



JILL AVERY

MICHAEL NORTON

Learning from Extreme Consumers

Overview

You are about to participate in a consumer behavior exercise called *Learning from Extreme Consumers*. This note describes the activities that you will complete.

This exercise is designed to equip you with a unique set of consumer research tools that you can utilize to spur radical innovation. Traditional market research techniques – such as focus groups and surveys – often yield evolutionary ideas for new products and services, rather than truly revolutionary innovation concepts. These traditional methodologies largely focus on understanding the *average* experiences of *average* consumers. Tim Brown, CEO of IDEO, a leading innovation and design firm, warns that the “tools of conventional market research can be useful in pointing towards incremental improvements, but they will never lead to those rule-breaking, game-changing, paradigm-shifting breakthroughs that leave us scratching our heads and wondering why nobody ever thought of them before.”¹

The goal of this exercise is to encourage you to study *extreme* consumers and to use the insights you glean to brainstorm and prototype *extreme*, innovative ideas. Extreme consumers include those who fall in both tails of a normal distribution of customers – those with needs, behaviors, attitudes, and emotions atypical of the average consumer. They include:

- People who are experts in your product category, and those who have never used (or heard of) it.
- People who suffer from constraints that inhibit their use of your product, and those who use your product in creatively brilliant ways that you never imagined.
- Rabid fans that are obsessed with your brand or product (“lovers”), and those who trash-talk it every chance they get (“haters”).
- People who reject using your product (whether as a matter of principle or out of necessity), and those who overindulge.

This exercise will immerse you in the worlds of extreme consumers by utilizing creative market research techniques to uncover unusual and unique patterns of consumer behavior. The exercise requires you to use ethnographic techniques designed to encourage you to think more deeply about the motivations and behaviors driving consumer behavior purchase in a given product or service category.

HBS Professors Jill Avery and Michael Norton prepared this note as the basis for class discussion.

Copyright © 2014 President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call 1-800-545-7685, write Harvard Business School Publishing, Boston, MA 02163, or go to www.hbsp.harvard.edu/educators. This publication may not be digitized, photocopied, or otherwise reproduced, posted, or transmitted, without the permission of Harvard Business School.

What's Wrong with Traditional Market Research Methods?

Automotive pioneer Henry Ford once proclaimed: “If I had asked people what they wanted, they would have said ‘a faster horse.’” Ron Johnson, creator of the Apple Genius Bars, noted: “You can’t follow the customer. You’ve got to lead your customers—anticipate their needs and meet those needs, even before they know what they want.”² Steve Jobs of Apple also eschewed traditional market research methods, claiming: “It’s really hard to design products by focus groups. A lot of times, people don’t know what they want until you show it to them.”³ Or, as the innovative chef Ferran Adrià put it: “Creativity comes first. Then comes the customer.”⁴

There are three key limitations to traditional market research methods; each can create gaps in understanding consumers:

- 1.) **The Knowing That/Knowing Why Gap:** *Traditional market research is best used to provide data on customers’ beliefs, attitudes, and behaviors. It is less suitable for providing insight into the reasons why those beliefs, attitudes, and behaviors have evolved.*

Harvard Business School professor Gerald Zaltman points to a critical knowledge gap that is created by traditional research methods: the difference between knowing *that* and knowing *why*. Traditional market research excels at generating facts and statistics about consumers’ past and current beliefs, attitudes, and behaviors – such as how frequently consumers purchase or what product features they rate highly. This type of information is often less valuable to managers than information about the reasons *why* a certain behavior is exhibited (i.e., *why* people are not purchasing more frequently) or *why* a certain attitude exists (i.e., *why* a certain feature is so attractive). As Zaltman explains, “Knowing *that* customers prefer a container that has a round shape rather than a square shape is important. Knowing *why* they prefer this shape is even more important, because it may suggest a desirable configuration that is neither round nor square.”⁵

Many innovation experts advocate for the use of human-centric, empathic research methods, such as ethnography, to help close this knowing *that*/knowing *why* gap. Ethnography – the close observational study of people through immersion in their day-to-day lives – can inform a deeper understanding of the “why’s” of consumer behavior.

- 2.) **The Cognitive Access Gap:** *Consumers’ ability to describe what they want or why they buy is limited by their imaginations and by lack of cognitive access to the motivations driving their purchases.*

According to Harvard Business School professor Youngme Moon, “the problem with asking consumers what they want is that not only will they ask for things they’re not getting, but their requests will usually be driven by what they see being offered by the competition.”⁶ Most people are limited in their imaginations: the new products they envision borrow heavily from those already in the marketplace. Consumers anchor too heavily on *what is* to be able to imagine *what could be*.

Worse still, the answers that consumers provide in focus groups and/or surveys about why they buy often bear little resemblance to the actual motivations behind their purchases. Consumer behavior is at least partly driven by unconscious motivations to which people have little conscious access. As a result, some of what consumers reveal in market research consists merely of stories consumers have concocted to make sense of their own behavior: people are unlikely ever to believe (or admit) that they purchased a car due to the attractive supermodel in the advertisement.⁷

To access these unconscious motivations, Zaltman advocates for market research methods that borrow from the fields of cognitive psychology, sociology, and anthropology to uncover “what people don’t know they know.”⁸ The Zaltman Metaphor Elicitation Technique (ZMET), for example,

elicits and analyzes the visual and text metaphors consumers use when talking about products and brands, in the belief that these metaphors offer a glimpse into the unconscious. To uncover the metaphors, ZMET researchers ask consumers to use photographs that reflect their thoughts and feelings about products or brands. Similarly, brand consultant Clotaire Rapaille, uses a three-step discovery process that involves putting consumers into a meditative state and eliciting their earliest memories and stories about products, in the belief that this process taps their unconscious motivations.

- 3.) The Inductive/Deductive/Abductive Thinking Gap:** *Most traditional market research techniques rely on inductive or deductive logic, focusing on drawing inferences from common patterns observed in data. Techniques that leverage abductive logic focus on drawing inferences from the exploration of irregular or surprising data.*

Closing the “knowing *that*/knowing *why*” gap is difficult using traditional market research methods because these methods tend to rely on inductive and deductive logic for their conclusions. Inductive logic involves inferring a general rule from a set of concrete, but limited observations: e.g., we observe that all of the consumers shopping in Walmart today are female, so we induce that all Walmart shoppers must be women. Deductive logic starts with the assertion of a general rule and then applies that rule to a specific situation, allowing us to deduce its consequence in a particular context: e.g., consumers are more price sensitive during a recessionary period, so we deduce that the luxury consumer segment must be more price-sensitive as well.

Philosopher Charles Sander Peirce believed that both inductive and deductive logic constrain new ideas because both are based on drawing inferences from common patterns observed in data. He advocated for the use of abductive logic: observing curious or surprising data that fails to accord with preconceived patterns, norms, rules, or laws. Professor Roger Martin of the University of Toronto notes that the inductive/deductive logic bias inherent in most market research techniques can lead managers to confirm their pre-existing beliefs about consumers rather than explore new hypotheses. The solution, according to Martin, lies in using techniques that rely on abductive logic, such as those used by design professionals: “Designers live in Peirce’s world of abduction; they actively look for new data points, challenge accepted explanations, and infer possible new worlds.”⁹ An abductive process starts with a search for data – and consumers – that don’t fit, that diverge from convention, that break the rules.

The Problem with Average Consumers

Most market research techniques assess the needs, wants, and desires of the typical consumer and *intentionally* exclude outliers – consumers who don’t match preconceived notions of a typical user. But, “the problem with average consumers is that they’re just a bit, well, average,” according to Brian Millar, Strategy Director at Sense Worldwide, an innovation strategy consultancy.¹⁰ IDEO’s Brown cautions that “by concentrating solely on the bulge at the center of the bell curve...we are more likely to confirm what we already know than learn something new and surprising.”¹¹

Igor Ansoff’s “weak signal theory” warns that ignoring outlier behavior can be costly. Ansoff notes that strategies often fail when managers overlook *weak signals*: ambiguous, atypical or anomalous market data. This type of data, often dismissed by managers, can be critical in predicting, warding against, and capitalizing on discontinuous or disruptive market forces.

Rather than ignoring extreme consumers, therefore, it is wise to learn from them.

Going Extreme

When looking past the average consumer to the two tails of the normal distribution – to “head for the edges” as IDEO calls it – several categories of extreme customers are evident:

The Fringe

- Who better to provide insight into toilet cleaners than someone suffering from obsessive-compulsive disorder?
- Who better to design a more fashionable sandal than a podiatrist, a foot fetishist, and a spiritual guide who teaches people to walk barefoot across hot coals?

These are just a few of the edgy consumers IDEO has used to generate radical innovation. Nike looked to religious cults to uncover the secrets of generating such passionate loyalty for their brand that it resembles religious zeal and idolatry. Sense Worldwide leverages its Sense Network, a global online community populated by those who live on the fringe of society, such as goths, punks, geeks, simple living advocates, and off-the-grid-ers, to uncover innovative ideas.

For example, when average consumers rejected the original formula for energy drink Red Bull because it didn't taste like cola, Sense Worldwide took the fledgling product concept to ravers – consumers who often stay up all night dancing and partying. Cola taste was a *negative* for these extreme consumers, who preferred Red Bull's medicinal taste because it made the product seem better able to accommodate their need to go days without sleep. This key insight drove the eventual positioning of the product – as “giving you wings” – when it became more mainstream.

Product Category Virgins

A second way to go extreme is to seek out consumers who have never used your product and who have little to no knowledge of it. Such naïve, uninitiated consumers are often called product category virgins. Novices often ask the simple questions that help uncover the taken-for-granted assumptions under which we operate and which hold us back from radical innovation. Nintendo's design team sought out consumers who had never played a videogame; the result was the Nintendo Wii, a gaming console that would have been panned by gamers due to its unsophisticated graphics and simple games, but was passionately embraced by non-gamers.

Designers can simulate the experience of the uninitiated by placing themselves into an unfamiliar product or service experience. When IDEO was working with a health care client, they sent one of their lead designers to the emergency room with a faux injury so he could undergo the patient experience first-hand. It was his first visit to an emergency room and his experience provided the team with concrete observational data and his own emotional responses. Advertising agencies working on traditionally female products have asked the men on their creative teams to experiment with these unfamiliar products, encouraging them to wear high heels or shave their legs; the resulting naïve observations can provide novel ideas.

Customers with Constraints

A third way to go extreme is to seek out people for whom existing products are problematic due to constraints, disabilities or other special conditions that limit them in their usage. Considering barriers that discourage some customers from purchase can help identify important constraints that – if removed or mitigated – can open up new customer segments. Consumers in certain market segments face economic, structural, and cultural constraints unimaginable to managers. Managers often approach constraints as roadblocks, but constraints can aid the design process. Sohrab

Vossoughi of Ziba Design, a design and innovation consultancy, noted: “Constraints are opportunities. They force you to be creative. They focus your attention and clarify your thinking.”¹²

Some designers use empathy tools – such as clouded glasses to simulate vision impairment and belly suits to simulate pregnancy – to simulate consumer constraints. When developing a car targeted towards elderly drivers, Ford engineers donned a jumpsuit constructed to simulate some of the physical constraints associated with aging: the suit limited their vision and hearing, reduced the mobility of their arms and legs, and reduced the dexterity of their hands. This enabled them to design the cockpit of the car with larger, more ergonomic knobs and buttons, larger print and eye-friendly colors in the dashboard display, and doors that open wider – to better appeal to older drivers.

Embrace, a non-profit organization, sought to reduce premature infant deaths in developing countries by creating a low-cost incubator. When the team headed to the field, they noted that mothers of premature infants carried their babies in a pouch close to their bodies, simulating the warm environment of an incubator. This spurred a design that incorporated many aspects that emerged from their field observations, a design that more closely resembled a sleeping bag than the boxy design of contemporary incubators, that worked without electricity because many users were off the grid, and that was quickly sanitized by boiling water because many users lacked sanitation facilities. Understanding and working with these constraints allowed the team to design a less expensive and more effective product.

Lovers, Haters, and Opt-Outers

A fourth way to go extreme is to find people who are passionately for – or passionately against – your product or brand. These people can be easily found in pro- or anti-brand online communities or in interest communities. Offline, brand fanatics can be found standing in line all night for a new product release or attending product launches or protests devoted (or opposed) to your offerings.

Lead users or superusers, those who use your product first and often, frequently provide forward looking insights. Indeed, lead users often modify products themselves to better meet their advanced needs. Observation of such jury-rigged constructions can generate product ideas with appeal for the masses.

Finally, critics are often an untapped mine of innovative ideas. Consumers who have used and then rejected a product category can also provide valuable insight. Who are the most outspoken rejecters? Why do they hate the brand or product? Attempting to overcome the objections of rejecters can lead to novel ideas. The designers of Vibram’s Five Fingers running shoes developed their innovative design after studying people who had rejected running shoes in favor of running barefoot.

Exercise Options

Your primary objective in this exercise is to study extreme users to develop a radical and revolutionary product or service concept. First, choose a product or service category for which you would like to generate new product or service innovations. Then, choose *one* of the methods outlined below to identify and study extreme consumers to inform your idea generation process.

- **Conduct an UnFocus Group:** Assemble a diverse and unconventional (think eccentric, weird, quirky) group of 6-10 consumers together for a focus group. Your goal is to maximize the diversity of participants so that non-traditional ideas can emerge.

- **Shadow Outliers:** Identify 5-6 extreme consumers and shadow them as they interact with your product or service. Follow them as they shop or use the product. Tagging along allows you to understand and observe their day-to-day routines, social interactions, and purchasing and usage behaviors.
- **Utilize Empathy Tools:** Handicap yourself with empathy tools that allow you to simulate the different experiences of different users. What constraints do some of the customers in your target segment face in your product category? How might you simulate those constraints in your own life to allow you to “walk in the shoes” of your customers? Are there every day conveniences that you can forgo to embody their experience?
- **Conduct a Netnography of Lovers or Haters:** Use online ethnography, or *netnography*, to analyze the conversations of consumers in online brand communities. Find fan clubs or affinity groups like rennlist.com (Porsche) and cultofmac.com (Apple) to uncover these extreme proponents’ views. And, look for the haters. Find sites like dellhell.net (Dell) or walmartsucks.livejournal.com (Walmart) to view the arguments against a product or service. What are these consumers’ values? Who are their leaders? What brings them together or drives them apart?
- **Go Extreme Yourself:** Be extreme in your own consumer behavior. If you are an avid user of your client’s product category, deprive yourself of it for a week. Or, go to the opposite extreme and immerse yourself in the product category for a week – overdoing it to gain insight into the experience of superusers. To better understand fast food culture, Morgan Spurlock ate nothing but McDonald’s for one year (documented in his film *Super Size Me*). John Winter Smith (of the film *Starbucking*) visited all of the world’s Starbucks.

Exhibit 1 provides sample activities for each method used by new product innovation teams.

Finally, compare and contrast your extreme consumer research experiences with traditional market research techniques. Use the following discussion questions to structure your thinking:

- What did you learn from studying extreme consumers? What kinds of insights did you glean from this research that you could not uncover using traditional market research techniques?
- In what ways are these techniques more and less effective than traditional market research methods? How well did these techniques address the common problems associated with traditional market research methods?
- What challenges would you face in implementing the ideas that came from using these techniques in designing new products and services? How might you overcome them?

Exhibit 1 Sample Extreme Consumer Exercise Activities

Exercise Option	Implementation Tips	Sample Activity
Conduct an UnFocus Group	<p>Adhere to IDEO's brainstorming guidelines to encourage rich, creative and divergent contributions from all participants: encourage wild ideas, defer judgment to avoid interrupting the flow of ideas, build on the ideas of others, hold one conversation at a time, go for quantity.</p> <p>Encourage play: Have a box filled with curiosities to inspire participants.</p> <p>Go visual: encourage participants to sketch their ideas in pictures or bring in photos that represent their thoughts and feelings about the product category or brand.</p>	<p>A team designing a health supplement gathered together a heterogeneous group including a doctor, an herbalist, an acupuncturist, and a member of a religious group that rejects modern medicine in favor of prayer.</p> <p>A team designing an energy drink gathered together people who need to stay alert and people who need energy: an investment banker, a weight lifter, an air force pilot, and a personal trainer.</p>
Shadow Outliers	<p>Observe how the consumption activity is embedded in the everyday lives and activities of your participants.</p> <p>Note in detail all tasks, actions, objects, participants, and interactions involved in the process.</p> <p>Ask participants to describe their thoughts aloud during their activities.</p>	<p>A team designing a car sharing service shadowed hitch hikers.</p> <p>A team designing a new car targeted to new drivers sat in the back seat during driver's education classes.</p> <p>A team designing a skin care product observed the morning routine of both heavy users (6+ skin care products used per day) and non-users (no skin care products ever used).</p>

<i>Utilize Empathy Tools</i>	<p>Keep a diary of the physical, social, and emotional experiences you have while using your empathy tools.</p> <p>Write down all of the constraints, roadblocks, and problems you encounter – and use these to prompt brainstorming possible solutions.</p>	<p>A team designing an ecommerce website accessed websites using a dial-up modem to simulate the slower Internet connection speeds experienced by consumers in an emerging market.</p> <p>A team designing a women’s razor put on vision reducing glasses and doused their hands in olive oil while shaving to simulate the foggy, slippery environment of a morning shower.</p>
<i>Conduct a Netnography of Lovers or Haters</i>	<p>Sample a diversity of online communities (3-6), sample enough conversations (100+) and include the voices of a diverse group of posters (50+) within each community.</p> <p>Document the traditions and rituals in which consumers engage to uncover the deeper meaning that the product has for them.</p> <p>Note the specific language and stories that consumers use to express their views – both positive and negative.</p>	<p>A team designing a fast food restaurant studied online McDonald’s fan clubs and brand communities.</p> <p>A team designing a product designed to help users quit smoking studied online anti-smoking communities.</p>
<i>Go Extreme Yourself</i>	<p>Take notes on the effects of your extreme usage on your physical and emotional state.</p> <p>Note the ways in which being extreme changed your attitudes and feelings towards the product or service – for better and for worse.</p>	<p>A team working on mobile telecommunications gave up their cell phones for one week.</p> <p>A team working on baby food ate nothing but baby food for one week.</p> <p>A team working on rice cookers made all of their meals in a rice cooker for one week.</p>

Source: Casewriters.

Endnotes

¹ Brown, Tim (2009) *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*, New York, HarperCollins Publishers, p. 40.

² Morse, Gardiner (2012) "Retailing Isn't Broken. Stores Are," *Harvard Business Review*, December 2011, p. .

³ Reinhardt, Andy (1998) "Steve Jobs on Apple's Resurgence: 'Not a One-Man Show,'" *Business Week Online*, May 12, 1998, <http://www.businessweek.com/bwdaily/dnflash/may1998/nf80512d.htm>, downloaded 10/22/13.

⁴ Norton, Michael I., Julian Villanueva, and Luc Wathieu (2009). *elBulli: The Taste of Innovation*. Harvard Business School Case 509-015.

⁵ Zaltman, Gerald (2003) *How Customers Think: Essential Insights into the Mind of the Market*, Boston, MA, Harvard Business School Press, p. 15.

⁶ Moon, Youngme (2010) *Different: Escaping the Competitive Herd*, New York, Crown Business, p. 34.

⁷ Nisbett, Richard E. and Timothy D. Wilson (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84, 231-259.

⁸ Zaltman, Gerald (2003) *How Customers Think: Essential Insights into the Mind of the Market*, Boston, MA, Harvard Business School Press, p. 75.

⁹ Martin, Roger (2009) *The Design of Business: Why Design Thinking is the Next Competitive Advantage*, Boston, MA, Harvard Business Press, p. 65.

¹⁰ Millar, Brian (2012) "Need Extreme Ideas? Talk to Extreme Consumers," *Wired Magazine*, April 30, 2012, <http://www.wired.co.uk/news/archive/2012-04/30/extreme-consumers>, downloaded 10/22/13.

¹¹ Brown, Tim (2009) *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*, New York, HarperCollins Publishers, p. 44.

¹² Martin, Roger (2009) *The Design of Business: Why Design Thinking is the Next Competitive Advantage*, Boston, MA, Harvard Business Press, p. 127.