Consumer packaged goods companies are always challenged to introduce new product innovation that strongly resonates with consumers and that sets them apart from products currently in the market. Apple, Google, Facebook, P&G, Dyson and General Mills are successful companies that stand out from their rivals in the market place because they regularly reinvent their products and redefine their competition.

Product Innovation Toolbox: A Field Guide to Consumer Understanding and Research brings together a global team of key thought-leaders and seasoned consumer researchers from corporate R&D, academia and marketing research companies to share their knowledge, experiences, cutting edge consumer research tools and practical tips for successful and sustainable product innovation. This is an essential resource for consumer researchers, product developers, technologists, marketers and executives who want to implement consumer-centric innovation and are responsible for designing product-testing strategies, from up-front innovation through to support of new product development. The book describes and explains the steps that transform a consumer researcher to a Consumer Explorer who guides the project team to successful innovation and new product introductions. With an emphasis on consumer understanding and examples that range from cheese to lipstick and printers to energy beverages, Product Innovation Toolbox offers guidelines and best practices for strategizing, planning and executing studies with confidence and high efficiency yielding faster and better insights.

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Product Innovation Toolbox
Product Innovation Toolbox
A Field Guide to Consumer Understanding and Research

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The Editors
Introduction

From Pixel to Picture

Jacqueline Beckley, Dulce Paredes and Kannapon Lopetchararat

Consumer packaged goods companies are always challenged to introduce new product innovation that strongly resonates with consumers and that sets them apart from products currently in the market. An Ipsos global survey showed consumers rank food and beverage, personal and household products low on the list of innovative products compared to computer equipment and electronics (Palmer, 2009).

Apple, Google, Proctor & Gamble, Starbucks and Dyson are known to be successful companies that stand out from their rivals in the marketplace, not only because they regularly reinvent their products that redefine their competitions but also the products that change consumers’ behavior and make consumers fall in love with the brands.

In Product Innovation Toolbox: A Field Guide to Consumer Understanding and Research, key thought-leaders and seasoned consumer researchers from corporate research and development (R&D), academia and product or marketing research companies share their experiences, cutting edge consumer research tools and practical tips for successful and sustainable product innovation that have been implemented in both well-known innovators and some companies that are more quiet in their creativity.

The field guide is essential for a wide range of people:

- Executives looking to understand whether their current global practices incorporate these newer approaches that address weakness of past methodologies. These individuals must be asking: “How much of my benchmarked approaches are inadequate today and which new approaches should be started, somewhere?”
- Product practitioners like product developers, product researchers, marketers, product designers, marketing researchers and technologists who want to implement consumer-centric innovation and are responsible for designing product-understanding strategies from up-front innovation to support new product development (NPD). These people will be saying: “What can I do better, smarter, faster to get the same or better results than I currently have been using?”
- Educators and their students will find the information in this book an asset in training that is more relevant to what is needed today to understand consumers, their behavior and their choices. This group will be thinking about how do I get the training and experience to educate against these new tools?”

The field guide offers guidelines and best practices for strategizing, designing, planning and executing a product research where the consumer, the person...
being studied, is viewed as a person, not a “subject”. Our goal is to provide the reader with confidence and high efficiency (faster and better insights). The methods provided are unique in their design, less familiar than legacy approaches yet are proven to work in many industrial settings. The field guide equips the reader to become a “Consumer Explorer” (CE), an insight leader and strategic innovator who can infuse and apply deep consumer understanding throughout the product innovation process.

Think of the CE taking a digital picture of the consumer and/or category landscape to identify breakthrough insights. A digital image is composed of many pixels (pixel is short for picture element, a pixel is a single point in a graphic image) that are close together so that the pixels appear connected. The number of pixels can define part of the quality of the image resolution, where to a point the more pixels the more exact the image. But also, a whole image is the sum of its parts, so the individual pixels in a picture make up what we see as the whole image. To gain competitive edge, the CE must scope the landscape, capture the aha! moment quicker and connect the dots faster to reveal the breakthrough insight faster than everyone else. Being well versed in both the pixel and the picture can make all the difference in the strategic direction of a project. Our imagery throughout is to move from pixels, or pieces of the picture, to the picture which is created by the piece.

This field guide contains 11 major chapters that will transform a consumer researcher to a Consumer Explorer by providing a step-by-step guide that shows how to design an innovative consumer research program from start to finish (pixel to picture). A CE differs from ordinary consumer researchers because, in addition to understanding consumers deeply, the CE can guide project teams to connect the dots and comprehend the big picture faster in a systematic manner. The ability to have an integrated iterative process which links one part of the process to the next is an evolutionary step for innovation research. The best practices described in the field guide will enable the CE to select and deploy appropriate and efficient consumer understanding and research tools for their current situation and to guide the project team to successful innovation and new product introductions that have the opportunity of taking insight to income.

Innovation is the engine of business strategy and success. A successful innovation is a product or service that provides comprehensive solutions to consumers’ needs and connects to consumers emotionally, cognitively and economically. However, many companies struggle to deliver a truly successful innovation constantly and sustainably in a tough economy. The key hurdle in product design and development is identifying “high potential” product opportunities while strengthening and maintaining core business needs. The key hurdle for a sustainable business is to balance the constant need to introduce game changing innovations in the marketplace and make a profit.

Leaders in innovation do not just figure out “how to read the trend” but also “implement processes” that allow them to morph the opportunities to actual products that have real high value opportunities. In short, these leaders connect the dots faster than their competitors (see Figure). The creation and implementation of efficient innovation processes take creativity and discipline. The field guide will provide guidance on how to accomplish this task.
From pixel to picture, winners are the ones who connect the dots faster.

Scoping the innovation landscape

Before embarking on any innovation journey, a general strategic direction must be understood and kept in mind. At the end of the day the team must “deliver” at least a product idea that supports the company’s strategic vision. Creating the team’s charter to innovate with consumers and business in mind is very important. Failure to incorporate these reasons early on derails the journey and results in delays and failure to deliver (but not failure to innovate).

There are five general strategic types of innovation:

1. Disruptive innovation (aka new market disruption)
2. Low-end disruption and me-too innovation
3. Sustainable innovation (aka incremental innovation)
4. Product rationalization or productivity innovation
5. Innovation for strategic purpose.

The first three innovations focus on “differences in different degrees” and the fourth one is focused on “similarity”. The last innovation deals with strategic advantages of companies more than introducing products to the marketplace. The research objective drives the methodology so it is important for the CE to define the innovation objective up-front in order to design the learning agenda effectively and choose the most efficient research tools.

How this book is organized

The field guide is organized so the CE can choose tools from two stages of innovation: up-front innovation and NPD. The tools are lined up to enable the CE to zone in and amplify the breakthrough insight faster.

Up-front innovation covers the various ways to generate deep consumer insights that can be converted to product ideas. The product ideas then enter the NPD process where they are refined, screened, optimized and validated. Many companies adopt the Stage Gate® approach (Cooper, 2001) in their NPD process to enhance the efficiency to commercialize and launch products (Moskowitz et al., 2006). Whether using Cooper’s approach or variations on this process, NPD classically is divided in stages. At the end of each stage is a gate that involves steps and checks from different business functions to assess viability of the whole product proposition.

The ideas must be proven to have potential before entering the stage gate process. It is at this early juncture where things usually go wrong. Many innovations can go through all the gates but still fail or not perform as expected in the
marketplace. We will address the flaws in the traditional screening process (few qualitative studies followed by a big quantitative study) and biases in the criteria that managers use to qualify innovation to enter the gate. We propose a new process called the “iterative qual-quant research” model (IQQR) that will enable companies to understand their product category comprehensively through knowledge mapping exercises, hypothesis testing, consumer deep dives, clear action standards, key performance criteria and action-oriented results.

Taking these processes in mind, the field guide is arranged into three parts designed to provide guidance to the different roles that CEs have to play: insight leader, knowledge expert and project manager.

Part I

This part contains Chapters 1, 2, 3, 4 and 5 and addresses basic principles and managerial topics. These chapters provide a big picture and guidance to anyone who is responsible for setting up and directing a sustainable consumer research program.

Chapter 1 Setting the direction: First, know where you are

It is important first to define the landscape that you will be operating in. Chapter 1 provides an honest discussion on how you can transform yourself into an insight leader through self-education and on-the-job training and “playing” in the company sandbox. The authors share their experiences in delivering and communicating impactful research.

Chapter 2 The Consumer Explorer: The key to delivering the innovation strategy

Consumer Explorer’s roles are three-fold:

- Steadily guide the team through the twists and turns that come with early project work or up-front innovation
- Design efficient testing strategies to refine and further validate product concepts and ideas
- Deliver project results on time to affect business decisions.

This chapter provides practical tips, checklists and best practice guidelines for setting up a research project plan from start to finish and covers roles of the Consumer Explorer in setting overall objectives, defining roles and responsibilities of key team members, understanding key questions, projecting expected deliveries from each stage, and finally presenting and communicating key learnings and diagnostic reviews.

Chapter 3 Invention and innovation

Chapter 3 explains the relationships between inventors and innovators and how to turn an invention to an innovation. Through the examples, this chapter
magnifies the different skill sets required for being inventors and innovators that are rarely found in the same person.

Chapter 4 Designing the research model

Chapter 4 further defines the two stages of consumer research: up-front innovation to identify product opportunities by understanding consumer wants, needs and pain points and NPD to refine, screen and validate new product opportunities grounded on consumer insight. The consumer exploration tools vary depending on whether the Consumer Explorer is looking for consumer insights or validating a product opportunity grounded on consumer insights. This chapter cites the importance of leveraging continuous feedback between qualitative and quantitative consumer research and sets the stage for the different research tools for Consumer Explorers.

Chapter 5 What you must look for: Finding high potential insights

Everyone knows that the long-lasting success of an innovation in the market greatly depends on the insights on which the innovation is based. However, identifying high-value insight is not an easy task. Not knowing what and where to look for these insights contributes to the delay or even the failure to innovate.

This chapter will outfit Consumer Explorers with skills to spot high-potential consumer insights and provides many characteristics of consumer behaviors and situations that allow discovery of high-value insights with in-depth analyses of product-related reasons for the success and longevity of these products in the marketplace.

Furthermore, this chapter will demystify the belief that high potential insights can only be found in something or from someone extraordinary. The reader will learn that nothing is “ordinary” about the consumer’s routine and habit; on the contrary, it is rather “irrational”. Providing innovation that changes this “ordinary” behavior will alter the landscape of competition.

Successful innovations must connect to consumers at an emotional level. Emotional benefits are everywhere and quite obvious (when people are happy they smile, when they are frustrated, they make faces). These non-verbal cues are often missed in traditional survey research.

At the end of this chapter, the audience will gain a new perspective that “a consumer is not one consumer”. This new perspective in redefining consumers allows brands to innovate more accurately and successfully.

Part II

This is the largest part in the field guide and organized based on the distance from final launch: (1) Up-front innovation and (2) New product development. These approaches have been proven to provide high-quality insights by experts. There will be instructions on how to identify the right questions, targets and contexts, how to set up the fieldwork and the common mistakes to avoid. After
finishing each chapter, Consumer Explorers will be equipped with the knowledge and understanding that allow them to select appropriate and the most efficient methods and approaches for their projects and try to make the action work for their situation. This organization will allow the audience to customize the consumer research tools that fit their own innovation engine.

**Chapter 6 Tools for up-front research on consumer triggers and barriers**

These research tools will clear the path to identify up-front innovation that identifies new opportunities stemming from unmet consumer needs and wants. At this stage in product innovation, the most important thing is to discover and capture high-value insights quickly and as many as possible. Here, the authors will introduce many research approaches and methodologies that guarantee the results when combining these recommendations with the knowledge gained from the other chapters.

- **Qualitative tools (Chapters 6.1, 6.2, 6.3 and 6.4):** Qualitative approaches and methods are often used at the very front end to discover insights. However, many standard tools are vulnerable to many factors (moderator skills, composition of consumers, setting, agenda). These four chapters include time-tested contemporary methods (Chapter 6.1) and cutting-edge methods (Chapters 6.2, 6.3 and 6.4).
  - Chapter 6.1 Understanding consumer languages
  - Chapter 6.2 Insights through immersion
  - Chapter 6.3 Qualitative multivariate analysis
  - Chapter 6.4 The Gameboard “Model Building”

- **Quantitative tools (Chapter 6.5 and Chapter 6.6):** At this stage of innovation, quantitative studies aim for exploration and discovery of insights. Learnings from qualitative studies are used to guide the preparation of quantitative studies, prioritize the objectives and ensure that the important questions will be asked. However, many standard tools are vulnerable to many factors such as questionnaire designs, composition of consumers, situations where products are used, test setting. Chapter 6.5 and Chapter 6.6 will highlight new methodologies that have been proven to provide new insights to consumers’ product and emotional experiences.
  - Chapter 6.5 Quantitative anthropology
  - Chapter 6.6 Emotion research as input for product design.

**Chapter 7 Tools for up-front research on understanding consumer values**

This chapter starts the “how to” discussion of research tools to understand the hierarchy of desired consumer benefits and values. This chapter covers the “how to” discussion of quantitative research tools to understand the hierarchy of desired consumer benefits and values. These tools are used to validate the insights with consumers. The information can be used by the innovation team for concept development and business portfolio management.
Introduction

- Chapter 7.1 Kano satisfaction model
- Chapter 7.2 Conjoint analysis plus (cross category, emotions, pricing and beyond)
- Chapter 7.3 Benefit hierarchy analysis.

Chapter 8 Tools to refine and screen product ideas in new product development

After identifying and validating the potential of the consumer insights found at up-front innovation, the ideas must be transformed into tangible products or concepts. Screening and refining the insights gathered are the hard parts in successful innovation. This chapter provides efficient approaches in refining and screening product ideas for product developers to prioritize and classify insights in order to strategize their activities accordingly.

- Chapter 8.1 Contemporary product research tools
- Chapter 8.2 Insight teams: An arena for discovery
- Chapter 8.3 Consumer advisory boards: Incorporating consumers into your product development team
- Chapter 8.4 Defining the product space and rapid product navigation
- Chapter 8.5 Free-choice in context preference ranking: A new approach for portfolio assessment.

Chapter 9 Tools to validate new products for launch

Chapter 9 has tools for product developers to validate new products developed from consumer insights. The tools will allow product developers to demonstrate early on the perception of values/benefits by consumers. Perceivable (aka demonstrable) values/benefits help product developers to get buy-in from different departments along NPD and, ultimately, guarantee the survival and success of the products in the marketplace.

- Chapter 9.1 Extended use product research for predicting market success
- Chapter 9.2 Product concept validation tests.

Part III

Parts I and II address topics to help CEs set direction, prepare and be ready for any product innovation project. Part III covers practical recommendations and steps to bring these learnings into practice.

Chapter 10 Putting it all together: Building and managing consumer-centric innovation

Chapter 10 provides guidance through practical experience for building and managing a great innovation team and creating a consumer-centric philosophy at the center of product innovation. This chapter proposes a teachable model
that combines team creativity with personal leadership at the consumer researcher level, with belief that innovation should be fun to the core.

Chapter 11 Words of the wise: The roles of experts, statisticians and strategic research partners

This chapter will provide guidelines and practical tips in working with multifunctional teams and leveraging external research agencies and technical experts.

- Chapter 11.1 Above averages: Use of statistics, design of experiment and product innovation applications
- Chapter 11.2 The role of in-house technical experts
- Chapter 11.3 How to leverage research partners (local and international testing)
- Chapter 11.4 Best practices in global testing and multi-cultural consumer research.

Chapter 12 Future trends and directions

The final chapter will offer future directions of consumer research methodologies as traditional and innovative qualitative and quantitative tools combine and morph to meet the increasing demand to generate consumer and product feedback instantly and efficiently.

This final chapter will summarize emerging research trends such as blurring the lines between qualitative-quantitative research tools, increasing use of digital technology and the rise of hybrid data.

This book has been designed to be a “how to” for individuals who want or need to get behind some of the leading approaches in new methods of understanding the consumer in today’s marketplace. As a result it will evolve over time. The book has been designed to be a “cookbook”. It is up to you to follow the detailed steps, or better yet customize and create your own imprint.

References


Part I

Starting the Journey as a Consumer Explorer
To think outside the box one must know where the box is and where you are relative to the box. Chapter 1 honestly discusses how you can transform yourself to an “insight leader” through self-education and on-the-job training and “playing” in the company sandbox. The authors share their experiences in delivering and communicating impactful research.
1.1 Roles in the corporation – the dance of the knowledge worker

The great management theorist and consultant, Peter Drucker (1999), coined a term for a class of professionals in industry whose job was to understand and manipulate symbols. He called them “knowledge workers”, to distinguish them from other workers who produced things. Knowledge workers had the job to manipulate symbols, and to create knowledge and manipulation of symbols. In Drucker’s mind, the knowledge worker was the worker of the future, as machines augmented, and even replaced people. Today’s world of computers, business intelligence, artificial intelligence, algorithms, and the utter connectivity between people and corporations makes the knowledge worker even more important than Drucker imagined.

In corporations a special group of knowledge workers practice the job of understanding the products a company makes, and at the same time the mind of the customer who uses the product. There is not one group, but rather at least three groups who share this grand responsibility of knowing the product/the user/the product-user interface.