CHAPTER THREE

Opportunity Identification[1]

Courtesy of Lucky Litter LLC and FroliCat

EXHIBIT 3-1
The Bolt laser-based cat toy, the original product of the FroliCat brand.

[1] Many of the ideas in this chapter were developed in collaboration with Christian Terwiesch, and are described in more detail in the book *Innovation Tournaments* (Terwiesch and Ulrich, 2009).

The pet products company *FroliCat* had introduced two successful laser-based cat toys, including the *Bolt* (Exhibit 3-1), a product that embodies a randomly moving laser beam to entertain cats. The company's management team, hoping to build upon their initial success, sought additional opportunities to develop new cat toys. They were particularly interested in opportunities to extend their brand to other types of motion-based cat toys. FroliCat was a small company, and so an investment in developing a new product represented substantial financial risk. As a result, the team hoped to identify opportunities that would be highly likely to result in profitable products.

FroliCat was based in Chicago, but because all of FroliCat's products were produced by factories in China, and because it wished to adopt a more global market perspective, it engaged a Shanghai-based product development consulting firm, Asentio Design, to lead the opportunity identification effort.

This chapter provides a conceptual foundation for opportunity identification, and articulates a six-step process, which includes generating a large number of alternatives and filtering them to identify those that are exceptionally promising. We illustrate the opportunity identification process using the FroliCat example.

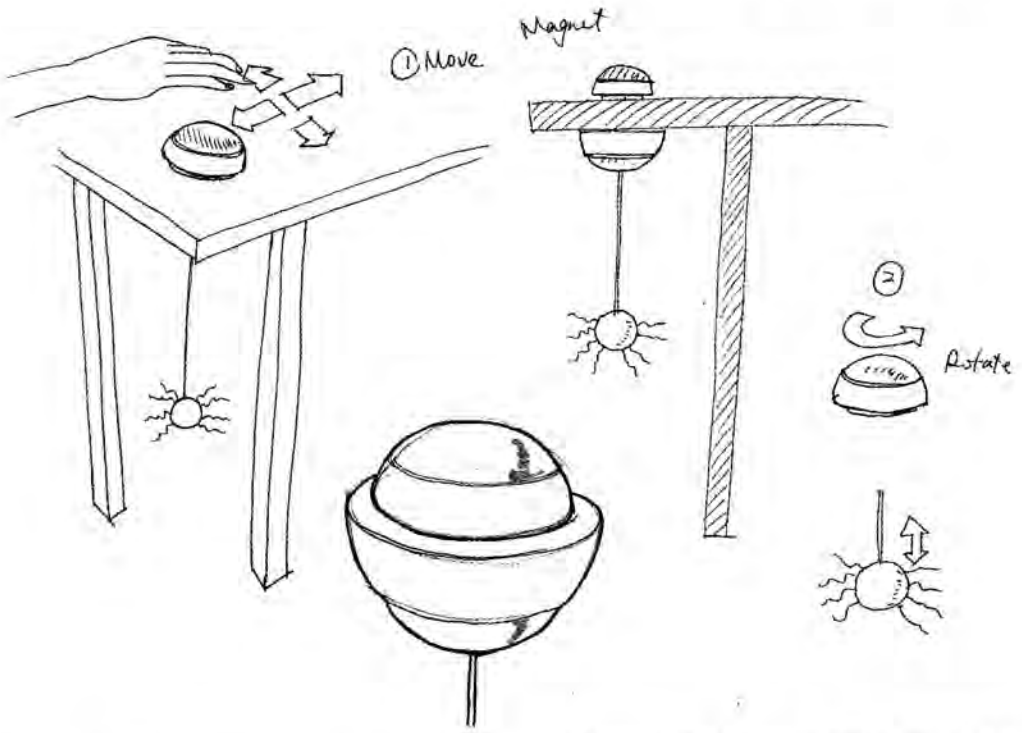
What Is an Opportunity?

In the context of product development, an opportunity is an idea for a new product. An opportunity is a product description in embryonic form, a newly sensed need, a newly discovered technology, or a rough match between a need and a possible solution. At the earliest stage of development, uncertainty clouds the future, so an opportunity can be thought of as a hypothesis about how value might be created. For a consumer-products company like Procter & Gamble, an opportunity might be a new type of cleaner suggested by a customer. For a materials company like 3M, it might be a new polymer with unusual properties. Some opportunities ultimately become new products while others never warrant substantial further development.

An opportunity for a new product is usually articulated with less than one page of information, often including a descriptive title, a narrative explaining the idea, and sometimes including a sketch of a possible product concept. Exhibit 3-2 shows the opportunity eventually pursued by FroliCat as it was first articulated following a brainstorming session by members of the team. The opportunity was for an interactive cat toy consisting of a swinging object hanging from the underside of a table, which would be moved around by a hand from above. This is an example of an opportunity that includes a possible solution concept, which is typical for efforts focused on identifying opportunities for new products in a well-defined category like cat toys.

Types of Opportunities

While there are many ways to categorize opportunities, two dimensions are particularly useful. They are (1) the extent to which the team is familiar with the solution likely to be employed, and (2) the extent to which the team is familiar with the need that the solution



Courtesy of Lucky Litter LLC and Future Life Labs

EXHIBIT 3-2 The "swinging ball" opportunity eventually pursued by the FroliCat team as first recorded in a sketch. This is an example of an opportunity that includes a potential solution concept.

addresses. For technology-based products, these dimensions can also be thought of as knowledge of the technology and knowledge of the market. These two dimensions are illustrated in Exhibit 3-3.

Because risk of failure increases as opportunities deviate from what the team already knows well, we can divide the opportunity landscape into categories based on the uncertainty "horizon" faced by the team. *Horizon 1* opportunities are largely improvements, extensions, variants, and cost reductions of existing products for existing markets. They are relatively low-risk opportunities. *Horizon 2* opportunities push out into less known territory in one or both of the dimensions of the market or the technology. *Horizon 3* opportunities represent attempts to exploit opportunities that in some way are new to the world, embodying the highest level of uncertainty.

Because of the need to launch a product within about a year, the FroliCat team explicitly avoided Horizon 3 opportunities. The team wished to build on its initial success with the *Bolt* cat toy, and so focused on its existing customers and the existing needs it already addressed. It sought a next-generation solution for the existing need to entertain cats, and thus focused on Horizon 2 opportunities.

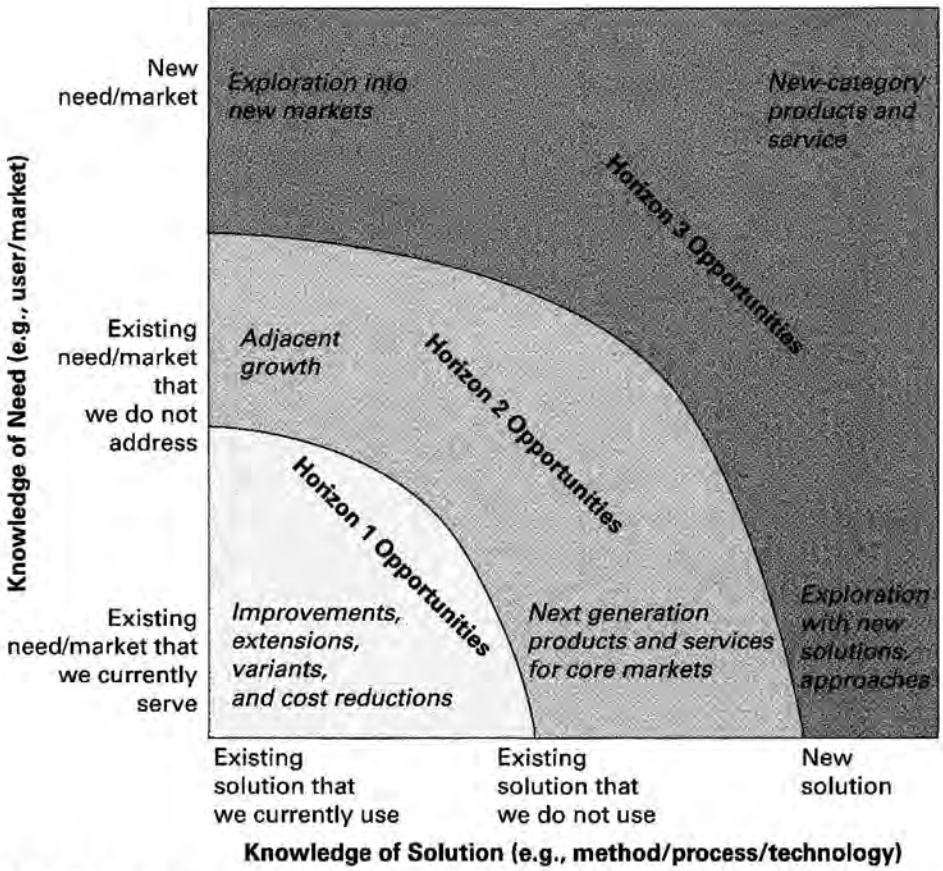


EXHIBIT 3-3 Types of opportunities. Horizons 1, 2, and 3 represent increasing levels of risk, reflecting different types of uncertainty.

Source: Terwiesch and Ulrich (2009)

Tournament Structure of Opportunity Identification

Opportunities vary widely in value; however, that value is plagued by uncertainty. It is therefore very useful to identify a set of opportunities and then to select a subset for further development, with just a few coming to fruition. This process can be thought of as an innovation tournament, with only the best ideas prevailing. In most settings, dozens, hundreds, or even thousands of opportunities are considered for every one commercial success. A filtering process selects a subset for further development and, from those, picks one or more "champions" that will be launched as full product development efforts. Exhibit 3-4 illustrates this tournament structure.

The opportunity identification process embodied in an innovation tournament precedes the product development process as shown in Exhibit 3-4. While both the opportunity identification process and the product development process consist of development steps and selection steps, the overarching goals of the two activities are quite different. In opportunity identification, the goal is to generate a large number of opportunities and efficiently kill those that are not worthy of further investment. In the product development

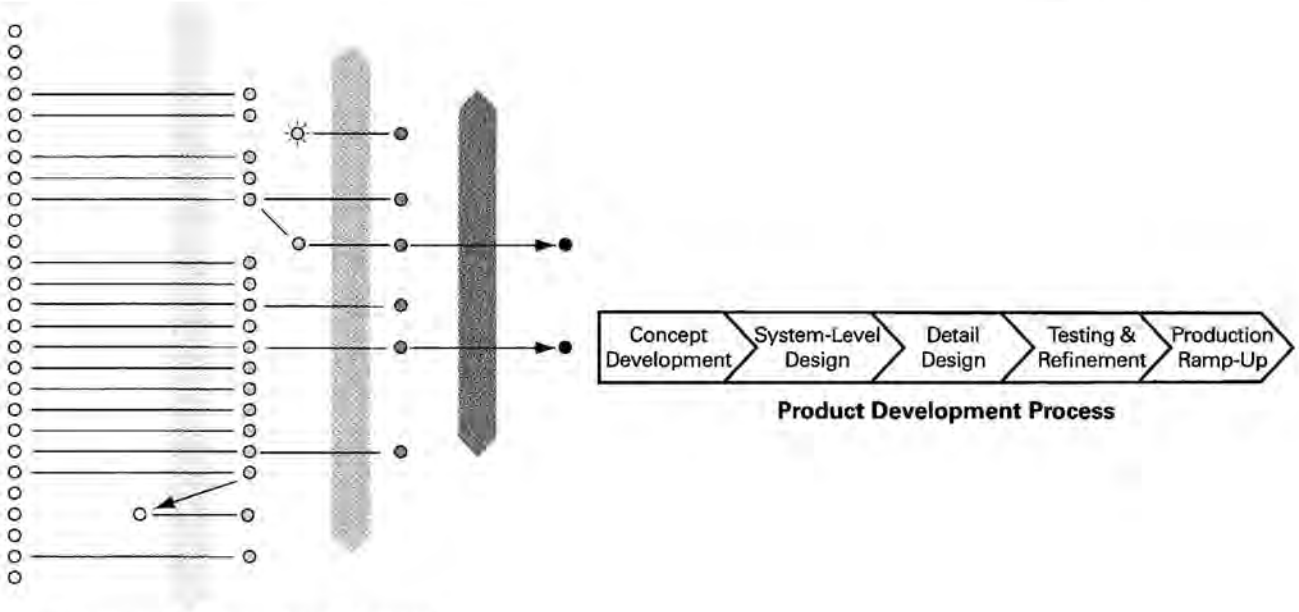


EXHIBIT 3-4 The tournament structure of the opportunity identification process. The opportunity tournament feeds the product development process with exceptional opportunities.

Source: Terwiesch and Ulrich (2009)

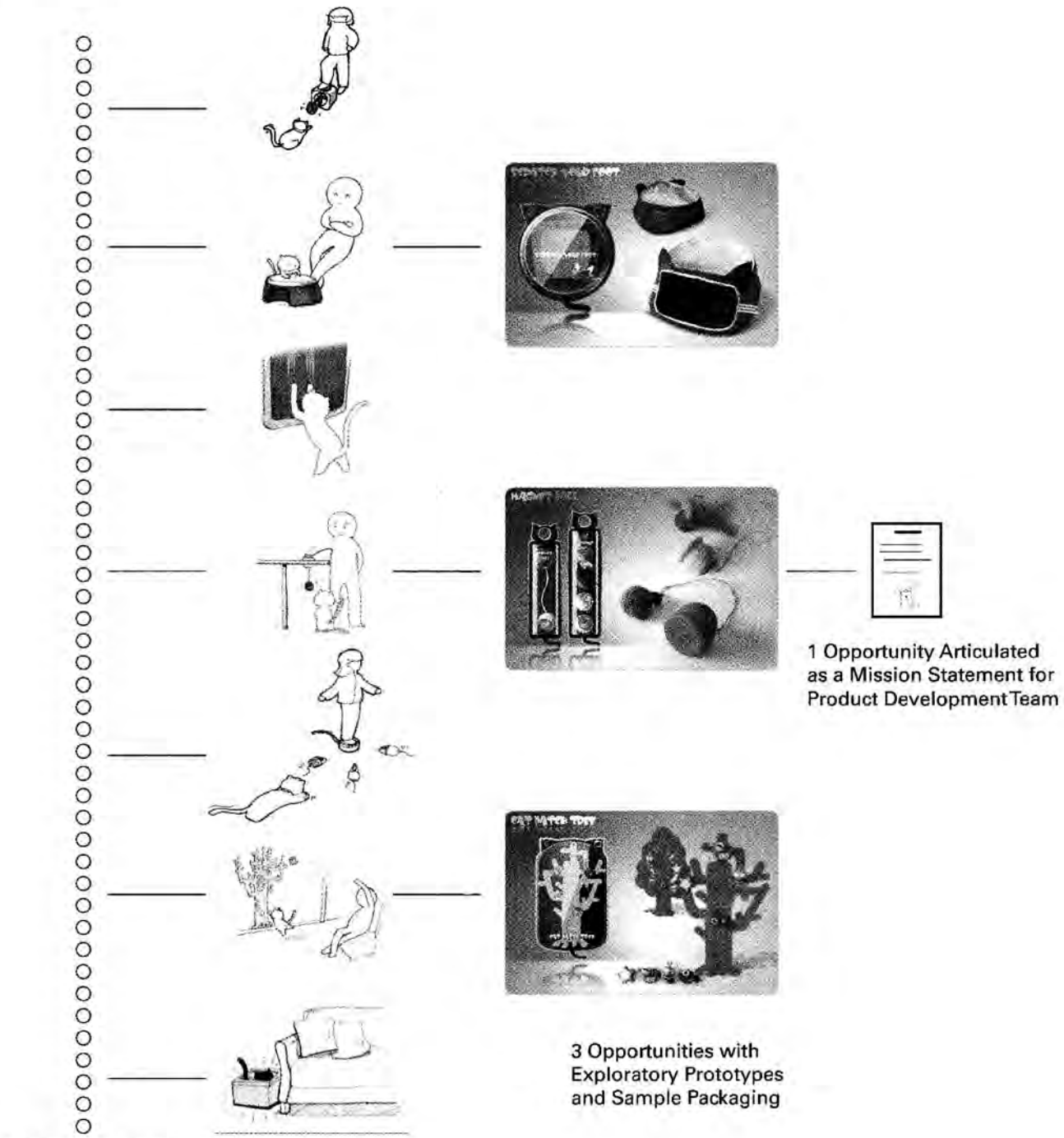
process, the goal is to take the opportunity articulated in the mission statement and do everything possible to assure it becomes the best product it can be.

Although opportunity identification and product development can be thought of as separate activities, there is clearly some overlap between them. For example, in a consumer product business like FroliCat, preliminary product concepts are almost always generated and explored with prototypes during the opportunity identification process, before a formal product development process begins. However, these exploratory activities are typically conducted for several alternative opportunities, with only the most promising proceeding to more comprehensive product design and development. Exhibit 3-5 illustrates the opportunity identification tournament structure used by FroliCat, starting with 50 opportunities and eventually resulting in one chosen to go into full product development.

Effective Opportunity Tournaments

Given that great opportunities are rare, how can the opportunity identification process be managed to increase the number of excellent opportunities identified? There are three basic ways.

1. **Generate a large number of opportunities.** If you produce more opportunities, you'll see more exceptional ones. The logic here is simple: on average, if you find one 7-foot (213 cm) tall person per 100,000 people, you'll find two among 200,000. Creating more opportunities (without sacrificing their average quality) is thus a key lever in finding the exceptional few.



Images courtesy of Lucky Litter LLC and Future Life Labs

EXHIBIT 3-5 The overall tournament structure of the opportunity identification process for FroliCat. Fifty raw opportunities were eventually filtered and explored, resulting in a "swinging ball" opportunity that was developed into a product launched to the market.

2. **Seek high quality of the opportunities generated.** Adopting better methods for generating opportunities and mining better sources of opportunities can increase the average quality of the opportunities under consideration, which will also increase the quality of the *best* ideas resulting from the tournament.
3. **Create high variance in the quality of opportunities.** This is a direct, though not immediately obvious, implication of statistics. Holding the average quality and number of opportunities constant, you'll generate more exceptional ones from a process that exhibits greater variability; that is, if it's less consistent in the quality of its output. The quest for variability contradicts normal approaches to process improvement, but it's exactly what you want in opportunity creation. Generating wacky ideas and wild notions increases the chance that at least one of the opportunities will be exceptionally good.

Opportunity Identification Process

We divide the opportunity identification process into six steps as follows:

1. Establish a charter.
2. Generate and sense many opportunities.
3. Screen opportunities.
4. Develop promising opportunities.
5. Select exceptional opportunities.
6. Reflect on the results and the process.

Each step is the focus of a section of this chapter.

Step 1: Establish a Charter

Organizations create new products to achieve goals such as growing revenues from existing customers, filling a hole in a product line, or entering new market segments. Entrepreneurs starting new organizations also have goals like creating a new product related to an area of personal interest. The *innovation charter* articulates these goals and establishes the boundary conditions for an innovation effort. Charters are closely analogous to (although somewhat broader than) the mission statement for a new product. (See Chapter 4, Product Planning.)

For example, the charter for the FroliCat effort was:

> *Create a physical product in the cat toy category that we can launch to the market within about a year through our existing retail sales channel.*

The main restrictions in this charter were the emphasis on physical goods instead of software or services, a focus on the cat toy category, a preference for opportunities that would not require enormous investments of calendar time, and a desire to take advantage of the company's existing relationships with retailers.

The charter requires resolving a tension between leaving the innovation problem unconstrained, and specifying a direction that is likely to meet the goals of the team and organization. By specifying a narrow charter, the team avoids wasting effort generating

opportunities in areas that are unlikely to be pursued. On the other hand, sometimes deciding which opportunities are worthy of pursuit in advance and in the abstract is difficult.

Similar to the mission statement for a new product, we recommend that the innovation charter be broad, perhaps a bit broader than the team is comfortable with. Generating ideas is inexpensive, and sharpening the focus later is not difficult. The benefit of allowing a broad focus is that opportunities that may otherwise have never been considered will challenge the team's assumptions about what kinds of opportunities it should pursue.

Step 2: Generate and Sense Many Opportunities

Based on a survey of companies across many industries, about half of innovation opportunities are generated internally to an organization and about half are recognized from customers and other external sources (Terwiesch and Ulrich, 2009). The distribution of sources of opportunities is shown in Exhibit 3-6.

We therefore recommend that the team explicitly focus on both internal and external sources of opportunities. Typically, the team will want to identify dozens if not hundreds of raw opportunities. Fortunately, this daunting task is made much easier through the application of some structured techniques, which we outline here.

Techniques for Generating Opportunities

For some creative people there is nothing more fun than coming up with new ideas. However, we find that the majority of people have a hard time when asked simply to generate some promising opportunities. For them the problem of coming up with something new is simply too abstract, too unstructured, and has too many degrees of freedom. Following are seven basic techniques for stimulating the identification of opportunities. Most work well in both entrepreneurial and corporate settings.

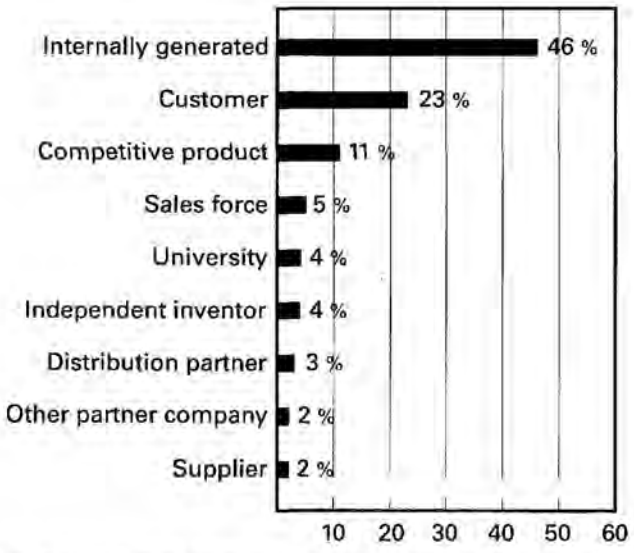


EXHIBIT 3-6 The distribution of sources of opportunities in innovation.

Source: Terwiesch and Ulrich (2009).

EXHIBIT 3-7 Nutrient delivery system worn during testing by the inventor, Matt Kressy (nutrient pouch, tubing, and valve on his right side).

Follow a Personal Passion

List your passions—endeavors that keep you awake with excitement—and then consider how emerging technologies, trends, and business models might influence them. Or identify unmet needs that you have in connection with a personal interest. An avid bicyclist whom we know has been developing a nutrient delivery system for use with existing hydration backpacks (for example, CamelBak), which has applications for the military and for a wide variety of sports (Exhibit 3-7). He identified the opportunity while reflecting on his desire to adjust the amount of sugar and electrolytes in the beverages in his hydration pack.

Compile Bug Lists

Successful innovators are often chronically dissatisfied with the world around them. They notice unmet needs of users, including themselves. List (or photograph) every annoyance or frustration you encounter over a period of days or weeks and then pick the most universal and vexing ones and dream up solutions. Any problem is an opportunity.

An annoyance that gives birth to the opportunity doesn't have to be yours alone. Instead, you might find it through customer complaints or market research. A powerful way to understand others' annoyances is to immerse yourself in the world of people using your products or services.

Pull Opportunities from Capabilities

Theories of competitive advantage abound, but most spring from the idea that firms achieve above-average profits by exploiting *unique resources.* Resources, an umbrella

term, includes *capabilities, core competencies,* and *competitive advantage.* To provide advantage, a resource must be:

- **Valuable.** To be valuable, a resource must either allow a firm to achieve greater performance than competitors or reduce a weakness relative to competitors.
- **Rare.** Given competition, a valuable resource must be rare.
- **Inimitable.** For value and rarity to persist, a resource must not be easily imitated.
- **Nonsubstitutable.** Even if valuable, rare, and inimitable, a resource providing advantage can't be easily substituted.

This perspective, abbreviated as VRIN, can be used to define targets by first articulating an inventory of resources and then using the inventory as a lens for opportunity generation.

Apple Computer's VRIN resources, for example, might include excellence in industrial design, a leading brand, and a loyal customer base. Each of these resources can guide the opportunity creation process by reformulating them as a challenge. For example: In what other product categories might Apple's design excellence create advantage? For which product or service categories could the Apple brand be deployed to advantage? What other products or services could Apple provide to its customer base?

Study Customers

Opportunities can be identified by studying customers in a selected market segment. These studies (also called user *anthropology* or *consumer ethnography*) provide a deeper understanding of the true customer needs than you can obtain through surveys.

Consider the bicycle industry. Shimano, a maker of bike components like pedals and brakes, recently commissioned a user-anthropology study to understand why more people in the United States don't ride bikes. The traditional approach to this problem would have been to create a survey or a set of focus groups, asking customers how often they ride and what attributes of a bike they value the most. Most likely, most Americans would say that they ride regularly (which for some might mean once a year) and that they want light bikes with many gears. Those, after all, are the product attributes emphasized in nearly every bike shop.

Unfortunately, what people say to researchers and what they really do can differ substantially. By spending many hours observing potential cyclists, including time on and off bicycles, Shimano's researchers found that many consumers want bikes that are technically simple, easy to ride, and easy to get on and off—all attributes that aren't emphasized in the current competition among bicycle manufacturers, who tend to emphasize the needs of biking enthusiasts.

User anthropology thus helped Shimano to identify a set of *latent needs.* (See Chapter 5, Identifying Customer Needs, for a description of latent needs.) When a latent need is articulated, it becomes a target for the opportunity creation process. Once they identified the factors that keep many potential customers in their automobiles as opposed to on their bikes, they had the opportunity to redefine the product category.

In the case of Shimano, these efforts led to the creation of bikes targeted specifically at the leisure rider, that is, people who might rent a bike during their annual family trip to the beach but otherwise weren't riding regularly. Shimano developed a line of components under the brand Coasting, and manufacturers then incorporated them into their bikes. One example is the Trek Lime, shown in Exhibit 3-8.

Courtesy of Trek

EXHIBIT 3-8 The Trek Lime bicycle incorporating the Shimano Coasting component group.

Consider Implications of Trends

Changes in technology, demography, or social norms often create innovation opportunities. Ubiquitous mobile telephone service, for example, enables a wide variety of information delivery services. An increasing Spanish-speaking population in the United States, for example, enables new sorts of Spanish-language media. Growing environmental awareness creates a market for green products and services. Once again, the means of exploration is easy: list social, environmental, technological, or economic trends and then imagine innovation opportunities made possible by each one.

Imitate, but Better

When another firm innovates successfully, it in effect publishes the location of a gold mine. You can exploit this information by either considering alternative solutions that could address the same need or alternative needs that could be addressed with the same solution. Exhibit 3-9 shows examples of the imitate-but-better approach. Here are some sources of opportunities for imitation:

- ***Media and marketing activities of other firms.*** Scan the media and monitor the activities of other firms by attending trade shows and following patent filings, for example. Articulate the need and solution associated with any innovation that you identify. Generate alternative approaches to meeting the need or alternative needs that can be addressed with the new approach.
- ***De-commoditize a commodity.*** Often, price competition characterizes a product category, and the offerings themselves are little more than commodities. Recall coffee before Starbucks or breath mints before Altoids. A situation like this creates an opportunity for innovation. To pursue this kind of innovation, list all of the inexpensive, undifferentiated products or services in a category and then consider the possibility of deluxe versions.

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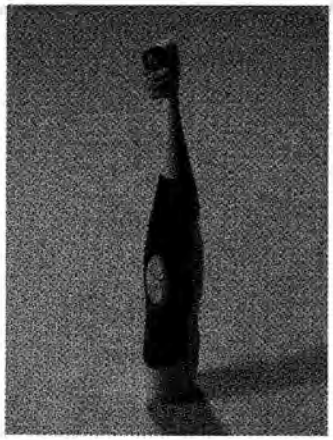

SMC Photos

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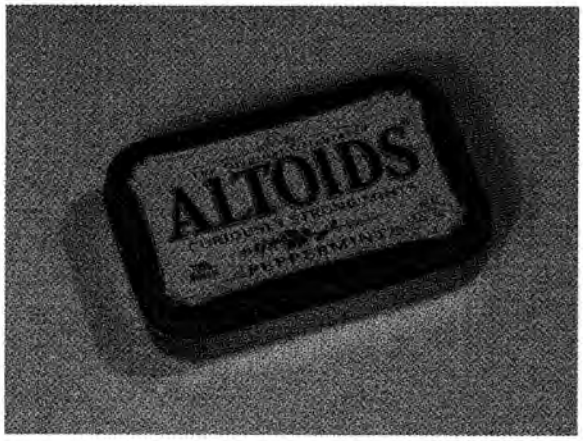
The McGraw-Hill Companies, Inc./Jill Braaten, photographer

SMC Photos

Existing Product



SMC Photos

"Imitate-but-Better" Product

EXHIBIT 3-9 Examples of the imitate-but-better approach: SpinBrush, Starbucks, Altoids.

- ***Drive an innovation "down market."*** Four entrepreneurs with a history in the toy and candy businesses invented the Crest SpinBrush in 1998. They believed that their competitive advantage was in creating small, cheap, battery-powered devices, as they had done with the Spin Pop, a lollipop spun by a little motor. They were struck by the array of electric toothbrushes, many selling for about $100, yet none having much more complexity than their spinning lollipops. They decided to "create an electric toothbrush that can sell for six dollars." Their SpinBrush became the best selling toothbrush of any type. To follow their example, list the premium products or services in a category and then imagine much cheaper versions that provide many of the same benefits.
- ***Import geographically isolated innovations.*** Innovations are often geographically isolated, particularly if introduced by smaller firms. Translating the innovation from one geographic region to another can be a source of innovation. The Red Bull energy drink started as a product for Thai truck drivers. Starbucks founder Howard Schultz created the chain after visiting Milan and becoming infatuated with its café culture and espresso-based drinks.

Mine Your Sources

Recall that about half of product opportunities arise from sources inside an organization and about half come from outside sources. As a result, you benefit from cultivating external sources of ideas. Those sources include the following:

- ***Lead users.*** Firms have ample incentive to innovate. Innovation, after all, can result in new sources of cash. But lead users and independent inventors may have even greater incentives. Lead users are people or firms that have advanced needs that may not be met by existing products or services. Lead users must either tolerate their unmet needs or innovate themselves to address them. Many devices and procedures in health care were invented by clinicians. For example, consider Dr. Lillian Aronson, a veterinarian at the University of Pennsylvania who performs feline liver transplants. Her procedure is relatively new, the market is small, and few existing surgical tools fit the task. Dr. Aronson thus has to choose between ill-suited instruments and inventing her own. If she invents a useful device, she creates an opportunity for further innovation by an established firm.

- ***Representation in social networks.*** Another way to increase the keenness of your sensing is to ensure that you are plugged into the appropriate social networks. Social institutions of all kinds facilitate communication among innovators. Some of these institutions may not be related to professional life. Cricket and softball leagues in Silicon Valley are widely known to be hotbeds of entrepreneurial activity and have played a key role in facilitating the exchange of ideas leading to opportunities for new products. Online social networking communities and discussion forums also may foster communication among innovators.

- ***Universities and government laboratories.*** Students, research staff, and professors continually pursue novel solutions to vexing challenges. In many cases, the solutions identified in universities and government laboratories can be commercialized by third parties, including existing companies and start-ups. Research universities and government laboratories have technology transfer organizations to facilitate this process.

- ***Online idea submission.*** Opportunities may be collected from customers and noncustomers through Web sites. For example, the computer company Dell runs a Web site IdeaStorm for soliciting innovation opportunities from customers.

Step 3: Screen Opportunities

The goal of screening is simply to eliminate opportunities that are highly unlikely to result in the creation of value and to focus attention on the opportunities worthy of further investigation. The aim is not to pick the single best opportunity. Given many opportunities to be screened, the process must be relatively efficient, even at the expense of perfect accuracy.

For this step, a very effective screening criterion is the holistic judgment by a group of individuals of whether or not the opportunity is worthy of a few days or weeks of additional investigation. Separate application of multiple screening criteria (e.g., market need, technological feasibility, alignment with strategy) tends to bog down the process in unnecessary discussion. Recall that in most settings you will have dozens or even hundreds of raw opportunities to consider.

Two methods are effective approaches to screening: Web-based surveys and workshops with "multivoting." Both methods rely on the independent judgments of a group of people. Typically this group comprises members of your organization, but could be an extended entrepreneurial team, or even friends and family members with relevant expertise. Of course, the group performing the evaluation must have relevant expertise, even if that expertise varies in type and depth.

A Web-based interface can ensure that the participants don't know the author of each idea, so they will base their votes on the quality of the opportunity, not their opinion of its originator. Many free Web-based survey tools are available, or you can use one of the Web-based tools designed specifically for the purpose of evaluating innovation opportunities. A Web-based screening survey can be as simple as a listing of opportunities with short descriptions for which you ask respondents simply to indicate a yes–no vote on whether or not the opportunity deserves further investment. Alternatively, you can use a 1–10 scale, which may be useful if you have a relatively small group of people voting. In our experience, you need at least six independent judgments, and preferably more than 10, to make reliable decisions.

You can also use an in-person workshop to evaluate opportunities. In a format we have used frequently, each participant presents one or more opportunities to the group. These presentations can be supported by a single slide, page, or flip-chart sheet. We strongly recommend that these presentations be limited to about one minute and that each presenter adhere to the same time limit and format. Summaries of each opportunity may be distributed in advance of the workshop.

Following the presentations, you ask a group of raters to *multivote* on the opportunities. With multivoting, you display opportunities on pages or flip-chart sheets posted on the walls of the room where you're conducting your workshop. Raters are given "dots" (or other types of stickers) to register their votes. They simply apply their stickers to the opportunities they favor. (Another way that multivoting may be applied in the product development process is for choosing the most promising concepts. See Chapter 8, Concept Selection.)

We recommend that you number the opportunities and ask voters to write the number of the opportunity they will vote for on each of their stickers. They do this quietly as a group before actually applying the stickers to the sheets. Then, everyone places their stickers simultaneously. By this method, you avoid influencing the voting decisions with information about how others have voted.

Workshops work well for reviewing up to about 50 opportunities. For more than 50, we suggest first doing a round of Web-based screening.

Regardless of which voting method you choose, we suggest that you consider advancing not only the ideas receiving the most votes, but also those with only a few very enthusiastic supporters. Strong opinions often point to exceptional ideas. Remember that your goal is to efficiently eliminate opportunities that are not worthy of further investment, but to avoid killing a potentially great idea.

The FroliCat team had developed 50 raw opportunities as the result of the efforts of six individuals working independently and in brainstorming sessions. The team members identified seven opportunities they felt were worthy of further development, by aggregating the individual judgments of the team members, including both product designers at Asentio and marketing managers at FroliCat.

Step 4: Develop Promising Opportunities

Rarely does it make sense to bet on a single opportunity. Too much uncertainty clouds the prospects for success. After screening opportunities, the team should invest modest levels of resources in developing a few of them. At a minimum, an opportunity passing the initial screen warrants an Internet search for existing solutions and an informal discussion with a few potential customers.

Some additional tasks that are often worth completing include: customer interviews, testing of existing products, concept generation, quick prototypes, and estimates of market sizes and growth rates. You might invest a few days to a few weeks in each of several promising opportunities.

In developing promising opportunities, the goal is to resolve the greatest uncertainty surrounding each one at the lowest cost in time and money. One way to structure this step is to list the major uncertainties regarding the success of each opportunity, the tasks you could take to resolve the uncertainties, and the approximate cost of each task. Then, perform the tasks that resolve the most uncertainty at the lowest cost. For example, an opportunity based on a clever concept might not be very valuable if a patent is unlikely. A cursory patent search takes just a couple of hours, and so that is a task that should be completed early in the process of developing the opportunity.

The FroliCat team explored the seven opportunities shown in Exhibit 3-5 and selected three opportunities for further development. The subsequent development tasks were to build functional prototypes and test them with cats and cat owners, to create packaging concepts and test their appeal with consumers, and to complete financial analysis based on likely manufacturing costs and price points.

Step 5: Select Exceptional Opportunities

Once a handful of opportunities have been developed with modest investment of resources, enough uncertainty should be resolved in order to pick the exceptional few opportunities that warrant a significant investment in product development.

Chapter 8, Concept Selection, describes how to choose a design concept by comparing alternatives against selection criteria. The same basic method can be used to select product opportunities. One specific approach used within established companies is the *Real-Win-Worth-it* (RWW) method, developed originally by 3M (Day, 2007). The name,

Real-Win-Worth-it, summarizes the three questions an organization should attempt to answer when screening opportunities:

- Is the opportunity *real*? Is there a real market that you can serve with the product? Criteria here include market size, potential pricing, availability of technology, and the likelihood the product can be delivered in the required volume at the required cost.
- Can you *win* with this opportunity? Can you establish a sustainable competitive advantage? Can you patent or brand the idea? Are you more capable of executing it than competitors? For example, do you have superior engineering talent in this field?
- Is the opportunity *worth it* financially? Do you have the resources needed (financial and developmental) and are you confident that the investment will be rewarded with appropriate returns?

Exhibit 3-10 shows the RWW criteria applied to the "swinging-ball" opportunity for FroliCat. An analysis like this one, done for each opportunity, allows the team to narrow the opportunities to the exceptional few. For FroliCat, the swinging-ball concept was highly appealing to potential purchasers, was engaging for cats, offered the prospect of a good patent, and could be developed and launched with modest investment. These factors distinguished the opportunity from the others.

Real-Win-Worth-it (RWW) Framework—"Swing Ball Cat Toy" Example

1. Is there a real market and a real product?	
Is there a need? (What is the need? How is the need presently satisfied?)	Yes
Can the customer buy? (size of the market, customer decision-making process)	Yes
Will the customer buy? (perceived risks and benefits, expectations on price and availability)	Yes
Is there a viable concept for a product already? How likely are we to be able to develop a viable concept?	Yes
Is the product acceptable within the social, legal, and environmental norms?	Yes
Is the product feasible? Can it be made? Is the technology available? Does it satisfy the needs?	Yes
Will our product satisfy the market? Is there a relative advantage to other products?	Yes
Can it be produced at low cost?	Yes
Are the risks perceived by the customer acceptable? What are the barriers to adoption?	Yes
Answer	YES
2. Can we win? Can our product or service be competitive? Can we succeed as a company?	
Do we have a competitive advantage? Is it sustainable? (performance, patents, barriers to entry, substitution, price)	Yes
Is the timing right?	Yes
Does it fit our brand?	Yes
Will we beat our competition? (How much will they improve? price trajectories, entrants)	Yes
Do we have superior resources? (engineering, finance, marketing, production; fit with core competencies)	No
Do we have the management that can win? (experience? fit with culture? commitment to this opportunity?)	Yes
Do we know the market as well as or better than our competitors? (customer behavior? channels?)	Yes
Answer	YES
3. Is it worth doing? Is the return adequate and the risk acceptable?	
Will it make money?	Yes
Do we have the resources and the cash to do this?	Yes
Are the risks acceptable to us? (What could go wrong? technical risk vs. market risk)	Yes
Does it fit our strategy? (fit with our growth expectation, impact on brand, embedded options)	Yes
Answer	YES

EXHIBIT 3-10 The Real-Win-Worth-it criteria applied to the swinging ball opportunity. The checklist is available from the book Web site.

This same selection method can be applied using other criteria. An entrepreneur starting a new business will use different criteria from those of an established company. For example, in addition to or instead of the Real-Win-Worth-it criteria, an entrepreneur might select opportunities based on the amount of capital required, the time required to get to market, or the passion and excitement invoked by the opportunity.

Step 6: Reflect on the Results and the Process

The FroliCat team pursued the swing-ball opportunity and developed a product for sale (Exhibit 3-11), which was named the *Sway*. The *Sway* was launched through major retailers such as Amazon. The team anxiously awaited the market response, which would be a key indicator of the success of their opportunity identification process. However, market success is not the only success criterion for the process. Some questions to consider in reflecting on the opportunity identification results and process are:

- How many of the opportunities identified came from internal sources versus external sources?
- Did we consider dozens or hundreds of opportunities?
- Was the innovation charter too narrowly focused?
- Were our filtering criteria biased, or largely based on the best possible estimates of eventual product success?
- Are the resulting opportunities exciting to the team?

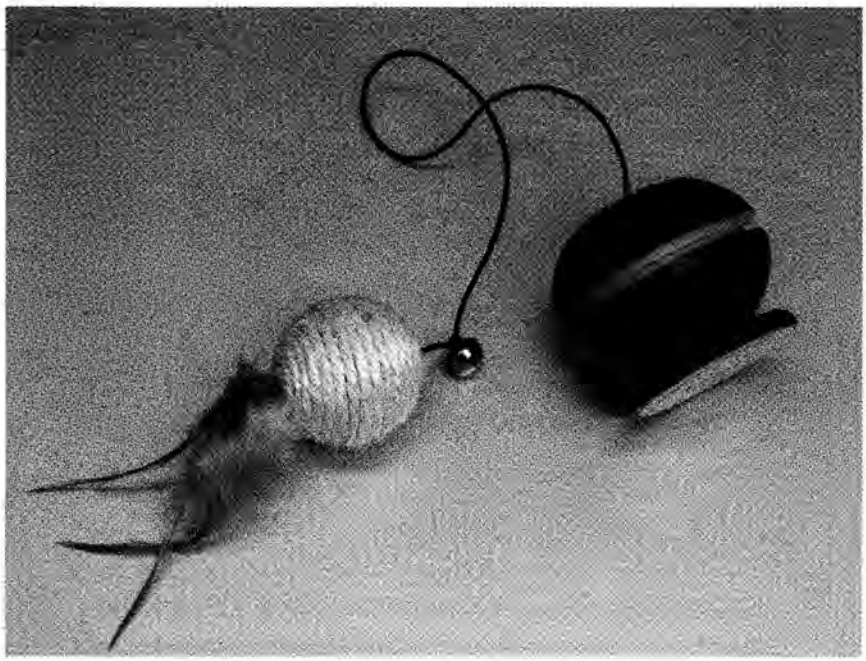


EXHIBIT 3-11 The *Sway* cat-toy product that resulted from the swinging-ball opportunity.

Summary

This chapter articulates a conceptual framework for opportunity identification as a tournament in which a large number of raw opportunities are generated and then filtered and explored in order to narrow those opportunities to an exceptional few.

The opportunity identification process includes six steps:

1. Establish a charter.
2. Generate and sense many opportunities.
3. Screen opportunities.
4. Develop promising opportunities.
5. Select exceptional opportunities.
6. Reflect on the results and the process.

The performance of the opportunity identification process depends on considering a large number of opportunities from a variety of sources, applying idea generation processes that result in good opportunities, and in considering opportunities of widely varying quality. By systematically filtering and developing a large set of raw opportunities to identify an exceptional few for further development, the resources of the organization are put to their best use.

References and Bibliography

Many current resources, including the Real-Win-Worth-it spreadsheet, and Web-based software for evaluating opportunities, are available on the Internet via
www.ulrich-eppinger.net

For more information about opportunity identification, see these books.

Kim, W. Chan, and Renee Mauborgne, *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant,* Harvard Business Press, Boston, 2005.

Nalebuff, Barry, and Ian Ayres, *Why Not? How to Use Everyday Ingenuity to Solve Problems Big and Small,* Harvard Business Press, Boston, 2003.

Terwiesch, Christian, and Karl T. Ulrich, *Innovation Tournaments: Creating and Identifying Exceptional Opportunities,* Harvard Business Press, Boston, 2009.

VanGundy discusses the merits of various screening methods.

VanGundy, Arthur B., *Techniques of Structured Problem Solving,* second edition, Van Nostrand Reinhold, New York, 1988.

The Real-Win-Worth-it method is described in greater detail in this article by Day.

Day, George S., "Is it Real? Can We Win? Is it Worth Doing?: Managing Risk and Reward in an Innovation Portfolio," *Harvard Business Review,* December 2007.

The following studies provide some of the theoretical and experimental evidence for the principles underlying the opportunity identification process.

Girotra, Karan, Christian Terwiesch, and Karl Ulrich, "Idea Generation and the Quality of the Best Idea," *Management Science.* Vol. 56, No. 4, 2010, pp. 591–604.