stress test participants views of a potential local SDV deployment and enable them to make tangible decisions about future policy and regulatory requirements for SDVs based on their views.

Table 1: Methodological approaches

By taking a truly multi-disciplinary approach to this research, we supercharged impact for CCAV by delivering robust insights, filling evidence gaps, delivering actionable recommendations, and providing proof of concept for the novel approaches used.

The research challenge

The UK is reaching a transition point in the development of SDVs with early uses approaching commercialisation. While it is broadly agreed that these new technologies have the potential to deliver a wide range of economic and societal benefits, ultimately these benefits will only occur if SDVs are widely used. Adding complexity to the issue, SDVs have the potential to be deployed in many different ways, from public transport to private, with many use cases also involving connected and shared mobility services.

For the deployment of SDVs to be truly beneficial, governments and industry need to embed the needs of end users into the development and deployment of SDVs and related transport services. In the UK, responsibility for developing the policies, regulations and standards relating to SDVs sits with the UK Government's Centre for Connected and Autonomous Vehicles (CCAV) – a joint unit between the Department for Transport and the Department for Business and Trade. It is essential that CCAV has a strong understanding of the concerns, expectations, and requirements of the public so they can act as the voice of the end user.

Findings from previous research conducted by Thinks Insight & Strategy (formerly BritainThinks) highlighted that while there is overall excitement among the public about the introduction of SDVs, more needs to be done before the technology and services are fully understood, considered safe enough to use, and are trusted. Previous research had not validated mechanisms for addressing the public's concerns or explored in depth their expectations for the deployment of SDVs. Much research remained superficial, asking about SDVs in general, not specific use cases, which we know can have a significant impact on attitudes.

With this in mind, in 2022 the UK Department for Transport (DfT) commissioned Thinks Insight & Strategy in partnership with University College London (UCL) and Aurrigo (a UK-based SDV manufacturer) to conduct a large-scale research programme with events held in areas of the country where little or no engagement with SDVs had occurred to date. The aims of this research included increasing exposure to and experience of SDVs among the public; generating insights for CCAV to help them understand public perceptions and address public concerns about SDV technologies; and understanding how, if at all, the public want SDVs to be deployed.

However, delivering actionable insight into if and how the public would want SDVs to be deployed is a big challenge. We needed to understand what people would want from SDVs in their day-to-day lives, in the places where they currently live, with all the idiosyncrasies of an actual transport system. To provide valuable insights, we needed to explore a lived future with SDVs, not just an imagined one.

The research approach

The research had three specific aims:

- To understand how to communicate information about SDVs effectively, including the types of information and best channels for educating the public about SDV technologies.
- To understand how different types of exposure to SDVs can influence awareness, understanding and perceptions of the technology.
- To understand what role the public see for SDVs in future transport systems.

To address these, we used a complex mixed-method programme incorporating deliberative dialogue, game-style discussion, creative tasks, EEG brain monitoring, and quantitative surveys repeated at various stages to understand the impact of the research on views towards SDVs. These activities took place around a series of four-day in-person SDV trials in three locations in England; locations were chosen to provide coverage of rural, town and urban environments. The three research locations were:

- Alnwick, Northumberland, a rural area in the North East. Alnwick is an historic market town with challenging road conditions and limited public transport.
- Manchester, an urban area in the North West. Manchester is well served by public transport, including a modern tram network, but suffers from congestion on the roads.
- Taunton, Somerset, a town in the South West. Taunton has some congestion in the town centre and average public transport coverage, but a large rural catchment which is less well served.

The research explored the views of three different audiences defined by their level of exposure to and engagement with the SDV trials in each location. This helped mimic the way people would be exposed to SDVs once deployed – some people might interact directly, others would hear about them on the grapevine. We also used a national control survey for comparison with a non-trial area.

The research focused on audiences likely to be most impacted by the deployment of SDVs and/or who have been underrepresented in previous research on the subject. These groups included: younger (aged 12-17 years old), older (aged 65+ years old), ethnic minority background, digitally disengaged (prefer to use traditional methods over technology when able to) and people with long-term health conditions (LTHCs) impacting their mobility.

Figure 1 gives an overview of the approaches used in this research.

Approaches	Activities	Audiences
In-person* deliberative workshops	Three x one- or half-day workshops, held on consecutive weekends • Pre-deliberative research survey • Day 1: Introduction and initial views • Day 2: Vehicle trials (incl. pre- and post-ride surveys +EEG test for sub-sample) • Day 3: Future scenarios and informed opinions • Post-deliberative research survey	'High exposure audience' of 264 members of the general public in Alnwick, Manchester and Taunton: • 192 core audience members (full-day workshops) • 72 additional audience members (younger; older; ethnic minority background; digitally disengaged; LTHCs) (half-day workshops)
Local engagement events	Open event for members of the general public to attend: • Take a ride in an SDV • Complete pre- and post-ride surveys	'Medium exposure audience' of members of the general public in Alnwick, Manchester and Taunton: • 450 respondents completed a pre-ride survey • 352 respondents completed a post-ride survey
Local surveys	Pre- and post-trial local polling conducted in the local areas to gather opinions of SDVs from people who were not involved in the deliberative research or vehicle trial events.	'Low exposure audience' of members of the general public in Alnwick, Manchester and Taunton: • 750 respondents completed the pre-trial survey • 750 respondents completed the post-trial survey
National survey	A national control survey used as a comparison to the areas where local populations were exposed to the workshops, vehicle trial events and local media coverage.	Nationally representative control sample of general public from across the UK: • Sample size of 4,027
Follow up survey	A six-month post-research survey , conducted online to understand the longevity of participants' informed views.	A subset of the high exposure audience : • Sample size of 127

^{*} Due to death of HM Queen Elizabeth II, the first core audience workshop in Taunton was conducted online

Figure 1: Overview of research methodology (repeated in each location)

Using novel approaches to explore views of novel technology

There were four key innovative approaches used in this research to supercharge impact for our client. These are explored in detail in this section.

Experiential: first-hand experience of SDV technology

Prior to this research, the wider transport literature suggested that awareness and understanding of SDV technology were mixed among the UK public. While awareness of SDVs was found to be high, self-reported knowledge of them was low compared to other transport technologies (Department for Transport, 2023). Regarding public understanding of SDVs, previous research found two distinct barriers: limited understanding of how the technology works, making it challenging to conceptualise or engage with the topic; and limited familiarity with the technology making it challenging to conceptualise using SDVs in real life (Department for Transport, 2021).

We also knew from previous research that the public felt excited about SDVs in principle (Department for Transport, 2021). However, for CCAV to make effective policy decisions about SDV deployment, they need to understand the public's lived, rather than imagined, experiences and views of the technology.

Therefore, addressing the lack of first-hand experience with SDVs was a requirement for this project. This research used SDV trials to bring the technology to life, addressing barriers to individuals being able to understand not only how the technology works but also how they might want to interact with it in the real world.

We partnered with Aurrigo, a UK-based SDV manufacturer, to deliver SDV trials in each of the research locations. Trials involved two operational vehicles: the six-seater Auto-Shuttle which operates on public roads, and the two-passenger Auto-Pod which operates at low speeds in pedestrianised and shared spaces. A static display of the Auto-Deliver self-driving delivery vehicle was also available for participants to interact with.







Figure 2: Aurrigo vehicles used for the SDV trials

The research also considered the impact of varying levels of exposure to SDV technology by exploring high-, medium- and low-exposure audiences. Engaging with these three audiences enabled us to understand how different types and levels of engagement impacted participants' perceptions. For example, while the trial experience had a significant impact on views towards SDVs and how they could impact local transport systems, by comparing the high- and medium-exposure audiences we found that providing information and opportunities for discussion prior to trials not only increased the impact of trialling the technology but also the type of information that participants wanted to know. This has implications for CCAV regarding what the public's information requirements are, and how and when these communications are required.

Providing first-hand experience of self-driving vehicles enabled participants to provide insights based on lived experiences as opposed to imagined ones. Increasing understanding of the technology also enabled richer

discussions about the practical aspects of how the technology could be deployed in their local area, including expectations and requirements for what this could look like.

Place-based: SDV technology deployed in novel and challenging places

To date trials of SDV technology in England have predominantly taken place in the South East and West Midlands, and primarily in urban areas. These trials have focused on developing the technology and demonstrating its capabilities, as opposed to seeking views from the public around the potential applications and their expectations. With the technological advancements achieved over the last few years and the work to move towards commercialisable services, there is now a need to understand what the public want and need from SDVs in their local transport systems (if they want them at all).

The research took a place-based approach to fill this evidence gap, introducing people to SDV technology in realistic settings within the context of their local area.

The three research locations chosen for this research had limited previous exposure to the technology. In fact, our trial in Alnwick was the first time SDVs were trialled in a rural location in the UK. By taking SDVs to these new places, we were able to engage with people who hadn't previously had opportunity to experience the technology. This gave us a clear understanding of the public's starting points and how interacting with information and the trial impacted their views.



Figure 3: Auto-pod deployment in Alnwick

Our approach involved focusing early discussions in the deliberative workshops on how participants currently travelled and why, grounding the research in participants' own local journeys and transport systems. We were then able to discuss how SDVs could potentially be used to address any gaps or issues participants were currently facing, before using the trials to take that vision of how SDVs could be used from the abstract into their real world.

To address our research aims, the self-driving vehicles had to adopt routes that were as realistic as possible to help participants consider how these new technologies could be introduced to their local areas. We also pushed the technology to its limits, operating it in a less controlled and more complex environment than previous trials,

which meant that sometimes it didn't work. Examples of the routes used include connecting a bus station to a local tourist attraction, and operating a shuttle service between a car park and a major sporting venue for those who may be unable to comfortably walk the distance. Taking people to the technology (e.g., to a closed testing infrastructure) or operating in a highly controlled environment (e.g., car park) would have made it harder for participants to translate their experience into tangible views of how SDVs could be deployed in practice. And the occasional tendency of the technology to overreact to rain, leaves or squirrels helped add a dose of realism to the discussions.

This approach enabled CCAV to understand the existing challenges that self-driving vehicles could help to address across different communities in England, as well as prioritisation in terms of future applications.

Experimental: EEG measurements to overcome social desirability bias

There is always a risk in research that participants will tell us what they think we want to hear; social desirability bias. In this research, we expected participants to be excited or nervous to try the new technology. However, when considering existing transport options such as riding a bus or being a passenger in a car, successful journeys are typically boring and easily forgotten – this means that nothing has gone wrong. Therefore, participants reporting being bored by the trial could indicate a level of acceptance of SDV technology and have vastly different implications for CCAV's policymakers than stronger (positive or negative) emotional reactions.

In partnership with UCL's MaaS Lab, we used lightweight, non-invasive electroencephalography (EEG) headsets to reveal differences between reported and actual emotional responses when trialling SDVs.

EEG headsets were used to understand participants' emotional responses, as determined by their brain activity during the trials. This was the first time that EEG technology was used to monitor experiences of SDVs in a "live" field environment. The EEG data allowed us to understand how different aspects of the trial journey were experienced by participants according to six key measures: "Engagement", "Excitement", "Focus", "Interest", "Stress" and "Relaxation".

The EEG data was analysed alongside baseline EEG readings taken prior to boarding the vehicles, video footage from inside and outside the trial vehicles, and pre- and post-ride surveys in which participants self-reported their emotional states. The use of multiple data sources enabled the research to triangulate participants' reported responses with objective data from the EEG headsets, giving a more holistic understanding of participants' experiences and ensuring CCAV could make policy decisions based on both in-depth qualitative discussions and actual lived experience.





Figure 4: Participants wearing EEG headsets. From left to right: UCL MaaS Lab team fitting an EEG headset on a participant; participants wearing EEG headsets during Auto-Shuttle trial

Copyright © **ESOMAR** 2023 CONGRESS 2023

Projective: using a bespoke "scenario exploration" game

The regulatory and policy landscapes surrounding SDVs are complex and interconnected. This means that even after bringing the technology to life for participants through the trials, there was still a challenge for the research design in terms of being able to engage meaningfully with participants on tangible next steps for SDV deployment.

We used a bespoke scenario exploration game called "Your Self-Driving World" to sense check views expressed in earlier discussions and turn these into actionable outcomes and interventions for future SDV deployment.

Our game was based on the European Commission's Scenario Exploration System (SES)¹ with multiple variables built into the game. To set up the game, groups of up to eight participants were allocated one of two future scenarios that their game play would be based around: increasing use of private SDVs or increasing use of public and shared SDVs. Groups were also allocated up to three trends impacting society and the economy that did not directly reference SDVs but could potentially impact their use. Finally, participants were assigned specific roles and were asked to play the game from the perspective of that role. They were provided with a description of the job role, its priorities, and its concerns. Roles included local and national governments; small and large businesses; disability, drivers', and transport charities; and SDV manufacturers. Each group had a facilitator to guide them through the game and support discussion.

The game was played in multiple rounds, with the first taking place in 2027 (five years ahead) and the second in 2042 (20 years ahead). In each round, participants decided collectively on actions to take to progress their assigned scenario, including remedying any perceived issues. There were 18 actions provided for participants to choose from, and these broadly fell into the following intervention categories in line with the Behaviour Change Wheel: *environmental restructuring*, *incentivisation*, *restriction*, *training/education* and *enablement* (Michie, Atkins, & West, 2014). Before moving on to the next round, consequences of the chosen actions and an additional assigned challenge were revealed; these involved either positive or negative implications for SDVs that participants needed to consider in the next round of gameplay.

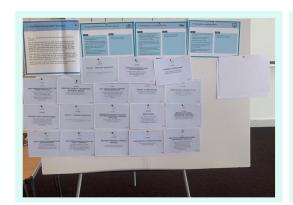




Figure 5: The bespoke scenario game as presented to participants. From left to right: The game at its initial set up with the scenario, trends and action cards; The game once all rounds were completed including the final scenario, trend and actions cards, including ones introduced by participants.

By asking participants to make tangible decisions to either promote or restrict the use of SDVs, the research was able to explore participants expectations for the deployment of self-driving vehicles. While the game was initially played with prepared elements, it was then repeated with participants modifying each element to better fit their

 $^{^{1}\} https://knowledge4policy.ec.europa.eu/foresight/tool/scenario-exploration-system-ses_en$

preferences, adding roles, for example, or new actions that they would like to see. This gave participants the space to explore the future of SDV deployment and use without any limitations from the game on what was possible.

The game also allowed us to explore instances where individuals' actions contradicted some of their earlier views. The projective, role-playing aspect of the game was particularly effective in being able to explore participants informed views, and further overcome social desirability bias as well.

Research impact

This combination of innovative multi-disciplinary methods enabled us to understand the requirements for building public acceptability of SDVs, including the priority use cases, societal impacts and policies that should be developed to achieve these aims. This approach is enabling the development of a more robust evidence base on which to develop policies relating to vehicle and service design, as well as the processes that are expected around their governance including expectations for safety and accessibility.

This research also helped to address several key evidence gaps, including identifying mechanisms to address concerns towards SDVs to pave the way for future intervention design.

One of the key benefits of the approach was that participants were able to move beyond discussions of safety (which have dominated previous deliberative and trial programmes). By combination deliberative information and trial experience participants were able to adopt a pragmatic position of a future end user and give much more detailed views on requirements for deployment. We could have greater confidence in these views because they were validated in the scenario game, showing the value of combining multiple methods in one study.

Beyond policy implications, this research led the way as a proof of concept on how to develop and hold in-depth and meaningful engagements on topics that are often hard to conceptualise for the public, which severely impacts the ability to develop and regulate these as required.

The project ran for over a year and the findings are currently being disseminated, with much of the true impact still to unfold.

Impact for future research on novel technologies

This research demonstrated the value of taking a risk with innovative approaches, especially when researching views of emerging technologies such as SDVs. Despite limited examples to follow for conducting real-world SDV trials as part of social research or using EEG technology in a live field environment with SDVs, these were critical elements of our design that enabled us to answer CCAV's research questions.

Due to the lack of live field experience using EEG headsets, our approach had to be amended and refined as the fieldwork progressed. This impacted the size of the comparable data-set achieved. However, we achieved the best data quality in the final research location, indicating that our refinements were effective. This demonstrates the importance of practising applying this method in the field, building competence and confidence across the industry so we can get the most out of the data for our clients.

Over the course of the research, the value of additional contextual data when interpreting the EEG readings became evident. Video was recorded inside the vehicle and matched to EEG readings to help understand participants' emotional reactions to events such as turning, acceleration and deceleration. However, these video recordings did not have sound, which would have provided additional context and helped us to understand

emotional reactions, particularly where the data quality was reduced. For example, are participants turning their heads because they are paying increased attention to the environment around the SDV (indicating lower comfort) or is it because they are talking with fellow passengers (indicating higher comfort)?

Ultimately, we were unable to use the EEG headsets with vulnerable participants in this research due to the lack of evidence about any additional safeguarding required; this posed a challenge in getting ethics committee signoff. Now that we have proof of concept and know that distress was not caused by using the headsets, we can look to expand their use to more diverse sets of participants.

With regards to the scenario exploration game, we found that doing an internal pilot with CCAV's policy teams was useful not only to test that the gameplay works but also to test the accuracy of the actions and consequences designed into the game. When playing the game with participants we found that some struggled to take on their character for the role-playing element, however the game was still an effective mechanism for encouraging them to be honest in sharing their views and making the steps towards deployment more tangible. There was a lot of content to read and review as part of the game play, and this should be considered if playing the game with certain groups such as young people or those with lower literacy levels. With this in mind, we reduced the number of options presented in the game and found this to be an effective solution.

Throughout this research, we found that robust co-creation with our client was particularly important for facilitating the design and delivery process when such novel approaches were being used. Breaking the slightly outdated notion of client and supplier and instead approaching the research as a single collaborative team, co-creating together and each bringing different skills and expertise, was key to enabling the successful delivery of this project.

References

Department for Transport. (2021). *Future of transport: deliberative research*. Retrieved from GOV.UK: https://www.gov.uk/government/publications/future-of-transport-deliberative-research

Department for Transport. (2023). *Transport and transport technology: public attitudes tracker*. Retrieved from GOV.UK: https://www.gov.uk/government/publications/transport-and-transport-technology-public-attitudes-tracker

Michie, S., Atkins, L., & West, R. (2014). *The Behaviour Change Wheel: A Guide to Designing Interventions*. Great Britain: Silverback Publishing.

About the authors

Clare Palmer, Associate Director, Thinks Insight & Strategy, London, UK.

Rebecca Posner, Head of Social and Behavioural Research, Centre for Connected and Autonomous Vehicles, Cambridge, UK.

Lucy Farrow, Associate Partner, Thinks Insight & Strategy, London, UK.

Riding the Shockwaves

Connecting with the next generation in a volatile and turbulent world

Luke Mantell
Luke Perry

Do we still need an army today?

When we began our engagement with the British Army in 2020, many young people's reference point for what being in the Army might be like was a reality TV gameshow. In the UK, the contemporary image of the combat soldier in popular culture and the professional reputation of the Army was very much defined by the legacy of Britain's involvement in the War on Terror, and specifically experiences in Iraq and Afghanistan following 9/11 (Akam, 2021). One of the most successful and long running reality TV series in the UK was SAS Who Dares Wins, which has recently completed its eighth season, and had been a top performing show amongst young adults for some time (YouGov, 2023). The show drew upon the experiences of a range of ex-special forces personnel, all with combat records in the Iraq and Afghanistan conflicts, although these engagements were over at the time of broadcast. These battle-hardened veterans had long been commercialised by reality TV, becoming a gritty interpretation of today's cultural emphasis on mental health and personal growth, with an approach that was defined by disciplined psychological and emotional resilience in the face of extreme adversity.

However, by the end of our engagement with the British Army, the prospect of a real war and the possibility of having to fight had not been entirely relegated to reality TV and the conflicts that came out of 9/11. The spectre of war had surfaced once again when Putin invaded Ukraine, instigating a European war, and one with global consequences. The idea that we could be fighting in a war had become real again, as Britain's strategic posture moved from one focused on the War on Terror, to one of great power projection in a multipolar world. The reality remains that our countries need armies, armies need young recruits and, in order to do this, the British Army needed a long-term research partner to understand how it could connect with young people today. We define "young people" collectively as Generation Z (henceforth Gen Z)—the cohort born between 1996 and 2015.

An army needs recruits: Jigsaw Research and the British Army

At the very start of 2021, the British Army commissioned Jigsaw Research to become its strategic research partner on a journey that lasted into the very early days and months of 2022. The research's overall objectives were to learn:

- What do young people (Gen Z) want from a career and a future employer?
- What do they think about the British Army as a brand, career and a possible employer?
- What could the Army do to connect with and appeal to Gen Z?
- What is the potential impact of COVID-19 on all of the above?

This research was to take place across Great Britain, with a specific focus on Scotland. In a sense, many brands and organisations ask themselves the same broad questions in terms of how they can connect with one of the most sought after generational cohorts, so that they stay relevant and cultivate "tomorrows consumers". However, unlike other brands, the British Army was asking for a much greater commitment from Gen Z than a purchasing decision. It needed to grapple with some fundamental challenges in attracting and retaining young people to its brand, and convincing them that they were a worthy and attractive employer to commit the best years of their lives to.

The challenges facing army recruitment

The British Army certainly had a fight on its hands when it came to trying to attract Gen Z into its ranks. The challenges it faced were wide ranging and considerable. They encompassed long-term demographic change and evolving generational attitudes, the systemic shock of the pandemic, as well as powerful social movements that were shaping their outlook on issues such as diversity, equality and social justice. In this context, the research needed to understand how one of the oldest institutions and brands in Britain needed to respond to these challenges and ensure that it could speak to the outlook and values of Gen Z, both as a brand and as an employer. Before narrating how the research helped the Army on this journey, it is worth elaborating on some of the profound challenges and obstacles that the brand was facing.

Long-term challenge 1: Declining willingness to fight for one's country

A modern 21st century professional European army plays many different roles in today's volatile world; from multilateral peace keeping and international humanitarian duties, through to homeland resilience. However, combat missions and fighting wars are still the core purpose of any army, and something that they constantly train and prepare for. Political scientists and proponents of cultural evolution theory (Inglehart, 2018; Inglehart & Norris, 2019) have argued that in the decades following World War Two, successive post-war generations in developed societies have grown up taking survival for granted. This growing sense of security has been enabled by the unprecedented economic growth and prosperity of the post-war era in developed societies, the emergence of the welfare state and the absence of war between the major powers. These unprecedently high levels of economic and physical security have led to cultural changes that have reshaped the values and views of successive generations, leading to a profound shift from survival values to self-expression values. Over the decades following 1945, there has been a long-term trend in the social values of developed societies away from giving priority to economic and physical safety and conformity to group norms, towards increasing emphasis on individual freedom and the right to choose how to live one's own life. Part of this long-term shift in values has included a diminishing willingness to fight for one's country. This trend has been observed across a range of countries that have attained relative economic security and prosperity, including the UK. The reasons for this declining willingness to fight are complex, but one major factor appears to be the spread of individual choice norms.

There are some interesting exceptions to this trend. One variant within this broad cultural evolution has been how military services have been perceived in the Nordic countries over the same period. Proponents of the theory argue that whilst cultural evolution is fundamentally shaped by rising economic and physical security, historical learning and period effects also play an important role. In light of this, it should come as no surprise that the public within the former axis powers of World War Two (i.e., Germany, Italy and Japan)

have expressed the lowest willingness to fight for their countries. However, conversely, publics in the Nordic countries show higher levels of willingness to fight for their countries, and this is attributed to those countries developing a new role for their military. This Nordic exceptionalism has been heavily influenced by Sweden's changed conception of the role of its military, which has moved from traditionally protecting its borders through to focusing on international peace support, as well as defending the values of democracy and human rights overseas. The Swedish military has close ties with other Nordic militaries, often holding common exercises and sharing camps; this has influenced other Nordics to follow suit, with more of an emphasis on serving international development and peace keeping. This emergence of a more distinctive and positive role for their military amongst Nordic countries has consequently made their publics relatively more willing to fight for their countries.

However, in the UK, public attitudes have followed the longer-term average trend of other secure and developed countries where, as the evidence shows (Inglehart, 2018) rising existential security has encouraged: a shift towards individual choice orientations; a reduced tolerance of human casualties; and a diminishing willingness to fight for one's country. The evidence suggests that this transformation has been taking place over the last 30 years, strengthening the factors supporting international peace amongst developed societies, but potentially weakening the attractiveness of the British Army as a career choice for younger generations over time.

Long-term challenge 2: Changing ties of national identity amongst young people

Attachment to "Britishness" amongst young people

A potentially important motivator for joining any national army relates to identity and feelings of patriotism, a desire to serve one's country and a potentially strong identification with the nation-in this case Britishness and the UK. At the very least, consideration of a career in the Army requires a degree of comfort with these identity aspects of the brand and institution. However, when it comes to feelings of, and attachments to, Britishness this tends to be weaker amongst the younger generations who are the target market for the Army. People who see Britishness through a thinner "civic only" lens (civic identity tends to centre on people's acceptance of political and legal institutions), and who put less emphasis on the importance of sharing British traditions, customs and historic ties remain a minority in the overall UK population, but their number is growing: from 23% of the country in the 1990s, to more than 30% of the country today. These growing numbers of what could be called "civic nationalists" are made up of the country's rising number of university graduates, Millennials and Gen Z (Goodwin, 2023), which are the very generational cohorts that the Army needs to draw upon. However, these younger generations generally feel less wedded to the thicker ties of nationhood that may characterise older generations. They are less attached to the traditions, symbols and institutions of British nationhood such as the monarchy, and they are less likely to voice pride in Britain's national identity. Rigorous academic studies have tracked this long-running decline in feelings of national pride in Britain. as each generation has replaced the last (Tilley & Heath, 2007).

Scottish and British identity

A further significant challenge in terms of identification with Britishness, was the growing and substantial national pro-independence movement in Scotland, whose leading political proponents, the Scotlish National

Party (SNP), were the overwhelmingly dominant political force in Scotland (Ford & Sobolewska, 2020). A Scottish Independence referendum had taken place in 2014, resulting in a vote against an independent Scotland by a significant margin. However, since the vote (and during this research), the SNP continued to campaign for a future independence referendum, keeping the idea of an independent Scotland very much alive in UK and Scottish politics. This was particularly the case in the aftermath of the EU referendum vote in 2016, where a majority in Scotland voted to remain in the European Union.

The political context in Scotland had potentially very significant implications for the Army, because of the major contribution that Scotland had traditionally made to recruitment numbers. In 2009, in a BBC documentary about the "Scottish Soldier" presented by comedian Rory Bremner, Lieutenant General Andrew Graham (of the Royal Regiment of Scotland and Director General of the Defence Academy) pointed out that hitherto, to produce a battalion in Scotland took around 700,000 head of population, whilst producing the same battalion in England took about 1.3 million head of population. British Army recruitment has traditionally owed a great deal to the disproportionate contribution Scotland has made to its overall numbers, and in bringing the British Army up to the required strength. How Scotland felt about attachment to Britain and the UK was understandably a significant concern for the brand.

The last independence referendum in 2014 had voted in favour of maintaining attachment to the UK and showed that the bonds of British identity were reaffirmed, with a majority of Scottish voters seeing themselves as equally or more British than Scottish. However, generational voting patterns revealed that the question of Scottish independence continued to present a key challenge for British Army recruitment. Whilst older generations in Scotland often expressed a stronger sense of British identity, younger Scottish voters were more likely to reject British identity altogether. Although turnout amongst younger voters was always lower, 54% of 18 to 24-year-olds voted "yes" for independence in 2014 (Ford & Sobolewska, 2020). Subsequent to the 2014 vote, this trend towards independence amongst young people in Scotland became even more pronounced. Since the 2014 referendum and during the time of the research, nationalist sentiments continued to be mobilised in Scotland by an independence party that dominated the political landscape, and had built up a broad coalition of voters that were drawn to its progressive liberalism, coupled with a determination to pursue a second independence referendum. During the time of the research, this impetus towards independence had also been strengthened by a common antipathy towards the Westminster government at the time (headed by the Conservative party and Prime Minister Boris Johnson), and the course of the pandemic in the United Kingdom, where the devolved governments of Wales, Northern Ireland and Scotland took on greater responsibility for government health policy in their own nations.

Public opinion polling amongst the young people that the Army needed to attract was a real cause for concern. At the time of the research, some opinion polls estimated that 80% of the youngest voting demographic were more in favour of independence in the future (Livingstone, 2020). In light of the disproportionate contribution that Scotland made to overall recruitment numbers, the political outlook of younger generations in Scotland had potentially significant implications for the prospects of Army recruitment overall.

Aside from long-term attitudinal and perception challenges, the British Army was faced with an increasing challenge in terms of raw demographic numbers. The size of the recruitment pool, 18 to 30-year-olds, had been in decline for the last 10 years. For the Army, it meant that they needed to maximise each and every engagement they had with a potential person in this smaller population pool, in order to ensure that they could achieve their target recruitment numbers.

Simultaneously, the demographic landscape of 18-to-30-year-olds had been shifting. There had been a continued increase in the proportion of those from ethnic minority backgrounds—a demographic which has typically been underrepresented in the British Armed Forces and harder to recruit. A key channel for recruitment was through current or past serving personnel, so there was a widening proportion of the population that was not currently being reached naturally through existing channels. In addition to the challenge of natural reach, being heavily skewed towards white ethnicities hampered perceptions of inclusivity and openness, with those from ethnic minority backgrounds less able to see people like themselves in army roles and, indeed, army advertising.

The demographic shape of the British Army was a known challenge, and one of the key objectives of our research was to understand how to overcome some of the barriers and understand how to approach Gen Z from ethnic minority backgrounds, ultimately to begin shaping the British Army to look like the country it served.

The shockwaves

In addition to the longer-term trends and challenges outlined above, young people were also living through a volatile and tumultuous time absorbing the systemic shocks brought about by the global pandemic, as well as assimilating and expressing strong support for powerful social movements that were reshaping perspectives on issues such as race, gender and identity. The impact and implications of these cultural shocks for young people (Gen Z) had to be understood by the research, and used to inform the recruitment strategy for the Army. This meant understanding how this context was shaping young people's feelings about their futures, how their aspirations and life choices may have been changed and how the values they advocated were also demanded of brands and employers.

Shockwave 1: Generation COVID

During the research, COVID-19 had been an unprecedented shock to the global system, and the crisis remained a significant disruption to economic and social life during the course of our engagement with the Army. The most pressing concerns at the time of the research were dealing with the health risk the virus posed, and managing the immediate economic and social impact of nationwide lockdowns. Earlier research undertaken as part of Jigsaw Research's brand tracking for the Army indicated that the pandemic had already had some impact on young people's outlooks and plans for the future. The data showed that young people had become uncertain about their career prospects, with many reconsidering their choices. Job security suddenly became much more appealing. Some analysts had renamed Gen Z as "Generation COVID" (Goodwin, 2020), since younger people were being disproportionately impacted by the economic consequences of the disease. Many young people were employed in the hospitality, care and retail sectors, which saw the

highest numbers of redundancies and business failures. Those who were already in university were also weighing up their options.

In the longer-term, Gen Z were now likely to spend their formative years surrounded by the economic stagnation and the fall out that has followed the pandemic. This has also been further extended by the consequences of Putin's invasion of Ukraine, resulting in sluggish growth, rising costs and inflation and increased interest rates in the UK. These challenges were further compounded by the economic situation preceding the pandemic. Even before the health crisis emerged, Gen Z in the UK still had to live with the significance of the 2008 financial crisis and the challenges of relatively low wage growth, as well as whether or not they could get on the house ownership ladder. These deep-seated economic problems had already prevented them from gaining the assets and secure employment that their parents had, and the pandemic potentially deepened these trends. With the pandemic they were now living through another economic shock, and enduring these seismic shocks had the potential to leave its mark on this cohort, both materially and psychologically.

Beyond the immediate crisis and foreground challenges this presented to young people, the key question the research needed to explore centred on the longer-term changes in the attitudes of young people that may result from the pandemic. What these longer-term changes might be was, of course, hard to define—particularly at the earlier stages of the research when the UK and wider world was very much in the middle of the pandemic. Nevertheless, if previous systemic shocks (such as the 2008 financial crash), were able to provide any lessons to draw upon, it was that the disruption and upheaval of the pandemic was at the very least likely to create greater potential for volatility and unpredictability in how young people felt about their lives and their futures (Fieldhouse, Green & Evans, 2020).

The research, therefore, needed to explore the implications of the pandemic, and whether young people would have a greater sense of vulnerability and insecurity as a result. In addition, it needed to understand how the pandemic may have changed young people's expectations of employers and the workplace, and whether it had reshaped their future career aspirations. Existing employment and educational relationships had been deeply disrupted with multiple lockdowns of society in the UK, and particularly with the sectors that young people often relied upon for employment and careers. These young people were already the first generation to be less well off than their parents, and they may have developed a stronger sense that the system, market and economy was not working for them. Thus, how this context shaped outlooks on the life choices young people were making was a critical part of the research we conducted for the Army.

In summary, the research needed to explore the impact of COVID-19 on Gen Z's outlook and attitudes to work and employment choices. Furthermore, it needed to understand which effects were temporary and which were more enduring.

Shockwave 2: The impact of powerful social movements

By the time of the research, the #MeToo movement and Black Lives Matter (BLM) were both fully fledged and powerful social movements that were potentially reshaping young people's perspectives on gender, race and identity. Gen Z had come of age in a time when their social milieu was passionately supportive of

liberal cosmopolitan and progressive values, and this had translated into making clear their support for diversity, gender equality, anti-racism norms and also endorsement of social movements like BLM. Consistently Gen Z, as well as Millennials, were far more supportive than other generational groups of a whole host of topics, from the EU, immigration, diversity, expanding rights for women and racial, sexual and gender minorities, as well as organisations like BLM. Specifically, support for BLM was roughly twice as high amongst Gen Z compared to older generations, and they were twice as likely to say that they felt "ashamed" of Britain's imperial past. Young women had also been central to these trends, and had been pulling away from other groups in terms of their rate of participation in higher education and their much stronger commitment to social liberalism (Goodwin, 2023).

Any employer brand trying to connect with young people in this volatile and unpredictable context would have a challenge on its hands, but this challenge was greatly amplified in light of the potential cultural distance between the British Army brand and institution, and the changing expectations and outlooks of Gen Z. Before elaborating upon how the research helped the Army develop its approach to this generation, it is important to take a moment to reflect on how the Army can be perceived in the UK.

How the Army can be perceived

Originally founded in 1606, the British Army is one of the oldest institutions in the UK; it is not very often that research agencies get to work for brands that are centuries old. There are some basic and widely perceived "truths" about the Army that further compounded the challenges the Army faced in connecting with young people. These included:

- The Army is predominately male and predominately white;
- Its core purpose is still combat and fighting;
- It is often known for its rigidity and inflexibility;
- It is steeped in tradition and has an extremely deep culture that has endured over centuries;
- It is often rural and socially conservative in outlook.

As some authors have stated, the Army is the ultimate unreconstructed British institution (Akam, 2021). The rigid structures that it has created, and that define its reputation for many, have been required in order to allow it to function amid the terror and gun smoke of war. Nonetheless, those same structures also meant that it faced fundamental challenges in adapting to the changes brought about by recent events, and appealing to an increasingly demanding and distant younger generation of recruits. These core characteristics potentially put the Army at odds with the context outlined above. The stage was set for a fascinating journey over the course of a tumultuous year, working out how to connect the brand and career proposition with Gen Z in the UK.

The method

Under the assumption that the scale of the shockwaves had fundamentally changed the attitudes of Gen Z (compared to any pre-COVID-19 research), we needed to start afresh. Forgetting everything we knew about Gen Z, we needed to build our understanding from the ground up. Ultimately this meant exploring Gen Z's lives, their interests and ambitions before mapping these onto their relationships with brands and, finally, employers. This called for a multi-disciplined approach, starting with foundational understanding that can only

be achieved via qualitative methods, before sizing these with quantitative approaches. Our multi-phased approach was designed to deepen our understandings of Gen Z, as we moved through the research programme over the course of a year. At a high level, the programme consisted of the following phases of research:

- Phase 1: Exploratory qualitative exercises via our proprietary WhatsApp platform WhyCatcher,
- Phase 2: Exploratory qualitive groups;
- Phase 3: Audience understanding via quantitative research;
- Phase 4: Audience sizing via quantitative research;
- Phase 5: Quantitative segmentation of Gen Z;
- Phase 6: Quantitative analysis of army appeal and evaluation as an employer.

In total, we spoke to over 10,000 Gen Z participants in Britain, across all phases of the research. Before we explore each of these phases in more depth, there are a number of overarching principles that were considered throughout our research design.

Representation

Anyone who is a British or Commonwealth citizen can apply to the British Army. It was therefore critical that our research encompassed people from a range of different backgrounds, whether that was based on their ethnicity, sexuality, education or social status. Throughout our recruitment, both qualitative or quantitative, we sought to spread our research as far as possible, making sure we had sufficient representation of our audience, regardless of whether they fitted the stereotypes of a potential soldier.

Understanding the value of different disciplines

As part of a multi-discipline team and research programme, it was imperative that we appreciated and respected the roles that each piece of research played. We needed to ensure that findings from each element translated well into the next, being clear what types of insight were mission critical at each phase from the outset. Fundamental to the success of this was our team structure; we purposefully allocated an overall project manager that understands (and can do) both qualitative and quantitative research. Underneath the project manager were then specialists in each field.

The relative merits of qualitative versus quantitative is one of the oldest debates in market research (Smith, 2004), and such introspective obsessions can lead researchers to miss the main point; i.e., the goal is to build understanding and insight that addresses the client's challenge(s). Delivering this goal was achieved by emphasising the interpretation of the whole array of evidence available, regardless of its type. Although very different, we did not think of qualitative and quantitative as separate disciplines in this project, and the emphasis was on finding ways to integrate the two forms of insight to deliver a compelling narrative that speaks to the many challenges being addressed by the research. Our model and ethos was, therefore, to create an environment where the distinct and unique contribution of each discipline was fully recognised and cultivated, and where synthesising the two to yield a more powerful outcome was embedded throughout our day-to-day working practices. This ensured that we continually challenged the assumptions underlying each method we used, whilst also making connections and discovering new meanings and perspectives that enabled us to look at the problem afresh.

Our team constituted both specialist and dualist researchers, with the latter having a strong knowledge of and respect for both disciplines, as well as the ability to create a meaningful alliance between the two at all stages. This was enacted by the following practices:

- An integrated team to ensure consistency across all elements of the project, with qualitative and quantitative knowledge and understanding transferred seamlessly throughout;
- Collaborative working ensured that qualitative and quantitative components complemented and strengthened each other;
- Harnessing the emotional sensitivity and diagnostic power of the qualitative with the concrete rigour
 of the quantitative—approaching both with the same level of analytical rigour—enabled us to synthesise
 the data into a single coherent narrative, communicating the story in a compelling way for the Army.

A key deliverable from the research was to produce a segmentation of Gen Z. We needed this segmentation to transcend the different phases of research, so it was critical that the person designing and conducting the segmentation questionnaire and analysis was involved throughout the qualitative phases.

Phase 1: Exploratory qualitative exercises via our proprietary WhatsApp platform "WhyCatcher"

Qualitative research played a critical role in the segmentation, particularly given the need to explore the influence of the pandemic. We recommended that qualitative research was used to book-end the quantitative stage, so it was effectively used at the beginning and end of the research. The qualitative approach was therefore a combination of capturing individual perspectives via digital pre-tasking, online focus groups at the start and individual bullseye depths, to bring the quantitative segments to life at the end.

Using WhatsApp to explore the individual and their personal context

The basic building block of every segment is still an individual person; we therefore initiated the approach by treating each participant as a unique individual. We needed to create space for individual reflections about career choices, how participants felt about their current lives, career futures and reflections on the pandemic experience. Our thinking was that authentic individual perspectives were best gathered when free from peer pressure and other influences, and to do this we used our WhatsApp research platform. Doing so allowed participants to reflect and express themselves in their own words and over a period of time, capturing different moods and feelings throughout the process. Participants were encouraged to respond to our exploratory prompts and questions in writing, and also via video and vlogging. These different modes of response helped bring richer and more varied insights into the early stages of the process.

WhatsApp was a particularly appropriate tool to use with this generation, specifically. As digital natives, their lives were already saturated with technology, and of all the generational cohorts these young people were the most able to use the platform to its fullest. Pre-tasking focused on the following:

- Capturing a sense of individual aspirations for future and what they wanted out of the "world" of work and careers;
- Bringing alive the personal, intimate and human side of their story;
- Getting them to record and upload a "video selfie" where they spoke about what they would look for from a future career and/or employer.

We included a proportion of the task outputs in the final output, to help bring the findings to life and humanise the respondents for the Army and stakeholders.

Phase 2: Exploratory qualitive groups

Exploratory qualitative at the beginning of the segmentation was vital to ensure that we understood the generation's outlook and decision-making, their needs, ambitions and values—all of which shaped how they made and pursued their personal career choices, as well as what they needed from their future employer. It was also critical for providing us with the pre-codes and the language to use in the quantitative questionnaire, as well as building hypotheses in terms of what the final personas and segments may look like. In addition, this stage of the qualitative was used to explore the nature of the impact of COVID-19 on educational and career choices, how it shaped the generation's world-views, feelings about their future and how the Army was regarded in this context. This exploratory research also included exploring the perceptions of the brand, its supporting advertising campaign and, importantly, a full investigation of the employer proposition.

Obtaining contextual insights about the audience meant we achieved a more personalised and authentic understanding of what the target generation was like: who they were and how they thought about work and careers, including the roles of gatekeepers and parents, before we interviewed thousands of them in a quantitative survey. It was vital in helping develop the quantitative questionnaire, by ensuring we didn't have any "blind spots" for aspects that were important to this audience, and making sure that we were using the right language in our quantitative survey questions

In addition, a large scale early qualitative stage helped the research to explore the impact of COVID-19 on the audiences' lives in general, and particularly on their plans for the future and attitudes toward longer-term educational and employment options. This included exploring how the pandemic had changed what they wanted from their employers and careers in the future.

How the pandemic influenced our methodology

The research team had always done a proportion of qualitative research via online interviews, but given that the pandemic had been ongoing for a whole year by the time of commissioning, they were seasoned veterans of making the most of online techniques. The effectiveness of the online focus groups were ensured by augmenting techniques used in face-to-face qualitative, and also by leveraging the distinct benefits of interacting with participants via a platform like Zoom.

Phase 3: Audience understanding via quantitative research

Designing the questionnaire in collaboration

Through the qualitative phases we built a deep understanding about the different functional and emotional drivers of Gen Z, and what they want from their lives, employers and careers. In total, we collated over 60 different potential drivers, many of which were aspects of life that any brand or employer could address. These drivers were discussed at length between the Jigsaw teams (qualitative and quantitative) to decide which were most potentially relevant to segmenting Gen Z. At this stage, it was also imperative to involve

the Army's recruitment team to understand which drivers could potentially be acted upon in their recruitment strategy. In many respects, this was a critical stage of development, ensuring we had sufficient breadth and detail to yield an insightful piece of quantitative research.

Approach to quantitative research

Conscious that the research was among Gen Z, we knew that the survey needed to be short but engaging with the ability to seamlessly take part using a mobile device. We kept these principles close when designing our questionnaire, with a strict 20-minute maximum time limit and a variety of different question types. Given the needs of the research and objectives of creating a segmentation, we were very mindful of receiving high quality data, which can be a challenge when conducting online research among younger audiences. Throughout our fieldwork, we regularly checked the quality of data being received with on-going monitoring of standard elements, such as speeding and straight lining, which can often disrupt segmentation analysis, but also manual checks on the comments that Gen Z would make.

During the first phase of quantitative research, which would be the basis of our segmentation, we wanted to ensure sufficient sample sizes, so we did not have to worry about producing segments that were too small. To that end, we approached 4,000 18 to 30-year-olds to take part in the research. With a view towards representativeness of the sample, we set detailed interlocking quotas, taking into account age, gender, government region and ethnicity, using the latest officially published data from the Office for National Statistics (ONS). Within our sample, we also wanted to achieve maximal representation from less privileged and more vulnerable 18 to 30-year-olds. We therefore skewed our data collection towards Social Grades C2 and DE, to enable deeper analysis within these groups. Our full sample design is detailed in Table 1 below.

Hard Quotas	Survey quotas that dictated the number of completes achieved in the final sample		
Monitoring Quotas	Quotas used to check fall out of completes is broadly in line with nationally representative population.		
	Total	Male	Female
17-20	1030	515	515
21-25	1430	715	715
26-30	1540	770	770
Total	4000	2000	2000
North East	163	81	81
North West	444	222	222
Yorkshire and the Humber	344	172	172
East Midlands	291	145	145
West Midlands	369	184	184
East	333	166	166
London	603	301	301
South East	507	253	253

South West	312	156	156
Wales	189	94	94
Scotland	333	166	166
Northern Ireland	112	56	56
White	3237	1618	1618
Asian	437	218	218
Black	151	75	75
Mixed	117	58	58
Other	58	29	29
AB	800	400	400
C1	800	400	400
C2	1200	600	600
DE	1200	600	600

Table 1

Phase 4: Audience sizing via quantitative research

A key output from our first quantitative phase was to size the potential market of recruits. This was key to providing a more realistic size of the pool than what can be understood from census-level data. To achieve this we included questioning that formed the basis of the Army's own application screening, including questions such as height, weight, long-term medical issues and citizenship status. Combining these questions with data available from the ONS, we were able to drill further down into the population of 18 to 30-year-olds, and provide an estimate of the number that would most likely pass any initial examination of their application. Sensitive to the fact that different demographics had differing levels of passing this qualification criteria (e.g., those from ethnic minority backgrounds are less likely to hold British citizenship), we took a bottom up approach to calculating the size of the pool. First by calculating sizes for individual cells (e.g., Black women) and then grossing these up to achieve an overall recruitment pool size. Doing so allowed the Army recruiting team to decide on achievable targets for recruitment (rather than based on total level population trends).

Phase 5: Quantitative segmentation of Gen Z

The other key output from the first quantitative phase was the creation of a Gen Z segmentation. This segmentation had to provide the Army with a method of splitting Gen Z into clear messaging, and targeting strands to aid recruitment. As such, it needed to be detailed (i.e., have many segments that were discrete), but not so overwhelming it couldn't be communicated widely within the Army and their media agencies. Given the breadth of potential drivers that were included within the questionnaire, we needed to reduce the set down to the most important unique variables to allow the segmentation to work effectively. We first manually categorised the drivers based on whether they were functional or emotional and then by themes. This produced six overarching career themes.

1. Core career needs: These were intrinsic requirements that would decide their future career direction, they included aspects such as job security, which almost all of Gen Z were looking for, through to an office job, which was often more divisive.

- 2. Recognition: These were about being recognised for their achievements, whether that's through more responsibility or through qualifications.
- 3. Social cohesion: A theme dedicated to how their careers and employers fit within their already established lives. Does it have a good work life balance? Can you make new friends? Does it fit with your values?
- 4. Employer culture: What does the employer give to their staff? Is it all about achieving a high salary or do they want an employer to be investing in them as an individual?
- 5. Self-actualisation: What does the individual want from their career? Do they want to build confidence, improve their skill-set or learn new things?
- 6. Social impact: Finally, what does their employer or career give back to the community? Does it help people and make a difference to people's lives? Is the employer environmentally friendly?

Grouping into these six themes helped us to identify which aspects were more divisive (and potentially more useful) for the segmentation. In addition to our themed approach to grouping the drivers, we also conducted principal component analysis to group the statements based on the underlying trends of how individuals were scoring the importance of each driver. Taking a data-led approach, we discovered an even wider array of themes; this was encouraging rather than surprising given that during our questionnaire design phase we had made an effort to limit drivers that may be prone to overlap. Armed with an understanding of the different themes we might see emerge from the segmentation, and an understanding of the drivers that are most differentiating, we could begin our segmentation analysis.

Our overall approach to the segmentation was designed to be both iterative and collaborative with the Army recruiting team. As such, each segmentation iteration was documented, with the approach, emerging themes, relative strengths and constraints of each solution. Across the full analysis, we conducted over 40 iterations of the segmentation, using a variety of techniques and methods of pre-processing the data, such as:

- Hierarchical cluster analysis;
- K-means cluster analysis;
- Latent class analysis
- Recoding of the data;
- Binary conversion:
- Standardisation.

Although our approach to segmentation was collaborative, it would have been impractical for us to discuss each and every solution in order to sense check whether it made sense, aligned to the qualitative, or was practical for the Army to action. Thus, how did we ensure that our solution was fit for purpose? We used our SMART segment framework to assess the solutions we developed, alongside the key objectives of the segmentation. This SMART framework included:

- Size: Segments must be manageable. If a segment was too large, it could mean part of the market is unsegmented. Too small and it becomes too rare in the market and too small to target
- Meaningful: Each segment had to bring something different to the others. Within each group, individuals had to be as similar as possible, while across segments individuals had to be as different as possible.

- Actionable: The segments had to deliver new insights that the Army could use going forward. They
 had to be sufficiently compelling to deliver internal buy-in from all stakeholders.
- Relatable: Segments had to make intuitive sense and be easy to understand, otherwise it would not sit well in your organisation.
- Targetable: The segments had to be easy to identify and assign individuals to.

A key lynchpin to our overall research design and team structure was to ensure that the analysis itself was not conducted by a background statistician or external team, and that our analyst was a central part of the overall project team. This meant that our analyst was:

- Involved from the very start of the process, from project briefing, research design and initial discussions with the British Army;
- Present throughout the qualitative phases, able to listen into research as it happened and able to freely talk to qualitative interviewers;
- Present in all meetings with the Army, and able to hear first-hand their objectives, concerns and development of their understanding of Gen Z;
- Able to design the quantitative sample, scope and questionnaire with the end segmentation in mind.

Leveraging an analyst who was embedded in, and indeed leading, the research in this manner, meant that objectives of the segmentation were at the heart of each stage. We could avoid needing to discuss every potential solution, as the analyst knew what would or wouldn't work.

While having an embedded analyst was an effective way to ensure we reached a relevant and workable solution, we were also conscious of the need to bring other members of the team and the Army along the segment journey, rather than a solution simply be presented to them. We did this through regular updates of the analysis, catching up to discuss the direction of the segmentation, the themes that were emerging and where improvements were needed. Throughout these discussions, we sought not only the opinions of the Army team, but those who had conducted the qualitative discussions, too. This was a critical piece of the puzzle, as this allowed us to understand whether they could picture (or had indeed talked to) the humans that were being brought out by the data. Together as a team, we agreed on a final solution of 10 segments with a wide spectrum of attitudes towards careers and, indeed, the Army as an institution, as illustrated in Figure 1.

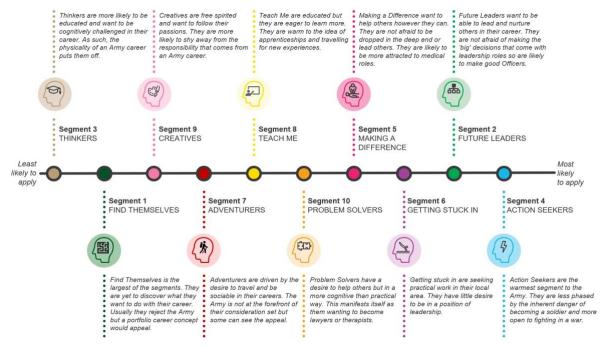


Figure 1

Bullseye interviews at the end of the project to bring the segments to life

Following the quantitative segmentation, a series of in-depth interviews were carried out. The main objective of a "bullseye interview" was to provide compelling video and/or audio footage that encapsulated the essence of the persona/segment. At this point we "knew" the audience—we just wanted to bring the persona to life to help engage and educate the internal audience. The personas needed to ensure that the segments were "seen" and "heard" across the Army, so that all recruitment efforts had these audiences in mind in day-to-day work.

Phase 6: Quantitative analysis of Army appeal and evaluation as an employer

Now we had an understanding of the different wants and needs from employers and careers, it was time to move this forward and understand how the British Army fits into this landscape. From our segmentation, we produced segments that on the surface looked more inclined to join; but would they? What might stop them and what other careers is the Army competing against for potential recruits? On the other hand, some segments looked less likely; are there routes that might change their mind, or specific roles that might make an Army career more appealing? This phase really was the next step in taking the segmentation forward, showing segments what the current Army offer is, understanding its relative strengths and weaknesses, as well as the barriers a potential recruit faces when thinking about applying.

To do this effectively, we first needed to design a subset of statements from our segmentation in order to ensure we could identify the segments accurately moving forward. We did this with the use of linear discriminant analysis to identify the best segment predictors, reducing our list of potential drivers down to the 16 core elements that were driving our 10-segment solution. These statements were then included in our questionnaire, focused on the different elements of a British Army career, including what 18 to 30-year-olds thought about the Army, perceptions and desires when it comes to salary and introducing the breadth of roles that could be available within an army career.

The second phase of quantitative research operated on a smaller sample size of 2,000 18 to 30-year-olds. Due to the need to be as inclusive and representative as possible, we boosted some of our low incidence ethnicity groups, such as those from mixed ethnicity backgrounds.

Understanding the role of the Army Reserves

Another strand to the research, but among a slightly older target group (18 to 40-year-olds) was focused on the Army Reserves. This is a slightly different proposition, with the Army Reserves able to fit around current employment commitments (if someone has them). Due to this, we needed to understand 18 to 40-year-olds' attitudes towards what they do in their spare time, and their perceptions of how the Army Reserves could fit into this. While the proportion of Gen Z is lower in this strand of research, we were still able to extract interesting insights on the different attitudes towards second careers and spare time activities. A separate segmentation was then developed using this research to understand the different roles the Army Reserves could (or couldn't) play in people's lives.

Understanding perceptions of the Army in Scotland

The final strand to the research was understanding perceptions of the brand and an army career in Scotland, in light of young people's potential support for Scottish independence. This primarily involved qualitative research in particular, understanding the sense of national identity that young people felt, and how this impacted attitudes towards the British Army. We recruited the sample according to the political leanings of the participant, or their parents' household, to ensure we sensitised the sample structure to the political map in Scotland, sampling those that had or would vote "yes" for independence, and those that had or would vote "no" for independence.

Bringing the research together

After the final quantitative phase, we had a wealth of research: data through all phases, across multiple methodologies and utilising multiple techniques. The challenge now was to reduce the detail into clear and concise findings and recommendations for the Army to take forward in their recruiting strategy. Through our research, we had uncovered many nuances in Gen Z, how they approach their lives and how that impacts their careers. As researchers, we were naturally inclined to want to show all of this detail, but as end users the Army required a more succinct version that does not result in an information overload. To get to this point, we needed to take a step back from the research and take a top-down view, isolating the largest challenges to Army recruitment and identifying how they can go about addressing these in future strategies. Some of our most pertinent findings are included in the following sections of this paper.

Riding the shockwaves

Shockwave 1: Riding the impact of COVID-19

It was clear from the research that COVID-19 had a profound impact on Gen Z. Everything, from numerous lockdowns to the wider economic fallout has led to Gen Z re-evaluating what was important in their careers, but also more widely in their lives. The pandemic provided a once in a lifetime moment to take a step back and think about what they want from their lives. Did they want to go back to how life was pre-COVID? Or

had they enjoyed a new balance of work and personal life? The impact of lockdown had created a time of introspection and reflection for many, and had allowed some perspective taking on how young people felt about their current work; many were asking themselves if they really wanted to go back to what they did before. It also created a sense of headspace and personal time, and enabled a re-think about what was important to them.

The ideas being thought about included becoming more independent, "resilient", better protected in the future, maintaining a greater sense of work-life balance and a desire to continue this post-pandemic. Some had also been prompted to think about the value of what they did as result of the pandemic, and were considering other careers, such as healthcare, voluntary work or working for a charity. Overall, it was a chance to think about and do something different; it re-articulated their sense of ambition. For some, that could be more about well-being and enjoyment, placing more importance on the social side of work over material rewards and progression. Overall, young people appeared to fall into three categories of impact.

- 1. Insulated from the impact: the youngest end of the sample were relatively insulated, and had a longer run up than others to recover. They could stay in an educational cocoon for a while, whether finishing school or continuing studying.
- 2. Disrupted but will carry on: This group had experienced a "bump in the road", but were carrying on with their current jobs or original plans. Their jobs and sectors had been disrupted, but were relatively stable and secure and they were working through the challenges.
- 3. Hit harder and changed direction: Some had significantly re-evaluated or been severely impacted in education and work. The educational experience had been tainted, and others had changed their jobs and plans for the future.

At least this last cohort within the sample had been significantly impacted, and were making key decisions as a result—whether choosing not to pursue more education, or changing career direction as a result of job insecurity or being furloughed.

Job security

For some, they had no option to go back to life pre-COVID-19. Many businesses had streamlined their operations, let staff go and closed physical locations. This led to Gen Z being more cautious about their futures, with a greater focus on job security, as well as placing more importance on developing skills that are widely applicable in a range of sectors. Some sectors and jobs had been significantly disrupted with widespread use of furloughing and some redundancies, creating a marked feeling of insecurity. Participants could feel that their opportunities were dwindling, that the job market had already been very tough and was now looking even harder for new, young workers. Those finishing education were feeling very disadvantaged in this fragile job market; they felt they had not been able to build up enough work experience, and were now facing even more competition.

On the one hand, as an employer, the Army offered the ultimate guarantee of job security. One does not "get fired" from an Army career due to economic uncertainties or downturns, nor are they reliant on any form of customer demand. However, the rigidity of the Army could also work against it. Gen Z were alarmed by the level of commitment required, with many worried about their options to move on to other career paths if the Army wasn't right for them. For Gen Z, job security was more than simply a guaranteed job—it was

about being provided the skills and experience to weather any future shockwaves, allowing them to swiftly switch careers or move employers.

Mental well-being

It was evident from the research that there was already a more open discussion amongst this generation about mental health, which to them had been de-stigmatised and was openly discussed in the pre-tasks and groups. To a great extent, young people appeared to have assimilated the cultural conversation on this issue. Many talked openly about their challenges in front of others in the qualitative groups; women were particularly open about their challenges and issues, although male participants also shared their struggles. Having experienced the pandemic this generation were now even more keen to prioritise their own mental health, and well-being was often described as a personal priority. This included considerations of how their work and educational environments impacted their well-being, and they demanded that employers also considered this area more deeply.

Whilst this area was already a priority for Gen Z, it had certainly been accentuated by the pandemic, which had been an isolating experience with their normal social lives being severely disrupted. There had also been a real lack of structure and routine in their lives, and they had to bear greater worries and levels of stress about work and education. In the qualitative research sessions, it was very apparent that some were clearly fatigued and visibly depressed by the lockdowns in the UK. These effects were openly talked about, with many describing a sense of personal stagnation and being keen to focus more on their well-being and resilience in the future. The need to build more resilience into their lives also included considering getting a second job and diversifying their careers, including self-starting their own businesses. For some, greater security could only be gained through greater economic independence and not depending upon an employer in the future.

Greater attachment to place was also evident, but so was the greater (albeit conflicting) desire to escape. Some had clearly become more attached and rooted to their home areas, and the prospect of breaking out of that bubble now could feel daunting. They had enjoyed staying at home, and felt a new sense of pride in their local areas, whilst others were even more desperate to get away, and had a pent-up desire to travel and escape.

Overall, the pandemic deepened the focus and importance on mental health, with some hope that there would be more of a focus on these issues coming out of lockdown. Some questioned the impact the Army may have, as well as its record in this area.

Mental health, employers and the Army

The research revealed that beyond the barrier of not wanting to fight in a war, mental health was the next largest concern when it came to the Army. Digging deeper into this, Army careers not only couldn't offer the same level of work-life balance that other careers could, but they also would take Gen Z away from their mental health support networks (i.e., their friends and family). In the media, the portrayal of armed forces personnel also often conjured up images of homeless veterans suffering from post-traumatic stress disorder, as one of the social legacies of previous conflicts in Iraq and Afghanistan. The Army faced a significant

challenge in overcoming mental health concerns. Some of their recruitment campaigns have now started to address these concerns. The more powerful themes that have been leveraged include camaraderie and belonging, where the soldiers you fight alongside are your family, and that they are there for the good and bad times. In addition, recruitment campaigns focused on how the Army teaches you resilience, as well as the ability to learn from adversity and failure. However, there is still more to be done to communicate how the Army takes care of your mental (as well as physical) health.

Impact on educational choices

Those still in education had been very worn down by online learning, experiencing a real drop in motivation. Younger school aged cohorts still had time to recover and plenty of school ahead of them to get back to normal. Older school pupils that were committed to higher education were determined to carry on with plans to go to university, and some were thinking they should "double down" on education so they would have more options coming out of the pandemic. Nonetheless, many had expressed a strong desire to escape from a now tainted educational experience. Some were very ambivalent about their time at college and university, and had been very turned off education in the year prior to the research as a result of the complete switch to online learning during the pandemic, even going as far as to fully reject the idea of more education. With this group there was a real desire to get straight into work and start earning and training. In light of this desire, the Army dialled up its skills and training proposition in its recruitment campaigning, emphasising both the skills and qualifications that could be attained, but also that the way a candidate learned in the Army was very different to classroom settings, often involving "hands on" and practical methods of learning.

Shockwave 2: Riding the impact of social movements

Through the research it was clear that the Army was still perceived to be a predominantly white and male career path. Given that women make up 50% of the potential recruitment pool and we had seen that the proportion of ethnic minorities has increased significantly over the last 10 years, the issue of diversity was key for the Army; it needed to better reflect the modern society it defended and served in the UK. The challenge the Army faced was that both women and ethnic minority groups did not see themselves represented in the Army, but the Army struggled to change this perception until more women and ethnic minority groups were present. As such, the Army needed to find a way to overcome these perceptions and get more underrepresented audiences in their ranks. Seeing was believing for these audiences, and if more women and ethnic minorities were to join up, they had to "see it in order to be it".

Appealing to Gen Z women audiences

The main perception of the Army career being "male" often stirred a number of connotations for Gen Z women. Typically, a male dominated employer was associated with a "laddish" culture, "toxic masculinity" and a general worry that women would not be supported in the Army if they raised any issues. However, it was also evident amongst female audiences that perceptions of the Army had made some progress over recent years in terms of inclusion. A common theme across the female sample was that the Army had improved on representation, though there was still more progress to be made to ensure full role equality. Whilst more women could imagine female personnel, some still associated them strongly with medical roles rather than any wider careers, including combat.

Nonetheless, more female personnel had been seen at careers events, which was a strong signal of inclusivity and equality. Younger women in the sample tended to assume full equality with male counterparts, and this was expected across all roles and in a culture that was strongly supportive. These participants had a stronger sense that they could do and be anything, and would have been shocked to hear that some roles did not accept women candidates. In contrast, older women participants could be more ambiguous and have more dated expectations. They still saw the Army as male dominated and worried about a "toxic" male culture. They also had more traditional and limited female roles in mind, such as medical when they were thinking about what a possible army career may entail. From the research, we identified that whilst the barriers were often expected, particularly by older Gen Z women, they could be overcome if there was sufficient support available, and if participants felt confident that someone would be there should the worst happen. However, currently this support was not assumed to exist, or if it did it was expected to be ineffectual with any potential concerns dismissed as "making a fuss".

Aside from concerns of gender bias in the Army, we also identified through this research that female audiences fundamentally had different underlying wants and needs from their careers. Our research highlighted that they are significantly more likely to be seeking careers that can make a real difference to people's lives, and that can help people and communities.

Addressing some of the barriers amongst women audiences

In light of these findings, the research highlighted an interesting disconnect for the Army, which was stereotypically seen in the UK as a war-fighting organisation. Gen Z was unaware of the Army's day-to-day humanitarian aid missions, whether at home or abroad. It also highlighted how little knowledge existed of the breadth of roles available, while female audiences tended be more interested in roles in healthcare or human resources, other roles were also available within the Army, but were often not considered by female candidates. There were, therefore, many opportunities for the Army to capitalise upon when considering recruiting Gen Z women. Whilst there was acknowledgement during the research that the Army was progressing in this area, more could be done and, indeed, has been done since this research.

The latest Army recruitment media campaign now focuses on the role of the Army as a humanitarian service, helping families in the UK when disaster strikes, such as flooding. This type of campaign is more likely to resonate with the female audience, showing a more caring side to an Armed Forces career. Furthermore, as a standard, Army campaigning now features approximately 50% female representation in order to ensure that women can recognise that they have an equally vital role to play in a modern British Army.

Appealing to those from ethnic minority backgrounds

Ethnic minority groups could be interested in an army career, but their reactions revealed a number of significant challenges and potential barriers. For example, the Army identity was expected to be white ethnicity; it was also seen as very patriotic and a traditionally framed British brand. Thus, many ethnic minority participants felt that they rarely saw "people like me" if at all represented in the Army. However, whilst ethnic minority participants often questioned their representation in the Army, they did not feel it was a "racist" institution. It was just felt to be a different culture and social mix, and not as diverse as the rest

of the UK population, particularly in terms of the larger cities where many ethnic minority participants lived. In addition, those from ethnic minority backgrounds were also more likely to place importance on their relationships with their friends, family and community. As such, stepping away from this community to an organisation where they may feel like an outsider was a more significant leap for this specific audience.

As a consequence, there was a stronger sense of cultural distance between ethnic minority groups and the Army. The idea of joining was a bigger hurdle for such participants, and it was a more significant wrench leaving home to enter into a very different culture that generally was not part of their social background. For many it was a move from an urban to a rural environment, they feared feeling more cut off from friends and the idea of mainly mixing with white people could be a prospect that, for some, potentially felt at odds with their previous lives and backgrounds. Their parents could also be more likely to question their choices; some were directly opposed to the idea and stated that they didn't feel like they were part of the Army's version of British identity and culture. The research took place in the wake of the Black Lives Matter protests, and some parents could express mistrust of established institutions like the Army, accordingly.

Parental worry about cultural distance often depended upon the background of the family and child concerned. If they had been socially shielded hitherto by the parents and their communities, then they anticipated that the Army culture was going to be too much of a social and cultural shock for their child. Some were, however, more comfortable with the idea, and again this often related to their cultural background, if their child had white friends and were more used to "white majority" social contexts.

Addressing the barriers for ethnic minority audiences

The Army needed to clearly signal inclusion, and it was very important to see representation in how the Army presented its personnel. This had made a difference with women audiences, and it would make more of a difference with ethnic minority audiences, if it could be "shown" rather than "told" to the audience in terms of actually seeing ethnic minority personnel carrying out different roles—including leadership roles that were more aspirational. Nonetheless, despite the importance of representation, the research also suggested a balanced approach to inclusion and diversity was required. Overall, the research indicated that there was actually a need to avoid an over emphasis on identity. There was a risk of overly focusing on identity could also feel divisive, forced and inauthentic, appearing to address the "category" rather than the individual person in the Army's communications.

Thus, the research concluded that inclusivity in the Army should be about everyone working together in one team, irrespective of social backgrounds and categories, and in a culture that is a genuine meritocracy transcending identity and open to all. In this sense, the Army had to be blind to identity, and focus on being about building togetherness and belonging based on shared values, rather than highlighting a diverse collection of demographic categories. This could be a valued antidote to the tribalism of "identity politics" in contemporary UK society that some young people could find divisive and unappealing.

Long-term challenge 1: Changing personal values

From the start of the research programme, it became clear that Gen Z potentially lived by a very distinct set of values. These varied from one individual to another, but it dictated how they approached life, the

brands they were drawn to and their careers. As such, they were actively looking for brands that shared these values and fitted with how they wanted to live their lives. Gen Z were marked by their progressive outlook and values, which generally prioritised fairness and equality. The expression of these values varied and could be stronger amongst women, ethnic minority and higher social grade participants. Such participants felt the need to create a more equal and fairer society, which was defined as treating everyone the same, giving all people the same opportunities and allowing people to be themselves. These audiences preferred the idea of an inclusive team and collaborative ethos, and that things needed to be justified and explained to them before they complied. They could therefore push back against hierarchical cultures, although at the same time they were also prepared to accept hierarchy if it was based on merit.

For some, their values were part of their identity, and such participants felt it was important to live up to your values in what you did as a career. Amongst these more value-driven participants there was a desire to do something coherent with their principles and beliefs. The more idealist participants wanted to play a role that would, in their view, make the world better and for them the committed social activist could be a role model to aspire to.

Addressing the values gap

For the Army, this potentially represented a real challenge. On the surface, little was really known about what the Army did day-to-day with perceptions being limited to easy stereotypes of "fighting wars" and a culture that values aggression. Outside of this, Gen Z often didn't know what the Army brand was and the values that underpinned the organisation, and therefore whether it aligned to their values or shared any common ground. Due to the lack of real knowledge, perceptions of the Army were often shaped by the wider media landscape, including programmes such SAS Who Dares, Wins or through stories covered in the news media, which were often negative portrayals of the military.

Part of addressing this challenge entailed developing a brand positioning that was about shared values, identifying the values that would be true to the Army brand and organisation, but also potentially resonate with Gen Z. These potentially shared values included attributes such as courage, discipline, respect for others, integrity, loyalty and selfless commitment. In addition, emphasising aspects of the Army's ethos would also help connect with younger audiences, such as teamwork, meritocracy and collaboration. Taken together, these shared values and ethos could be used to close the potential values gap between the Army and younger audiences through marketing and communications.

Long-term challenge 2: Changing ties of national identity

The British Army's obvious connection with Britishness and national identity was potentially problematic with three main audiences, including ethnic minorities, sometimes students, but more significantly in Scotland. The potentially complex relationship between the brand identity and ethnic minority participants and their parents, has already been outlined above. This section focuses on the identity challenges in Scotland in particular. In Scotland, participants' sense of Scottish or British identity varied widely across the focus groups we conducted. However, whilst most had a sense of dual identity, many felt emotionally "closer" to Scotland and attached to "home". Overall, participant identities were more mixed and layered than opinion polls on young

people's attitudes to independence might suggest. A person could still be very proud to be Scottish, but vote "no" against separating from the UK.

National identity was, therefore, layered and complex in Scotland, and different shades of "dual" identity were in evidence. Although few were "rejectors" of a British identity, even those from a "no" voting background often felt closer to Scotland, and understandably expressed a strong attachment to being Scottish. Amongst these groups there were varied responses to the Army brand, which emphasised the Union Jack flag and British national symbolism. Some participants could feel distant or hesitant about the brand and what it signified. For some, it could be more associated with England rather than Britain, and this could trigger the literal assumption that to join the Army a candidate has to move from Scotland to England in order to train. For more hesitant participants, the symbolism of the brand could also suggest a sense of superiority and even arrogance, with a fear that family and friends may disapprove of any idea of considering the Army as a career. Such participants felt very distant from the overall brand, and were more likely to be from "yes" to independence voting backgrounds.

However, for others the Army brand was widely recognised, and it clearly stood for the organisation. More positively, its symbolism also suggested a valued sense of unity and togetherness, and was often talked about in the Scottish focus groups as representing "all the nations" in the UK, rather than just Britain. In this sense, a more modern and younger interpretation of British identity could be seen in terms of a "four nations" identity (i.e., England, Wales, Scotland and Northern Ireland) rather than a traditional "one nation" Union identity. This "four nations" conception could also convey a valued sense diversity, in terms of all the different peoples that make up the UK being brought together in one organisation. This could give the brand a more modernised framing, that helped younger audiences feel more comfortable with symbols of Britishness.

Concluding thoughts: A very old brand in a changing world

The British Army is one the oldest brands in the UK, and the institution represents one of the most traditional British cultures, second only to the Monarchy. Connecting such a brand and organisation with young people today represented a huge challenge for both the Army and the research, but one that had to be tackled if the UK was to remain secure in an increasingly volatile world that continues to pose all sorts of different security threats. Ultimately, the research helped the Army understand two fundamental things if it was to connect with Gen Z.

Firstly, the Army needed to adapt and evolve if it was to address the different shocks that were reshaping Gen Z's attitudes towards brands, careers and employers. This entailed a high degree of modernisation and change if the Army was to stay relevant, and enhance its appeal amongst young people today. The second point was understanding the values and cultural assets that were already within the Army, and core to its identity that would also resonate with the next generation. There were many aspects of the traditional Army culture and career that also had the potential to speak to young people in the UK. The research helped the Army understand how best to use these assets to articulate the common ground and shared values that would bridge the cultural distance that some young people felt, particularly women and ethnic minority participants, in order to attract them to the brand. This included reframing how the Army talked about its

identity and values in terms that were more modern, diverse and individualist in order to help build more connections between one of Britain's oldest institutions and young people today.

This combination of adaptation and enlightened continuity provided a more sustainable way forward for the Army, where it could pursue the necessary changes required to reach out to Gen Z, whilst also staying true to itself and the values that had long underpinned its enduring success and effectiveness as an organisation.

References

Akam, S. (2021). The Changing of the Guard: The British Army since 9/11. Scribe.

Bremner, R. (2009, September 5th). The Fighting Scots. *BBC Scotland.* Available: https://www.youtube.com/watch?v=ktrCbEyM8DM

Fieldhouse, E., Green, J., and Evans, G. (2020). *Electoral Shocks: The Volatile Voter in a Turbulent World.* Oxford.

Ford, R., and Sobolewska, M. (2020). Brexitland. Cambridge.

Goodwin, M. (2023). Values, Voice and Virtue: The New British Politics. Penguin.

Goodwin, M. (2020, April 21st). Will Gen Z recover from Covid? *UnHerd*. Available: https://unherd.com/2020/04/will-gen-z-recover-from-covid/

Inglehart, R. F. (2018). *Cultural Evolution: People's Motivations are Changing and Reshaping the World.* Cambridge.

Inglehart, R. F., and Norris, P. (2019). *Cultural Backlash: Trump, Brexit and Authoritarian Populism.* Cambridge.

Livingstone, E. (2020, October 18th). Young Scots rally to independence banner for 2021 elections. *The Guardian*. Available: https://www.theguardian.com/politics/2020/oct/18/young-scots-rally-to-independence-banner-for-2021-elections

Smith, D. (2004). The Art and Science of Interpreting Market Research Evidence. Wiley.

Tilley, J., and Heath, A. (2007). The decline of British National Pride. *British Journal of Sociology 58*(4): 661-78. Available: 10.1111/j.1468-4446.2007.00170.x

YouGov. (2023). SAS Who Dares Wins Popularity and Fame Quarter1. YouGov. Available:

https://yougov.co.uk/topics/entertainment/explore/tv_programme/SAS_Who_Dares_Wins

About the authors

Luke Mantell, Analytics Director, Jigsaw Research, London.

Luke Perry, Deputy Head of Qualitative Research, Jigsaw Research, London.

The Death of the Debrief

If empathy is at the heart of good research practice, why are we still presenting insights in PowerPoint?

Alice King Andrew Therkelsen Chris Moschos

Introduction

Over the past few decades, the research industry has evolved rapidly from data production to a story-telling and insights distribution and content provider. Such a metamorphosis has been fuelled by client demand for insight delivered in such a powerful way that it compels stakeholders to action. Researchers have fine tuned and honed their story telling skills in the process, taking clients on ever more sophisticated journeys that immerse them in the human, cultural and consumer context.

However, our format of insight delivery has remained stubbornly predictable. PowerPoint presentations still reign supreme.

In this paper we explore a new form of insight delivery. One that is indivisible from the insight generation. We argue that in a new era of short attention spans and increasingly artificial interactions, we must lean into our superweapon of empathy to generate more understanding and emotion around the information we deliver.

We showcase a collaborative project run recently between The Lab and Lion about the Gen Z audience, which pioneered new approaches to client engagement using a gamut of empathy-driven delivery techniques.

The premise: on the road to deeper empathy

In its simplest expression, our job as research professionals is to better understand people; what makes us tick and why we think and act the way we do. It can be summed up in just one word: empathy. The capacity to understand or feel what another person is experiencing from within their frame of reference.

Entire fields within our industry – qualitative, ethnography, observation – were built with this very purpose. To get closer to the human, to see the world with their eyes, to spend time in their shoes. And almost all advances in research methods and tools can be explained as one continuum: the quest for ever deeper human empathy.

We have come a long way. The digital revolution has opened up more windows into people's lives, enabling us to get closer to their heads and hearts than ever before. But, at the same time, digital advances – above all the rise of social media – have made the world, and the humans that inhabit it, less homogeneous and more fractured. This context makes the need for empathy in research more acute, and at the same time harder to achieve.

The irony: the way we report and deliver insight has not kept up with the times

Whilst we have made great strides as an industry in how we get to deeper empathy in our research, there is one great irony: the way we report and deliver insights has barely changed. Charts, graphs, tables, reports, booklets,

posters and, above all, slides remain the primary channels through which we tell the stories from our findings. How can we understand people as people by simply looking at content on a page or, worse still, on a screen? It's remote, not intimate; it's "outside looking in", not "in their shoes"; it's abstract, not authentic.

This isn't good enough. It isn't real, it isn't human, and it isn't conducive to empathy. How are we meant to better connect with customers, consumers and communities if we're not connecting properly with our colleagues, clients and contractors? How are we meant to explain the complexities of humankind in a mere PowerPoint presentation?

Where other industries are taking a stand, we are often still stuck in our old ways. The CEOs of LinkedIn and Amazon have banned PowerPoint from meetings. As long ago as 2016, the Harvard Business Review was recommending "immersive presentations" to avoid the dreaded "death by PPT". Other categories have evolved organically. Take news consumption: few of us wait all day for the TV evening news broadcast to stay informed. Rather, we dip in and out, consuming news in various formats throughout the day, be it notifications on our phone, social media or conversations with others.

So, we're throwing down the gauntlet and declaring that the debrief – or at least the debrief as we know it – is dead. A challenge to our industry to rethink the way we deliver research, insight, strategy and trends in a format that is far more immersive, intimate and human. A supercharged format that "breaks the fourth wall" where we treat each other as humans and not just as working partners.

Case study: understanding the next generation of consumers for Australian alcohol business Lion

It's an approach that Lion, one of Australia's leading alcohol businesses, has pioneered together with The Lab, its cultural insight agency. The brief was one that I'm sure will be very familiar to almost all readers: to deconstruct and dimensionalise the next generation of consumers. To push beyond the superficial and get down to the nuance of GenZennials aged 18 – 29, to understand who they are, what makes them tick, how they spend their money and what role our category and brands can play in their lifestyle now and, most importantly, into the future.

Cue segmentation study, pen portraits and brand book. Think again. We knew that GenZennials are a complex cohort of consumers. They are a conundrum. They are both boundary-pushing and conformists, entrepreneurial and anti-capitalist, hedonistic and yet restrained. They are a globally connected bunch, fluent in memes and tackling some of the biggest social issues of our time.

An empathetic approach to understanding an entire generation

GenZ is a fixation of tabloid media, often unfairly framed, judged and parodied, fuelling a chronic misunderstanding and empathy gap. We aimed to dispel some of the mythology around the GenZ, to pull back the headlines and reveal their real struggles, aspirations and varied personalities.

So, if we, as researchers and brand custodians, were serious about understanding this cohort, we needed to create an intimate and immersive way of explaining the GenZennial generation. A way of experiencing insight rather than just having it told and shown.

After 100+ qualitative friendship interviews, in their favourite bars and their homes, preceded by two weeks of self-reported ethnography, documented through videos and posts on their own project Instagram accounts, we had a rich and nuanced view of Australian and New Zealand GenZs. We saw their world; through their eyes, their

friendships and their phone cameras! From here, we identified five core mindsets that are uniquely GenZennial. Aptly titled: *The Recalibraters, The Hustlers, The Hell Yeahs, The Change Agents* and *The Homebodies*.

A new blueprint for the debrief?

The next step was immersing our clients in the cultural world of this generation, a crucial step in priming them for the innovation workshop. With much of that culture readily available in digital form, The Lab's Cultural Insight specialists curated memes, TikToks, reels and videos organised by GenZennial mindset on the project Instagram account, with clients following along for three weeks. During this time, they were exposed to the varied icons, idols, humour and perspectives of their young consumers in an easy-to-consume format, accessed each day at their convenience. Our clients didn't have to read a dense research report: they had our daily social media commentary, ready and scrollable for them on their feed each morning commute, getting them ready for the innovation day....

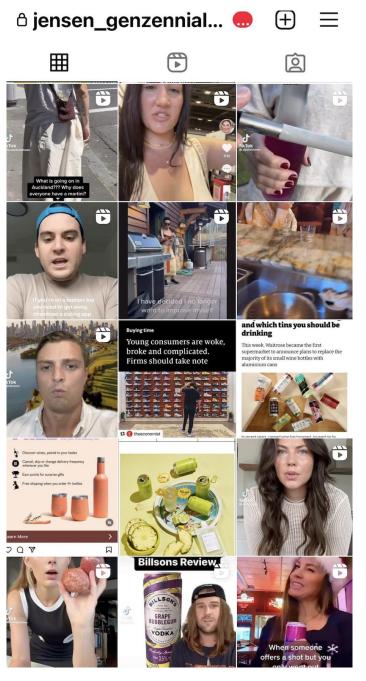


Figure 1: Project Instagram account

We knew we couldn't risk undermining our findings by hosting the workshop in a sterile corporate space; we needed to invite clients into a new frame of mind, and a new setting. We therefore picked the bohemian, student neighbourhood of Newtown, Sydney, and hired an AirBnB on King Street, which we transformed for the day into the aspiration club house of the generation. We called it The House of Jensen. The Lab transformed each of the five bedrooms and curated them as bedrooms of our five mindsets.

Here we guided everyone involved in the project into each bedroom – inviting them as if they were a friend – to be in the intimate space and proximity of each of these five GenZ segments' bedrooms. A carefully curated Spotify playlist in each room set the tone and tempo. Music is so personal and evocative; it encodes an entire culture of meaning that helped our clients immediately hook into what kind of person they were about to meet. Props indicated the personality and interests of each mindset. A poster hung over each bed, drawn by an illustrator to bring to life the persona of each mindset. For example, our Change Agent sported yellow Crocs and bleached choppy hair; our Recalibrator had shaggy long locks and a Pounamu NZ jade stone around his neck; our Homebody wore a retro Star Wars T-shirt and thongs/flip flops. The design of the workshop was an invitation to meet five mindsets, and be immersed in their stories, experiences and needs in the alcohol category.







Figure 2: The workshop

The bedroom walls were adorned with photos of the bars, parks, festivals and events important to each mindset, with cans and bottles of their favourite drinks displayed on shelves. As the innovation session got underway, we noticed a visible shift in the behaviour of the clients, who loosened up immediately. Lying on the beds, trying on the artefacts, enthusiastically sketching out new concept ideas and interrogating the bottles of alcohol in the room as the music played, they were highly engaged, and truly immersed in each of our GenZ lives.



Figure 3: Favourite drinks

Copyright © **ESOMAR** 2023 CONGRESS 2023

Clients could feel as well as see who the person was, what they valued and how and where they socialised, and could then truly empathise with the role alcohol played for them, making the job of creating new ideas to meet unmet needs that much more tangible and engaging. As a result of this project and delivery method, Lion was able to create exciting and strategically relevant NPD to populate its five-year innovation pipeline, stemming from a truly consumer-centred place.

The way forward

So, is this how we breathe new life into the debrief? We think so. If empathy is at the heart of our craft as researchers, we can and must make our work so much more impactful for our clients and for ourselves.

Are there challenges and pitfalls to this approach? Of course. How do we keep a record of insights that can live on beyond an experiential debrief day? How do we socialise findings beyond the first layer of stakeholders involved in the project? How do we create immersive experiences suitable for our digital "work-from-anywhere" age?

But we shouldn't let this hold us back. By presenting human and cultural insight in a fully immersive and experiential way, by treating both our research subjects and our research consumers as humans, and by logging off Zoom and spending more work time in the real world, we can add even more value to the work we do as research professionals.

About the authors

Alice King, Senior Strategist, The Lab Insight & Strategy, Sydney, Australia. Andrew Therkelsen, Managing Director, The Lab Insight & Strategy, Sydney, Australia. Chris Moschos, Head of Innovation & Insights, Lion, Sydney, Australia.

Empathy and its Role in a VUCA Business World

A framework for the deployment of empathy as a marketing tool in organisations

Anju Joseph Adrian Terron Kavita Mahto

Introduction: how empathy can lead to EBITDA

What sometimes seems like turbulence and tumult can often be a symphony in the making. Like a duet between jazz musicians or the famed "Jugalbandi" from Indian classical music, where a spontaneous coming together starts with uncertainty but melds into harmony. This kind of "blending", with empathy as the catalyst, is the new basis for creating greater consonance and connection between brands and consumers.

After all, establishing empathy between two parties is much like a duet. An act of co-creating deep meaning and melody, as equal participants in an exhilarating union. It is the forming of an alliance shaped to forge uplifting experiences, that can captivate the senses and transcend mundane marketing.

In a world where consumers say that they wouldn't care if 74% of the brands they use disappeared and feel that less than 27% of brands improve their lives and well-being, the need to bond more closely with consumers is more urgent than ever before.

The challenge therefore was to create a clear, contemporary and common definition for empathy in developing markets like India.

This was necessitated by a set of circumstances for both consumers and brands which called for a way of mending and augmenting the future relationship between the two.

For consumers, there was an urgent need to address:

- A feeling of alienation and of being "used" by brands for mere profiteering through transactions
- Increasing isolation and loneliness perpetuating a vicious cycle of poorer mental health and depression
- Ensuring a way of redressing the fact that rapidly altering expectations from brands are increasingly being unmet or altogether ignored.

For brands too, we needed to devise a way to address the:

- Increasing cost of attracting and retaining consumers
- Decreasing profitability of brands that do not create deeper connections with their consumers
- Mistrust and suspicion between value chain partners, e.g., retailers/distributors, that risk increasing the cost of doing business

The intended outcomes of this research were to:

- Develop a reliable and replicable method for brands to authentically demonstrate empathy.
- Establish a clear and pragmatic model for consumers to perceive empathy as delivered by brands.

Key marketing and brand dilemmas

This led to a series of challenging questions that brands would face on this journey such as:

- Will consumers appreciate empathy from brands when the profit motive exists and may lead to consumer scepticism?
- How is it possible for brands to reflect a concept like "empathy" in their actions when it is a concept that does not have a universal, commonly agreed-upon definition?
- Will observing and demonstrating empathy impede a business's ability to compete and generate consumer loyalty more effectively?
- How can empathy be instilled across the value chain and at the frontline to influence the "moments of truth" experienced by consumers?

Methodology

To decode and define what empathy could mean for one eighth of humanity, and by extension the developing world, Quantum and Tata Sons undertook experimental anthropological research, which included the analysis of digital ethnography and a review of historical literature. The primary research tools were expert in-depth interviews and empathy storytelling sessions with sexual and religious minorities, pet caregivers, design professionals, economically challenged groups and marketers. In addition, we met regular consumers and "prosumers".

The idea was not to have a complex and rigidly structured conversation with consumers about the academic concept of empathy, but instead to map, measure and identify consumer experiences of empathy to evolve alternate sets of ways to discern the experiences of empathy.

We did this through three modes: A) Digital Ethnography and Social Listening; B) Empathy Storytelling Sessions; and C) Expert Interviews.

Digital ethnography and social listening

Digital ethnography and social listening exercises were used to conduct a preliminary analysis using secondary data available online to nuance our understanding of consumers' perception of empathy and brands.

Given the ever-increasing volume of consumers online, there was a significant opportunity to mine and analyse publicly available social media feeds (platforms such as Facebook, Instagram, Twitter, etc.), video blogs and articles around the topic, especially pertaining to brands.

Key information areas

- Conversations and chatter about and relating to empathy stories, incidents, their settings and contexts, associated markers and key cues of empathy.
- Consumer reviews, preferences, pain-points relating to brands.
- Videos that had gone viral given the empathy quotient.

Empathy storytelling sessions

Mini-focus group discussions with religious minorities, members of the LGBTQIA+ community and prosumers, in addition to mainstream consumers.

These sessions were in two parts:

Part 1: Priming

We introduced the concept of empathy to consumers PRIOR to the discussion, and we asked them to think of experiences, incidents, anecdotes that they felt had been empathetic.

Priming as a method is a powerful psychological tool that aids memory and adds to the richness of the conversation.

Part 2: Empathy storytelling sessions

These respondents were then met with as small groups wherein two types of conversations were had:

- 1. Sharing of personal experiences
- 2. Use of psychology/sociology tools that helped access

the subconscious/unconscious

Examples of such tools are psycho drawings, collagemaking, scenario completion, role-plays, dilemma scenarios.

Table 1

Key information areas

- Understand the definition of empathy
- Narratives in popular culture, mythology and folklore
- Gather personal experiences of empathy (receiving and giving)
- Explore and interpret the consumers' conscious and subconscious experiences of empathy from brands across various levels and the expressions, gestures, feelings associated (before, after and during) with these moments to arrive at ideas surrounding empathy
- Micro-macro spectrum the design pros and cons, anxieties addressed (high priority vs. low priority), purpose/cause taken up
- Deep empathy-apathy spectrum identify what does and does not count as empathy, why/why not
- Understand the consumers' perceptions of various brands mentioned products and services their perceived strengths and shortcomings
- Decipher the tangible attributes and markers of the experience, and the context in which it was received

The purpose of this component was to identify potential codes from consumers' experiences of empathy and with the help from experts, arrive at principles that help design brands around the notion of empathy.

Expert interviews

We interviewed expert practitioners like animal-care experts, hospitality experts, product designers, counsellors and marketers, to enable deeper understanding around the experiences of empathy from various experts, to obtain data on recognising and addressing consumer needs and ascertain the identifying principles of empathy (for brands).

Key information areas

- Explore and interpret the expert mindset across the deep empathy-apathy spectrum identity what does and does not count as empathy, why/why not and the expressions, gestures, feelings associated (before, after and during) with these moments
- Understand how experts recognise and interpret the need for empathy
- Expert PoV on differences between service and product brands on empathy
- Perceived future of empathy
- Trends in the space
- Empathy guardrails for brands

The combination of these three key components helped us triangulate a nuanced interpretation of empathy. Further, the use of key sociological and psychological techniques was used to facilitate the creation of actionable insights that brands could deploy on their journey to greater empathy.

The schematic below integrates the three key components:

Brand question	Technique	Interpretation and insights
How can empathy be converted	Psycho-drawings: consumers	An emergent definition of empathy
from the unarticulated to the expressed?	drawing scenarios of empathic interactions	as an exchange that recognises and embraces multiple different
	Collages: pictorial depictions of empathy chosen by consumers Trait-building: personifying empathic behaviour	realities and creates customised, humanised, non-hierarchical connections. It is also bidirectional, multisensorial, emotionally honest, and creates deep connections.
How does empathy manifest in the experiential domain and what are its limits?	Social media ethnography: trawling social media conversations pertaining to moments of empathy expressed in varied situations	Discovering nine principles that can guide the creation of more empathetic brand strategies
	"Absence of empathy" exercises: visualising situations in which empathy was unexpressed despite its dire need	
How can empathy be defined clearly and sharply so that it is	Synonyms: words denoting empathy	Defining clear "guard rails" for what empathy should look like, when it should be applied and when it should be restrained in the physical and virtual world.
comprehended correctly?	Antonyms: words denoting the opposite of empathy	
	Distinction from "neighbourhood concepts" like "kindness" and "sympathy"	p Jan 1 and
Are there pragmatic techniques of empathy that can be demonstrated in everyday life?	Mythology: mining myths originating from socio-religious beliefs that manifest in consumer conversation	Creation of a glossary of "empathy practices" that can be understood, emulated, and acted upon by stewards of a brand across the
	Folklore: decoding popular stories that form part of everyday narratives about empathy Social media ethnography: trawling social media or publicly acknowledged examples of empathy	organisation.
	Pre-tasks like imagery representing empathy, song lyrics, movie scenes, speech bubbles, products and brand examples that exemplify modern manifestations of empathy	

What does empathy look like		
when embedded across		
perceptible touch-points?		

Incident deconstruction: breaking down specific memories to decode what tangible markers of empathy emerged (words, gestures, expressions)

Storytelling linked to me, my world, and the world: narrating experiences of empathy linked to oneself, family, colleagues, and strangers

The ability of brands to vary the application of empathy to maximise it at specific moments of truth.

Table 2

Each of the interpretations, insights, and examples of their applications for brands is mentioned in subsequent sections of the paper.

Defining empathy and its application in the business context

An emergent definition of empathy: by using this combination of techniques we discovered contemporary interpretations of "empathy". As a result of this, we now define empathy as "an exchange that recognises and embraces multiple, different realities and creates customised, humanised, non-hierarchical connections". It is a two-way, multi-sensorial exchange of emotional vulnerability that creates deep human connections.

However, this still begs the question: can businesses, or the brands that represent it, be empathetic? Simply put, can a business's actions be considered empathetic if they entail an exchange for a consideration?

Our research indicates that consumers do perceive empathy in businesses if they truly solve a problem or fulfil a need effectively. What's more, consumers are more than happy to obtain this in exchange for payment. At first, this seems the antithesis of what the common notions of empathy have come to be.

However, while this exchange can be categorised as a transaction – the exchange of a solution that solves a need, for money, it should not be mistaken for a "transactional relationship" i.e., one devoid of keen understanding and mutual appreciation of each other's position.

"They (brands) are doing business and they understand the end users. That is fine. Profit will be (important) in the market."

Delhi, Males, 32 - 38 years, NCCS A1

The Empathy Tenets Is an Exchange – not a one-way process Is a space of Emotional vulnerability Has pay offs for both parties (the Giver and the Receiver) Can be learnt Impathy Involves action and courage Is multi-sensorial Requires Engagement, Curiosity and Open-mindedness Requires Presence and Attention – being in the NOW Is Enriching Vibrant and Safe

Figure 1: The empathy tenets

How brands can devise and deploy strategies for greater empathy

Nine principles that can guide the creation of more empathetic brand strategies

The study was able to crystallise an ineffable concept such as empathy into sharp business and brand dimensions, and bring it alive through the Brand Empathy Doughnut. In line with the conceptual idea of empathy being non-hierarchical, the doughnut has no hierarchy. Each of the dimensions is equally relevant and brands may choose to demonstrate one or more, but not necessarily all nine.

This was further validated by co-creating strategies with 15 CMOs (each representing different categories and brands) to cover a range of brand touchpoints.



Figure 2: The brand empathy doughnut

These dimensions are elaborated in the following sections:

1. Delivery on promises

One of the fundamental building blocks of empathy is the most pertinent – brands need to ensure they deliver on their functional promises. Because the marketing world is fraught with hyperbolic promises, delivering on primary functions that the category and brand claims is seen as empathy. This makes the consumer feel satisfied and prevents disappointment. It reassures her of the choice she has made. "I need something for protection and moisturisation. There are 1000 products available in the market. But Nivea is working for customer satisfaction" said Chennai women.

Implications for brands: Brands need to ensure clear and unambiguous communication of their ability to convincingly meet the brand's promise without being obfuscated by exaggerating just the end benefits.

2. Access

Brands should ensure that they incorporate diverse/inclusive ranges, affordable options, availability at nearby or easily accessible outlets and cater to a wide diaspora through products or even communication that can be viewed as empathetic. Men in Indore, a smaller metro in India, said "Domino's pizza does not only target people from high society, they target medium and low range people also. Everyone should be able to afford it, and everyone should be able to eat it."

Inclusivity is a crucial form of access because it includes "non-mainstream" audiences who would have otherwise felt left out. "Dove soap, compared to the advertisements of others, is so different. It moisturises well and, in its advertisement, one person is fat, another is short, or curly-haired. They say, don't see the shortcomings, see if you are healthy. That is more important than beauty."

Implications for brands: In a manner that befits a brand's positioning, brands should constantly think about expanding physical, emotional, or psychological boundaries to demonstrate that they exist to serve the customer.

3. Consistency

Brands must maintain the promised quality and deliver on claims across offerings over long periods of time, to create a sense of deep reward for consumers. An iconic Indian, co-operative brand in the foods space has been demonstrating this since 1946, for over 75 years and consumers in Indore eloquently articulate this when they say: "No other product gives the quality that Amul gives. They give quality and taste and they have maintained their status; whether it is milk or butter or cheese, there is no one like them in the market. They understood that if we give quality to the customer then the customer will not leave them and go elsewhere."

Implications for brands: As brands expand into new geographies, categories or segments they need to ensure that they adhere to the same expectations (across attributes like quality, value, delivery, aesthetic etc.) that consumers ascribe to them to avoid dissonance.

4. Reimagined convenience

Brands should constantly think on behalf of the consumer and attempt to make their stressed and pressured lives easier or hassle-free. This helps consumers feel "efficient", and empowers them to devote time and effort to things that matter to them. "Working women don't have much time to cook for their kids and so kids can cook Maggi themselves and one Maggi is good enough to fill the stomach."

Implications for brands: Leveraging this principle requires brands to constantly appeal to consumers by reducing effort, making purchase and use easier, as well as reducing any psychological burdens by reimagining different aspects of the brand or category.

5. Specialisation

Brands could adopt an approach to developing sharper propositions that cater to specific or unique needs. This results in consumers feeling special and catered to. Young men in Indore speak of Spotify and say, "If I am in a dance mood, I will only listen to dance music or if I am emotional then I will only listen to emotional music, so Spotify has an option of shortlisting in which they arrange songs according to the mood of the listener beforehand and according to your mood the playlist is generated automatically."

Implications for brands: Brands that use the principle of specialisation could do so by diving deep into a specific expectation consumers have from the category and over-performing on it by constantly evolving how consumers needs are likely to progress over time.

6. Personalised attention

Paying attention to the individual when needed by being responsive, measured and prompt in service and communication is another way for brands to execute empathy. Paradoxically, openly accepting one's mistakes also contributes to deep, humanised connections between brands and their franchise.

Equally, any expression of customised attention makes consumers feel prioritised and puts concerns at ease. It gives a sense of control in a VUCA (Volatile, Uncertain, Complex, Ambiguous) world by making the situation less ambiguous. Amazon stands out as an example on this dimension. "Amazon understands. The way they give assurances that their product delivery will happen in so many days, the way they give you updates, they communicate with you, it is their way of working. They are professionals in their work, and this makes us feel they are very empathetic."

Implications for brands: Brands that use the path of personalised attention could do so by emphasising through the way they design their product/service/experience that they have used a different and deeper understanding of the individual.

7. Passionate commitment

For brands, making an investment in one's area of focus, striving for authenticity, possessing mastery that delights via superlative experience delivery and a display of ardour towards the subject are decoded as empathy. This commitment by a brand enables a consumer to think of themselves as an enthusiast of subjects allied to their areas of interest. A branding expert says, "I think Apple is designed for humans; like it has that arc of thumb in how they've designed the iPhone, it's like every key you type should be able to have a single hand play ... so it's outstanding."

Implications for brands: Brands should make their "obsession" with excelling in their chosen category or field of expertise evident to customers by showcasing their industry recognition, engaging customers intellectually, and creating and disseminating thought leadership, leading to an overall betterment of "mastery". This allows the customers who patronise them to be seen as "connoisseurs" or "afficionados" of the category.

8. New possibilities

Devising interventions that create a sense of "awe and wonder" are critical to humans feeling like their lives are being elevated and enriched. To be perceived as empathetic, brands should focus their innovation workstreams on solving unarticulated problems, and create products/services or even features that go beyond consumer imagination.

Prosumers in Delhi speak of Google maps: "Google maps is not for the best routes alone. You can search for gym and coffee shops and get the number and do the booking. They thought of giving us everything under one roof. We do not need to visit other apps. This is empathy."

Implications for brands: By blending "novelty" with "ingenuity", brands can meet needs that may have been deemed trivial by others and left unaddressed as a result. E.g., wearables that don't just measure your heart rate but also ping your emergency contacts when it spikes beyond a prescribed range.

9. Beyond profit

Businesses could endeavour to go beyond profit by contributing to the greater good. When a consumer affiliates with brands that truly demonstrate this, she feels proud about doing her bit for society vicariously. It eases the guilt of consumption and lack/inability to contribute in larger, more meaningful ways. Large conglomerates in India that regularly contribute to causes of national importance are oft-cited examples of this form of empathy. "Tata and Mahindra are helping socially, and they are helping India, they are helping the government. They are doing great services in terms of building the nation."

Implications for brands: Brands could adopt an "altruistic instinct" that is demonstrated by going beyond the narrow confines of their category and addressing societal or other needs that solve issues important to their target audience.

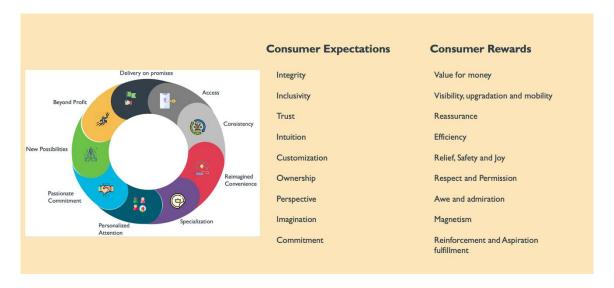


Figure 3: Empathy rewards

Empathy: what it looks like in the real world

Enabling the embedding of empathy requires a few key practical actions on the part of brands hoping to institutionalise it. These are:

Gauging openness: The giver takes stock of whether the receiver does, in fact, seek empathy from the giver, in a specific manner and at a specific time.

Mindful observation: Observing minute aspects of the receiver, like their body language, the tone of their voice and, their facial expression enables the giver to make an accurate and effective assessment. This requires complete attention focused on the prospective recipient.

Deep listening: By allowing the prospective recipient to speak unhindered and without interruption, or resisting a premature eagerness to provide quick solutions.

Tonality and voice modulation: The human voice is a potent tool to mediate interactions. The vocal gestures of empathy are a low pitch of voice, softness in enunciation, an unhurried pace, tender courteousness, and a soothing demeanour that absorbs the recipient's energy.

Apt body language: The giver's body language, another key non-verbal aspect, should be inviting and comforting, while ensuring that any traces of imposition or duress are eliminated.

Eye contact: Maintaining complete eye contact allows the giver to communicate that they see the receiver for who they are in the same way that they see themselves. "There should be a smile in their eyes, like a warm welcome."

Touch: It provides the opportunity to synchronise between giver and receiver and convey a host of messages while also serving as a balm for frayed nerves. It is important however, to ensure that the recipient sees it as appropriate, consensual and matched to their level of comfort. It can of course, take several different forms:

Holding hands: The human hand meeting to clasp or clap another hand is a nearly universal gesture between giver and receiver, across age, gender and relationships, to signal the transmission of support, solace, or celebration.

Embrace/hug: Usually reserved for relationships that share a degree for familiarity, "hugging" evokes a sense of camaraderie or comfort, or even cognisance of what the receiver is experiencing in the moment.

Pats on the back, shoulder, head or hand: Used frequently when the relationship between giver and receiver is less involved and less familiar. While the mere presence in a moment requiring empathy sometimes suffices, a casual touch is an unambiguous expression of intent.

"Consent and a low stress environment are critical. Understanding individual references of each animal and then working to kind of help with those. Ideally, let the animal make the choices, respect their boundaries – this helps build trust."

Animal Care Expert

This has implications for marketers, organisations and frontline workers given that use of some of these cues could dial up empathy, while their absence could take away from what could be a more fulfilling experience for the consumer.

Unmuting empathy over the internet

Even in an environment where interactions across boundaries and borders are facilitated by disembodied talking heads over an MS Teams or Zoom meeting, the opportunity to demonstrate empathy remains undiminished. For empathy not to be imprisoned by technology and virtual interactions it must accord to a few principles.

Rapport Building: Commonly dismissed as "small talk", the idea that any preamble on topics current and common interest or even inquiring after each other can establish a rapport holds true.

Facial Visibility: Keeping the camera on, maintaining eye-level view, and speaking "to" the recipient is of crucial importance in signalling empathic engagement.

Language Familiarity: This may seem obvious but often the tendency for each participant to lapse into their language of comfort, or the use of esoteric or technical terms can also alienate others and act as an impediment to empathy. Additionally, allowing for multi-lingual interactions in countries like India creates a sense of inclusion and acceptance.

Techno-inadequacy: It is imperative that the thoughtful and deliberate use of expressions like facial expressions or hand gestures be used. Similarly, allowing others to fully express themselves uninterrupted or non-verbally acknowledging other people's input through nods and mentions, modulating one's pitch, tenor and volume can play a key role. Being undistracted by other devices or occurrences outside the meeting is equally important.

When does enacting empathy go wrong?

Defining the clear "guard rails" for what empathy is and isn't: when empathy is enacted and deployed correctly, it creates meaning and deep connections for both parties.

In sharp contrast, what clearly constitute the opposite of enacted empathy are actions that evoke opposition, indifference, or a lack of fit between the receiver's needs and the giver's actions. Brands should also be aware of this, and ensure they observe these guard rails.

Opposition and indifference are easily understood as non-empathetic behaviours. However, an interesting finding of the study was the imperfect delivery of empathy.

This occurs when there may be an effort to empathise, but it does not yield the desired results. Situations when the giver thinks his/her actions are empathetic, but the receiver might think otherwise. Young girls in Delhi told us:

"Some boys show off that they are helping the girls, but it goes overboard. The girl might only be asking for you to drop her to a point, but they will insist on walking with you till your hostel. I feel it is not needed, so stop. That is going overboard."

From a marketer's point of view, this becomes important because in empathy terms, "more is not equal to better". It is critical to calibrate the "right" level of empathy. Or else, it might not be seen as empathetic.

Empathy vs. sympathy and other forms of benevolence

The fundamental difference between empathy and other forms of benevolence is intent. Empathy breaks culturally or socially constructed boundaries and places the "other" on the same side as oneself. The act of empathy is rooted in seeking to understand the situation and interpret it from the point of view of the protagonist. Empathy also reduces the "power distance" to forge human connections rather than operate from a position of superiority. Sympathy, on the other hand, perpetuates the status quo but empathy breaks the status quo by elevating, engaging, and energising the connection between the two parties involved.

Empathy, in its truest form, is non-judgmental, human and understands things from the other's perspective. A 25-year-old consumer articulates it beautifully:

"Suppose somebody comes to you and tells you that something bad has happened to them. You sympathise saying that you too are feeling bad for that person. But empathy is when you go to that person who is suffering, help him, hug him, and support him. So, there is a difference. Empathy goes a step beyond sympathy."

"Watch-outs" for marketers and organisations

While taking cognisance of what enhances the practice of empathy, it is equally important to be aware of what might impede it. Empathy is a potent force; a gentle electricity that can recharge human relationships. Its benefits are unarguable and yet it is often besieged by a variety of factors.

Knowing what they are, and why they can often impede an uninterrupted supply of empathy is the starting point to ensuring that empathy mediates interactions and leaves them awash in positive outcomes for both giver and receiver.

The two key categories of barriers to empathy reside in 1) the sense of self and 2) a person's socialisation and orientation

- 1. The Sense of self: How a person perceives their self-identity and their role in each interaction can have various diluting effects on empathic behaviour.
 - *Egocentrism:* Individuals' obstacles to demonstrating empathy can stem from who each of us is innately or is conditioned to think we are. When we disregard the feelings of others in favour of how we feel, this stymies empathy.

- *Power:* A sense of superiority stemming from feelings of power or authority can serve to subtract empathy.
- *Too much effort:* When empathy is perceived as requiring inordinate effort, or too onerous, it becomes less likely to be attempted.
- *Time deficit:* A perception that the act of empathy might take more time and might therefore strain the giver, makes it less likely to be employed.
- *Distraction by technology:* Distraction by devices dilutes the expression and experience of empathy since the giver's focus is likely to be diverted.

2. Socialisation and orientation

- *Biases:* Prejudices, heuristics and preconceived notions can anchor a person away from the present situation and context.
- Conditioning: Prior experiences, instilled beliefs and life experiences shape how we see others.
- *Morality:* Predefining virtuous traits in a person or what qualifies as being "good" or "bad" may lead to prejudicial views of a person.
- Lack of knowledge: A limited frame of reference, or narrow and self-referential view of the world may prevent the development of empathy by lack of information or understanding of the facts.
- Reducing avenues for connection: Technology is aggravating the isolation and "separateness" pervading the urban landscape, as well as the ability to understand other realities.

Touching the touch-points with empathy

There exists the opportunity for brands to vary the application of empathy: The Brand Empathy Doughnut is a sound model for how to refract empathy across everyday touch-points in a manner that is perceptible to customers across their experiences of a brand. A brand could choose some touch-points that are important to the customer to energise the connection with the brand, or which are current roadblocks in creating deep, non-hierarchical human affinity.

If we were to think of the broad touch-points of pre-purchase, during purchase and post-purchase, a brand could deploy empathy through simple means, as elucidated above. The hypothetical example below attempts to take the empathy dimensions of Delivery on Promises and Access through all the touch-points to demonstrate its simplicity, and, equally, its splendour:

In the pre-purchase stage, if a brand's communication could be transparent and authentic in its claims, it could deliver on the dimension of Delivery on Promises. If it has an intuitive UI/UX for its website or app, it could cue Access.

In the purchase stage, the range of products could underscore inclusivity and satisfying a wide spectrum of consumers (Access). A well organised, intuitive retail space could again cue ease of Access. Detailed and authentic information on packaging would demonstrate Delivery on Promises.

Post-purchase, customer experience of the product and the grievance-redressal system could cue Delivery on Promises and Access respectively.

If we were to imagine these touchpoints through the lens of another set of empathy dimensions, the touchpoints and the delivery of empathy might be significantly different. Let us take the dimensions of Passionate Commitment and Personalised Attention.

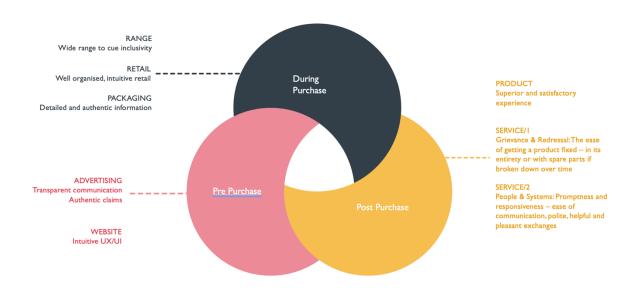
In the pre-purchase stage, the communication for the brand would be extremely specific and profoundly simple, such that it is able to create an empathetic bond with the consumer by evoking inspiration and awe. The website

would again, intuitively reflect adequate and detailed information to be able to deliver to the dimension of Passionate Commitment.

The purchase stage experience would be delivered through experts who demonstrate both insight and an ability to have tailor-made conversations to deliver to Passionate Commitment and Personalised Attention. The retail space would also be designed with the perfect balance of expertise and warmth. The range might not be very broad but there would be options to customise.

The post-purchase stage would have elements that help the customer discover dimensions of the product and deliver both, certainty, and surprise. Innovative ways to be engaged with the customer at times of their convenience would be exemplars of empathy on these two dimensions. Disposal mechanisms too, could be strong differentiators in this space.

Mapping Touchpoints for Empathy- Delivery on Promises and Access as principles



Mapping Touchpoints for Empathy- Passionate Commitment and Personalized Attention as principles

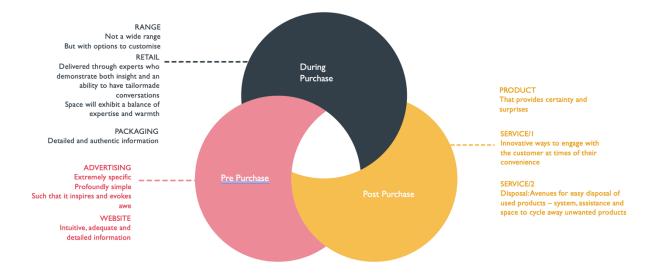


Figure 4a and 4b: Mapping touch-points

Copyright © **ESOMAR** 2023 CONGRESS 2023

Given this, brands should first determine which dimensions of empathy they want to own and then (re)design their touch-points using that dimension.

Conclusion

The contract between brands and consumers needs an urgent renewal. Much like the understanding between performers preparing as prelude to a remarkably resonant duet, both participants are in dire need of the crafting of a new passage in the history of marketing. It is a time for marketers to verse themselves once again in the creation of unbreakable bonds, built on the refrain that people will always remember how you make them feel.

Using a more nuanced and multi-faceted model for empathy can help transform the way brands think about how they address consumer needs. Designing each touch-point with a keener understanding of what people want but may be unable to articulate easily, can harmonise brand and consumer like never before.

Only then will consumers truly join in the chorus of brand advocacy, and build steady bridges between themselves and the marketers who are crafting a more empathic future for the world around them. When all is said and done, the outro to this energising enmeshing will be the legacy of "brand love" that all successful marketers leave behind for others to emulate.

About the authors

Anju Joseph, Managing Partner, India Business Head, Quantum Consumer Solutions, Bangalore, India. Adrian Terron, Head, Corporate Strategy and Customer Centricity, TATA Sons, Mumbai, India. Kavita Mahto, Chief Aashiyana, TATA Steel, Mumbai, India.

One Size Doesn't Fit All

Can news be gender-neutral? How the BBC World Service's mission to address the gender gap in its audience was able to challenge stereotypes and offer a new path towards inclusivity

Maria Bruder Celine Llanta Kevin Cowan Minnie Kweon

The challenge

Women make up 49.6% of the world's population, and yet many businesses struggle to achieve the same proportion in their consumer base. Imagine a world where this is no longer the case; a world where we can all effortlessly tap into the immense potential of women as consumers. It's a challenge that still plagues countless sectors. Let's take the news industry: most, if not all of us, consume some type of news. Yet, if you were to look at the gender balance of the majority of global news broadcaster audiences, you'd be forgiven for thinking that only half of us consume international news. News readership, particularly for international news, tends to skew male. When extended across multiple language services in culturally distinct markets, the target to achieve gender-neutral reach becomes even more daunting.

Our research revealed that in trying to answer how to improve our reach among women, the real issue in fact lay with the question. By posing the question in this way, we risked falling into a ubiquitous traptreating women as a homogenous group. In fact, both men and women share many news behaviours. The research reaffirmed the existence of two main barriers to women's news consumption: the "structural" (physical barriers towards higher education, employment, digital access), and the "mind-set" (entrenched beliefs about the role of women in society). Differences owe more to the degree in which the lives of each are shaped by these two barriers, rather than purely gender.

This was not a new challenge for the BBC World Service; it has grappled with the problem of skewed gender reach for a long time and achieved some positive headway. True sustained progress was confined by several barriers: research studies on female news consumption do exist, but are often limited outside of markets like the UK and US. Internal initiatives to improve female reach were often conducted independently from each other, resulting in "knowledge silos", making it difficult to consolidate learnings in a way that was actionable to the business. The importance of a comprehensive central narrative became apparent, which would enable us to parse fact from fiction and act as the definitive guide for all 42 language services of the BBC World Service.

The approach

This was the impetus leading to the commissioning of this project by the BBC World Service, undertaken by the World Service Audiences team. Due to both the number of markets that we operate in and the range of stakeholders who would be using this research, it was quickly understood that a mixed-methodology approach was needed. To meet this challenge, we employed five approaches:

- 1. Synthesising existing knowledge to identify what we already know, what we don't and the gaps to be explored.
- Ensuring her voice is heard by running a combination of mobile ethnography and in-depth interviews among a cross-section of women in seven key markets. It was originally planned to conduct the ethnography in-person, but this was adapted due to ongoing COVID-19 restrictions at the time of fieldwork.
- 3. Scaling findings from the ethnography in a global quantitative survey.
- 4. Using data science to drill deeper into our audiences.
- 5. Running digital content analysis across internal data to re-visit the feasibility of existing audience targets.

CrowdDNA and Ethos were our qualitative agency partners and Gallup our partner agency for the quantitative survey. We adopted an exploratory design, conducting a qualitative phase first to better understand the role that news currently plays in the lives of women around the world; the hypotheses gained from this phase subsequently informed the instrument design for the quantitative survey to test findings at scale. The final report has helped to guide leadership content strategy, and will act as the basis for workshops across each of our language hubs.

This paper will focus primarily on the findings derived from the statistical and digital analysis in the final quantitative phase. These findings allowed us to successfully challenge how the business had previously approached the problem of reaching more women. Rather than viewing the current gender gap as a symptom of over-serving men, this research proved that it is due to under-serving different audience groups with higher proportions of women, effectively re-framed the issue of gender to one of inclusivity. Instead of how do we reach more women, the question became: how do we reach more audiences?

Background

A backdrop of change

At the time of the research, the corporation's World Service was undergoing a period of structural change, with the aim of streamlining existing operations to better meet the challenge of a digital-first future. This involved recognising the need to pursue a more robust digital strategy in accordance with global media trends. The increasingly important role of social media within the news consumption journey is generally accepted, with growing levels of digitisation leading to a proliferation of alternative news sources. Engaging, targeted and digitally-native, some of these sources pose an existential risk to the BBC, especially in markets

where penetration is still precarious relative to population size. Facebook's recent update, which deprioritises news, has also exacerbated the issue.

Understanding that different markets are at a different stage of digital development led to a historic realignment of the language services, from traditional regional hubs as defined by geography towards hubs that combined services with similar market needs and digital circumstances. The re-structure provided a key opportunity for this research to feed directly into news strategies for reaching (and keeping) underserved audiences.

Scattered progress

As outlined above, previous attempts at solving the problem of gender-neutral reach have met with success, but lacked a joined-up approach that could be applied universally. Experiments and initiatives resulted in "pockets" of knowledge and experience without a top-down mandate. However, the experience yielded three truths to keep in mind for this research:

- 1. Solutions needed to improve reach among women without alienating men. Approaches that successfully engaged both genders were preferred.
- 2. Findings needed to be applicable across all services, as it would not be feasible to re-conduct this research across all markets that we operate in.
- 3. Actionable findings needed to keep in mind the broader strategies of the World Service, which meant its move towards embracing greater digital transformation.

Known "truths"

As a first step it was important to understand the existing assumptions, stereotypes and known "truths" regarding women's news consumption within the corporation. We were then able to use this as a basis to design our research objectives in order to prove, challenge or disprove these hypotheses. We conducted a series of stakeholder interviews from across multiple areas of the World Service including editorial teams, marketing, business development and senior leadership. From these interviews we were able to identify several key internal assumptions which have historically been made about women's news consumption:

- It is because of the countries and/or societies we operate in that we don't reach women;
- Women are not interested in politics, let alone news;
- · Women only consume near-news content;
- The way to reach more women is through "women issues";
- Content needs to be "emotional" to engage women;
- To reach more women, we need women to be the main character in the story;
- Instagram and women's panel shows (i.e., "The Real") are the solution.

When looked at holistically, these assumptions fall into a singular pitfall: the tendency towards treating women as belonging to one homogeneous group. Assumptions about women's relationships to news can fail to take into account the differences in the lived experiences of women across the globe, by instead risking treatment as a monolith with similar needs and barriers. The danger of this reduction is that one risks producing overgeneralised recommendations that try and engage everyone, but can end up not adequately serving any.

Our research needed to produce a more sophisticated analysis that considered the interplay of multiple factors when it comes to news consumption:

- Cultural effects—how societal and cultural norms around women differ by country;
- Life stage effects-changes occurring as people reach milestones;
- · Cohort effects-an age group having different views as they were socialised at a different time.

Approach

The following stages of this project included a literature review and qualitative research. The former allowed us to understand current research and thinking on the subject, as well as to identify the gaps in knowledge. The latter aimed at gaining a deeper understanding of the lives of women, conducting ethnographic research across seven countries: Brazil, Egypt, India, Indonesia, Nigeria, Ukraine and the US. These countries were chosen as they are some of our largest markets for the BBC language services, as well as providing a good cross-section of market types. The original plan for this stage was to conduct direct observation studies in the homes of our respondents. However, ongoing restrictions due to the COVID-19 pandemic meant we needed to adopt a virtual approach. This took the form of a seven-day video diary as well as in-depth interviews, which helped us to understand the lives of women in these markets and their relationships with news in particular.

The final stage of research used the findings of the ethnography piece to inform a largescale global quantitative survey across seven countries: Brazil, Egypt, India, Indonesia, Nigeria, Serbia and the US to understand how reach among women can be improved across the BBC services. Serbia was introduced to the need to replace Ukraine following the Russian invasion in February 2022. Research was conducted by Gallup from July to October 2022. Samples were assembled using online representative quotas for age, gender, education and income in all online markets. Originally, it was decided to cover a broad range of markets thanks to the online methodology. Due to a bigger budget allowance, it was then decided to use a face-to-face approach in Nigeria and India, due to the complexity of these markets; i.e., from a profile diversity perspective in Nigeria, and a language diversity perspective in India.

For the two offline markets, a random sampling approach was been adopted. In Nigeria, a nationally representative sample was achieved. Data from India is representative of 10 out of 28 states: Andhra Pradesh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Delhi, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh. The BBC is available in India in the following languages: Hindi, Marathi, Gujarati, Tamil and Telugu and Punjabi. These states were chosen to provide a representative view of these languages. Weighting was applied to account for the larger sample in India.

A brief summary of qualitative findings

The qualitative stage of this study suggested that there are two main factors that are the driving force impacting news consumption among women in the study: gender norms and mobile internet access. For many women, particularly in low-income countries, gender roles were introduced and enforced from an early age. This effectively mapped out the different spheres of influence and associated responsibilities for each gender, with news consumption behaviour impacted as a result. However, the introduction and increased adoption of internet-enabled electronic devices is beginning to make the news more accessible to women

than was the case previously. As other factors in life stage and circumstance (such as education and employment) begin to mirror those of men, so does the consumption of news. These findings formed the basis of the instrument for the quantitative stage.

Quantitative questions

The instrument was designed in three parts. The first asked our respondents about their daily lives and responsibilities. Questions regarding societal issues, personal goals and perceived available leisure time would help us to find out if there was a connection between these factors and the desire to consume international news. A question that sought to probe gender perceptions across a range of roles was also included to help us understand how far patriarchal ideology played a role. The second stage centred on news consumption behaviours, utilising the same questions we've used in previous projects, to maximise comparability across data-sets. As well as frequency and length of time spent accessing news, we also asked questions on preferred platform, consumption occasions and topics, perceptions of the news category and drivers and barriers for consumption, to get as detailed a picture as possible on their daily news consumption diet.

The last stage was more focused on our respondents' relationships with the BBC. Alongside general awareness and usage, we conducted content testing for a recent debranded BBC article that had been published across all language websites, and headline testing for a universally important topic: cost of living. These tests would enable us to understand if there is an inherent issue with the language and terminology we use and whether alternative approaches would yield stronger engagement.

Key learnings from the research part 1: The world outside the BBC

It's still a man's world

The daily lives of men and women can be different wherever you are in the world. In many areas, gender roles (and their relation to news consumption) are often introduced and enforced from an early age, where women may be encouraged to prioritise the collective (family, home), while men are encouraged to focus more on individual progression. This can be traced to the lasting impact of patriarchal structure, which has previously been recognised to work across two basic levels:

- 1. Structural barriers;
- 2. Mind-set (conceptual) barriers.

The structural barriers relate to factors such as being in full-time paid employment, access to a digital device and access to higher education. External sources such as the *Global Gender Gap* report show that that the world is still an estimated 132 years away from global gender parity, with the gaps in governance, education and employment opportunities, and access to healthcare forming the key factors for calculation. These barriers are often strongest in (though not exclusive to) lower income markets, where gender norms are more likely to be enforced. From the chart below (see Figure 1), we can see how closely women's news consumption is aligned with the social progress index of a country.

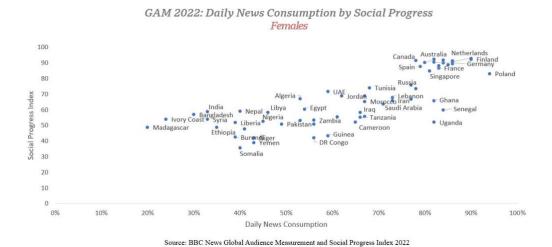
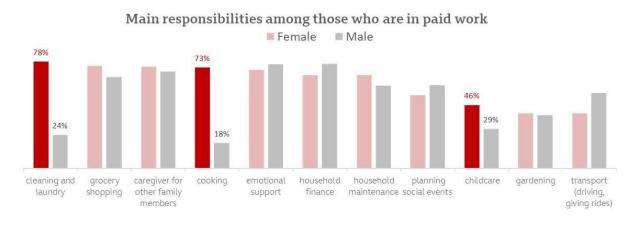


Figure 1

However, even in more developed nations where women's news consumption is higher, we still see a gender gap in consumption because "mind-set" barriers are still in play. Mind-set barriers can be characterised as the societal expectation for women to take on the bulk of unpaid domestic labour, i.e., cooking, cleaning, childcare etc., alongside the associated mental and emotional loads. Figure 2 highlights this discrepancy across all markets. Even among those with full-time jobs (i.e., working 30+ hours a week, proposing that a similar proportion of time is spent each week on work), the division of labour for cleaning, cooking and childcare is stark.



Base: Males=2750, Females=2077; respondents with employment status = have a paid job (even if part-time or informal)

Figure 2

Why is this the case?

Culture is one of the forces shaping societal norms: views on gender will differ by country, ethnic group, religion, political belief, etc. The condition of women has been evolving at different rates across regions.

Societal changes take time, and transitional phases will be a reflection of the remnants of the past and the aspirations of the future. To better understand the relevance of cultural values and the impact this can have on news consumption, we looked at gender equality into more detail. Within our survey, participants were asked about diverse tasks and roles in society, such as pursuing higher education, leading in government and institutions, supporting the household financially, choosing who and when to get married and working at a full-time paid job. They were asked whether it was more important for women, more important for men or equally important for both to conduct these tasks or to fulfil these roles. Our analysis showed that the majority of respondents thought most tasks were equally important for both men and women, although the proportion differs notably by market. When we analyse markets by the degree to which respondents are categorised as "male skew" or "female skew", these differences become more pronounced, with Indonesia, Nigeria and Egypt in particular displaying sizeable "male skews" (see Figure 3).

Gender Equality for Tasks and Roles in Society 90% 88% 85% 78% 73% 69% 60% 30% 25% 34% 12% 9% 9% 6% 10% India Serbia Brazil United States Indonesia Nigeria Egypt Skew Female —Equal -Skew Male

Base: Brazil: 971, United States: 1073, India: 2070, Nigeria: 988, Serbia: 990, Indonesia: 989, Egypt: 912

Figure 3

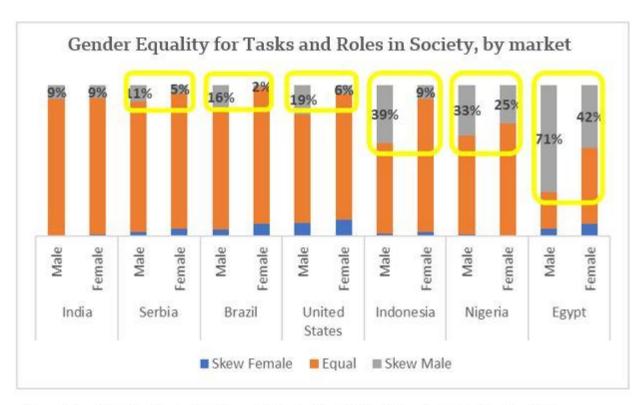
The disparity can also be seen across gender; with the exception of India, women were more open than men when it came to gender equality. Not only did female scores reflect a higher adhesion to gender equality than men overall, but they were also significantly less likely to "skew male" than men are (see Figure 4). Further to this, there was a distinct pattern in the types of tasks most likely to be ascribed to one gender. Tasks which related to family were often assigned as being more important for women, across both genders. Tasks which related to finance, career and being in governing or leadership roles were more likely to be ranked as more important for men, especially among males.

Looking forward

Although there has been steady improvement in gender parity, the impact of the pandemic and rising inflation has caused a stagnation in many regions, as well as active backsliding in others (most notably south Asia). One area where this stagnation can be measured is that of digital access. The impact of the pandemic

and the current global economic down-turn is also negatively impacting the rate of digital access among women, particularly those from low-income areas. The GSMA 2022 *State of Mobile Connectivity* report demonstrates how the pandemic has had a devastating effect on poverty-eradication, causing greater levels of inequality and reversing pre-pandemic trends. This has since been exacerbated by the war between Russia and Ukraine, in combination with rising inflation and disruption to food supply, placing higher levels of pressure on vulnerable populations.

Although mobile and internet adoption has continued to increase, the rate has slowed and growth is unequal. The rate of adoption of mobile internet has stalled among women since 2020, and the gap in gender usage has in fact widened since 2020 in south Asia and sub-Saharan Africa. This means that the rate of mobile internet adoption among women has not increased in line with similar adoption by men. The implication for the BBC World Service is that as we move towards embracing greater digital transformation, these trends show that our gender skew is likely to worsen in the short-term as a result.



Base: Brazil: 971, United States: 1073, India: 2070, Nigeria: 988, Serbia: 990,

Indonesia: 989, Egypt: 912

Figure 4

Key learnings from the research part 2: Our audiences

The drivers of news consumption

To be able to pin-point the reason for disparity in the news consumption of men and women, we first needed to establish what drives news consumption. Using multiple logistic regression in SPSS, we were able to determine the variables which had an impact on news consumption. We then conducted key influencers

analysis in Power BI to understand their relative influence. Using this approach, we found that being in full-time paid employment had the highest level of influence on daily news consumption. This is followed by high levels of digital literacy and education. Table 1 shows the likely increase of daily news consumption according to specific factors.

Employment: Full-time paid	1.25x
Digital literacy: High	1.19x
Education: High	1.18x
Employment: Retired	1.16x
Gender: Male	1.12x
Parenthood: Children at home	1.11x
Political leaning: Conservative	1.09x

Table 1

Interestingly, being male does appear to have a statistical impact on the likelihood of consuming news daily. The gender gap for educational attainment, health and survival are the closest to universal parity (more than 90% average of the gap closed globally). However, there still exists notably large gaps in economic participation and/or opportunity (only 60% global average of the gap being closed), while the mobile internet gender gap in some regions is as high as 41%. The fact that being male appears as a driver of frequent news consumption serves to underline the uneven level of access to employment, education and mobile internet experienced across gender. Some minor but important details were noted when analysing the drivers for each gender individually. Amongst men only, being in full-time work is the primary driver. Although full-time employment is still an important factor for women, the key driver is a high level of digital literacy.

Market-level nuances were also observed:

- In India, high digital literacy and educational levels are the main drivers for women;
- In Egypt, Indonesia and Nigeria, women in full-time paid employment with at least one child at home are more like to consume news daily;
- In Serbia and Brazil, two of our more developed markets, retired women are the heaviest news consumers.

Copyright © **ESOMAR** 2023 CONGRESS 2023

Having established these drivers, we then sought to analyse the reasons behind why these can differ between men and women.

A day in the life

The structural and mind-set barriers that are a result of gender inequality have a profound impact on the forces that shape the daily lives of women and, crucially, how they differ from men. Through our analysis we have observed two broad categories for such forces.

- 1. Personal
- "Me factors" that influence personal outlook: location (urban/rural), income, personal values and aspirations;
- "Life-stage": Common milestones or societal markers that will also impart a set of shared values and/or shared priorities, such as marital status, parenthood, education and professional (working) status.
- 2. Contextual
- Market forces that are distinct to their particular environment: political landscape, gender norms, main language spoke, religion and GDP;
- Cohort: Categorisation of digital literacy, based a) on smartphone ownership, and b) level of ease in performing a range of increasingly complex activities on your smartphone.

Audience typologies

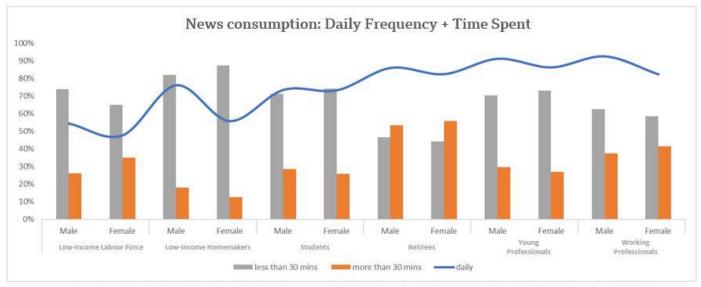
From our analysis of gender norms and expectations across our markets, we identified eight key forces that influence the daily lives and behaviours of men and women: education, income, parent of children under 18 in the household, marital status, digital literacy, moral values, political view and gender equality perception. By using cluster analysis, we were able to use these variables to uncover six over-arching audience groups:

- 1. Low-income labour force: Poorest of all groups, low levels of education, highest levels of informal work and/or unemployment. Mainly rural with low digital penetration.
- 2. Low-income homemakers: Lowest levels of education, highest number of self-identified homemakers with children in household. Mainly rural with low digital penetration.
- 3. Students: Youngest of all groups, mainly single and/or non-parents, time-rich, low levels of responsibilities, highly digitally literate. Medium income.
- 4. Retirees: Oldest of all groups, mainly married, widowed or divorced with no children in household. Medium income, some digital penetration, but strong preference for linear.
- 5. Young professionals: Highest income across all groups, mainly single or young families. Urban with strong digital literacy. More likely to lean Conservative.
- 6. Working families: Most educated group, all parents with children in the household. Predominantly urban with the highest number of people in full-time work. Digitally confident.

All groups were mixed gender to illustrate that the lived experiences of men and women can be shaped to the same degree relative to their contextual circumstances. However, due to the imbalance of forces that impact the lives of men and women, some of the final audience groups were found to skew more naturally towards a single gender than others. As seen earlier, frequent news consumption corresponds with levels of education, professional work, income and digital literacy. The reality of these findings could be viewed across

our groups, each of which experience a distinct rhythm of news consumption. Digitally literate, educated professionals and the older retired group are the most likely to consume news daily. This is followed by our students, and finally those groups from poorer, more rural areas with lower digital access.

When analysing news consumption behaviours (see Figure 5), we found that these are strongly aligned among genders across our groups, both in terms of frequency and time spent with news per day. The biggest gender disparity in daily news consumption can be found in groups 2 (low-income homemakers) and 6 (working families—our most time-pressed parent groups), suggesting that the additional responsibility and mental load associated with childcare has a disproportionate impact on female news consumption versus male. Crucially, news consumption amongst women in group 6 is still proportionately higher versus those in group 2, due to their higher level of education and digital access. The groups with the least disparity across gender are students (group 3) and retirees (group 4)—i.e., the most likely to not have children in the household. The removal of this extra responsibility and associated tasks, alongside equal access to other resources (paid work, digital devices, education and income) may help to explain this.



Base: Group 1: m=647, f=559; Group 2: m=473, f=761; Group 3: m=855, f=1028; Group 4: m=496, f=430; Group 5: m=1011, f=510; Group 6: m=599, f=801

Figure 5

This finding allows us to directly challenge homogeneous stereotypes around women's news consumption. The reality is that news consumption is more closely aligned with life circumstances than with gender. For instance, the behaviour of a young female professional who is single, highly-educated and a non-parent can be very similar to her male counterpart when it comes to news consumption. When looking at BBC penetration in particular, we also found a similar trend with reach levels corresponding more to the group a respondent was placed in rather than only their gender. Engagement with BBC News was found to be highest among the most affluent groups, particularly those with higher levels of full-time employment and digital literacy. These groups were more likely to be urban, consume news multiple times a day for longer periods and across multiple platforms.

To account for the gender disparity in news consumption at a total level, we needed to look at the size and composition of each of the six groups. This revealed that the group in which the BBC currently has the

highest reach (young professionals) made up the smallest proportion of the total respondent group. Moreover, this group also included more males than any other—almost two thirds. While working to illustrate exactly why our current reach is more male, this finding also helped to uncover a new concern: even if we were to reach 100% of this audience, we would never achieve gender parity. To reach more women, we need to reach more audiences (see Figure 6).

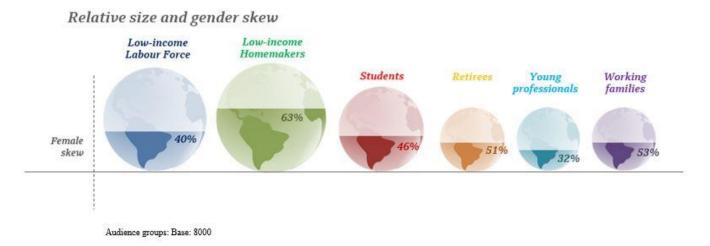


Figure 6

In this way we were able to demonstrate how the issue of increasing reach among women will not be achieved by focusing on women as a whole, but on how we can find ways to better our reach and impact across different types of audiences.

Key learnings from the research part 3: Engaging broader audiences

What this meant for the BBC

We embarked on this research with three key parameters to keep in mind:

- 1. Solutions are needed to improve reach among women without alienating men. Approaches that successfully engaged both genders were preferred.
- 2. Findings are needed to be applicable across all services, as it would not be feasible to re-conduct this research across all markets that we operate in.
- 3. Actionable findings are needed, to keep in mind the broader strategies of the World Service, which meant its move towards embracing greater digital transformation.

So far, we had successfully identified why the BBC World Service mainly reaches men and how reaching more women would require a focus on engaging different types of audiences. To achieve this, we needed to discover what inclusive reach currently looks like. The next section will focus on how we leveraged our own data to understand what type of content works best to reach more audiences at scale.

Challenging assumptions

Analysis of our data-set revealed that there are a number of common news behaviours and barriers shared by the majority of audiences.

Behaviours

- Meal times and evenings are the top occasions for consuming news;
- Search engines, YouTube and Facebook are currently still the top digital platforms for consuming news;
- Education on key topics is the top reason for consuming news;
- Politics is the main news topic consumed by both genders, with the differencing lying more in the levels of assumed knowledge—i.e., men feeling more confident in their understanding of key events, places and people.

Barriers

- Higher education is out of reach for most audiences globally;
- Digital access still has a lot of room to grow;
- News providers must answer a need for convenience;
- The emotional toll of news can be a burden.

The main differences between men and women are linked to the division of daily tasks; women are more likely to consume news when cooking or doing household chores, for instance. This disparity exists across all groups, though to a lesser extent for students.

Reaching women at scale: Digital content analysis

While engaging women more is the ultimate goal, some content is more desirable than others in terms of staying true to the BBC proposition. Some of the sustained effort to engage more women across our services may have had an impact, but at the cost of quality. An analysis of digital content on the social media pages of our 42 language services has revealed that content that reaches women at scale can be different to content that reaches mostly women. Content that reaches women at scale (although it might not skew women percentage or even be gender balanced) do better than average, and represent appealing digital content. In contrast, content that reaches mostly women can be split into two types. The first are often gender-specific in focus, which are editorially important to do, while the second can stray into territories that do not necessarily represent what makes the BBC a distinctive media and news outlet. In order to improve reach among women, we need to prioritise content that engages women at scale.

To help guide journalists on how to achieve this, we conducted further content analysis around relevant key topics: health, the cost of living and the Russia-Ukraine war. By adopting a quadrant approach of high/low male/female reach versus audience numbers, we were not only able to identify the pieces that fulfilled our needs for high female reach at scale, but also show that engagement is driven more by treatment rather than topic. Explainer treatments were particularly effective in meeting this challenge, alongside human-centric perspectives that champion the hero's experiences.

A new empathy

To further inform the creation of content that promises broad appeal, we return to our audience groups. When it comes to news, each group has unique challenges, behaviours, needs and goals. Understanding

this can help tailor our approach to create a news brand that is empathetic to our audiences across the globe. As an example, for those groups with lower levels of education, the top driver of news consumption centres on learning about topics in the news. Increasing depth of understanding of a key issue becomes more of a driver as education levels rise.

Key news barriers identified

- Groups with lower levels of education struggle the most with terminology used in news.
- Knowledge of politicians is the next overt barrier towards engaging with news and, in particular, politics. Although knowledge increases alongside positive social circumstances, a third of our heaviest news consumers still lack a good understanding of who is being talked about.
- News can also feel like a chore, with over half of young professionals agreeing with this statement. Given the high level of news consumption of this group, this is a surprising level of dissatisfaction.
- The perception of intended target audience is an issue for low-income groups; here women are less
 likely to think the news is aimed at people like them, in stark contrast to the men from the same
 demographic.
- This perception balances alongside levels of affluence, with similar proportions across gender in the remaining groups feeling that the news is aimed at them.
- Almost all audiences—regardless of the actual number of responsibilities—feel that they struggle with time. There is a common sense of often needing to multi-task across both genders.
- News needs to feel relevant (i.e., of personal importance) in order to resonate.

To translate these findings into actions for our editorial teams, we synthesised the themes into the following "KIT" framework: knowledge, interest and time.

- Knowledge: Do not presume existing knowledge of a story, topic or subject. Provide explanations, links and summaries to help audiences get up to speed without feeling overwhelmed or patronised.
- Interest: Stories which are not perceived as relevant to the lives of audiences can be quickly dismissed, while some can detach themselves from a situation they feel powerless against (a common response to political coverage). Thus, treatment of "hard news" topics such as politics need to display a clear connection to audiences' lived realities.
- Time: Content needs to offer clear value for time. The time available will dictate the preferred format, meaning that formats need to fit into our audiences' schedules rather than the other way around.

The framework achieved the objectives of bringing together key learnings for achieving inclusivity, whilst still being easily adaptable across markets and services.

Market nuance

It is important to understand that one market is likely to contain multiple audience groups, based on the distribution of wealth, online access, education and urbanicity. The implication is that solutions for improving reach among women for a particular service will need to take into account the group she is likely to belong to, alongside general market factors. The aforementioned KIT framework achieved the objectives of bringing together key learnings for more inclusive journalism, whilst still being easily adaptable across services, based on our understanding of a specific market.

The road ahead: Impact and next steps

This project set out to understand in depth the levers behind the apparent gender disparity in news consumption, and what the BBC World Service could do as a result to engage more. The World Service is currently embarking on a moment of change, navigating a huge re-structure whilst also charting a path towards becoming digital first. The final report proved both impactful and influential on editorial strategy. The findings were able to deliver a clear set of actions to define success at both a global level, and individually across each of its 40 languages. These actions were taken on board by the BBC World Service leadership team with immediate steps to incorporate them into new workstreams. World Service Audiences and the Editorial Executive teams have planned a roll out to bring these findings to our language services, beginning with a series of pilot studies for our most critical services, in terms of size and gender skew. Success for these services would then act as a case study for the remaining languages.

Learnings from the digital content analysis have already been taken onboard. The approach to digital analysis that prioritises audience volume over percentage of gender reach has already prompted a seismic shift in how we define and measure successful engagement. Our understanding of the differences in mobile internet adoption across gender has prompted a re-evaluation of our internal gender targets, leading in turn to the introduction of new targets that better reflect market norms, so that we can contextualise what success looks like across language services. The BBC is constantly developing its strategy to become truly gender-inclusive. Internal networks such as Global Women in News, initiatives like the 50:50 project (which aims to ensure 50/50 gender representation both in all aspects of news production) and content such as BBC 100 Women List (an annual list of 100 influential and inspiring women) are all expressions of the ongoing commitment to this cause. This research will form a key component of this strategy moving forward, providing the comprehensive and nuanced understanding of our audiences that so far have been lacking.

Now that we have fixed the issue with the question, there is renewed hope for the answer.

About the authors

Maria Bruder, Senior Audience Research Executive, BBC World Service, London, UK. Celine Llanta, Senior Audience Research Executive, BBC World Service, London, UK. Kevin Cowan, Audience Research Manager, BBC World Service, New York, USA. Minnie Kweon, Senior Data Manager, BBC World Service, London, UK.

"My Sex, My Way!"

Driving meaningful engagement with the LGBTQ+ community

Oana Stroie

Tania Page

Introduction: the critical role of human expertise in today's tech-fuelled research landscape

The importance of technology-driven approaches in today's agile research landscape is widely recognised – from sampling and automated solutions to real-time reporting, technology is transforming the way we conduct and deliver high-quality research quickly and at scale. Yet in this rapidly changing environment, human-driven research expertise and insight is as critical as ever, whether it's embedded into automated solutions or layered on top to further optimise specifics of research design, implementation or activation.

The study shared here illustrates how the right balance of technology-enabled, human-driven insights can deliver optimal outcomes – how deep client, partner and audience understanding and collaboration, coupled with thoughtful research design, played a critical role alongside smart, tech-enabled approaches; and how this approach has continued to deliver lasting, positive impact to the communities at the heart of the study.

Pioneering sexual wellbeing research

Durex is the world's number one provider of condoms with over 80 years' experience in the sexual health market. Since 2006, Durex has partnered with Toluna Group (Toluna and Harris Interactive) to run The Durex Global Sex Survey (GSS).

Its remit was to provide an up-to-date picture of sexual wellbeing by providing an understanding of attitudes towards sex and sexual behaviour across the globe and reinforcing Durex's position as the global expert in sexual health and wellbeing.

The most recent wave of the GSS covered 42 countries, 30 languages and broke new ground by fielding in traditionally "taboo" markets. It pioneered more inclusive definitions of sexuality, and new, agile formats making the survey more accessible to those in Asia and Africa.

However, whilst being one of the biggest and longest running sexual wellbeing studies, there was limited coverage of the LGBTQ+ community.

Shifting the focus

In 2021, Durex partnered with Toluna Group to launch its largest-ever sex survey aimed at the UK's LGBTQ+ community.

Durex are proud to support the LGBTQ+ community in unleashing the freedom to "their true sexual selves" and playing a role in supporting and championing self-acceptance. The My Sex My Way project aimed to drive this meaningful engagement with the LGBTQ+ community and build brand credibility and purpose. By understanding the challenges experienced by these communities, Durex established priorities to engage with and support the LGBTQ+ community and drive action and change.

"A good, interesting survey with plenty of opportunities to express my own idiosyncratic opinions."

Respondent feedback from My Sex My Way Survey

Respondent feedback on survey design is always welcomed. The above response from a member of the LGBTQ+ Community provided an endorsement that our research approach had allowed members of the LGBTQ+ Community to control their own narrative on their experiences of sex education, acceptance, sexual fulfilment, sexual & mental health and dating.

Durex is committed to providing an accessible, inclusive and appropriate respondent experience for everyone who participated in the study. With this commitment comes challenges – how to obtain a high-quality sample of a relatively small population, ensuring sub-populations of this umbrella term LGBTQ+ were visible and represented, along with the fluid nature of sexual identity and relationships and the deeply personal, sensitive and potentially triggering nature of the topic we wanted to explore.

The design was endorsed by 5000+ people who trusted us by sharing their most intimate details.

The challenge of being inclusive and accessible to all

An online quantitative survey was selected as the best methodology for the study as:

- It is the most inclusive and accessible form of data collection
- It allows for a large sample and sub-group analysis, which ensures that the diversity of sexualities and romantic identities could be captured (See fig. 1)
- It can easily integrate different sample sources, allowing us to reflect the diversity within the community
- Given the sensitive nature of the survey, respondents could complete it in privacy
- Enables respondents to control their own narrative, and to respond to and reflect on the survey in their own words

DEMOGRAPHICS Gender / Sex Female 50% 41% Male Sexuality Gender fluid / Non-binary 6% Straight/Heterosexual 9% Gay 30% Gender non-conforming 1% Lesbian 21% Others 2% 23% Ace (incl. asexual) Age Ranges Pan 5% 18 to 24 38% 25 to 34 35% 8% 13% 35 to 44 Own description of sexuality 8% 45 to 54 5% 55 to 64 1% 65 to 74 75+ durex

Figure 1: Respondent demographics

Collaboration is the key to meaningful inclusion

An innovative, tailored approach was taken with the sample frame for the survey. Rather than depending solely on a single sample source, members of the community were recruited to the survey through different platforms, again recognising the diversity that exists and the different gateways into sections of the community. A social and digital campaign, which appeared in LGBTQ+ spaces, including the PinkNews, and partnerships with dating apps HER and Grindr, helped to boost participation in the survey. High-profile LGBTQ+ Influencers encouraged participation and shared the survey link on social media. In total over 5,000 members of the LGBTQ+ community participated.

To ensure the survey provided the best experience for respondents, two surveys were created – a longer survey for panel respondents more used to participating in market research, and a shorter link that was promoted across public domains.

The longer survey captured more detail across the research topics, whereas the shorter route was created to be more in line with the length of surveys seen across digital media platforms, such as Grindr or HER.

Collaboration was key when it came to the survey design. A partnership between Toluna Group, Durex, and community ambassadors (Stonewall, Grindr and HER), provided a forum to discuss the challenges and sensitivities of the survey design. The MRS code of Conduct and guidelines for best practice when it comes to inclusivity were also adhered to.

- There was a firm commitment to share the research findings and give the community transparency of the data
- Participants were clearly informed about the topic of the survey and the type of questions included. The
 research objectives were also communicated to clarify the reasons for the sexual wellbeing and sexuality
 questions being asked.
- Less sensitive questions were placed at the beginning to build up trust. Respondents were assured that their participation is anonymous, and that the analysis will not be conducted on individual bases.
- Participants were given the option to only answer questions they felt comfortable with, and questions could be skipped at any stage.
- Contemporary definitions of sexuality and romantic relationships were used based on advice from community members and sexual wellbeing experts. We provided an inclusive list of non-mandatory answer options when asking what gender they identified with, and how they would describe their sexual orientation / romantic and/or emotional engagement with other people.
- It was also acknowledged within the survey that some people may identify with more than one of these descriptions.

Owning the narrative

We were mindful that over half of participants (higher still for Lesbian and Trans members) had experienced mental health issues because of their sexual orientation, so sensitive questions started with a caution/trigger warning and options to skip if preferred.

The survey clearly stated that although the questionnaire was created with the best intentions to be inclusive, respondents may see terms used that they don't feel apply to them personally, or they'd prefer they were expressed differently. This honest approach allowed us to gather feedback from the community on future improvements.

The majority shared personal experiences related to their sexuality or simply that they found the survey to be highly inclusive and a positive experience:

"One of the best surveys I have seen in terms of inclusiveness. Well done."

The large number of open-ended questions, blank text spaces asking respondents to add their own answer, as well as giving the community the option to provide feedback at the end was hugely valuable. It empowered the lesser-heard groups to define themselves and their experiences in their own terms. Through this technique, we learnt that how people define their sexuality is fluid, and this can change over time or based on how people feel in the moment. This suggests that sexuality questions should be very open. They may also require clarification around whether it's people's sexuality at the time of answering the questionnaire or the sexuality they identify with most often. Additionally, people generally crave more open-ended questions as opposed to rigid and defined answer options when covering topics around sexuality and intimate relations.

Evidence of the benefit to both Durex and the community

The data generated from the My Sex My Way survey is a force for good. Since completion of the study, Durex has seen the impact on its brand and has started using the results to benefit the community.

Additionally, Durex's brand reach and equity measures suggest improved perception of brand purpose and credibility in terms of supporting and championing self-acceptance.

The results of the survey provided an immensely helpful framework for Durex to continue supporting the community further and establish where this support is mostly needed.

Introducing positive, inclusive, sex education initiatives across UK schools and universities.

Sex Education represents one of the earliest opportunities society has to say "we see and accept you", however, the survey highlighted negative experiences of sex education. Less than 1 in 10 respondents in the LGBTQ+ community surveyed believe that formal sex education gave them the confidence to be their true sexual self or had a favourable effect on their sex life. To date, it has not been a positive or relevant experience for the majority of the LGBTQ+ community. Additionally, 64% of respondents said porn has been the primary education source for them.

Durex have partnered with The Proud Trust (an LGBTQ+ organisation that supports LGBTQ+ young people) to help roll out their inclusive sexual health toolkit across the UK, training professionals to empower young people to express their identity and sexuality their way. Additionally, as part of Durex's Find Your Way campaign, they created inclusive sex education content for young people to help them have the confidence to explore their first sex experiences by addressing their anxieties and providing the knowledge on how to have enjoyable, pleasurable, safe sex. Durex is also working in partnership with Stonewall to bring LGBTQ+ sex education to university campuses across the UK, working to further fill the gap (see fig. 2).



Figure 2: Inclusive sex education with Stonewall

Communications campaign championing self-acceptance

The research revealed that whilst there is a sense of self pride amongst the LGBTQ+ Community, a disturbing 8 out of 10 respondents worry about discrimination, and the majority feel the need to hide some parts of their identity in public. Although societal attitudes have changed for the better, only 13% of LGBTQ+ respondents say they think today's society is totally accepting of LGBTQ+ people.

Durex is increasing awareness of these issues by making these results public on their website, alongside the manifesto that Durex stand for a sex positive society where everyone is supported with the freedom, knowledge and tools to be their true sexual self. The Durex website also features testimony stories to showcase how different people embrace their true sexual selves to lead by example. Durex have also created advertising and educational content to drive societal change, authentically depicting sex in all its myriad beauty to challenge the status quo (see fig 3). The online campaign has already reached 5M impressions to date and can be viewed using the link below:

https://www.durex.co.uk/pages/my-sex-my-way.

Dating without discrimination

The results of the research show that the LGBTQ+ Community appears to have a more positive attitude towards dating and meeting others than those outside of it, with 7 out of 10 of the LBGTQ+ community respondents saying they enjoy dating. However, trans people seem more likely to experience discrimination when dating and to more readily seek advice about dating safely. Overall, only a fifth of LGBTQ+ respondents feel that LGBTQ+ dating is fully represented in the media.

With Durex partnering with Stonewall to bring sex education to university campuses across the UK, this will provide reliable and safe sources of information, including information about dating safely.

Durex has a long-term commitment to making a real difference to the community and the My Sex My Way ethos is core to Durex's brand purpose. The gains achieved for the LGBTQ+ community to date are only the start of the journey.

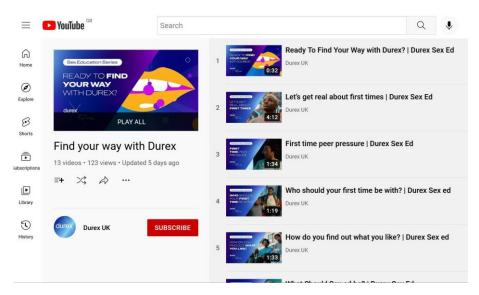


Figure 3: Durex sex ed campaign: self-acceptance

About the authors

Oana Stroie, Consumer Insights Manager UK Health Team – Dettol, Durex, Veet, Reckitt Benckiser UK Commercial, Slough, UK.

Tania Page, Research Director UK & NL, Toluna Group, Ealing, UK.

Sustainability at High-Speed

Revolutionising a mature sector with the creation of a new brand

Oscar Santamaría Anders Braekken Jordi Crespo

The next generation of mobility

In 2022 IRYO was created, Spain's first private high-speed rail operator, partnering with Air Nostrum, Globalvia and Trenitalia, it has become one of the best options to get around the Peninsula. In just six months iryo has achieved a clear positioning differentiating itself from its competitors through:

- Sustainability and corporate responsibility. The most sustainable, quietest and fastest fleet in Europe.
- Flexibility. The only rail and mobility operator to offer its passengers flexible tickets with no restrictive fares, where customers can make changes without losing their money.
- Different comfort options available. Compared to other competing fares, IRYO offers travellers four different comfort options.
- Quality catering on board.

The result is a brand concept based on the freedom to choose your own path. Beyond the importance of the destination, the path is a decision we make with every step we take; a concept that is inscribed in the very name of the brand, "IRYO", and in its essence: "el camino eres tú" (the path is you). IRYO is a brand with a mobility different to anything we have ever known; a brand that embraces new ways of living, connecting and moving. IRYO opens the door to a new era for mobility, personal, multimodal and sustainable: the "new speed".

Context

Spain is the second country in the world with the longest high-speed rail network (4,000 km). By comparison, France has 2,000 km and Germany has 1,000 km. It is second only to China, which has 38,000 km of high-speed rail. Until the end of 2022, three brands were operating in Spain. AVE, managed by RENFE as well as AVLO (its low-cost brand), and OUIGO which belongs to the French brand SNCF. During 2021 and 2022, a third brand and operator ILSA, a consortium formed by shareholders of Air Nostrum and the rail company Trenitalia, was introduced. Its new commercial brand was launched (IRYO), headed by the most modern, sustainable and quietest fleet of trains in Europe.

The challenge

Create the new commercial brand of ILSA, the new protagonist in the high-speed market in Spain

The challenge was to build a differential positioning and identity in relation to the new competitors in the market, far from the territories already explored. All with a firm purpose: to create a before and after in the high-speed sector in Spain. In order to do so, we faced different challenges:

- Naming and visual identity development;
- Brand building and positioning through rational and emotional attributes, values and brand personality. Building a differential USP;
- Creating a memorable travel experience throughout the customer journey, from ticket purchase, comfort, onboard service and catering;
- Analysing the app's usability to achieve the best possible interaction;
- Enabling differentiation by addressing competitive pains. Creating unbeatable engagement;
- Defining the optimal pricing strategy in a well-defined package;

- A clear communication strategy on social media and TV with its slogan "the quiet speed";
- Understanding the travel preferences of the different segments, or ways of travelling: leisure versus work, weekdays versus weekends, travelling with children, travelling with pets, etc.;
- Establishing a commitment to sustainability, leading the connectivity of different sustainable modes of transport so that the entire customer journey, from origin to destination, meets the highest environmental standards.

Potential solution

A complex project that ranges from the brand strategy with the definition of the strategic concept, the creation of the entire identity (name, story, visual identity) to its implementation and launch. To solve each of these challenges we worked together on IRYO's branding and positioning process with the branding and market research companies: Columna Branding and Hamilton Global Intelligence.

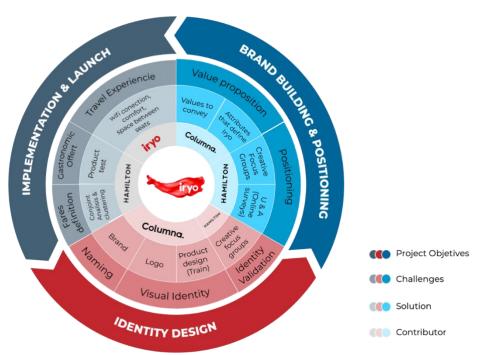


Figure 1

A wide variety of analytical techniques have been used:

- Design thinking and co-creation to define the naming and visual identity;
- Creative focus groups with frequent high-speed rail passengers to validate the visual identity and brand positioning;
- Clustering to define segments and produce fare bundles (Inicial, Singular, Infinita Bistró);
- U&A has helped to understand the market in depth and the travel habits of competing users;
- Conjoint analysis to establish the price elasticity of different fares and potential demand;
- Product testing to define the most suitable menus for a complete offer in breakfast, lunch and dinner;
- SWOT analysis, through multiple regression, of passengers to adjust the service and align passenger expectations.

Naming and visual identity development

Column was in charge of all the branding: the graphic and creative development part of IRYO, from the naming, iconographic support and product (the train) and through Hamilton it was validated that the branding had a good acceptance among the public and the meaning was consistent with category. Focus groups were conducted with five different groups of six to seven people, divided according to whether they were AVE travellers (at least once in the last year) as well as business travellers (at least three times in the last year). Before conducting the focus groups, Hamilton's LifeShare qualitative platform was used to carry out previous exercises with the users defining relevant brand aspects,

Copyright © **ESOMAR** 2023 CONGRESS 2023

building a collage of brands, emotional and rational attributes and values of existing brands at that time such as AVE, AVLO or OUIGO. The following conclusions were drawn.

Naming

The first question mark was the pronunciation and reading of the brand. IRYO is fully validated as a brand name. It has an easy and pleasant-sounding pronunciation, which is also quickly interpreted and related to travel and the significance of the individual as the subject of that journey (see Figure 1).



Figure 2: Presentation of branding by layers.

Visual identity

In this testing phase, different materials were presented to the consumers participating in the focus groups.



Figure 3

Logo

The iconographic SCARF concept as a support for the logo also holds meanings in keeping with the category and positive for the brand. The graphic development of the concept supports these attributes very well. The recognition of freshness, dynamism and flexibility is enough for it to be appealing and relevant to the leisure target. Quality is also clearly perceived.



Figure 4

Application and branding

Branding, considered as a whole, creates great appeal and has the ability to build a brand that fits perfectly with a dynamic and modern alternative to the rigidity and seriousness of Renfe (AVE). An appeal based on the general perception of a young, dynamic, modern and approachable personality.

Product design test

The preferred product design receives excellent ratings. It has a strong potential to create a sense of seriousness and efficiency, and it definitely positions IRYO in the territory of modernity and state-of-the-art technology, bringing the brand closer to work and/or business travel. The product gives potential to the brand; it promotes its rational values and on that basis of safety in the travel experience, it strengthens IRYO's young, dynamic and accessible personality. It is a clear mobilising element towards brand testing. Enabling in the consumer's mind the relationship of that capability and the values with IRYO as a brand, with no "middle man" Frecciarossa, is probably the right way to build the brand at launch.



Figure 5

Assessment of the visual identity versus the competition

Generally positive ratings in comparison with the competition:

• The IRYO logo reflects a more contemporary, modern brand. It has a more innovative character than the others and is the most open in its meanings; i.e., more able to respond to the different needs that may arise in high-speed rail. It is a more suggestive logo in relation to the travel experience.

- More attractive website and app, but functionality is prioritised. IRYO's digital tools are the most visually
 appealing to the target. The "most striking" design, compared to the others, it creates feelings of a more carefully
 designed product and a somewhat more sophisticated brand, and therefore a more premium personality. The
 competition has a more basic and rational offer in terms of look and feel.
- The design of the train is clearly a strong point in relation to the competition. Compared to the competition, impressions associated with the design of the train are confirmed, with its excellent ratings as an attractive product with it values of speed, efficiency, technology, etc., and which is superior to the other options.

Brand building and positioning

For this phase, Columna Branding worked on the brand building process by creating the value proposition. The brand's essence was defined as well as the values it wants to convey and the attributes that define IRYO. Hamilton conducted a quantitative study of 459 interviews with business travellers (222 interviews) and leisure travellers (237 interviews), where the positioning of IRYO in relation to the competition was extracted in order to validate the values to be conveyed. For the brand concept we were faced with different realities.

- Maas (mobility as a service): Companies in the mobility sector are re-inventing themselves, finding new ways to create, capture and produce value;
- Digitisation for personalised mobility, hyper-connectivity and extreme 5G speed enables personalised mobility experiences tailored to each traveller;
- Mobility for self-realisation: The new generations want the option to work wherever there is Wi-Fi, to go to another country, to connect, to create content and to be mobile;
- Third space: People want their "third spaces" outside of home and work to meet the same standards of comfort, connectivity, entertainment and above all health, safety and hygiene—especially in terms of COVID-19;
- Mobility as part of an experience: Travellers are looking for a satisfying experience online to then carry over into their offline experiences and vice versa;
- "Sustainable mobility": Consumers who are more conscious are more likely to use green modes of transport. The conscious consumer also looks at the sustainability of the products associated with the journey.

The brand building process



Figure 6: Brand creation process.

Why?

Our aim was to offer the freedom of mobility that our customers need. Mobility has changed; ILSA wants to offer sustainable and innovative solutions, based on multimodality and customised with the highest quality experience in Spain and Europe. We're here to be resilient and to surprise. With this in mind, our brand essence is "el camino eres tu" (the path is you).



Figure 7: "El camino eres tu" (The path is you).

Antonio Machado is a great Spanish poet and figure who is passionate about life, just as we are at IRYO. With clear language and full of passion and symbolism, his work has inspired our brand essence, specifically one of his best-known poems: *Caminante no hay camino* (1912):

Traveller, there is no road.

Traveller, your footprints
are the only road, nothing else.

Traveller, there is no road;
you make your own path as you walk.

Because it is you, and only you, who chooses your path.

Every step you take, every stretch you walk, that's you.

Building a future together, a commitment to tomorrow, and leaving yesterday behind.

You set the pace, you choose the next destination with complete freedom.

You are the one who will discover new routes and the one who will always decide to go on.

Yes, the path is you.

And together, we are ready to move forward.

From his verses we borrow the term "path" to allude to the idea of creating a new path between all of us that will lead us to a mobility different from anything we knew, because there is undoubtedly something poetic about travelling, especially by train. It is a moment for reflection, introspection and dialogue with yourself.

Defining positioning: How?

Our values, the ones we want travellers associate our brand with, are:

- People: For us, people come first and are at the heart of everything we do. They are our reason for being. We
 are committed to ethics, respect and care for our customers with a new way of travelling that is more
 personalised and closer than ever. We also aim to provide the best health and safety conditions to ensure our
 customers' health while they travel.
- Passion: We put our hearts into everything we do, and it shows. We believe in doing things well, we are passionate about people and our primary commitment is to create a travel experience you won't forget.
- Life: Life must be protected. We believe in sustainable connectivity and are committed to the United Nations Sustainable Development Goals (SDGs), in our day-to-day work as an example of sustainability—both in our strategy and in the small details with our travellers.

Copyright © **ESOMAR** 2023 CONGRESS 2023

- Technology: We believe that technological change will power a better tomorrow. The future is for the brave, and innovation is our starting block to offer new, smarter, digital and sustainable travel.
- Efficiency: We know where we want to go and how we want to get there, just like our customers. That's why we focus on efficiency in all our operations to ensure a reliable, punctual service tailored to their needs.
- Resilience: We are able to withstand the most adverse moments and to adapt to any possible scenarios, such as the COVID-19 pandemic. For us, it's an opportunity to introduce new models and processes in our day-to-day work through innovation.
- We also provide value by distributing wealth and contributing to the well-being of Spanish society, offering
 quality employment and a more competitive service that improves regional connectivity, promoting the growth
 of Spain's GDP.

The attributes that define IRYO are:

- Easy and personalised: No two people in the world are alike, which is why our users deserve an experience that is as authentic as they are and fully tailored to them. We have created a personalised service as easy as 1,2,3—adapted to their different realities to give them the travel experience they deserve. We have developed a third space where they can feel at home and which also helps to create a great community of travellers.
- Technological: A 21st century company like ours needs to be committed to innovation with sustainable proposals and state-of-the-art technology. At IRYO we are driven by passion, and we are ready for anything that may come our way. For example, digitising our services will help us to be able to respond quickly and efficiently to our users and their needs.
- Sustainable: What is good for you is good for others. We are the first choice for sustainable mobility for all travellers committed to the planet and the future. The train is one of the greenest modes of transport available, and at IRYO we are committed to using renewable energy sources. Among other things, our state-of-the-art train crews ensure high efficiency and a lower impact on the environment.
- Integrated and reliable: Integrated mobility means that you can travel from A to B with peace of mind. At IRYO we want to make people's lives easier, and we know that your journey begins long before you go on one of our trains. Thus, we've created a network connected with all kinds of mobility options (bikes, motorbikes, buses, etc.) that helps you to arrive at the train and your final destination with no surprises.
- Flexible and resistant: One day you need one thing, and the next day you don't. And that is how it should be. At IRYO we know how to adapt to what you need and what you don't need. A flexible and open attitude to change allows us to respond in time to unforeseen events, to identify all the latest developments, and to even anticipate them. This is how we build a future based on resilience.

Hamilton validated IRYO's attributes through an online questionnaire to high-speed train travellers in the last 12 months. When asked about IRYO's image compared to competitors Ouigo, AVE and AVLO, travellers rank IRYO in attributes such as dynamic, innovative (72.3%), modern (77.8%) and fresh (75.2%).

The brand provides a differential and unique positioning in the category

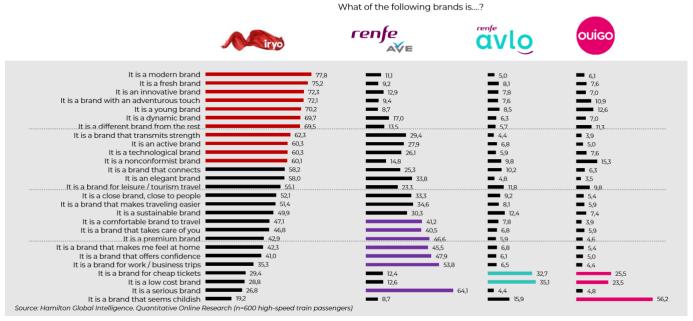


Figure 8: The competition.

IRYO achieves a differentiated positioning from the competition, validating that the attributes defined by IRYO are being properly conveyed to travellers.

The brand provides a differential and unique positioning in the category

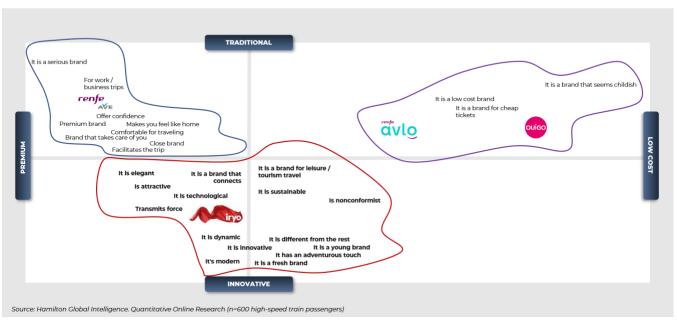


Figure 9: Image and positioning map.

Who: What are our customer segments?

If we are customer-oriented, the customer must come first. It is important to segment well, because knowledge of your customers will give you power, always from the outside in.

Companies;

Copyright © **ESOMAR** 2023 CONGRESS 2023

- SME's and freelancers;
- Leisure (VFR);
- Holiday getaways;
- International tourism.

What? Value proposition

Our value proposition is: "The next generation of personal, multimodal and sustainable mobility".

The pillars of our value proposition are:

- Personalisation: We want to offer a customer journey that is people-centred and 100% personalised. Our customers deserve the highest quality experience.
- Multimodality: We want to offer an integrated and seamless customer journey, redefining the future of mobility in Spain and Europe.
- Sustainability: We want to offer the best possible mobility that is sustainable and environmentally friendly, making us a life partner.

Defining the optimal pricing strategy in a well-defined package

Hamilton conducted an online quantitative study to detect the price sensitivity of travellers and define the optimal ticket strategy through CBC (Choice Based Conjoint Analysis). CBC also is known as discrete choice modelling (DCM) or discrete choice experiments (DCE). The difference between choice-based conjoint and the earliest approaches to conjoint analysis is that the respondent expresses preferences by choosing from sets of concepts, rather than rating or ranking them. The combination of attribute (feature) levels we ask respondents to evaluate is critical to making choice-based conjoint analysis work properly. Each level appears nearly an equal number of times, and appears with levels from other attributes nearly an equal number of times. This makes for a fair and balanced (orthogonal) experiment where the utility value (the preference) of each attribute level can be measured independently and with high decision. This conjoint technique is perfect because the full profile (showing all attributes) is a more realistic representation of the "real" world, you can choose a "non-option" level, so it is not forced to choose an option if you do not like any of them.

A total of 3,082 interviews were conducted where the respondent was presented with four options to choose from a total of 12 screens. The factors presented in each of the scenarios were: train frequency, route stops, seat type, ticket change flexibility, seat reservation, gastronomy and ticket price (see Figure 10). Price was found to be the most important factor (see Figure 11).

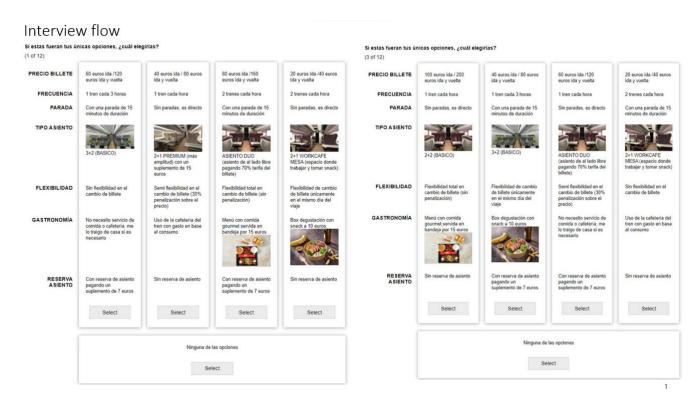


Figure 10: Interview flow (conjoint analysis).

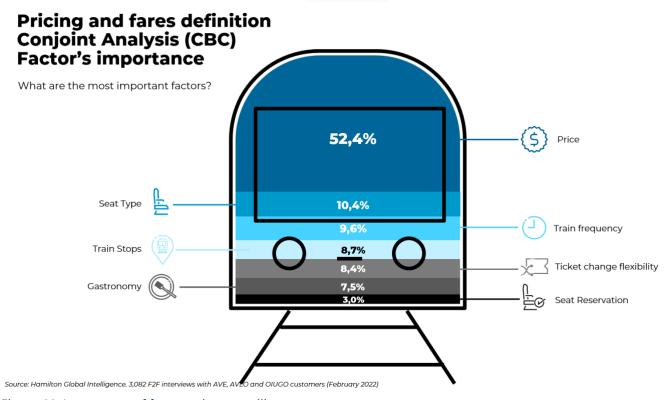


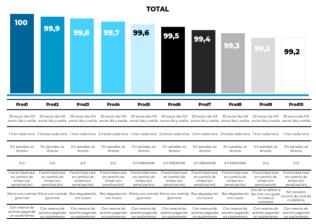
Figure 11: Importance of factors when travelling.

Furthermore, based on the stated preference for each of the scenarios, the top 10 best service combinations were extracted in order to define the different fares.

Pricing and fares definition Conjoint Analysis (CBC) Well-defined fares through an optimal pricing strategy

Share of Preference simulation method

Reach of the simulations



Source: Hamilton Global Intelligence. 3,082 F2F interviews with AVE, AVLO and OIUGO customers (February 2022)

Figure 12: Top 10 ranking optimal configuration.

FLEXIBLE fares & UNLIMITED changes allowed







4 CLASSES OF COMFORT:

- Infinita class: Great comfort without limits
- 2. Singular Only YOU class: A workspace perfect for entrepreneurs and companies.
- **3. Singular class**: Comfort, technology and 5G.
- **4. Inicial class**: A space designed for every type of traveler.

In order to position itself as the personalised and flexible option, different types of fares are defined according to travellers' needs, all of them flexible and with the option of unlimited changes.

- 1. Infinita Fare: Unlimited great comfort;
- 2. Singular Only YOU Fare: An ideal workspace for entrepreneurs and companies;
- 3. Singular Fare: Comfort, technology and 5G for your business trips;
- 4. Inicial Fare: A space designed for all types of travellers.

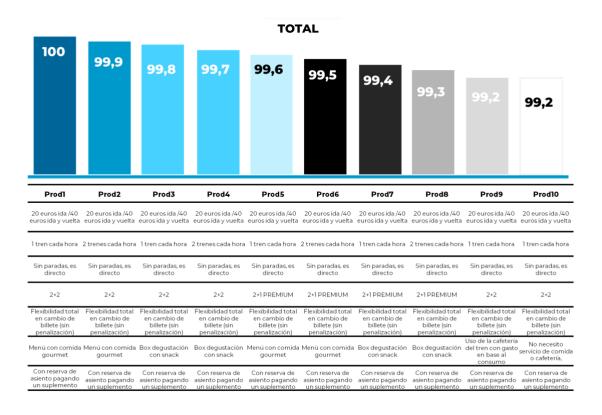


Figure 13: Reach to define IRYO Fares.

Creating a memorable travel experience and defining the catering options

Hamilton conducted an U&A study among competitors' travellers in which an opportunity for differentiation was detected through the gastronomic offer on board, since the competition was not covering this need of the traveller. A personal interview and product test was carried out at the stations of Atocha (Madrid) and Sants (Barcelona), with 390 people to define the most suitable menus for a complete range of breakfast, lunch and dinner. 16% said they regularly eat in the train cafeteria, 31% occasionally and 53% do not have anything at all.

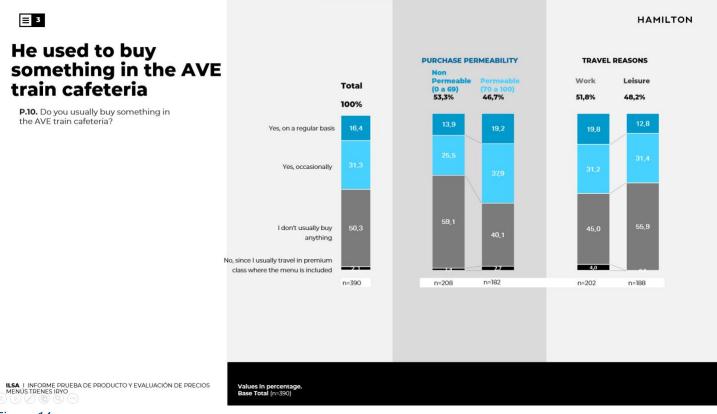


Figure 14

During the product test, the overall ratings were excellent, 8.2-out-of-10 for appearance, 8.1-out-of-10 for quantity of ingredients and 8.0 for tastiness. A branding and positioning opportunity was identified through the positive experience with the catering, as the current offer from the competition was not meeting travellers' needs.





Figure 15

Copyright © **ESOMAR** 2023 CONGRESS 2023

In June 2023, after only six months operating in Spain, IRYO reached 70 services covering the Madrid-Barcelona, Mediterranean and Andalusia corridors, and with a high occupancy on its trains. After the sector was opened up and the launch of IRYO, the number of passengers on the Madrid-Barcelona corridors has gone up by 57% and on the Madrid-Valencia corridor by 119%. It is estimated to reach 8 million passengers throughout Spain over the coming years. In addition, according to wave 1 of the brand tracking and positioning study conducted by GFK:

- IRYO's frequent traveller is a loyal traveller as they are noted for having an above-average exclusive use of IRYO (11% versus 5%);
- IRYO has managed to position itself as the most recommended brand among people who have used it, with an NPS of 58.

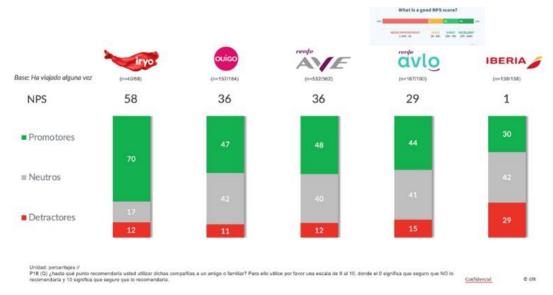


Figure 16: NPS.

IRYO is seen as a favourite due to the quality of its service, the quality of its carriages (38%) and for being a modern company (39%). It also achieves good user interaction with the app. The touch-points that have created a better experience than those of other operators have been the company's website and mobile browsing, online banners and videos, social media, the station, emails, event sponsorship, radio, travel agencies and outdoors. IRYO is associated with positive aspects such as being a modern and innovative operator, offering a different experience from others, with flexible changes and cancellations, good customer service, superior quality and good on-board comfort.

"Red arrows" have worked well as an advert in being seen as different, prompting people to find out more and to try it. IRYO has come to the market with an offer that confirms its position in the following arenas.

Sustainability

IRYO has spent 1 billion euros on building a fleet of 20 "Frecciarossa" trains, that manage to contain 28 grams of CO2 emissions per passenger-kilometre, saving around 80% carbon dioxide per person per journey. They are state-of-the-art electric trains made from 95% recyclable materials and powered by 100% renewable energy. All of these characteristics position the IRYO fleet as the most sustainable, quietest and fastest fleet in Europe, as well as being interoperable trains in different markets on the continent, with which to fulfil its European vocation in the medium-term.

IRYO aims to go one step further in sustainability and involve the customer in its responsible value proposition by giving the option to off-set their journey's carbon footprint with two alternatives, 24 and 48 hours. Thus, all tickets will have the option of adding the so-called green add-on where the operator will create a "smart forest" with the help of the company Retree—all with the aim of raising awareness in the fight against the climate crisis, which will improve the absorption of CO2, create rural employment and help to prevent deforestation.

Copyright © **ESOMAR** 2023 CONGRESS 2023

Flexibility

IRYO is the only rail and mobility operator that offers its passengers flexible tickets with no restrictive fares where customers lose their money. All tickets are flexible to all kinds of changes, and they also offer the option of extending this flexibility with the "Open" mode. This makes the train a high-speed shuttle service where any changes in the three higher fares come at no cost, including missing a train, which is exchanged for a new journey.

Unique travel experience: Classes and catering

With the aim of meeting each traveller's different needs, IRYO has designed four comfort classes: Infinita Bistró, Singular Only YOU, Singular and Inicial. These are aimed at satisfying the needs of both leisure and business travellers. Together with Haizea, iryo has presented its own brand of local catering on board. Customers who have chosen the Infinita Bistró fare while purchasing their ticket, will be able to enjoy an excellent service in their seat; full of details, a carefully selected range of food and drink where they can choose from more than three menus and taste a variety of D.O. wines.

About the authors

Oscar Santamaría, CMO, IRYO, Spain.

Anders Braekken, Head of Consulting Practice, Columna Branding, Spain. Jordi Crespo, Partner Director, Hamilton Global Intelligence, Spain.

Power Up For Change!

How E.ON Next is navigating the uncharted emotional terrain of eco-anxiety

Kimberley Howard
Dr. Adele James
Kelly McKnight
Emma Webster

Introduction

Eco-anxiety is "a chronic fear of environmental doom" (APA, 2017). It comes with "feelings of loss, helplessness, frustration and guilt, as the sufferers feel they are unable to stop climate change". Eco-anxiety has been on the rise for the past decade, and is particularly prevalent in younger people. Those affected by eco-anxiety can be less likely to engage in positive climate action, as they feel too overwhelmed to act. In recognition of this psychological barrier to environmental action E.ON Next, an energy provider, devised #PoweredUpForChange. A future-facing brand campaign that sought to directly address eco-anxiety in Gen Z by providing the tools to nurture healthy minds, and empower young people to take positive action towards environmental goals. The campaign (which originally ran between February and June 2023) was developed via ground-breaking research with agency Verve, blending innovative social intelligence, semiotics and behavioural science approaches, with "traditional" quant. The resulting campaign successfully deployed the psychology of "soothe", to disrupt doomscrolling on TikTok, and encourage positive environmental action amongst young people. This paper details the approach taken to the research and the impact of the campaign. The findings are relevant to any brand looking for a practical roadmap to overcoming the "say-do gap", and drive sustainability action amongst Gen Z.

Context

The UK has a target to reduce greenhouse-gas emissions to net zero by 2050. In addition, the government says all the UK's electricity will come from clean sources by 2035. Currently, around 20% of UK carbon emissions are produced by the energy used in the home. It is, therefore, imperative that energy brands not only talk about sustainability, but act as a positive force in this space if the UK is going to hit net zero targets. Young people are widely heralded as holding the key to creating a better, more sustainable future (World Economic Forum, 2021). Environmentally engaged and demanding of a better future for themselves, they are at the vanguard of action on climate change. If this next generation can be equipped with the practical tools they need, to take personal climate action and reduce home emissions, the impact on energy usage has the potential to be significant. Yet, young people are also the most affected by the crises facing our world. They want to drive positive change, but at the same time, they face multiple stressors themselves. These range from the UK cost-of-living crisis and poor employment prospects, to the climate emergency and social media pressures. The emotional landscape and cultural context of young people need to be recognised and addressed if any meaningful change can happen in this space; interventions cannot happen in isolation.

In the literature, there is recognition that "younger people seem to feel more anxiety" [about climate change] (Clayton & Karazsia, 2020). Several studies have found that climate change anxiety impacts younger more than other age groups (i.e., Whitmarsh et al., 2022; Searle & Gow, 2010). Wu, Snell and Samji's (2020) recent "call-to-action" reiterated the need for more research into this area, recognising that young people may disproportionately bear the brunt of climate anxiety. It is against this backdrop that E.ON Next decided to take steps to empower Gen Z (as the future energy consumers), to turn their eco-anxiety into climate action. The goal was to identify ways in which they could practically help Gen Z manage their eco-anxiety, whilst still encouraging pro-environmental behaviours, ultimately making a positive difference in the world.

Research challenge

A programme of research was required to underpin the campaign. The goal of the study was to understand how eco-anxiety could be used in a healthy way, in order to encourage more planet-positive behaviours amongst young people. Whilst it was important to get quantifiable measures of the scale and prevalence of eco-anxiety amongst UK Gen Z, the researchers knew it would not be enough to simply ask people about the topic. The climate emergency is a divisive topic and eco-anxiety is a sensitive condition as it is potentially upsetting and distressing for those experiencing it. This may mean that people will not accurately share how they feel and behave out of avoidance of these negative feelings. More widely, these negative feelings could contribute to the "say-do gap" in sustainability—a paradox that while stated concern about the environment is high, it does not always translate into action in our day-to-day lives. Research in this space could not solely rely on primary survey data. Furthermore, the context in which content is consumed affects the impact it has on individuals. Context here refers to the system the behaviour is occurring in. In other words, if this audience is experiencing eco-anxiety because of social media, then the campaign needs to address what they see on social media, as this is where the biggest problem lies. It was clear that the research objectives could only be addressed by a combination of primary and secondary research methods, as we summarise in the sections below.

Behavioural science

The exploration of relevant academic and grey literature to identify root causes of eco-anxiety and develop a framework for measuring emotional and behavioural impact of eco-emotions. This was used to provide a fuller understanding of the nuance of emotion people feel, and how they behave versus relying solely on self-reporting to identify these factors.

Social intelligence

The detailed analysis of eco-content across social media platforms to identify a full typology of social media content in the environmental space, and the prevalence of this content by platform. This removed the reliance on individuals self-reporting what they had been exposed to, and in doing so minimised the limitations of recall.

Semiotic analysis

The creation of semiotic codes unpicking the ways in which social media is communicating environmental content, as well as the specific signifiers, including imagery, pace, language, music and cultural cues the

posts were deploying. This provided clarity on how eco-content is influencing an emotional response—something most individuals find difficult to pinpoint.

Quantitative survey

Alongside generating robust measures on prevalence and strength of eco-emotions within the Gen Z audience, the quantitative survey included an experiment conducted to investigate how the different social media post themes impacted eco-anxiety and respondents' stated behaviours. This gathered empirical evidence for which social media post type was most effective in promoting an emotional state that will most help proenvironmental behaviours to occur.

Behaviours around eco-anxiety clearly do not happen in a vacuum, thus, the research needed to consider the broader context in which these actions occur. If the problem had not been analysed in its wider environment, it would have certainly hindered the impact of the intervention (the campaign). By researching and testing social media posts and their impact on emotions and intended behaviour in this way, the study has "high ecological validity"—i.e., the results of the experiment can be applied in the real world. This is in line with the Britannica definition of ecological validity: "ecological validity, in psychology, a measure of how test performance predicts behaviours in real-world settings" (Gouvier et al., 2014).

Case study objectives

The objectives of the research were:

- Understand what "eco-anxiety" is at a behavioural and/or psychological level;
- Gauge the severity of eco-anxiety amongst UK Gen Z;
- Understand the factors that influence eco-anxiety, with a particular focus on social media (channels/platforms/content);
- Understand how eco-anxiety affects pro-environmental behaviours (e.g., are people more likely or less likely to act in an eco-conscious way if they experience these emotions?);
- Identify ways E.ON Next can help Gen Z manage their eco-anxiety, whilst still encouraging proenvironmental behaviours.

Case study design

There were four principal stages to the research.

Stage 1: Behavioural science (desk research)

As a relatively new area of investigation there was a need to understand more about eco-anxiety as a concept. This is essentially, what it is, what is the scale of it, how it is caused and the psychology of eco-anxiety—i.e., how it manifests for people experiencing it, how it impacts them emotionally and what people currently do to cope with it. A foundational programme of desk research was undertaken, reading applicable literature and identifying solid research on eco-anxiety in the wider domain. The sources included in the desk research ranged from grey literature (i.e., news articles from BBC News, The Guardian and industry-related sources, such as Friends of the Earth and EY), through to relevant academic journals. This upfront stage

was necessary to design the research programme, as well as inform thinking in the later stages of the research.

There is evidence in the literature that eco-anxiety is more prevalent in Gen Z than other demographics, and importantly social media is a particular amplifier of eco-anxiety—and potentially a trigger to it. Young adults in the UK are the cohort who spend the most time online (across computers, tablets and smartphones). In 2020 18-to-24-year-olds averaged four hours, 34 minutes online per day (Ofcom, 2021). This generation also exhibits high incidence of daily usage of social media platforms. The three most popular platforms amongst UK Gen Z are: Instagram (71% of Gen Z users visit daily); TikTok (68% of Gen Z users visit daily); and YouTube (68% Gen Z users visit daily) (Statista, 2023, February 2). TikTok has the highest engagement amongst social media apps, with users worldwide spending approximately 95 minutes per day on the app (Statista, 2022, October 20).

There is, therefore, a logical connection between Gen Z's higher usage of social media, and their higher prevalence of eco-anxiety, establishing the hypothesis that TikTok has a unique role in promoting eco-anxiety amongst this cohort because of its never-ending scroll nature, tailored algorithms and short form content. In a recent paper by Samantha K. Stanley and colleagues exploring the differential impacts of different eco-emotions, including eco-anxiety, it was identified that eco-anxiety is not the only eco-emotion that one can experience (Stanley et al., 2021). They explored eco-anxiety, eco-depression and eco-anger, finding importantly that these different eco-emotions can individually motivate or have depressing effects on the type of behaviour one takes around climate action. Their work largely influenced the quantitative approach (see Stage 4) taken in our study.

Stage 2: Social listening

The second stage of the study was social listening. The objective of this phase was to understand how climate-related content is manifesting on different social media platforms. Specific objectives were:

- Identify what proportion of the overall climate conversation is "eco anxious" content—essentially content that "perpetuates the fear of environmental doom" (APA, 2017);
- Identify what social media platform features the most "eco anxious" content, and is therefore the most triggering for Gen Z.

To conduct this study, a spread of platforms (TikTok, Instagram, YouTube, Twitter and Reddit) were selected. They were chosen as they these represent different social media styles (forum, long-form video, short-form video, image and short-form text). Digging deeper into platform demographics:

- 38.5% of TikTok users globally are 18-to-24-years-old, #1 user cohort (Statista, 2023, May 12);
- 31% of Instagram users globally are 18-to-24-years-old, #1 user cohort (Statista, 2023, February 14);
- 23% of internet users in the UK aged 15-to-29-years-old use Reddit, #2 user cohort (Statista, 2022, April 28);
- 17% of Twitter users globally are 18-to-24-years-old, #3 (joint) user cohort (Statista, 2022, March 29);
- 15% of YouTube users globally are aged 18-to-24-years-old, #3 user cohort (Statista, 2023, February 6).

Whilst not everyone who uses the selected platforms is from Gen Z, we can conclude the content delivered on these platforms reaches a Gen Z audience. From here, a code frame was developed for analysis. A code frame is essentially a framework to qualitatively and quantitively analyse the social media posts through. A database was created in Microsoft Excel with the following measurement metrics:

- Post ref (number sequence);
- URL (paste post URL);
- Platform (TikTok, Instagram, Twitter, Reddit, YouTube);
- Post format (dropdown-picture, text only, text + picture, short vid, long vid, etc.);
- Hashtag (#NoPlanetB / #ClimateCrisis / #Sustainability / #ClimateChange / #ClimateSolutions / #SavetheEarth);
 - These hashtags were chosen because of their relative size (they were the biggest eco-focused hashtags at the time), but they also represent a spread of positively skewed hashtags (#ClimateSolutions), neutral hashtags (#ClimateChange, #Sustainability) and negative hashtags (#NoPlanetB, #SaveTheEarth).
- Sentiment / tone (sliding scale–3 fatalistic, 0 neutral, 3 hopeful);
- Seven universal emotion scores (angry, contempt, disgust, enjoyment, fear, sadness and surprise);
- Post reach—number of account followers (numerical);
- Post engagement-likes, shares (equivalent) etc. (combined);
- Eco-anxiety theme-reframed to get at the "purpose" of each post (i.e., to agitate, to scare, to soothe, to educate, to inspire).
 - Inspire: Posts that inspire the receiver to take positive climate action, sharing tips, tricks and/or motivational quotes.
 - Agitate: Posts that cause angry and agitation in the receiver. They may express anger, shame individuals or be controversial. The aim of the post is to cause discomfort and arouse anger in viewers.
 - Scare: Posts that scare the receiver. These could be scary statistics, scaremongering and forecasting future doom. The aim of the posts is to scare people into action.
 - Soothe: Posts that soothe the receiver. They ease eco-anxiety woes. This could be reassuring content, good news, memes and comedy content to laugh off the seriousness of the topic. The aim of the content is to make people feel better about the climate crisis.

The sample was 300 posts per platform, 50 posts per hashtag. This resulted in the analysis of 1,500 climate-focused posts in total. Four Gen Z researchers conducted the analysis, to ensure the demographic in question was "reading" the social media posts. Raters were trained on how to code the different posts together, then all posts were coded independently by two different researchers. Raters were given clear criteria on what constituted a "soothe" post, a "scare" post, etc. They were trained on sample posts as a practice, and given real-time feedback by our semiotics lead.

This approach was taken to check the degree of agreement between the two raters who are assessing the same phenomenon. It measures consistency—do they all agree that a "soothe" is really a "soothe"? This is especially important when looking to rate something quite complex and abstract, where raters might frequently have differences in judgement despite training, and where the posts might be a mix of themes (i.e., "soothe"

and "scare"). Disagreements between rater 1 and rater 2 were explored qualitatively, and discussed with our semiotician who made the final judgement and acted arbitrarily in how to code posts where raters disagreed.

Stage 3: Semiotics

For the next phase of research, we used semiotics analysis. Semiotics is "the study of signs and symbols, and their use and interpretation by people". It is a way of meticulously analysing imagery and language to understand:

- 1. the signifiers that "make up" that piece of content and;
- 2. what those signifiers mean culturally.

An experienced semiotician analysed all the posts coded underneath each theme "inspire", "agitate", "soothe" and "scare", identifying key executional themes (see Figures 1 to 4). Ultimately, how is each post delivering that meaning?



Figure 1



Figure 2

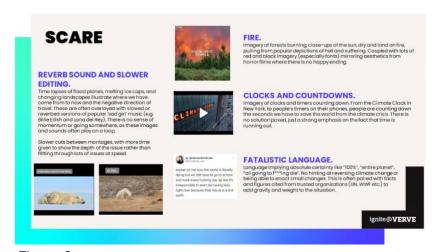


Figure 3



Figure 4

Stage 4: Quantitative survey

The next phase of research was a quantitative study. It took the form of a 15-minute online survey with 1,500 Gen Z (16-to-25-year-old) consumers in the UK (gender and region nationally represented). The objectives of the survey were:

- To understand how strongly eco-anxiety is felt within this audience;
- To understand climate change perceptions, attitudes and behaviours;
- To understand how climate change makes them feel (what "eco-emotions" are felt), as inspired by the Stanley paper (from Stage 1);
- To understand the triggers to eco-emotions (with a hypothesis that social media channels might be the most prevalent driver) and understand when these eco-emotions arise;
- To understand their coping mechanisms for eco-emotions.

The original definitions were broadened out to include positive eco-emotions as well as negative ones, exploring six in total: eco-depressed, eco-anxious, eco-angry, eco-concerned, eco-happy and eco-optimistic. These are not mutually exclusive but, in the analysis, we chose to concentrate on a respondent's "dominant" emotion (and in the rare case there was more than one dominant emotion, we randomly assigned them to a bucket).

Behavioural science (experiment)

At the end of the quantitative survey, an experiment was conducted to investigate how the different social media post themes impacted on eco-anxiety and subsequent stated behaviour. Experiments allow the researcher to identify the causal relationship of a given treatment. In this case, gathering empirical evidence for which social media post was most effective in promoting an emotional state that will most help proenvironmental behaviours to occur. This was the key outcome of interest—would respondents say they would engage in behaviours that would help the planet (such as reading about climate change, joining an activist group, etc., versus trigger management and avoidant behaviours)?

The aim of this experiment was to test which type of content E.ON Next's campaign should anchor itself on to have maximum impact. To do this, the sample was randomly assigned into four different experimental groups (n = 375 per group). This was done to minimise selection bias. Each group was shown a different themed post in a monadic design (so each group was only exposed to one type of post). Each of the four groups were show an exemplar video posts from TikTok and Instagram, selected from the four themes identified in the social intelligence stage: soothe, scare, agitate and inspire.



Figure 5: Exemplar image from "agitate".

Copyright © **ESOMAR** 2023 CONGRESS 2023



Figure 6: Exemplar image from "inspire".



Figure 7: Exemplar image from "scare".

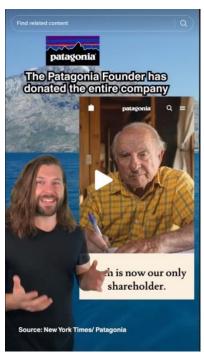


Figure 8: Exemplar image from "soothe".

To understand impact, eco-emotions were tested pre- and post- social media exemplar exposure. The preread provided a baseline measure of how they predominantly felt about climate change (bucketed into: depressed, anxious, angry, concerned, happy or optimistic). Then they were shown a "soothe", "scare", "agitate" or "inspire" stimuli, and asked to watch the video for at least 10 seconds. In the post- phase, respondents were asked how the social media post made them feel—again using the same eco-emotion measures as before (i.e., depressed, anxious, angry, concerned, happy or optimistic). This same pre- and post-exposure measure allowed isolation on what impact the social media post had on their eco-emotion type and strength, if any. Finally, respondents were asked about subsequent intended behaviour after seeing the social media post. This can be summarised into nets:

- Communication (i.e., talk to someone);
- Trigger management (i.e., actively avoid climate news);
- Learning about eco-anxiety (i.e., read up on climate change);
- Escapism (i.e., listen to music);

As well as having "something else", "nothing" and "don't know" codes as mutually exclusive options to filter out those who may not do any of these pre-selected behaviours.

Study findings

Eco-anxiety is a huge problem amongst Gen Z

The research confirmed the hypotheses that Gen Z are suffering huge levels of climate anxiety. The quantitative study found "anxious" is the most likely emotion to be felt by Gen Z when thinking about climate change, with 60% feeling anxious. Eco-anxiety was also ever-present in their lives, with 37% experiencing eco-anxiety in the week of the survey, rising to 59% in the fortnight before the survey. Climate change was found to be a fundamental concern, alongside "the economy", "personal finances" and "health".

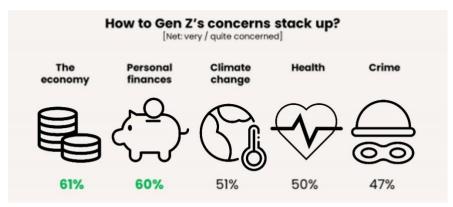


Figure 9: Gen Z quant findings.

Social media amplifies eco-anxiety

Social media usage is very high among Gen Z, with close to nine-in-10 (87%) visiting at least one platform daily. Social media is also a key platform that Gen Z use for news (53%), rivalling more traditional news routes and/or outlets such as the BBC. Subsequently, eco-emotions, particularly negative ones, tend to be triggered by seeing something on social media, with TikTok and Instagram acting as the key platforms for consuming this content, in line with Gen Z's social media consumption generally.

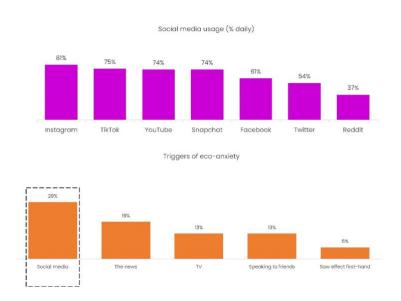


Figure 10: Social media and triggers findings.

TikTok contains the most problematic content

The social listening stage provided the following key insights:

Which social media platforms skew more positively versus negatively in climate conversation. This
confirmed the hypothesis that TikTok is the "scariest" platform. It was the most likely, out of all the
platforms, to feature content tagged by the "scare" theme, and the least likely to feature "inspire"
content.

Which content has the biggest reach? TikTok was the platform with the most "scare" content, and
was the platform with the biggest reach in our study. Reoccurring signifiers in "scare" content included:
countdown clocks, reverb sounds, fires, explosions and post-apocalyptic scenes.

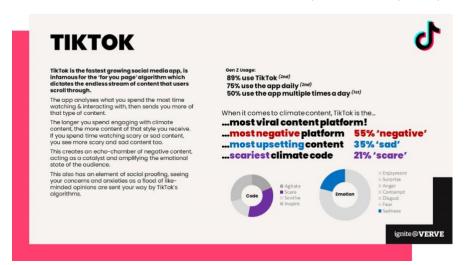


Figure 11: TikTok findings.

We found TikTok to be the most problematic platform; it's the most viral but features the most "scare" content.

The "doomscrolling" nature of TikTok (it is a continuous feed, where the algorithm "feeds" back the content you engage with most frequently) places it at high risk. If users watch anxiety-inducing content, they are more likely to receive more of that content, feeding the anxiety and creating a negative feedback loop.

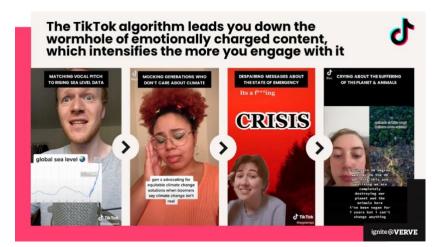


Figure 12: TikTok commentary.

This translated into an opportunity for E.ON Next to disrupt the "doomscrolling" experience on TikTok with more uplifting climate content, helping to ease feelings of eco-anxiety amongst this cohort.

Soothing content is the best for action

The social intelligence phase identified a subset of eco-content we called "soothe" content. In the behavioural science experiment, respondents were exposed to "soothing" stimuli from the social intelligence phase (along

with "inspiring", "agitating" and "scaring" content). As a reminder, eco-anxiety levels were measured pre- and post-exposure to the content. The findings from the experiment are summarised in Table 1.

Mean scores on 0-100 scale (0=not at all this way, 100=a great deal)								
	Eco- depressed	Eco-anxious	Eco-angry	Eco- concerned	Eco-happy	Eco- optimistic		
Pre-exposure	53.0	60.3	59.9	59.5	34.6	39.8		
Post-exposure								
Agitate	63.1	58.3	69.6	64.1	27.9	31.8		
Inspire	36.4	37.4	35.4	40.9	56.2	61.0		
Scare	52.1	56.2	58.9	52.1	38.3	41.1		
Soothe	31.9	34.9	32.7	37.9	69.4	69.5		

Table 1: Experiment pre- and post- findings.

Overall, "soothing" content was found to deliver a substantial reduction in negative eco-feelings—this content can have a profoundly positive impact on emotional state. The type of social content can also impact on the types of behaviours respondents think they might consequently do after viewing the post.

	To score	To agitate	To soothe	To inspire
Escapism (TV, reading, music)	37%	42%	44%	30%
Trigger management (put phone away, avoid climate news)	27%	28%	22%	18%
Learning (read up about climate change, join a group)	41%	38%	39%	37%
Communication (talk to someone, post on socials)	38%	34%	40%	35%
Go for a walk / exercise	26%	15%	25%	18%
Meditate	11%	10%	11%	13%
Nothing	11%	10%	8%	15%

Table 2: Consequent behaviours findings.

For example, "inspiring" content, whilst positive emotionally, leads to the lowest amount of action overall. However, "soothe" content drives the greatest level of escapism and communication actions, the second highest learning and the lowest trigger management and "nothing" responses. The takeaway is that the positive emotional impact of "soothing" content works to calm eco-anxiety and provide Gen Z with the mental headspace to do something more than only for the self, and in doing so benefit the planet, as well as themselves. The semiotic analysis identified the key signifiers for "soothing" content, which could be deployed in the campaign. Key signifiers included:

- Diverse perspectives showcasing different human voices debating climate change, collectively working through the difficult topic (e.g., conferences, discussions, roundtables);
- Natural landscapes (tranquil scenes, trees, grass), i.e., an absence of imagery showing harm or damage to the environment);

- Comic relief, shining a light on problematic non-sustainable behaviour and/or shaming the behaviour in a soft way, to encourage others to "do better";
- Sharing "positive" climate stories, news and showing improvements versus only focusing on the negative.

Campaign design

The research directly informed the design and execution of a three-stage campaign:

- 1. Diffuse to help Gen Z reduce eco-anxiety;
- 2. Educate Gen Z to recognise the signs and dangers of eco-anxiety;
- 3. Take action by empowering Gen Z to spring into climate action.

The campaign launched in three locations, all inspired by the "soothe" insight. The first partnership was with TikTok. It felt logical to launch content on TikTok to disrupt the "doomscroll" and reduce feelings of ecoanxiety, given this is the most problematic platform. E.ON Next worked with TikTok creators to develop videos that pulled on the "soothe" semiotic code, to teach Gen Z what climate anxiety is, and to provide tips (with an emphasis on energy-saving tips, grounded by the insight that 20% of UK carbon emissions are produced by the energy we use at home).

The next location was Acast for Podcast content. Encouraged by the fact that Gen Z feel soothed when they hear diverse perspectives and discussions, podcasts represent the perfect place to receive information as longer form content. These took the form of interviews with subject matter experts and guided meditations designed to soothe eco-anxiety. The third and final location was a dedicated landing page on the E.ON Next website (E.ON Next, 2023), to provide a toolkit with further information and guidance to encourage Gen Z to shift their climate anxiety into climate action. All key learnings from the study were published here, to build awareness of this rising problem and contribute positively to the management of it, whilst the social intelligence and semiotics learnings helped to guide the imagery and tone-of-voice we used.

Campaign impact

The campaign insights are encouraging, suggesting positive engagement at all three stages.

TikTok

The first phase was to diffuse via TikTok engagement. The TikTok campaign received 135 million views, with 373,000 clicking through the E.ON Next website landing page with more information and guidance. The TikTok posts were successful in directing users toward the E.ON Next website landing page—with a CTR of 0.26%, this comfortably exceeds the industry benchmark. A modest positive increase in brand lift metrics (ad recall, attitude and favourability) was also achieved amongst those exposed to the branded content on TikTok, despite E.ON Next branding being kept to a minimum. By keeping a core focus on the issue of eco-anxiety, the message was not diluted with broader brand activity (e.g., innovation in renewables or social debates about energy prices) and represented the commitment to soothing users versus promoting the brand. The campaign was successful in engaging users, and increased E.ON Next's share of voice to 39% within the energy industry.

The overall sentiment on this channel was mixed, with 31% positive and 69% negative scores. The key messages covered education on eco-anxiety, political and societal frustration from users about climate change in general, as well as climate change denial. As one of the first brands to talk about such a sensitive topic, E.ON Next were prepared for some backlash, although of the 69% of negative scores, we found that only 1% of total comments mentioned E.ON Next (and "E.ON" specifically), so these findings are still encouraging. Audiences have an issue with climate change more broadly, rather than with E.ON Next as a brand.



Figure 13: TikTok performance.

Acast

The second phase of the campaign was to educate via podcasts. The Acast podcast partnership received 56,000 episode listens, which is 45% above the projected listens. E.ON Next also received 10 million audio ad impressions—the impact of which has been attributed to longer form content on a relatively new topic that really educates the listeners and exposes them to trusted expert guests.

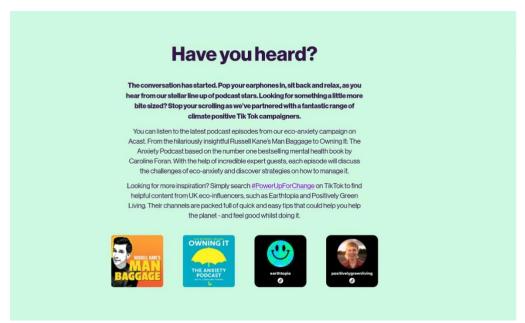


Figure 14: Acast.

The Acast data was very positive. Compared to control, eco-positive statements saw increases including "E.On Next [has] given me tools to deal with climate anxiety" (+37%) and "E.On Next helps me reduce my energy usage" (+33%). Spontaneous and prompted awareness of E.On Next also increased after listening to a branded episode (10% and 32%, respectively). Consideration also saw an uplift of +10% when asked about preferred supplier. Finally, a measure about intention to act after exposure to a branded episode saw an uplift of +26%, although we did not specify what action would be taken. Taken together, the Acast results suggest that the branded podcast content helped raise awareness, consideration and reinforce brand perceptions of E.On Next as a climate-positive supplier.

Toolkit

The final stage of the campaign was to empower Gen Z to take action, giving them resources via a toolkit on the E.On Next website. In terms of toolkit metrics, users that clicked through to the "Take Action" page were engaged, staying on the page for an average of 1 minute 52 seconds, 160% above overall website average time.

Eco-anxiety is on the rise, particularly amongst those aged 16-25. As a generation who have grown up facing the impact of climate change, the weight of responsibility to act lies heavy on their shoulders. Climate change is consistently ranked as one of young peoples' biggest concerns across the UK – showing just how deeply they care. That demand for change is a source of power, but it can often come with an immense sense of pressure to be the solution. Out of 1500 young people interviewed, 59% told us they had feelings of eco-anxiety in the last fortnight, but they also showed the strongest desire to take positive climate action.

Figure 15: Toolkit.

The campaign was deemed to be a real success across several marketing metrics. E.ON Next wish to rerun the campaign later in 2023, with some tweaks to help improve brand awareness and recall (i.e., more prominent branding in TikTok videos). Ultimately, re-running the campaign and spreading awareness and resources about eco-anxiety will boost E.ON Next's credibility in this area, by being the voice of the topic and encouraging positive engagement.

Case study key insights

- 1. Eco-anxiety is high amongst UK Gen Z;
- 2. Eco-emotions drive self-care over planet-care;
- 3. Social media triggers eco-anxiety in Gen Z, with TikTok the platform of biggest concern;
- 4. Soothing content has a positive effect;
- 5. TikTok is the best place to impact on Gen Z.

Implications

The paper adds to a wider understanding of eco-anxiety, which has implications for how brands in the energy sector and beyond should approach this important topic, as well as how they should talk about it with a Gen Z audience. At the time of writing, relatively few brands are talking publicly about eco-anxiety, but it is clear that this is an important topic for Gen Z and likely for other cohorts too. In the short time since the campaign ran, eco-anxiety as a topic is gaining traction in the media. For example, The Telegraph (Gatten, 2022) and BBC (Mckinnon, 2023) have recently published reports on its impact with younger people. Eco-anxiety is important and will likely become more important as the climate continues to deteriorate.

With 20% of UK carbon emissions currently produced by the energy used in the home, the energy industry has a vital role to play in addressing eco-anxiety and promoting positive environmental behaviours. By addressing eco-anxiety head-on, E.ON Next is enjoying increased SOV in the energy sector (on TikTok at least), as well as beginning to influence consumer perceptions of them being one of the first brands shining

a light on this important topic. In turn, over time this will work to lift their brand in the eyes of tomorrow's customers. This study concentrated on Gen Z; Gen Z are not E.ON Next's main customers at the moment, but they will become their (and your!) customers soon enough. Their values are different, and they are ecoconscious, so it is wise of brands to start to think now about what these prospective customers will want, need and expect.

Summary

In experimenting beyond the safety of traditional research methods, the researchers were able to gain real-world perspectives on eco-anxiety amongst Gen Z, and design an appropriate behavioural intervention. Conducting holistic, highly contextual research that is rooted in the way that the next generation truly thinks and feels is the future of research and campaign development. Gen Z are bombarded with "scare" content about the environment across social media, and on TikTok particularly. This contributes to their feelings of eco-anxiety. There is an opportunity for brands to address these negative emotions by deploying the psychology of "soothe", and in doing so drive positive action around the environment. This will ultimately benefit everyone.

Finally, the campaign demonstrated that there are real benefits for those brands who dare to tackle important environmental topics that aren't wholly positive, with future-facing brand campaigns that do not have immediate ROI. We hope this case study encourages more brands to address underlying eco-emotions and act for your future consumers today.

References

APA. (2017). Mental Health and our Changing Climate: Impacts, Implications and Guidance. *American Psychological Association*. Available: https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf

Clayton, S., and Karazsia, B. T. (2020). Development and validation of a measure of climate change anxiety. *Journal of Environmental Psychology*, 69.

E.ON Next. (2023). Power up for Change. E.ON Next. Available: https://www.eonnext.com/eco-anxiety

Gatten, E. (2022, October 31) Students suffering 'grief' over climate change offered support sessions. *The Telegraph.* Available: https://www.telegraph.co.uk/news/2022/10/31/university-offers-eco-anxiety-course-students-depressed-climate/

Gouvier, W.D., Barker, A.A., and Musso, M.W. (2014), Ecological validity. *Britannica*. Available: https://www.britannica.com/science/ecological-validity

Mckinnon, M. (2023, June 8) Climate change is harming my mental health. *BBC News*. Available: https://www.bbc.co.uk/news/uk-scotland-65633082

Ofcom. (2021). *Online Nation 2021 Report.* Available: https://www.ofcom.org.uk/ data/assets/pdf file/0013/220414/online-nation-2021-report.pdf

Searle, K., and Gow, K. (2010). Do concerns about climate change lead to distress? *International Journal of Climate Change Strategies and Management, 2* (4): 362-379.

Stanley, S.K., Hogg, T.L., Leviston, Z., and Walker, I. (2021). From anger to action: Differential impacts of eco-anxiety, eco-depression, and eco-anger on climate action and wellbeing. *Journal of Climate Change and Health, 1.*

Statista. (2023, May 12). Distribution of TikTok users worldwide as of April 2023, by age and gender. *Statista*. Available: https://www.statista.com/statistics/1299771/tiktok-global-user-age-distribution/

Statista. (2023, February 14). Distribution of Instagram users worldwide as of January 2023, by age group. *Statista*. Available: https://www.statista.com/statistics/325587/instagram-global-age-group/

Statista. (2023, February 6). Distribution of YouTube users worldwide as of January 2023, by age group and gender. *Statista*. Available: https://www.statista.com/statistics/1287137/youtube-global-users-age-gender-distribution/

Statista. (2023, February 2). Share of Gen Z users in the United Kingdom engaging with selected social media platforms daily in October 2022. *Statista*. Available: https://www.statista.com/statistics/1341903/social-media-daily-usage-uk-gen-z/

Statista. (2022, October 20). Average time spent using selected mobile social apps daily for users worldwide in 2nd quarter 2022. *Statista*. Available: https://www.statista.com/statistics/1322876/social-media-apps-time-spent-global/

Statista. (2022, April 28). Percentage of internet users who use Reddit in the United Kingdom (UK) as of 3rd quarter 2022, by age group. *Statista*. Available: https://www.statista.com/statistics/1184024/reddit-user-demographics/

Statista. (2022, March 29). *Statista*. Available: Distribution of Twitter users worldwide as of April 2021, by age group. *Statista*. Available: https://www.statista.com/statistics/283119/age-distribution-of-global-twitter-users/Whitmarsh, L., Player, L., Jiongco, A., James, M., Williams, M. O., Marks, E., and Kennedy-Williams, P. (2022). Climate anxiety: What predicts it and how is it related to climate action? *Journal of Environmental Psychology*, *83*. Available: https://doi.org/10.1016/j.jenvp.2022.101866

World Economic Forum. (2021). Young people hold the key to creating a better future. *World Economic Forum*. Available: https://www.weforum.org/agenda/2021/08/young-people-hold-the-key-to-creating-a-better-future/

Wu, J., Snell, G., and Samji, H. (2020). Climate anxiety in young people: a call to action. *The Lancet: Planetary Health, 4*(10): 435-436. Available: https://doi.org/10.1016/S2542-5196(20)30223-0

About the authors

Kimberley Howard, Semiotics Lead, Verve, UK.

Dr. Adele James, Behavioural Science Lead, Verve, UK.

Kelly McKnight, Head of Ignite, Verve, UK.

Emma Webster, Marketing Campaign Manager, E.ON Next, UK.

Research Effectiveness Award 2023 Finalist

How an Agile Community Approach Supported the Transition from Uncle Ben's to Ben's Original

And how the brand change resulted in positive business outcomes and social impact

Katie Kaylor Patricia van der Hart

Business issue

In the summer of 2020, a myriad of racial injustices were thrown into the global spotlight thanks to the acceleration of the Black Lives Matter movement. Mars Food, already being aware of this movement, decided that it was time to evolve the long-established brand, Uncle Ben's, to reflect its ambition to promote equity and inclusion. However, doing so risked destabilising a brand with long-standing equity, which could negatively impact sales. As such, Mars Food needed to define a new brand platform that would mitigate this risk.

Research objectives

Given the racial inequities that were associated with the name and imagery of the Uncle Ben's brand, Mars Food understood that it was time to pivot the brand to promote equity and inclusion. To truly understand the emotions and opinions around this sensitive topic, they decided to look for an agile, quick way to listen to their (potential) brand buyers and consult them on how to move forward. The core objectives were:

- 1. To learn how to evolve the visual brand identity;
- 2. Identify potential next steps to enhance inclusion and equity.

Methodology

Having already established multiple methodologies to listen to its audiences, the Uncle Ben's team turned to its long-term community partner Human8 to tap into one such channel: the Food & You online research community run on behalf of Mars Food. An ethnically balanced sample of community members was recruited from the UK and the US. Within the community environment, a series of qualitative discussions formed the backbone of the project, creating a thread of insight onto which other agency partners (such as self-service platforms and communications agencies) could build.

The5 online research community was a critical element of this project, chosen to facilitate rapid and agile activities with an audience already primed to engage with Mars Food and its brands. In the first round of activities, Human8 assessed the potential impact of adapting the iconic brand identity (name and visual), and presented a list of potential new brand names to the community members to capture their preferences. The outputs from this served as input for a second iteration, which tested the tone of voice of a new brand narrative and discussed potential actions to enhance inclusion and equity. A further discussion zoomed in on how the brand purpose could reflect the brand's new identity. Finally, the community members could share their feedback on the brand's first concepts for design and packaging.

The community was a respectful, open and safe environment for people to voice their honest opinions. Community members who were initially against change were able to gain a better understanding of why some people felt offended by the current brand identity and, as such, some members reconsidered their point-of-view. Community members did not just provide socially acceptable answers, but a mix of honest and personal views which was imperative to help develop not just brand products, but brand purpose. Through short, iterative research cycles, Human8 curated an in-depth, rich understanding of why and how changes were needed. The brand team could move forward rapidly and pivot its brand identity to promote equity and inclusion. The online community facilitated extensive qualitative feedback, which was crucial to achieve the objectives of the project and inform the actions taken by Mars Food.

The voices of community members were added to those of thousands of consumers, associates and stakeholders around the world who were listened to by Mars Food. Not only was this research noticed by senior leadership at Mars, but it was activated with urgency; within just three months of launching the research project, the new brand name "Ben's Original" was announced, alongside a new purpose to "create opportunities that offer everyone a seat at the table". After this, the community members also supported the roll-out of the new brand. Their feedback helped to shape the in-store communication for both the UK and US markets and contributed to the development of video advertisements through storyboarding.

Impact

The in-depth qualitative discussions that took place on the community led to "aha" moments and powerful insights for the Mars Food team, which helped them understand how to evolve the visual brand identity from Uncle Ben's to Ben's Original. Awareness and understanding of the sensitivities increased the willingness to embrace change, and thus also a new brand identity. The research also helped the team to identify potential next steps to enhance inclusion and equity. Along with other collaborations, the Ben's Original team collaborated further with consumers to translate its purpose into concrete action to enhance racial justice, diversity and inclusion.

Since this research was conducted, Ben's Original community outreach programmes have been set up to ensure underserved communities have access to nutritious meals, and to help culinary entrepreneurs of all ethnicities get educational opportunities. In the US, the brand has forged a partnership with National Urban League to support aspiring Black chefs through a scholarship fund, and this support will be expanded into other underserved communities around the world. In Greenville, Mississippi, where Ben's Original has been produced for more than 40 years, Mars Food will invest in the local community to address issues that have

Copyright © **ESOMAR** 2023 CONGRESS 2023

plagued the region for generations. This will focus on enhancing educational opportunities for more than 7,500 students, as well as furthering access to fresh foods.

Around 5 million USD has been committed over five years to offer everyone a seat at the table. In addition, Mars has made commitments to continue to improve racial equity, such as increasing representation in the company's workforce, leadership and talent pipeline, as well as better utilising spend to drive positive change.

Effectiveness

This research project was pivotal for Mars Food, having positive outcomes in both business and societal terms. Not least was the speed of change in the organisation. This research fuelled the fastest rebrand in Mars, with more than 1,500 SKUs changed in total, and just 10 months to complete from decision to shelf. Our supporting document highlights some of the results below.

Communications results:

- +42% prompted awareness within three months;
- Brand perception-modern (+13%), responsible (+8%);
- 40.1 billion earned reach, 90% positive sentiment.

Business outcomes:

- Household penetration +20%;
- +229% purchase intent post-relaunch.

Social impact-acts, not just ads:

- 18+ million meals donated in 2021;
- 300 scholarships intended to increase diversity in the food industry (2021-2025);
- +5 million USD given between 2021-2025 aimed at increasing access to nutritious meals and educational opportunities.

Following the research, Mars Food won "Best Response to Change" and "Rebrand or Relaunch Strategy of the Year" at The Drum Awards for Marketing 2022, for Ben's Original with the We're All Original Recipes campaign, created with The&Partnership.

About the authors

Katie Kaylor, Global CMI Foresight, Mars Food, UK.

Patricia van der Hart, Research Director, Human8, Netherlands.

Research Effectiveness Award 2023 Finalist

Owning Inspiration

Unpacking the sub-dimensions of inspiration for strategic success at Pinterest

Dr. Daron Sharps, PhD Martyn Hill

Enabling inspiration for its users is the core of Pinterest's mission, and it is always actively exploring new and innovative ways to measure this mandate. In 2021, Pinterest approached Firefish with a unique challenge; to understand inspiration and make it feel less "squishy". This study needed to be designed and executed in a way that could translate an intangible concept into a working model of what inspiration means, in order to guide internal development, support content creators and build a compelling narrative to take to market. Crucially, we needed to bring that knowledge to life through a visual lens—allowing teams across the business to see the opportunities for action; no "black box" solution would suffice. Through a bespoke blend of cutting edge qual, quant and Al-driven semiotic analysis, all with human understanding at its heart, Firefish helped Pinterest arrive at a game-changing insight: that inspiration is as much about narrowing down your options and moving towards a final decision, as it is about exploding your options out and broadening your horizons. What's more, Pinterest is a platform that helps people discover ideas, make decisions and then take action—often including the brands and products they're going to buy.

With a set of questions that stemmed from understanding what the observable, rateable and/or shared characteristics of Pins that people find inspirational are (including cues, drivers and how they break down across the inspiration journey), the study began with a foundational qualitative phase. This involved 80 respondents (including cross-functional stakeholder and expert interviews) designed to consider psychological, academic and social perspectives of inspiration, and how they drive people, communication and action. To drill into the theoretical and confirm the hypotheses developed at this point, live, guided-browsing "inspiration safaris" and a series of digital communities across markets shaped the development of the first unique visual model: the "inspiration diamond". This quickly gained traction across the business as a clear, tangible explanation of how inspiration functions, and confirmed that the way in which Pinterest and Firefish were approaching this unique piece of work was the right way to go.

Building on this, a quantitative phase began blending an innovative, AI-semiotics-at-scale approach (machine learning) overlaid with survey (human learning), using an unprecedented 15,000 pieces of stimulus referred to as the "corpus of Pins". In short: images posted and/or shared along with their accompanying metadata,

sourced directly from user-generated content on Pinterest. This was a first-of-its-kind challenge for Pinterest, with a data file being compiled that contained URLs to Pins, and their metadata (category, country, etc.) for the 15,000 Pins from the Pinterest universe. A "Pin spec" was developed to effectively manage market nuance and ensure the stimulus was as representative as possible for the four markets (US, Japan, Brazil, Germany), as well as across 23 categories of interest (including beauty, sports, weddings, DIY and crafts, travel, etc.).

A robust quality assurance process ensured the quality of stimulus served respondents. This involved exporting Pins directly from the Pinterest platform and taking a human approach to assessing them against a series of criteria in order to ensure their suitability for use as stimulus in line with best practice—e.g., removing any that could be perceived as triggering or offensive, whilst balancing this with a need to avoid applying excessive, subjective censoring. The quantitative AI semiotics explored the visual codes of the Pins, which were clustered thematically based on defining codes and semiotic metrics. These were then explored through multiple lenses, including content, colours used, composition, complexity of image, semiotic and emotional energies coming from them. This enabled each cluster to be described using "archetypal signifiers", including mapping them to the Jungian archetypes (rebel, explorer, creator, hero, magician, age, ruler, innocent, everyman, caregiver, lover and joker). These were used as an overlay to profile and bring to life the clusters and aid actionability.

For example, the "lushness" cluster has a green-brown earth colour palette featuring images from nature. This allowed Pinterest to go beyond their categorical clusters (weddings, fashion, home décor, etc.) to look at Pin content through a visual-led lens based on thematic clusters of visually similar inspirational content. These newly identified semiotic clusters transcend the traditional "bucketed" categories (like weddings, home décor or beauty), and understanding the overlap revealed a deeper comprehension of how consumers are searching for and saving (pinning) content that inspires them to realise ambitions in their offline lives. Indeed, when looking at the behaviour behind how users are engaging with content semiotically, it became apparent that Pinterest's most popular verticals (e.g., weddings) are actually showing up across the platform, revealing a key opportunity for advertisers to reach potential customers via new routes beyond the most obvious explicit bucket categorisations.

Across the four markets studied—chosen because of their cultural differences rather than their similarities—the "inspiration diamond" was tested at scale with 12,313 survey respondents, giving implicit and diagnostic responses to the 15,000 pictures, across numerous metrics that we identified as subdimensions of inspiration in the qualitative phase. Further, this yielded 182,600 pin ratings and 102,000,000 individual data points. This collaborative phase saw the supplementing and layering of said data with additional statistical analysis, including key drivers modelling to diagnose and size the sub-dimensions of inspiration, and regression modelling to understand the strength of inspiration in relation to the specific image attributes.

Finally, the semiotics, survey results, data analytics and qualitative learnings were combined for a holistic understanding of inspiration, allowing the identification of the themes most prevalent in Pins considered "inspirational". This went on to determine which clusters were of almost-universal appeal, and which were more niche. By dissecting multiple images which looked superficially similar, the team were able to understand why one image was much more appealing than another. For example, isolating the impact of colour revealed that near identical images varied vastly in terms of their appeal, with more muted tones rated much more highly than garish brights in certain contexts in the beauty category. More broadly, themes can be derived about which colour palettes are most likely to trigger an inspirational response. Going beyond explicit semiotic codes, we were able to layer additional context to understand why two superficial images might perform very differently with people. For example, cliched images underperformed on markers of inspiration than more "real" depictions, illustrating the importance of tailoring content to suit people's real-life situations. Despite obvious cultural nuances there's a range of subjects that transcend borders to deliver universal inspiration, with the most inspirational images clusters providing inspiration to all.

There was also a key "check your own bias" learning moment when looking at the long tail of images that had had little impact for most people, but were hugely inspiring for others. For instance, think of a silly image of a milk carton crafted into a whale, an image of guns or a highly technical electronic component map images that were tagged. This served as a core reminder that beyond the universality and trends, there is always a highly personal element impacting content engagement that remains in the realm of human rather than Al. By the end of the study, we had learned that inspiration is a universally motivational and emotional process, despite playing out differently by country, and went on to develop a playbook that would help Pinterest and its advertiser clients create content that would better generate the feeling and/or action associated with inspiration. This playbook with the theory of what drives action-focused inspiration with clear illustrative examples from Pinterest's own content (Pins), has gone on to be the basis for a series of activations. Translating this theory into implications for advertising best practice has enabled us to talk to advertisers about the unique benefits of Pinterest's inspiration USP, and give tangible recommendations for how to make the most of this for commercial benefits.

The research was also designed with longer-term impact at its heart. It was designed and executed as a project to translate an intangible concept into a working model of what inspiration means, in order to guide internal development, support content creators and build a compelling narrative to take to market. Crucially, the work brought that knowledge to life through a visual lens, allowing the business to see the opportunities for action. It landed impact across the business from marketing, sales and advertising to product strategy, development, UX and execution with broad reach both internally and for external sales conversations with some of Pinterest's biggest clients and/or brands. Pinterest is now able to help marketers to get a different kind of ROI: return on inspiration. It has also been a critical jumping off point for additional research, including development of an "inspiration algorithm" and an academic research partnership examining the links between inspiration and mental health.

Pinterest's CMO highlighted the impact of the research as part of their unique global ads summit event "Pinterest Presents" in March 2022, which was viewed by tens of thousands of viewers. This yielded tens of millions of dollars of attributed revenue within 90 days of the event, and hundreds of millions of touched revenue within 90 days of the event. According to Cassandra Rowe (Head of Product Research at Pinterest): "The research was a linchpin for our company's long-term vision and strategy. By articulating an easily understood framework and bringing along dozens of cross-functional stakeholders, the project has transformed parts of our product, marketing and metrics".

As for Pinterest's own return on research investment, the deliverables of this project have gone far beyond their initial huge value. The insights resulting from the project were foundational in shaping Pinterest's inspiration-focused strategy going forward. Over 50 sessions have been run across the business to teams including sales, marketing and product design, in order to roll out the framework for designing and delivering optimally inspirational content to Pinterest users ("Pinners"). The content has also been shared with leading global brands, with one household name stating: "I now get what to use Pinterest for...inspiration. That was invaluable as most of our tactical campaigns have been mid and lower funnel [and this] will truly unlock upper funnel".

This study also became a critical launching-off point for additional research. The vast global database and image level stacked data files (containing semiotic metrics as well as survey data) was used for a follow-up AI predictive analysis of the potential ROI (i.e., return on inspiration), the commercial benefits of optimising online content to spark greater inspiration. This work to develop an "inspiration algorithm" would not have been possible without the foundational understanding and quantification of inspiration that the Pinterest-Firefish partnership delivered.

Inspiring stuff, wouldn't you agree?

About the authors

Dr. Daron Sharps, PhD, Researcher, Pinterest, US.

Martyn Hill, Business Development Director, Firefish, UK.

Research Effectiveness Award 2023 Finalist

An Innovative Approach to Employee Experience

The story of how Judo Bank changed the way it listens to its people and proved that supporting the well-being and happiness of its people makes for happy shareholders

Laurie Hibbs Garreth Chandler Ben Griffiths

Summary of the project and methodology

This is the story of how Judo Bank changed the way it listens to its people, proving that supporting the well-being and happiness of its people makes for happy shareholders, supporting the old adage "happy people make productive people". It all started with the idea that people can provide weekly feedback using AI, and the result has been transformational.

Judo Bank is an Australian neo-bank focused on small and medium-sized enterprise lending, but also offers a range of personal term deposit products to consumers. It is an organisation known to be a disruptor ("challenger bank")—innovative and driven by data, but relying on old fashioned customer service models (i.e., "banking like it used to be"). Evolved Thinking is an Australian insights services company that helps its clients use human insights to drive organisational success. Judo approached Evolved with a strong belief that large-scale, annual or intermittent engagement surveys don't genuinely guide decisions, nor offer real insights about the ebbs and flows in employee experiences at work. Judo wanted to take employee experience to the next level with weekly feedback. It wanted to link this to its CX programme, which was real-time, in order to ultimately show how the workplace experiences really affect customer experiences, as well as the implications on business financial outcomes.

The solution developed by Judo and Evolved adopted the latest in technology to change the way Judo listened to its people. This included:

- Weekly mobile-first listening through SMS;
- Mobile-first feedback interface to make feedback seamless and natural;
- Use of conversational AI to allow employees to express themselves in their own words;
- Animated morphed non-verbal scaling to elicit ratings of employee engagement, physical energy, emotional connection and mental acuity;

- State of the art text analytics to explore conversational feedback;
- · Real-time reporting to bring the data to life for company leaders;
- Integration of psychographic and other organisational variables;
- Providing continuous reflection opportunities with employees reviewing their year of feedback in a personalised dashboard.

This programme was put in place in 2019, and is known as the Judo Employee Delight Index (JEDI). By integrating case matched CX data and sales data, we created a unique and powerful data-set to explore the premise of the service profit chain.

The key steps to achieving this were:

- Getting feedback faster by changing from an annual to weekly (yes, weekly!) feedback system from employees;
- Human-like feedback engagement using AI by moving from a traditional survey to an AI powered workplace companion who chats with employees and listens to their thoughts, feelings and concerns;
- Rescaling aligned to a validated model of human engagement drivers by using the smile badge system developed by Evolved to explore and track engagement, physical energy, mental acuity and emotional connection to the employer brand;
- Tooling up and applying new analytical methods by applying text analytics to surface and explore themes in the conversational data—sharing this in an anonymised format with managers to enable actions;
- Integration of multiple data-sets from across the business by integrating the HRIS and VOC data to explore complex causal relationship in the data (e.g., psychographic profiles, attrition data, sales, CX feedback, etc.);
- Creating a 360-feedback loop by allowing employees to review their year of feedback and reflect on what experiences at work drive their responses and how to be and do their best.

The totality of these changes is now called the JEDI programme. The JEDI programme is one of three components in our linkage work, where each component and further methodological details are outlined below.

The JEDI system

Each week employees receive an SMS asking them to share their experiences at work via smile badges, and to have a chat with a workplace companion powered by AI (see Figure 1). This was built from primary research into employee engagement data, and comprises 37 distinct subtopics that drive the AI to prompt and probe on their workplace experiences.

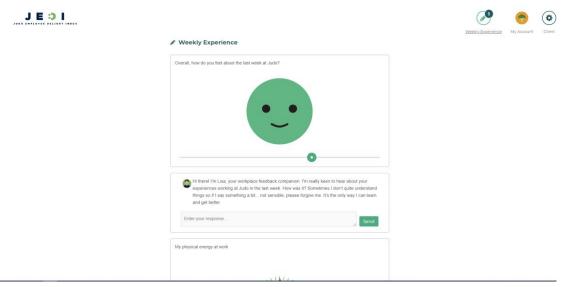


Figure 1

Data from across over 450 employees is pooled and text analytics classifies their feedback in a real-time portal, summarising insight to a real-time dashboard. Data is tracked over time to identify any required actions and detect any issues. At the end of the year, each employee receives their own dashboard featuring all their trended results to date, enabling self-reflection on their well-being and experiences during a given week (see Figure 2). For instance: "My physical energy was lower in August and I was talking about tight deadlines. Next year I'll schedule an extra break to build my energy before this busy period and discuss deadlines with my manager". The dashboard also features an automated system providing personalised advice for employees based on their actual engagement levels throughout the year.

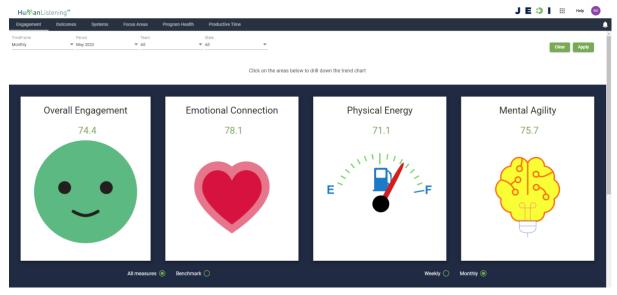


Figure 2

The CX system

Customers of Judo are invited to provide feedback about their banking team, and this data is linked to the relationship owner employee ID. Results are tracked and presented in a real-time dashboard.

The HRIS data

Judo assesses the psychographic profile of its employees at onboarding as part of its enablement programme. Other data are captured in its Elmo HRIS system.

The analysis plan: Finding the insights from this unique data-set

Our data science team created a relationship data-set linking employee ID with customer ID (in the banker team). This was also linked to employee financial performance, personality profile and leave status to develop an aggregate-level strategic insights presentation, based on case-level data linkages to the Judo leadership team. The data was analysed to consider the sequence of interactions, to explore cause and effect and recursion; i.e., does a happy employee make for a happy customer, or does a happy customer make for a happy employee? The linkage work conducted is as follows:

- Customer net promoter score (NPS) refers to the likelihood of VOC customers to recommend Judo Bank to their friends or colleagues on a 0-10 scale. This metric is compared to each of the key JEDI metrics for a given customer's relationship manager across time.
- The linked completes are organised by five different time periods, relating each VOC complete
 interaction date (the date they onboarded, hit six months as a customer or exited) to the JEDI
 completes of their relationship manager.
- JEDI surveys completed on the same day as linked VOC surveys.
- The nearest preceding JEDI survey.
- The nearest preceding JEDI survey filtered by JEDI completes within seven days prior to the VOC interaction date.
- The second preceding JEDI survey.
- The nearest JEDI survey completed after the VOC interaction.

This enables analysis of the leading and lagging indicators of VOC results, by comparing pre- and postinteraction employee survey responses. The JEDI metrics of interest are listed below:

- Overall engagement;
- Physical energy;
- Emotional connection;
- Mental agility;
- Advocacy;
- Future intent;
- Discretionary effort.

Results are based on the NPS scores for linked exit, onboard and relationship customers, and various JEDI metrics for their corresponding relationship manager. Following encouraging initial and indicative results, the scope of this research was expanded to incorporate Judo-provided information on financial performance, personality and employees who left Judo Bank. This information has subsequently been contrasted with

linkable VOC survey completes and JEDI results to ascertain the key influences on employee attrition, employee well-being, financial performance and customer outcomes.

- Financial performance refers to the number of deals an individual employee has successfully completed.
- Leavers refer to whether an employee has left Judo or is a current employee. Leavers are categorised
 according to whether they are voluntary, involuntary or out-of-contract—where the latter group has not
 been included due to small sample size.
- Personality refers to the PI data for employees with this information. It is based on four dimensions
 of personality, the combinations of which are used to allocate each employee towards one of 17
 different personality profiles.

We additionally incorporated our in-house text analytics functionality, in order to explore how the conversations Judo employees have with our conversational AI can further explain the employee retention and well-being. This analysis employed the JEDI metrics as well as the topics and subtopics from the Judo Bank Employee Listening Focus Words model.

About the authors

Laurie Hibbs, General Manager Relationships, Judo Bank, Australia. Garreth Chandler, Founding Partner and Head of The Evolved Group, Australia. Ben Griffiths, Research Consultant, The Evolved Group, Australia.