

Part One

THE WHY AND THE HOW OF INNOVATION GAMES







In the introduction you read stories of companies and people who apply Innovation Games to better understand their customers and in doing so solve a variety of problems associated with creating innovative products and services. Part One of this book gives you the foundation you need to use Innovation Games to accomplish your goals. It starts with an overview of Innovation Games, discusses how they can be used, and moves through the process of selecting, planning, playing, and processing the results of a game. It prepares you for Part Two, in which each game is discussed in greater detail.







WHAT ARE INNOVATION GAMES?

Innovation Games are fun ways to collaborate with your customers to better understand their needs. There are twelve

Innovation Games explained in this book. Table 1.1 provides a brief description of each game.

Table 1.1 Innovation Games

Innovation Game		Description
Show and Tell		Customers describe the most important artifacts produced by your system to you and other customers.
Start Your Day		Customers collaboratively describe when, how, and where they use your product(s).
Prune the Product Tree		Customers work in small teams to shape the evolution of your products and services.
Me and My Shadow		Discover hidden needs by carefully observing what customers actually do with your products.
Product Box		Customers work individually or in small teams to create and sell their ideal product.
The Apprentice		Create empathy for the customer experience by doing the job of a customer.

Innovation Game	Description
Speed Boat	Customers identify their biggest pain points with your products and services.
	
Buy a Feature	Customers work together to purchase their most desired features.
	
20/20 Vision	Customers negotiate the relative importance of such things as product features, market requirements, and product benefits.
	
Spider Web	Customers work individually or in small teams to create vivid pictures of how your products and services fit into their world.
	
Give Them a Hot Tub	Customers provide feedback on outrageous features to establish what is truly essential.
	
Remember the Future	Understand your customers' definition of success by seeing how they shape their future.
	

To illustrate how you might use an Innovation Game, suppose you are an alarm clock radio manufacturer and your product team is interested in better understanding current and future market needs associated with a “next generation” clock radio.

You could accomplish this through any number of techniques. You could engage a simple and direct form of market research and simply ask your customers, “What do you want in your clock radio?” The answers may help your team, but your team may find the customers’ responses relatively simplistic and lacking rich detail.

You could employ a significantly more advanced form of market research, such as a detailed questionnaire followed up with conjoint analysis. The result is more likely to be analytic (“47% of customers surveyed wanted a variable snooze timer, a way to wirelessly connect a personal computer to store MP3 files, and two alarms”) but this approach can often feel sterile and suffers from a lack of discovery because you, and not your customers, have predetermined the set of features that are being explored.

Or you could play an Innovation Game, such as *Product Box*, with a representative group of customers. With *Product Box*, you would ask them to design their ideal clock radio, using blank cardboard boxes and fun supplies that you provide. When they had finished, you would ask them to sell their idealized creation to you and the other customers in the group.



FIGURE 1.1 Making a Product Box



FIGURE 1.2 Selling a Product Box

At the end of the game you would have a collection of product boxes that describe your customers’ ideal clock radio. You would also have the rich descriptions of features and benefits associated with this idealized radio, and the questions and answers of other customers who were being “sold” this wonderful new device. You could then mine all of this for powerful insights, as I’ll describe later in Part Two.



FIGURE 1.3 Gallery of Product Boxes

Overly Simplistic or Overly Complex Market Research

Innovation Games strike a balance between the overly simplistic and overly analytic approaches to trying to understand customers. Overly simplistic approaches rely too much on direct questioning, asking customers “What do you want?” (or its cousin, “What do you think our product should do?”). If you’ve asked these questions, you’ve probably come to realize that they tend to produce disappointing results. Customers are people. They often have trouble understanding their problems. And even if they think they understand their problems, and can describe them, that doesn’t mean they can articulate the solutions they are seeking. Of course, many times they often don’t know they had a problem, or that they desired a solution, until they see or possess it—much like I never knew how much I needed a Swiss+Tech Utili-Key until Todd Girvin, a friend who travels as much for his company as I do for mine, gave me one for my birthday! (The Swiss+Tech Utili-Key is a small, multifunction pocket knife that, when folded, resembles a key. You can put it on your key ring and continue to keep it there because it slides through the airport security screening process.)

At the other of the spectrum from simple questions are sophisticated market research techniques that have equally sophisticated names, such as *conjoint analysis*. Such techniques tend to be hard to apply, produce results that can be misleading, and, in my experience, are not that much fun.

The unfortunate result of this disparate spectrum of market research techniques is that product teams often end up engaging

in sporadic or episodic customer inquiry. At times, they may ask a few customers some questions, often without a clear goal, or they may hire a specialized market research firm to apply a technique on their behalf and interpret the results. The use of outside firms increases costs, further discouraging product teams from frequently seeking the understanding of their customers that they need to generate innovations. To make matters worse, the outside firm running the study is the organization that develops the understanding, serving as an unnecessary intermediary between a company and its customers, and it is difficult to deliver the insights gained from the outside firm into the product team in a way in which the product team can act on the results. The effects of disappointing internal results and the relatively high cost of external research lead product teams to avoid market research.

Innovation Games strike a balance by moving beyond simple questions to provide you with powerful insights into customer and market needs. At the same time, they are simple and lightweight enough that you can engage them on your own. Perhaps more importantly, even when you use an outside firm to help you plan, facilitate, or post-process the results of the games, the Innovation Games process ensures that your team is the group that captures the majority of the information by having them work directly with customers.

ORGANIZING AND USING INNOVATION GAMES

There are two ways to organize Innovation Games. The first is based on the kind of understanding you seek. The second is based on the context in which you are going to apply the game.

Organizing Innovation Games

Table 1.2 organizes the games by your goals for customer understanding. Note that some games appear more than once because these games are useful in more than one context.

Table 1.2 Selecting Games that Best Meet Your Goals

What do you want to understand?	Consider These Games
<p>Unmet and/or idealized market needs. Although all Innovation Games provide insight into market needs, these games are specifically designed for identifying unmet and/or idealized market needs, which can then be used as input to strategic planning and the identification of new business opportunities.</p>	<p>Product Box Me and My Shadow Buy a Feature Give Them a Hot Tub Remember the Future</p>
<p>Products and services usage and relationships. Successful products evolve over time, typically becoming richer and more customized to meet the needs of increasingly diverse markets. A key aspect to managing this evolution and tapping into new markets is gaining a better understanding of how customers use existing products and services and how they are related to other products and services. These games will help.</p>	<p>Spider Web Start Your Day Me and My Shadow Show and Tell The Apprentice</p>
<p>Product and service functionality. As Theodore Levitt wrote in his seminal work <i>The Marketing Imagination</i>,¹ customers don't want a drill—they want a hole. Clayton Christensen echoes this theme in <i>The Innovator's Dilemma</i>² by reminding us, "We hire products to do jobs." These games will help you better understand the jobs your customers are striving to accomplish.</p>	<p>Product Box 20/20 Vision Me and My Shadow Speed Boat Start Your Day The Apprentice Buy a Feature</p>
<p>How to shape your product for the future. Every company spends a lot of time thinking about the future of its products and services. Unfortunately, all too often they don't explicitly include their customers in the conversation. These games provide a way for your customer to join you in shaping your future—together.</p>	<p>Remember the Future 20/20 Vision Buy a Feature Prune the Product Tree</p>

1. Levitt, T. *The Marketing Imagination*. New York, NY: The Free Press, 1986.

2. Christensen, C. M. *The Innovator's Dilemma*. Boston, MA: Harvard Business School Press, 1997.

Four Ways to Use Innovation Games

This book details four specific ways in which you can use Innovation Games. The first way is *directed market research*, or market research that is designed to answer specific questions with data that supports taking action against these data. Examples of directed market research include determining what features should be included in a specific product release or specific pain points of target markets (including, but not limited to, existing customers, prospects, competitors, channel partners, and so forth).

The second is *customer-centric innovation*, in which you use the games to uncover previously unknown market needs. As you'll see later, Innovation Games are especially effective at creating opportunities to learn “what you didn't know that you didn't know,” which in many ways serves as the heart of innovation.

The third way to use Innovation Games is *generating the rich understanding of customer needs and desires* that feed the various requirements techniques we use to manage products. User personas, scenarios, and use cases, assessing feature importance through Kano analysis, or creating “nonfunctional requirements” are all important—but all come after the insights that lead to innovation, shaping them and defining them. Innovation comes before requirements, and playing Innovation Games with your customers creates richer requirements.

The fourth is *providing support and strengthening the ongoing relationship* that you have with key customers through ex-

isting channels such as customer advisory boards, user groups, and/or customer conferences. Instead of subjecting your customers to a boring afternoon of PowerPoint presentations, you can use Innovation Games to engage and energize them in a way that drives innovation.

These areas are all linked through the use of Innovation Games. For example, although you may have a specific question (directed market research), playing a game is almost certain to provide you with new information, some of which may drive innovation (customer-centric innovation). Part One starts with directed market research, because the process for using Innovation Games to support directed market research can be leveraged by the other motivations.

INNOVATION GAMES AS A MARKET RESEARCH TECHNIQUE

Because I've classified Innovation Games as a form of qualitative market research, it is appropriate to take a step back and briefly discuss the broader topic of market research. I have a sinking feeling that some of you may have cringed a bit when you read that last sentence, because not everyone has had favorable experiences with market research. It is worth making the investment to read this section because a grounding in the basics of market research is important to getting the best results from using Innovation Games, and the market research process described in this section provides a solid foundation for using the games in other contexts.

You Know Something About What You Don't Know

Individual knowledge can be organized into three areas:

- What you know
- What you don't know
- What you don't know that you don't know

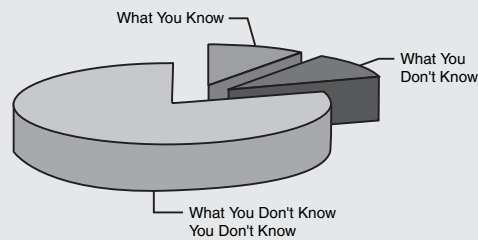


FIGURE 1.4 What You Don't Know

To illustrate: I know how to ride a bike, change a diaper, and plan, facilitate, and post process the results of an Innovation Game (and a few other things). I don't know many more things, from scuba diving to performing knee-replacement surgery.

But I can't tell you anything about what I don't know I don't know. I can't even tell you that I don't know it, because when I tell you that I don't know something, it actually means that I *do* know something—I know that I don't know it. The point is subtle and is worth repeating: When you claim that you don't know something, you

actually *do* know something—you know that you don't know it. Thus, any movement from complete ignorance moves you into a continuum of knowing. We communicate our place in this continuum through convenient shorthand phrases that are contextually motivated: "Yes, I know how to play chess" or "No, I don't know how to replace the transmission on my car."

By collapsing the continuum of knowledge, we can simplify the organization of individual knowledge into two dimensions:

- What you know
- What you don't know that you don't know

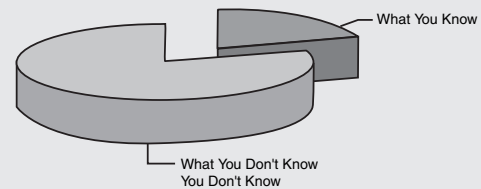


FIGURE 1.5 You Know Something About What You Don't Know

Part of the power of Innovation Games lies in their capability to move you from complete ignorance into a state of knowing. From this state of knowing, you can choose to create a variety of innovative products and services.

As you read this, keep in mind that market research is an incredibly complex topic. This book makes no attempt at a detailed discussion of market research. I may not cover an item that you think is important. I may not cover an item you know a great deal about in sufficient depth. That's OK. My goal isn't to write the definitive reference on market research. Instead, my goal is provide enough of a foundation in market research so that you can leverage basic concepts to help you succeed whether you're a market research expert or an engineer who wants to better understand the people who are using her product.

For our purposes, it is sufficient to define market research as an ongoing process of finding answers to questions; the answers enhance your understanding of your customers, your markets, and your product and service offerings. Market research, whether sophisticated or simplistic, enables you to make better decisions with greater confidence. It is ongoing because you, your customers, and the larger product and service ecosystem in which you exist are not static.³

Effective market research is

- Systematic—Planned, well-organized, with a goal and a method
- Objective—Minimal researcher or method bias
- Focused—On specific questions
- Actionable—The results obtained enable you to take action

3. Note that this definition means that all uses of the games—even when used in requirements management—are a form of market research.

The first letter from each of these words forms the acronym SOFA, and like a comfortable SOFA, effective market research provides a comfortable position for sound decision making. As I describe the use of Innovation Games, I'll discuss how you can play them according to these tenets.

A Market Research Process

The following is an effective market research process. Although it is simple, it is not simplistic, and you'll find that using it will produce much better results than ad-hoc planning.

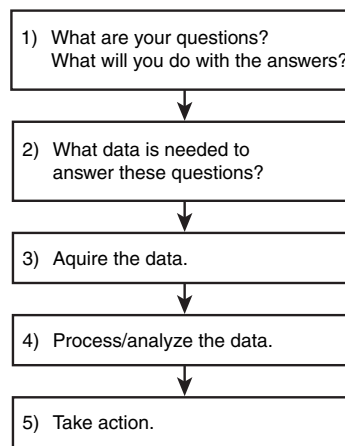


FIGURE 1.6 A Market Research Process

Step 1: Forming Questions and Preparing for Answers

The first step is determining the questions you want answered and what you will do with the answers. Both are included as part of the first step because it doesn't make much sense to ask questions if you're not

committed to at least do *something* with the answers. Of course, the specific things you do, such as create new products, adjust current product road maps, or change existing products to better meet market needs, can't be predicted in advance. In this way, then, market research starts like a great vacation: you select both a destination and some activities that you'll do once you arrive, even if the activities you define in advance are as imprecise as "explore the terrain."

Step 2: Determining the Kind of Data Needed

Your questions and goals strongly determine the kind of data you'll need to acquire in your market research process, much like your vacation destination strongly influences your choice of travel. Focused and precise questions, such as "Which color of blue is most preferred by my customers," motivate the gathering of data that is very different from questions that are more open ended, such as, "How does my customer see this market landscape changing over time?"

Step 3: Acquiring the Data

This phase encompasses all the activities you need to acquire the necessary data, from planning your data acquisition method to putting it into action. Continuing with our vacation analogy, after you've selected the destination and choice of travel, you have to do the detailed planning and take the trip.

Step 4: Processing/Analyzing the Data

After you've arrived at your vacation destination, you will probably have to unpack and get ready for your activities. Similarly, after

you've acquired the data, you have to process it into a form that allows people to take action. This is one of more rich and complex areas of market research, and it includes many topics that are beyond the scope of this book. Fortunately, as you'll read in Part Two, processing and analyzing game-related data is a relatively simple process.

Step 5: Taking Action

Taking action means putting your newly obtained understanding of your customers to work. In some cases, "taking action" may actually mean making no changes to your current plan, such as when you find that your product road map matches customer and market needs. In other cases, as described by Joan Waltman in her foreword, taking action may mean creating an entirely new product offering based on unexpected information, much like you might spontaneously change your vacation plans to attend a local music and arts festival that you learned about from the hotel concierge after you've checked in.

Primary and Secondary Data

Market researchers classify data according to the kinds of questions it answers. The key distinctions are *primary data*, which are data designed to answer your specific question(s) as well as possible, and *secondary data*, which are previously collected and published data that may or may not answer your specific question(s). (See Figure 1.7.) Examples of secondary data include census bureau data, which may help you broadly size your market, but may not help you determine how your customers use your product or what they might want in future products.

<p style="text-align: center;">Primary</p> <p>Data designed to answer your specific question(s) as best as possible.</p>	<p><i>Qualitative/"open ended"/"VOC":</i></p> <ul style="list-style-type: none"> - Focus groups - Interviews (phone, in-person) - Innovation Games - Customer advisory boards <p><i>Quantitative/"facts, choices":</i></p> <ul style="list-style-type: none"> - Questionnaires/Surveys
<p style="text-align: center;">Secondary</p> <p>Previously collected and published data that may or may not address your specific question(s).</p>	<p><i>Free, often under-utilized:</i></p> <ul style="list-style-type: none"> - Internal company records - Government data - Libraries <p><i>For sale, often market focused:</i></p> <ul style="list-style-type: none"> - Syndicated or private data

FIGURE 1.7 Primary and Secondary Data Table

What Kinds of Questions?

In addition to the general destinations described in this section, you might have a whole host of specific questions regarding your products and services. Here are various questions that you might have relative to your customers, your markets, and your products and services. We'll start with secondary data, because these are the kinds of questions that are often asked when considering the broad opportunity that you're exploring through your market research.

Questions best answered through secondary data:

- Is my market growing?
- What is the median age and income of my market?
- What is the total spending on goods and services for this market?

Questions best answered through primary data:

- What kinds of products could or should we add to our product mix?
- Which color of yellow is best for our packaging?
- Which member of the family has the greatest influence in selecting products?

Questions best answered through Innovation Games:

- What features do customers want in the next release?
- How do customers use our product?
- How do my customers perceive the relationships between my product and other products?
- What is my customers' definition of success?

Primary data, on the other hand, is data acquired to answer a specific question and is further classified as qualitative and quantitative. Qualitative data is considered open ended, is usually acquired through intensive human interactions, and must be interpreted. Examples of qualitative data include focus groups, interviews, and Innovation Games. Quantitative data is based on facts or choices and can often be acquired through less intensive and/or semi-automated methods. Examples of quantitative data include surveys and conjoint analysis.

Whom Do I Ask? Market Segmentation

Primary data is acquired directly from your customers, which leads us to the process of selecting the customers who will participate

in your market research. Unless your market is extremely small, you'll have to segment your market and choose representative customers from one or more of the resulting segments. Market segmentation is a process of dividing a total market into groups consisting of entities who have similar attributes that help you accomplish some larger goal, such as sales, marketing, or, in this case, better understanding customer needs.

Like other aspects of marketing, market research, and product development, market segmentation is itself a rich discipline. A market segment is just one way to slice a market, and choosing a meaningful slicing is important for your goals. A common way to segment consumers includes such things as demographic data, such as where they live,

Why Statistical Significance Doesn't Matter in Complex Business Architectures

In his seminal work on innovation, *Dealing with Darwin*, Geoffrey Moore makes a powerful case that companies who serve complex-systems markets must rely on qualitative research to guide their decisions. As Moore explains, a "Complex-systems architecture specializes in tackling complex problems and coming up with individualized solutions with a high proportion of consulting services." Such companies are characterized by relatively small numbers of customers, and a small number of transactions with each customer, with each transaction costing hundreds of thousands to millions of dollars.

As Moore describes it, qualitative scenarios drive the research efforts of complex-systems architectures. From p. 39: "In the complex-systems

model, market research has a *qualitative* bias because each customer constitutes a market reality unto itself. For example, the commercial airline businesses at Airbus and Boeing have perhaps two hundred or so primary customers worldwide to consider. Statistically averaging insights across such a modest customer population makes no sense. Instead, you want to delve deeply into the specific circumstances of each account, seeking out unique patterns, not mathematical correlations. This is where war stories and hypothetical scenarios, even just the occasional apt metaphor, can prove so insightful."

Innovation Games are explicitly designed to provide you with these kinds of insights through direct interaction with your customers.

disposable income, or highest educational degrees, their purchase behavior, and their perceptions of the product and/or service being offered. Common ways to segment businesses include the kind of business, its size in terms of revenue or employees, the kind of business (corporation, sole proprietorship, LLC, and so forth), rate of growth, and markets served, to name just a few.

You may find a marketing and sales bias to your existing segmentations. This is understandable; many times the most important aspect to segmentation is helping the marketing function size the market and find leads to hand over to sales. This approach, however, may not yield the best results when considering whom to invite to an Innovation Game. Many times you'll obtain more true insights by considering alternative approaches to market segmentation. Here are some ideas to get you started:

- Experience with your product
- Knowledge of the domain
- Perceived motivation to use your product
- Strategic importance to your firm (such as by revenue)

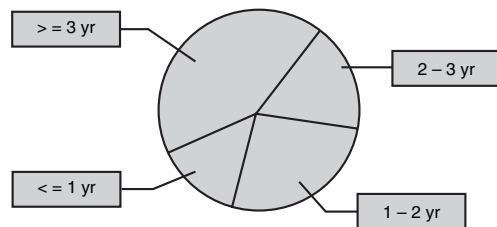


FIGURE 1.8 Experience With Product

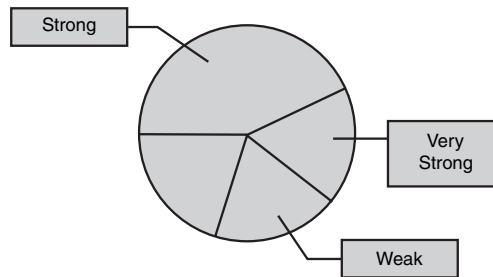


FIGURE 1.9 Knowledge of Domain

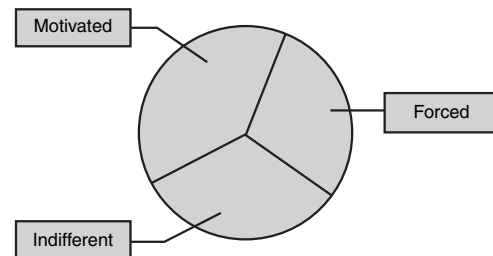


FIGURE 1.10 Perceived Motivation to Use Product

The key objective is finding the people who are most likely to provide you with the best answers to your questions. You may find that the customers who pay you the most money are not necessarily the ones who have the best handle on how your product needs to evolve to meet future needs.

After you've finished your market segmentation, you'll still need to select specific customers. This aspect of the process is covered later in Part One under the detailed notes of preparing for the game. Keep an open mind as you consider your current market segments, as playing the games may provide you with insights that motivate changing them.

Questions, Data, Answers, and Actions

Acquiring data is not the same as having your questions answered. One important benefit to using Innovation Games is that they can offer considerably more information: you can get the answers to your questions *and* you can make new discoveries

about your market. For example, in one of the more novel applications of *Speed Boat*, I was asked to help a major law firm in Silicon Valley identify the root cause of associate dissatisfaction. In the process, we acquired data about specific issues that contributed to associate dissatisfaction—the data that

Whom Should I Invite? Who—or What—is a Customer?

One of the long-running debates in the field of product development is how a given product team should define a customer. When defined too narrowly, teams lose the opportunity to expand their market with new innovations or improve existing products by better understanding complex relationships. When defined too broadly or haphazardly, teams can become overwhelmed trying to make sense of data that simply does not apply to their situation. At times, emotions can get the better of common sense, with everyone—especially the customer—losing in the process. That said, it has become clear that this is an important issue and that some guidance is important.

One source of tension is that product teams struggle to capture the meaning and impact of direct and indirect customers, often at the same time. By distinguishing between these two kinds of customers, teams can gain a much richer sense of overall market needs. A *direct customer* is any person or system that directly uses or consumes your product or service. An *indirect customer* is any person or system who is or will be affected by your product or service.

The chief benefit of this definition is that it challenges you to think broadly when considering which customers you should include when

considering a game. It also is practical. If you're trying to understand operational issues, deal with customers who work in operations. If you're trying to understand financial/ROI issues, get access to the people who pay the bills. If you're trying to understand the effects of slow system performance for airline reservation software, ask the airline customer who has to wait in line while the ticket agent changes his reservation. In this case, the direct customer of the software is the ticket agent, and the indirect customer is the passenger—who just happens to be the direct customer of the airline!

Don't be misled by differences in usage profiles. Some customers are power users, people who use your product or service every day. Others might be occasional or episodic users, who use your product only when motivated by certain needs or circumstances. What are those needs? Those circumstances? Different people will use different capabilities or features. Which? When? Why? All these people have a right to be heard, although you should certainly feel free to assign weights to what they've said. Although it is important to select a reasonably good set of customers to play the game you've selected, you do not have to get some "perfect" set of customers together before you can get started.

helped answer the specific question. We also acquired data far beyond the original question, such as the associates' ideas on how the law firm could better utilize IT resources and share information about the firm, all of which created new opportunities and possibilities.

Having answers to your questions does not always mean that you will take the actions it suggests. Continuing with the example of the law firm, certain actions were incongruent with the larger culture of the firm and were not taken. In terms of the vacation analogy, the law firm had a specific destination in mind and the intent to act on the data it provided. However, after they arrived at that destination, they surveyed the possibilities and chose some activities, but not others.

It is common, and often recommended, to use a combination of market research approaches to gain the confidence to take a specific course of action. Suppose that while playing *Product Box* to answer questions

about marketing messages for an existing product, a customer identifies a new product opportunity. Before building this new product, you might consider engaging in other kinds of market research—for example, secondary market research to help determine the size of this market, and additional forms of primary market research to determine how much people might pay for this product.

The Unique Benefits (and Drawbacks) of Qualitative Market Research

Each form of market research has its own strengths and limitations. Table 1.3 presents some of the strengths and weaknesses of qualitative market research.

The strengths of working directly with customers through qualitative market research strongly outweigh the weaknesses. Simply put, qualitative market research (finding ways to interact, experience, and collaborate with your customers) is the strongest foundation for creating truly innovative products and services.

Table 1.3 Strengths and Weaknesses of Qualitative Market Research

Strengths	Weaknesses
Generates deeper understanding through contextual, multifaceted, verbal/nonverbal communication.	By definition, is less objective than other market research methods. We account for this in Innovation Games by using facilitators, multiple observers, and post processing results as a team.
Can strengthen customer relationships, especially in B2B and B2P markets.	Does not scale to large numbers of people.
Builds customer empathy within the team doing the research.	Is not statistically significant (see the sidebar “Why Statistical Significance Doesn’t Matter in Complex Business Architectures”).
Creates vivid, concrete language and commitment to solve customers problems.	Relatively costly on a “per customer” cost basis (but often relatively cheap on “actionable results” basis).
Forms the foundation of innovation by letting you explore “what you don’t know you don’t know.”	

WHAT MAKES INNOVATION GAMES SPECIAL?

Innovation Games possess several qualities that stand out among the various approaches of qualitative market research. One quality is reflected in their name: Innovation *Games*. By referring to them as “games of collaborative play,” I am intentionally conditioning your mind to think about the many fun ways you can work with your customers to better understand their needs. This can be contrasted with traditional surveys and focus groups, which are often not designed to be fun and may not include a heavy emphasis on collaboration.

The games themselves, while fun, are more than just play. As detailed in Part Two, each game leverages deep principles of cognitive psychology and organizational behavior to uncover data that is difficult to uncover using traditional market research techniques. As you come to understand the power of these deep principles, your use of the games will improve, and you’ll find yourself able to discover even richer data.

One area you’ll improve through experience is your willingness to put your customer in control and “trust” the process of the game. Innovation Games are not tightly controlled by a facilitator. In fact, a well-facilitated game has exactly the *opposite* effect; there is a bit of chaotic fun as customers become fully engaged in the game. You’ll know a game is going really well when your customers don’t want to stop playing (drawing their spider webs or creating their product boxes, for instance). This is precisely what you want, for when customers are fully

engaged in the task, they won’t want to stop. Neither will you, because it is this deep level of engagement that gets past any barriers to communication and produces the most honest and useful feedback.

Innovation Games are also distinguished from other forms of market research that do not involve the product team in the preparation phase and leave the product team as distant observers during the research. In an Innovation Game, the team is expected to actively participate in preparing for the game (and have fun doing so). During the game, even one that is professionally facilitated by a third party, a cross-functional product team is expected to act as observers who are involved firsthand in gathering data from customers. They see product boxes being created and hear them being sold. They watch product trees take shape and listen to customers explain how they are growing over time. They see complex spider webs of relationships emerge and can explore why these relationships are important to customers. This can be contrasted to other forms of qualitative research in which teams are hidden behind a two-way mirror or are looking through the small lens of a video camera.

Preparing to play the games helps product teams confirm their goals for their offerings and their goals for the market research. Playing the games internally before playing the games with customers helps increase your confidence in the power of the games. This doesn’t mean that the games are complex. Quite the contrary. The games are designed to be simple to explain, simple to play, and rich in results.

Part Two

THE GAMES

Now that you've completed the groundwork of Part One, you're ready for a detailed description of each of the games profiled in this book. We'll use the format outlined in Table 2.1.

Table 2.1 Structure of the Games

The Game	A Description of the Game
Why It Works	The reasons behind the game's effectiveness
Preparing for the Game	Tips to help you prepare for this game
Materials	A checklist of any game-specific materials ¹
Playing the Game	Tips to help you play this game
Processing the Results	Some suggestions for processing the results
How I Can Use This Game	A place for you to make notes on how you can use this game

1. General materials checklists recommended for all games are included in Part Three.

The detailed descriptions of the games also include several figures, photos, and sidebars, which will help you better understand how you can use the games to accomplish your goals.

Prune the Product Tree



Shape Your Product to Market Needs

Gardeners prune trees to control their growth. Sometimes the pruning is artistic, and we end up with shrubs shaped like animals or interesting abstract shapes. Much of the time the pruning is designed to build a balanced tree that yields high-quality fruit. The process isn't about "cutting," it is about "shaping." Use this metaphor to help create the product your customers desire.

THE GAME

Start by drawing a large tree on a whiteboard or butcher paper or printing a graphic image of a tree as a large format poster. Thick limbs represent major areas of functionality within your system. The inside of the tree contains leaves that represent features in the current release. Leaves that are placed at the outer edge of the canopy represent new features. The edge of the tree represents the future. Write potential new features on several index cards, ideally shaped as leaves. Ask your customers to place desired features around the tree, shaping its growth. Do they structure a tree that is growing in a balanced manner? Does one branch, perhaps a core feature of the product, get the bulk of the growth? Does an underutilized aspect of the tree become stronger? We know that the roots of a tree (your support and customer care infrastructure) need to extend at least as far as its canopy. Do yours?

WHY IT WORKS

One of the greatest challenges in creating and managing a product is creating a balanced picture of everything that must be

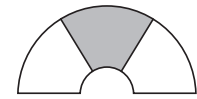
done to be successful. The problem can be complicated by overly linear, inorganic representations of product road maps, which tend to represent product evolution as linear over time. By tapping into our understanding that products must grow in a planned way, and that products are supported by a variety of mechanisms, *Prune the Product Tree* allows customers to shape all aspects of the product, instead of just providing feedback on a selected set of features in a road map.

You and your customers both know that features vary in importance. We tend to want to put our efforts behind the most important features—those features that provide the greatest value to customers. Unfortunately, sometimes this means that we put too little effort behind the features that are needed to complete the product. The *Prune the Product Tree* game provides your customers with a way to provide explicit input into the decision-making process by looking at the set of features that compose the product in a holistic manner.

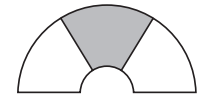
Prune the Product Tree also gives product teams the rare opportunity to identify, and potentially remove, those product features that are simply not meeting customer needs.

PREPARING FOR THE GAME

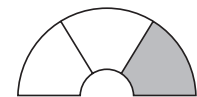
The first step in preparing for the game is selecting your tree and deciding how you want it drawn. You can have a graphic artist draw the tree, or you can draw the tree by hand. If you choose to have a graphic artist draw the tree, be careful about how nicely they draw it. One of the goals of this game is to have customers mark up the tree, and if something is



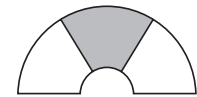
Open-Ended Exploration



Time Frame of Action



Scalability



Customer Preparation



Market Preparation



Physical Preparation

drawn too nicely customers may resist marking it up.

You'll need to prepare one tree for each group of customers. A good size for a customer group is between 5 and 10 people.

You'll also have to consider how your product is evolving over time. Stable products can be characterized by broad limbs and consistently growing canopies. I've provided a sample drawing of this kind of product (see Figure 2.2). The differently colored canopies represent various product releases. In this

kind of tree you will want a way to let customers "prune" features that aren't working for them, even if they are part of the already released product. You can do this by representing these as leaves that can be removed. New features can be added to outer growth rings.

Young products can benefit from having multiple trees, especially when the branches that represent major aspects of the product may be in a state of flux. In this case, draw one tree for each version of the product, with branches appropriate to that release. Then,

Picking Your Tree Shape

One of the best parts of preparing for *Prune the Product Tree* is considering the kind of tree that best represents your product. Are you a fast growing cottonwood? A slow but steady oak? Are you a fruit-bearing tree? Do you provide shade? Comfort? Beauty? What kind of tree would your customer pick? Why? Here are some

images of various trees to help get you started.

For even more inspiration consider ordering the *National Register of Big Trees* from <http://www.americanforests.org/resources/bigtrees/>. I'm especially fond of the Seven Sisters live oak, a 1,200 year old tree that survived Hurricane Katrina.

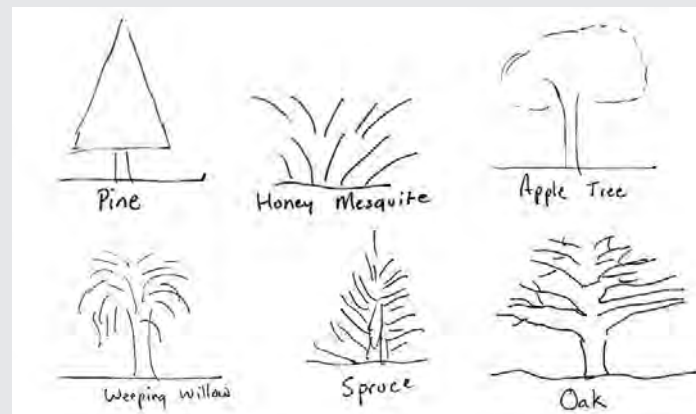


FIGURE 2.1 Sample Tree Shapes

in the “new” version of the tree, allow your customers to draw the branches that they think are most appropriate.

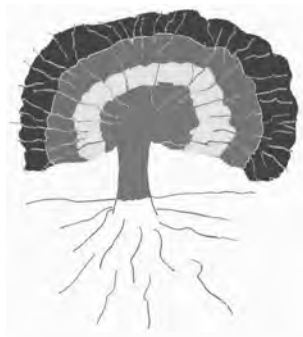


FIGURE 2.2 Sample Drawing of a Product Tree

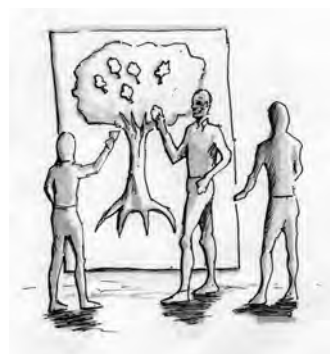
Don't get hung up on drawing a perfect picture. I was working with a client who wanted to use this technique, and they seemed to be stuck on how to get started. I sketched out the tree used in the sample drawing in a few minutes on a regular piece of paper, scanned it into my computer, colored it with a simple drawing tool, and then printed it on a larger format printer as a 6'×6' poster, one tree per group.

When you're finished selecting your basic tree shape, you'll have to consider the leaves.² Existing features that you want customers to consider pruning (by taking them off the tree) should be printed on paper and attached to the tree with tape or re-adhesive glue. New features that you want customers to consider adding to the tree should be

2. You can also use pine cones, fruit, or nuts, depending on the kind of tree that you choose.

printed and placed around the tree. It is a good practice to list the feature on the front of the leaf and the perceived benefit on the back. You'll also want to include blank leaves to capture new ideas.

The ratio of blank leaves to predefined feature leaves reflects the degree to which you want customers to provide you with new information (things you haven't thought of or heard before) versus the degree to which you want them to arrange your existing plans. More blank leaves means that customers can add their own ideas. More predefined leaves means that customers will spend time organizing your suggestions. Either approach is okay.



Work in small teams to shape your tree.

FIGURE 2.3 Playing Prune the Product Tree

If you intend to have a large number of predefined leaves (more than a dozen, for example), consider sending the list of features along with a brief description of the same to customers in advance so that they can become familiar with them before the event. Note that having a large number of leaves usually slows down the playing of the

game, as customers spend more time thinking about what the leaves mean and less time adding or removing leaves.

Game play is enhanced when you use index cards that are cut into the shape of a leaf or have an image of a leaf printed as a watermark. It is okay to mix leaf styles; on one project we started by using a watermark of a maple leaf but found a teacher's supply store that sold leaf-shaped cutouts. They worked great together (see the sidebar "Using Multiple Trees at the AIPMM PMEC 2006 Conference").

In terms of inviting customers, you should emphasize customers who have been using your product long enough to provide solid feedback on future developments based on how your product has evolved in the past.

The last major element of your tree is its root system: the services, support, and related corporate infrastructure (websites, partners, distribution channels, and so forth) that they would want in a vibrant, healthy tree. Such corporate infrastructure is less subject to change than product features, and you may want to consider preprinting the trees with this infrastructure.

Materials

- Trees, printed in poster-print format or ready to be drawn on butcher paper or a white board
- Preprinted leaf cards
- Blank leaf cards
- Leaf stickers (customers can put these on leaves to signify importance)
- Stickers and/or other artwork that help you establish the right tone

PLAYING THE GAME

Organize your participants so that 4 to 10 people are at each tree. Having too many people at a single tree prevents good group interaction. It is ideal if you can allocate one observer to each tree.

During your explanation remind participants that the shape of the tree represents growth over time. Existing features should therefore go near the trunk, as they are the oldest. The next closest leaves represent features to add in the near term. Leaves on the outer edges of the tree, at the edge of the canopy, and even beyond are considered longer term. You can make this even more explicit by putting time frames or release identifiers on the growing canopy.

Allow each group time to present their results to the entire group. Encourage other participants to ask questions about how the leaves in the tree were organized.

Try not to worry about the tree becoming unbalanced. It might happen, but my experience is that participants tend to organize features according to the shape of the tree you've given to them. In one game, a participant remarked to another, "We've got to move some features around, as the tree is becoming lopsided," and another remarked, "We're cramming too many features into this release—what can we push out?" Of course, the tree your customers create might not match the tree that they started with. If that happens, pay attention to what your customers are trying to tell you.

Encourage participants to group leaves or draw lines between leaves to clarify relationships among features. As described in the

Using Multiple Trees at the AIPMM PMEC 2006 Conference

The Association for International Product Marketing and Product Management (www.aipmm.com) used multiple trees to gather feedback from attendees at their 2006 Product Management Educational Conference. In this photo from the conference you can see three trees (see Figure 2.4). The top left tree represents the 2005 conference, which had two primary tracks (represented as two branches): Product Management and Product Marketing. The 2006 conference tree is shown below the 2005 tree and has four branches representing the phases of the product life cycle: Plan, Build, Launch, and Sustain. Tutorials, keynotes, and activities were represented as leaves that could be moved to the new tree.

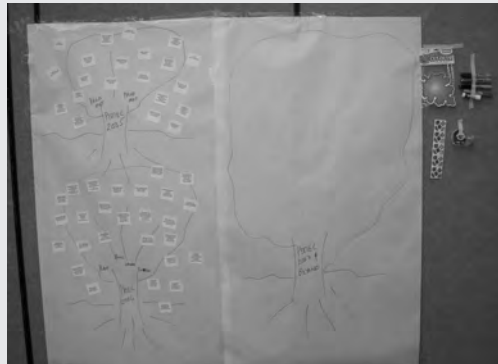


FIGURE 2.4 Using Multiple Product Trees

The 2007 tree is shown to the right. As you can see, it allowed for a completely open-ended exploration of the next conference. PMEC attendees could create their own branches, move leaves from the 2005 and 2006 trees to the 2007 tree, and add new leaves (representing new topics they'd like to see addressed at the 2007 conference). There is also a package of leaf shaped foil stickers, which attendees used to indicate strong support for a proposed topic. Attendees were also encouraged to personalize their trees, adding business cards or other mementos of their time at the conference.

PMEC participants quickly got into the game, as you can see in Figure 2.5. Groups quickly formed, mostly from people who

shared the same lunch tables. These groups moved the leaves representing the talks that they liked most from the 2005 and 2006 conferences to the 2007 conference, and, as you can see, they added several new ideas for talks by adding new leaves. Participants added business cards and one even drew a heart around two leaves that she particularly “loved.”³



FIGURE 2.5 Playing Prune the Product Tree at PMEC

Therese Padilla, Executive Director of AIPMM, posted her experience of the event into the Enthiosys Forum at www.innovationgames.com. Here is an excerpt from her post:

“Once the trees were placed around the room and the conference attendees began to add ideas, it was gratifying to scan the room and visually see all the new ideas that were placed on the trees. We have begun to gather the results, but already we have three exceptional ideas for our next conference.

This is a wildly different approach to conference activities. This form of engagement energized the attendees and really involved them. This was the first time in all our conferences that we witnessed this level of participation and creativity from attendees. Attendees really took an interest in the event and were encouraged to make the event their own. This was the best way to ask them to design PMEC the way they wanted to see the content.”

3. This is an example of when it was good that an observer spoke; by asking the meaning of the “heart,” the observer was able to confirm that the participant “loved” the talks.

Letting Customers Pick the Tree Shape

You can make this game even more open ended by giving customers a list of current features and several different kinds of leaves (or just blank index cards) and asking them to select both the tree and structure of the leaves and branches. You'll find that although this approach takes quite a bit more time, you'll gain an even richer and deeper understanding of your customers as you listen to them explain why they chose a particular tree and how the features of your product relate to this tree. This approach can also provide more insights into the larger product ecosystem, as customers often draw additional items along with their trees.

sidebar about the PMEC conference, one participant drew a heart around a pair of leaves to signify that she “loved” these features.

Encourage participants to personalize their trees. Although not required, the game can be more fun when people add additional art (birds, grass, sun), tape business cards to the trunk, or write their name on the back of their leaf suggestions.

Don't forget about the root system. Encourage participants to write information into the root system.

Try to leave the trees up as long as possible. If you're playing this game over a multiday event, put the trees up on the first day and leave them up as long as possible. You'll find that participants continue to play the game as they think of more leaves and discuss the game with other participants.

PROCESSING THE RESULTS

Depending on the number of participants, you'll have between one and seven trees, each adorned with leaves, along with the notes of the observers. Compare the results of this exercise to your current product road map and look for the following items.

- Which of your features were pruned? Although you might have a strong attachment to some (or even all) of these features, you should carefully consider removing them to allow for other features that have more customer demand.
- Do the trees retain their general shape? Customers who put a lot of leaves on a single branch can be telling you that you

haven't been paying attention to a critical feature set. Customers who change the shape of the tree can be providing even richer feedback about how they perceive your company.

- How fast do customers want your tree to grow? Customers who put a lot of features on the inner versions (or releases) may be signaling that you're not releasing your product fast enough or often enough. Alternatively, fewer leaves in the interior may mean that the current plans are just fine, but look for the growth in the canopy, which might hold some really big new features.
- What things do customers add to or remove from your root system? How do these relate to your current infrastructure? Pay special attention to this information because it usually is of critical significance to your customers.