Hybrid Insights:
Where the Quantitative Meets the Qualitative

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Taking a human-centred approach to market segmentation can help organizations identify new opportunities for growth.

by **Johannes Seemann**

WHEN ROSARIA WALKED THROUGH the doors of **IDEO**'s Palo Alto studio on her lunch break, she was juggling several 'smart' devices. A 20-something paralegal with multiple family commitments, she depended on these devices to manage a slew of daily commitments as efficiently as she could. When we met her, Rosario was also running a small event-planning business on the side and scheduling appointments for her sister, her husband and other family members. While she used her work computer just for work, she used emerging technology to stay connected throughout the day and was always on the lookout for the next device that could help her stay on top of business and family commitments.

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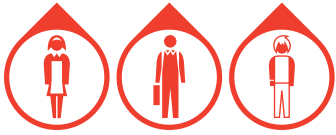
Was socially-connected, hyper-efficient Rosaria an 'outlier' – was she unique among early adopters of new mobile technology? Or was she representative of a larger population?

Rosaria was one of 10 in-person interviews my team and I conducted to learn more about emerging mobile device behaviour. Having led with this 'qualitative research', we then turned to quantitative methods to strengthen and refine our initial insights. Linking qualitative and quantitative research would help us determine whether there really was a significant cluster of female early adopters out there, alongside all the classic male 'tech geeks'.

Sure enough, we found that conventional tech wisdom had overlooked a significant early-adopter set: our quantitative findings showed that Rosaria was a statistically-representative member of a segment of 14 per cent of the population that shared the same preferences and allocated the same importance to 20-plus value drivers of mobile devices. One of five real-life customer segments we identified, this group of 'efficiency seekers' skewed heavily towards women and had the highest usage of the first round of iPads.

Based on these insights, some of the design concepts we developed for early adopters of technology pivoted away from *male tech geeks* and towards *female efficiency seekers*. Throughout our iterative design cycle, stories like Rosaria's provided tangible ground for our human-centered designers to create products that met real needs. We knew that Rosaria was representative of both a larger population dataset and the needs-based clusters we had derived, and this gave us the opportunity to scale and the data we needed to attain confidence in an emerging market for several design concepts.

While quantitative methods have their merits, they often lack the design insight and texture that inspires new ways forward. Meanwhile, qualitative research provides invaluable inspiration for human-centered designers, but the insights unveiled can be fragile if they are not backed by hard numbers that represent a larger population. Integrating quantitative research methods with a qualitatively-driven design cycle is a powerful new approach

that we have dubbed 'hybrid insights'.

By seamlessly integrating people's real-life stories with hard market numbers, the hybrid insights approach helps strategists leverage the *why* as well as the *what* when making important decisions. We have found this to be a robust and powerful tool for design and innovation.

An Integrated Approach

At IDEO, one of our goals is to assist organizations in identifying new ways to serve and support people by uncovering latent needs, behaviours and desires. Our obligation is to find and launch effective, elegant solutions that meet the needs of real people, and the people with that need have to be a large enough segment for a viable business.

Often, innovators are given traditional market segmentation data to ground them in a new challenge. This data typically reads something like this: "Meet Joe, a blue-collar worker, who is an average user of average computer brands. The segment is 65 per cent male." Which can lead to the cheeky question: "What's the remaining 35 per cent of Joe?"

As a company that believes in maintaining a human-centric perspective, we often wondered: "Why do researchers try to make *people* out of *data*? And why do companies rely on these 'segmentations' to design new products and services for their customers?" In short, *why do people disconnect the human stories from the data in the first place?*

In our ongoing work in this area, three design principles have emerged for achieving hybrid insights.

1. Embed Stories Into Your Data

Human-centered design aims to solve the needs of real people – not manufactured personas. Starting with qualitative research into people's existing needs and behaviour allows strategists to create innovative solutions that are desirable, feasible, and viable for all involved. By placing a real person like Rosaria into a larger data set, the data can 'breathe' with a heart and soul

that inspires strategists and helps them connect with the deeper meaning behind the statistics.

Qualitative research often produces surprising and inspiring individual stories, and while these individual portraits are invaluable for designers, more rigor is sometimes needed to generate insights that speak to all parties in the innovation process. The hybrid insights approach serves both concept designers and business strategists by embedding individual stories into larger data sets. By placing an individual's needs in the context of a peer set or market, designers can create human-centered solutions that scale.

Whereas most standardized research approaches emphasize analytics and testing in an abstract way, embedding stories into data can help strategists put faces to the numbers. Further, the continued ability to drill down in the data and reference real stories within a large quantitative dataset allows for new insights to emerge throughout the design process.

2. Cross-validate Insights

In 2009, the American newspaper industry was in crisis. **Craigslist, Google,** and other digital competitors were eclipsing traditional advertising revenue and circulation declines were the grim reality for city papers. Many venerable publications were shutting their doors or severely cutting back staff. Media pundits talked seriously about the collapse of community journalism and the death of the local news industry.

Enter media titan **Gannett Co. Inc.** The company – which shifted the newspaper paradigm in 1982 with the full-color

national daily *USA Today* – was not about to go gently into that dark night. Instead, Gannett intended to shift the newspaper paradigm again and remain at the industry's forefront in the 21st century. But how?

This was the big question IDEO designers and Gannett executives set out to answer using hybrid insights. We were on a tight deadline: in six months, Gannett aimed to launch a new experiment in the San Francisco market. The goal was to create a new local newspaper, unencumbered by existing media structures, which could lead to new learnings about emerging consumer needs.

The team began by conducting a scan of the market landscape that encompassed startups and novel media solutions. We also conducted human-centered field research and in-person interviews with local merchants, community leaders, and San Franciscans of all stripes. Soon, we arrived at two important *qualitative* insights:

- First, most San Franciscans engage with their neighborhood community more through local commerce than through traditional means of civic engagement;
- Second, local readers were attracted to a particular style of content: they appreciated subjectivity (vs. strict objectivity), found narrative writing a refreshing alternative to Twitter-esque communiqués, and appreciated highly-designed premium content.

THE HYBRID INSIGHTS CONTINUUM FOR INNOVATION

The hybrid insights journey for a design and innovation project has four stages: Inspire, Explore, Prioritize, Evaluate.

Inspire: Human-centred field research, observation, interviews, and other qualitative tools identify latent or emerging consumer needs, qualitatively-derived behavioural types, and initial design insights.

Explore: This stage builds on the discovered needs, derived insights and established behavioural types. The team develops concept provocations, a representative set of needs and a behavioural context. These are meant to confirm and scale the behavioural types into clusters / segments. These clusters are validated using the feedback from concept provocations. Quantitative research is seamlessly integrated at this point.

Prioritize: Feedback sessions, coupled with short analytic exercises, highlight the most desirable value proposition and boost confidence to pursue rapid prototyping and further design iterations with a reduced but validated set of features.

Evaluate: Strategists use this stage to identify and confirm the positioning of the product or service. Who do the designs appeal to most? What marketing messages resonate most?

While these four stages are emerging as best practices for hybrid insights, the approach is flexible and every project is different. The key is this: by seamlessly integrating people's stories with population-representative numbers, this approach provides insights that are rich enough to inform design and robust enough to support decision-making.

Based upon these key qualitative insights, we entered an additional round of research where we built concept provocations off our insights and learnings. We then set out to validate our qualitative findings through rigorous quantitative research using a much larger dataset. To achieve this, we designed two detailed customer segmentation studies – one for merchants and one for locals – and asked participants to prioritize between sets of statements that defined their needs, behaviours and attitudes.

Through a mix of qualitative and quantitative approaches to segmenting the market, we found that some 'niche' insights scaled up to a larger dataset. For example, we discovered new insights about local merchants that translated to a bigger segment; and we learned quickly that some small businesses were not interested in growing larger and becoming big businesses. At least one important cluster of iconic merchants in qualitative research told us: "Don't send me more customers! Just send me more of the *right* customers!"

The 'right' customers, as these niche business owners perceived them, were individuals that they perceived as being part of the same small, carefully curated niche community they themselves belonged to. Armed with these qualitative insights, quantitative research then allowed us to understand another cluster of merchants, who were even less interested in a monthly subscription service that would contribute to popularizing their business.

The merchants in this segment were mostly concerned with what other respected merchants thought about their business, validating their work through peers rather than profits or number of customers. These findings helped us consider new ways to create true value for local merchants and neighborhood communities in general. We were also able to prototype based on these insights during an iterative design process.

Within six months, Gannett launched a new local San Francisco online magazine called **The Bold Italic**. The magazine, which exposes San Francisco's cultural core rather than simply its civic image, encourages so-called 'Bold Locals' to engage in new ways. The stories published strive to unearth rare tidbits about the city, outline offbeat urban adventures, and inform citizens about local products and services.

The takeaway here: discovery of seemingly 'extreme' behaviours and latent needs can fuel good design, but cross-validation of insights is critical to identifying the right value proposition and positioning a product within a relevant target market.

3. Do What You Can to Help People Imagine

As **Henry Ford** once said, "If I'd asked people what they wanted, they would have asked for a faster horse." Disruptive design and innovation – in cars, healthcare, or any other industry – requires bravery of the imagination. While designers are experts at imagining and coming up with prototypes and experiments, when *disruptive* concepts are tested in the abstract, people often default to what they already know: research shows that something radically-different almost always scores lower with people than something familiar. How can we tell if something is not scoring well because it is a bad idea, or if it is really just too innovative?

The key to helping people imagine how a new concept can add value in their lives is to use design as a tool to put the new concept *into a context that they can relate to*. By helping people relate to the behaviours enabled by the new concept, they are able to see its value.

In an area such as birth control education, the impact of good concept testing evaluation – via experience-based studies, highly-visual survey design, and iterative prototyping – can be life-altering. For example, the United States has a significant problem with unplanned pregnancy, especially among unmarried 18- to 29-year-olds: seven in ten pregnancies in this demographic are unplanned, a statistic that applies to women of all ethnicities and socioeconomic levels.

To address this gap in effective birth control education, the **National Campaign to Prevent Teen and Unplanned Pregnancy** set out to build a birth-control support network for women ages 18 to 24 and asked us for help. Working with them, we began with qualitative human-centered design research, gathering

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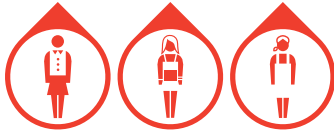
stories from women about their experiences and conducting observations in health clinics and hospitals.

We are used to hearing organizations talk about birth control in a fairly typical way that is medical, clinical, and politically correct. If you pick up a birth-control pamphlet and a dental pamphlet in a doctor's office, the information will often be conveyed in the same factual, logical tone. Perhaps that tone is effective when it comes to the need for regular flossing – but unplanned pregnancy rates indicate that a clinical tone has proven to be largely uncompelling when it comes to emotional topics like sex, birth control and family planning methods.

Our initial hunch was that birth control education needed to be less clinical and more 'sex-positive' to truly connect with the target demographic – a major departure from the traditional textbook-toned birth-control brochures. To cross-validate this insight, we hosted discussions with a number of stakeholders in the birth control web, including young women and men, health care providers, and clinic workers. We also interviewed people to find out what they knew about birth control, plus how they preferred to talk about birth control adherence.

We quickly discovered that learning about birth control in the classroom was analogous to learning how to drive a car in the classroom, six years before being thrown the car keys and told, "Have at it!" We also found that people wanted to be able to talk about birth control and adherence to it as part of normal life, and that they wanted reliable information available online.

We solicited feedback from a larger panel of prospective consumers to prioritize design concepts and prototypes. By placing our concepts as closely as possible into an actual behavioural context, we allowed people to experience, rather than just hear about, the value of what we were proposing. This research led to additional insights and refinements, including the introduction of SMS text reminders and a free birth control method finder.

As we prototyped our way forward with a small group to find out what tone and wording was most well-received for SMS text reminders, we soon discovered that women were forwarding their favourite text reminders to other people, establishing a network effect. The tone they preferred was a witty, 'big-sisterly' informational tone, and this insight led to additional refinements

in messaging. Evaluation of these hybrid research findings led to the design of **Bedsider**, a digital community that offers comprehensive education about existing birth control methods and acts as a vehicle for behavioural change.

After extensive pilot testing of experiences and the construction of indicators to evaluate progress, Bedsider launched nationally in November 2011 with the help of an **Ad Council** campaign that drives sexually-active women ages 18-24 to Bedsider.org. The multi-platform public service announcement effort includes television, radio, print, digital, and non-traditional advertising, as well as an integrated social campaign. Although Bedsider's carefully crafted sex-positive brand is somewhat uncommon for the U.S. healthcare industry, rigorous hybrid insights research cross-validate this approach for the target demographic.

In closing

Researcher **Brené Brown** once said, "Maybe stories are just data with a soul." Keeping the soul in data is the great strength of the hybrid insights approach. Today's groundbreaking innovations are fueled by human-centered design insights coupled with analytic confidence within relevant target markets.

A combination of the best of both qualitative and quantitative market research methods, hybrid insights leads with qualitative research and subsequently integrates quantitative methods in a seamless way. By allowing people to then toggle between the two methods during rapid prototyping and research synthesis with the whole team, hybrid insights points to the future of smart insight generation. *R*

Johannes Seemann is a business designer at IDEO focused on bridging qualitative and quantitative methods through hybrid insights.