



Strategic Fit

Pulling Opportunities from Strategy

Aligning Innovation Opportunities with Corporate Strategy

EXCERPTED FROM

*Innovation Tournaments:
Creating and Selecting Exceptional Opportunities*

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STRATEGIC FIT

Pulling Opportunities from Strategy

The previous chapters outlined a number of ways you can increase the supply of innovation opportunities and then screen them to find those that are exceptionally good. We implicitly assumed that any opportunity is a good thing and thus focused our attention on creating as many of them as possible. But, especially for established enterprises, innovation does not happen in a strategic vacuum. Competitors attempt to steal market share, technologies that once were cutting edge become obsolete, and markets that once were growing start to mature. This creates a demand for opportunities that address specific strategic needs—opportunities that strengthen one’s competitive advantage, that explore the use of new technologies, or that create new markets and revitalize existing markets.

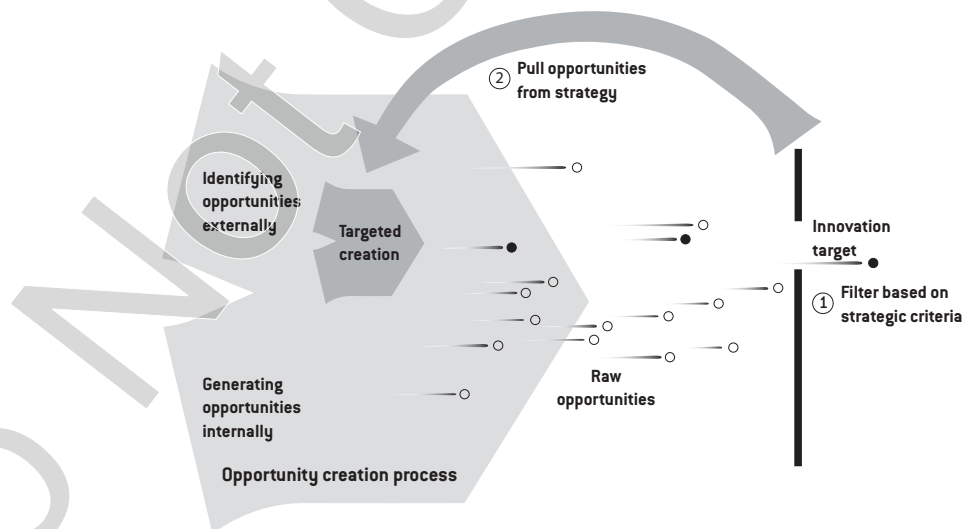
For this reason, innovation can be as much a *pull* process, directing the generation of new opportunities to where they will be of highest strategic value, as it is a *push* process, allowing a set of interesting

opportunities to flow through a series of selection steps. Figure 5-1 illustrates the combination of these two approaches.

- ➔ You can filter opportunities using strategic considerations as the criteria for screening and selection. By simply adding strategic considerations to the screening criteria discussed in the previous chapter, the opportunities that you generate might still range far and wide, yet the opportunities that you move forward will address important strategic needs.
- ➔ Alternatively, you can attempt to direct the opportunity creation process to identify opportunities that are more likely to create strategic advantage in the first place. In this case, you communicate the strategic context and the gaps that you identified with the tools outlined in this chapter to those generating and sensing opportunities. We call this second approach *pulling opportunities from strategy*.

FIGURE 5-1

Strategy can be implemented by filtering opportunities according to strategic criteria, or strategy can pull the opportunity creation process by identifying specific innovation targets.



This chapter will provide you with a set of tools that help you with pulling opportunities from strategy. We explain how to conduct an innovation strategy audit that identifies areas in your company that are in need of innovation, thereby constituting important targets for future opportunity generation. We then discuss how the targets identified in the audit can be used to identify additional opportunities.

THE INNOVATION STRATEGY AUDIT

This chapter isn't a comprehensive review of business strategy—that's a subject for other authors and other books—but you should think in terms of overarching strategy as you answer the following questions:¹

- ➔ *Who* are your company's target customers (market segments) and *why* do they buy from you?
- ➔ *What* products or services do you offer and *how* do they differ from the competition?

Keeping in mind that an innovation is a new match between a need and a solution, you can think of who and why as *needs*, and what and how as *solutions*. In answering these questions, you should be describing your firm's strategic intent. Unfortunately, this intent might not (and typically does not) correspond with the actual business situation. Markets and the economy change fast, and formerly market-leading products or services can quickly fall behind. This reality can create a set of strategic gaps that require innovations to close them.

An *innovation strategy audit* identifies existing and possible future gaps in your innovation portfolio. Gaps in the portfolio pull the appropriate opportunities forward instead of you pushing opportunities into the process. In the following two sections, we discuss how you can target your innovation gaps by assessing both the market's

needs and your technological vitality. In gauging the market, you analyze your products or services *from your customers' point of view*, whereas in evaluating your technological position, you bore into the competitiveness of your technologies and determine where they stand in their life cycles.

THE MARKET NEED PERSPECTIVE

Start your innovation strategy audit by examining your product and service offerings through your customers' eyes. Think in terms of their needs. Ask yourself which attributes differentiate your products and services from your competitors. Ask which matter most to your customers and whether you're meeting or, better yet, exceeding their expectations. Finally, consider what your customers think when they buy (or, worse, don't buy) what you sell. The following three tools help you answer these questions.

The Value Map

Consider again the example of the iPod. In October 2001, when Apple launched the iPod, Diamond Multimedia's player, the Rio PMP300, had been on the market for more than three years. It, like most of its competitors, consisted of flash memory that was able to hold ten to thirty songs. The industry had commoditized quickly, bringing pressure to compete on price. None of the players stood out.

With the iPod, Apple launched a music player that ignored the conventional wisdom. It was larger, heavier, and, with a \$400 price tag, triple the price of competitors. Yet it could hold one thousand songs and had a very fast PC connection and outstanding music management software (now known as iTunes). Apple's move fits an innovation approach called a *blue ocean strategy*.² Instead of battling in the existing market and competing on price, Apple redefined what mattered.

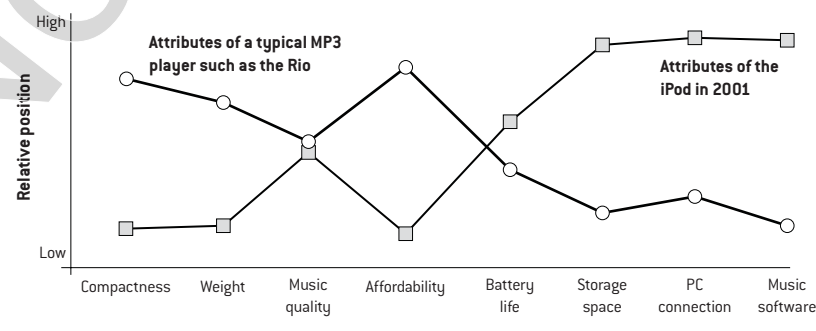
Value maps are used to pull the opportunity creation process by identifying a set of product attributes and evaluating the performance of competitors with respect to those attributes (figure 5-2). They help to detect obvious weaknesses in your products relative to your competition. But, as we discussed in chapter 2, innovation doesn't just reposition you in terms of existing product attributes. It tries to discover new sets of attributes. The opportunity creation process can then set its sights on identifying solutions that perform extremely well with respect to these underserved attributes, perhaps even at the expense of the traditional attributes. Simply replicating existing attributes satisfies your customers. Identifying new ones, as Apple did with the iPod, has the potential to delight them.

Analyze Attribute Positions Relative to Their Importance

Analyzing product attributes also can identify gaps between the hopes and expectations of customers and your ability to satisfy them with your current products and services. Unmet customer needs, especially those that haven't been explicitly articulated, are ideal targets for the opportunity creation process. Broad-based surveys can help

FIGURE 5-2

The graph compares the iPod and competing MP3 players with respect to a set of attributes. The big difference between the iPod and the competing products for the three attributes on the right suggests that the iPod created another dimension of merit, making the introduction of the player a "blue ocean strategy" move.

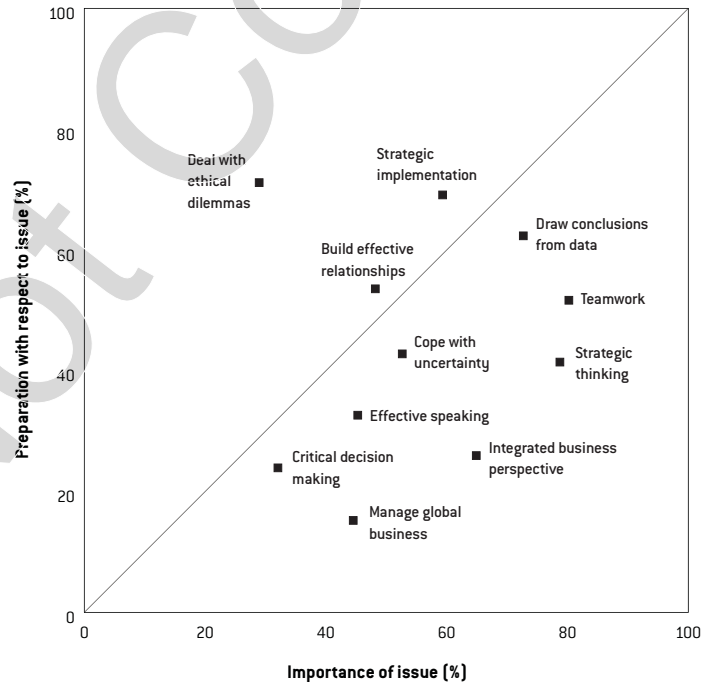


you zero in on these needs, especially when attempting to innovate in an established product category with a large existing customer base.

Another useful technique for identifying unmet needs is to plot the importance of a product or service attribute (or suite of them) with respect to the extent to which your product or service delivers on it. Figure 5-3 summarizes this approach for the curriculum of a major business school. The vertical axis shows student satisfaction with the school's current performance. The horizontal axis gives the students' assessment of the importance of the attributes. Looking at figure 5-3, we see that former students say the school delivers just about the right benefits relative to *drawing conclusions from data* but

FIGURE 5-3

Example performance-importance map for a business school. For each attribute the customer considers when purchasing the product or service, the firm compares its current position (as assessed by customers) and the importance of that attribute. Performance gaps are associated with attributes in the lower right of the graph.



falls short on providing an *integrated business perspective*. Attributes that end up in the lower right corner of the figure—high in importance yet low in current performance—become targets in the opportunity creation process.

User Anthropology

You can also assess customer needs through observational studies of customers using your products. These studies (also called user anthropology or ethnography) provide a deeper understanding of true customer needs than you can obtain through surveys.

Consider the bicycle industry. Shimano, a maker of bike components such as pedals and brakes, recently commissioned a user anthropology study to understand why more people 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 them 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 markedly. By spending many hours observing potential cyclists, including their time on and off bicycles, Shimano 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 bike makers, who tend to emphasize the needs of biking enthusiasts.

User anthropology thus helped Shimano to identify a set of *latent* needs.³ Once a latent need is articulated, it becomes a target for the opportunity creation process. Note especially how such latent needs can help you redefine the value map discussed earlier. Once you have identified the latent needs that keep Americans in their SUVs as opposed to on their bikes, you have 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 don't ride 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 figure 5-4.

THE TECHNOLOGY SOLUTION PERSPECTIVE

In their efforts at addressing customer needs with new solutions, most firms tend to build deep expertise in some specific technologies (for example, combustion engines, Internet search algorithms, flavors and fragrances). This sort of expertise is required to identify new matches between needs and solutions, to translate these matches into product or service offerings, and to deliver the resulting offering to the customer.

FIGURE 5-4

The Trek Lime bicycle incorporates the Shimano Coasting component group.



Source: Trek Bicycle Corporation.

The following three tools let you analyze your current areas of expertise and help you identify targets for future opportunity generation.

Technology Positions

As a leading provider of energy and automation technologies, the Swiss-Swedish company ABB routinely evaluates its product lines. It assesses its market dominance, technology performance, costs, and intellectual property alongside those of its competitors. Figure 5-5 shows an easy way, used by ABB, of making these comparisons. The company refers to this method as the *traffic light approach*. The rows in the figure correspond to the firm's existing product lines. The *market position* column is black where ABB is the market leader, gray where it's one of the top five players, and white otherwise (to extend the traffic light analogy, make the colors green, yellow, and red). The *technology position* column evaluates your technology relative to competitors. Here, the criteria are specific to ABB, with its emphasis on technology leadership. A consumer-product manufacturer might use brand position instead of intellectual property position. The criteria should reflect your strategy by defining the areas in which you seek competitive advantage. The gray and white (yellow and red) lights then become targets for the opportunity creation process.

FIGURE 5-5

Traffic light analysis. For each product line or service offering of the firm, evaluate the current strategic position with respect to a set of criteria. The results can be visualized using different shades or colors.

Product	Market position	Technology position	Cost position	IP protection
Alpha	●	●	○	●
Beta	●	●	●	●
Gamma	●	●	●	○
Delta	●	●	○	●

Core Competencies and 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:⁴

- ➔ **Valuable.** To be valuable, a resource must either allow a firm to achieve greater performance than a rival or reduce a weakness relative to a rival.
- ➔ **Rare.** Given competition, a 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 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 creation.

Apple's VRIN resources, for example, might include excellence in industrial design, a leading brand, and a loyal customer base. Each of these resources can inspire a challenge in the opportunity creation process. 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? Apple's recent introduction of the iPhone appears as a logical step given the capabilities defined earlier.

Technology Life Cycles

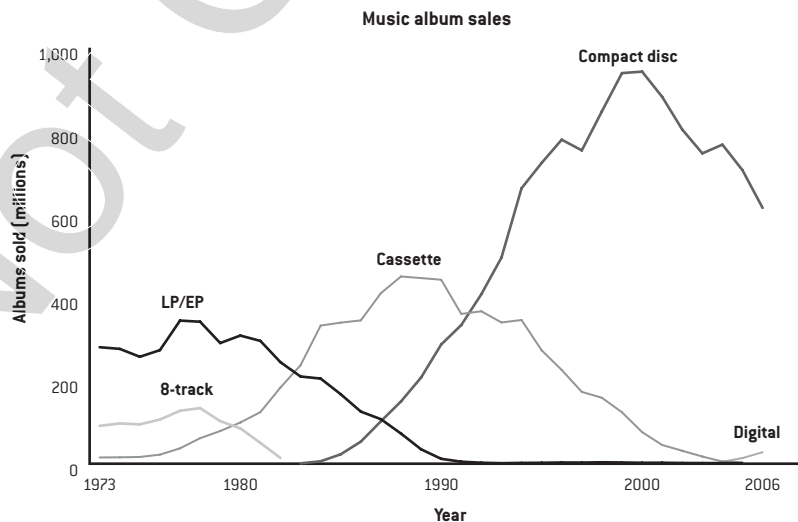
Technologies follow life cycles that display remarkably consistent patterns. Almost all new technologies start with slow sales growth, followed by an exponential surge, maturation, and then stabilization

or decline.⁵ Figure 5-6 shows the trajectory of music album sales over the last three decades. Initially, music was sold on large plastic discs that spun on turntables. But turntables were first displaced by cassette tape players and then by compact disc players. At the beginning of the twenty-first century, CD sales are falling (though still high in absolute numbers), and digital music distribution through outlets such as iTunes has begun to take off.

In most cases, an individual company can't resist the rise and fall of a technology. Sony, for example, may have wanted to continue to distribute music only on eight-track tapes, but to do so would have been a death sentence. At the beginning of the twenty-first century, no large entertainment company can afford to ignore online distribution. The targets of innovation change as a technology matures. Each stage of the technology life cycle offers new targets for the opportunity creation process:⁶

FIGURE 5-6

Most successful technologies experience the sales pattern illustrated in this graphic. Sales are initially low and then accelerate quickly. Ultimately, the technology is displaced and sales decline.



Source: Recording Industry Association of America.

- ➔ **Embryonic phase.** A characteristic of this period is the absence of a *dominant design*.⁷ No technology has established itself as a standard. In this setting, the opportunity creation process should identify the rival technologies competing for dominance.
- ➔ **Growth.** Once a dominant design has taken hold, the amount of uncertainty falls. Along with the dominant design, *dimensions of merit*—key attributes that characterize product performance—emerge. The focus of opportunity creation is enhancing performance along the dimensions of merit.
- ➔ **Maturation.** The focus of competition shifts more and more to the efficiency of product delivery. Firms fight to gain scale and diversify their offerings to appeal to different market segments, yet they typically offer a similar basic technology. The automotive industry has been in this phase for almost a century. Here, opportunity creation should target cost efficiency and solutions that address subtle differences in customer needs.
- ➔ **Decline.** As a technology declines, some rival technology usually crops up. In this environment, you continue to focus on efficiency but should also seek new uses for the mature technology—so-called *last-gasp applications*, which can be surprisingly long lived.⁸

DIRECTING THE OPPORTUNITY CREATION PROCESS

So far, we've stressed how innovation strategy audits can help you identify gaps that then become targets for opportunity creation. But once you understand your gaps, you still have to feed that awareness back into your organization to ensure that you act on your new knowledge. We believe that the process of assessing gaps will lead to organizational awareness of needs and thus influence the process. Beyond this implicit influence, we see at least four means of direct influence.

- ➔ **Establish opportunity generation projects with a focused charter.** Chapter 2 provides methods for generating opportunities internally. This activity requires only the dedication of time and will reliably produce many opportunities. Opportunity generation can be set up as a project with an ad hoc team assigned for a definite period. You can give the team a clear charter. One of us, for example, recently worked with a team charged with identifying horizon 2 opportunities for electrical products that could be sold through Home Depot and Lowe's. Even given such a narrow charter, the team identified about six hundred opportunities, three of which resulted in significant new products.
- ➔ **Structure organization to address gaps.** Create an organizational unit with responsibility for your gaps. For example, a major producer of heating and cooling equipment faced difficulty in identifying far-horizon product opportunities. By creating an organizational unit with specific responsibility for creating, generating, and developing far-horizon opportunities, it filled that gap.
- ➔ **Deploy sensing activities to address gaps.** Organizations create opportunities in part by sensing them externally. Gaps in the opportunity portfolio usually correspond to blind spots in the sensing network. A maker of children's products, for example, might address its gaps in part by tapping into user groups, blogs, and Web sites targeting parents and children. (See chapter 3 for more details.)
- ➔ **Set quantitative goals by type of opportunity.** We asserted that simply assessing gaps is likely to influence the opportunity creation process. A slightly more aggressive intervention is to set quantitative goals for the fraction of opportunities identified of particular types. For example, a publishing company might set a goal that 25 percent of its opportunities should relate to electronic distribution. Such goals are somewhat

arbitrary, but they serve as forces to influence the many organizational processes that generate and create opportunities.

SUMMARY

Two basic approaches enable you to identify opportunities aligned with your corporate strategy. You can filter a large set of opportunities using strategic considerations as the main criteria, or you can direct the opportunity creation process to identify opportunities that are likely to address strategic needs, in effect pulling opportunities from strategy.

You pull opportunities by identifying strategic targets for innovation. Your targets can then be used to influence the process of creating opportunities through organizational and administrative actions. This chapter discussed an array of analytical tools that help you in conducting innovation strategy audits.

The first three of these tools—the value map, the analysis of attribute positions, and user anthropology—consider innovation opportunities from the perspective of your customers. The other three—the traffic light, the analysis of competencies and capabilities, and the mapping of your technology life cycles—emphasize the role of solutions. Collectively, the tools contribute to an innovation strategy audit and help you to identify opportunities that are more likely to create strategic advantage.⁹ They guide you in defining the scope of your innovation tournaments.

Diagnostics

- ➔ How many of your innovation efforts follow a push approach and how many follow a pull approach?

- ➔ Do you understand your business strategy? Are you able to answer the questions related to the markets that you serve and the solutions that you offer?
- ➔ Do you routinely evaluate your market position and use this evaluation to identify gaps that then become the target for future innovation?
- ➔ Do you routinely evaluate your technology or solution position and use this evaluation to identify gaps that then become the target for future innovation?
- ➔ In what ways do you attempt to influence the opportunity creation process through the results of your innovation strategy audit?

APPENDIX

MORE TOOLS AND OUR WEB SITE

To help you focus on your innovation journey and to apply the principles of innovation tournaments within your organization, we have compiled a library of supporting materials, available online at www.InnovationTournaments.com, including the following:

- ➔ PowerPoint slides of the figures in this book and sample presentations that you can use for your innovation workshops
- ➔ Excel spreadsheets to quickly create innovation return curves and Real-Win-Worth-it evaluations
- ➔ The Darwinator software, which lets you run tournaments with a group of participants over the Web
- ➔ An annotated bibliography of many of the most important books and articles on innovation management

- ➔ Readings and case studies on topics such as open innovation, outsourcing, performance measurement, and research on opportunity identification and creativity

All this material is ready for download and free of charge, enabling you to quickly obtain some small wins as you run your first innovation tournaments—small wins that we hope will lead to big results.

Chapter 5

1. See Constantinos C. Markides and Paul A. Geroski, *Fast Second: How Smart Companies Bypass Radical Innovation to Enter and Dominate New Markets* (San Francisco: Jossey-Bass, 2005) for a very elegant way of articulating a business strategy based on a set of simple questions. Loch and DeMeyer provide an excellent application to the R&D setting. See A. DeMeyer and C. Loch, “Technology Strategy,” in *Handbook of New Product Development Management*, eds. C. Loch and S. Kavadias (Hoboken, NJ: John Wiley and Sons, 1996). Loch and Tapper also use the Markides framework and show how one can translate the business strategy to an R&D strategy. See Christoph H. Loch and U. A. Staffan Tapper, “Implementing a Strategy-Driven Performance Measurement System for an Applied Research Group,” *Journal of Product Innovation Management* 19, no. 3 (2003): 185–198.

2. The term *blue ocean strategy* was coined by Kim and Maurgogne to reflect an uncontested market space. See W. C. Kim and R. Mauborgne, *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant* (Boston: Harvard Business School Press, 2005).

3. K. T. Ulrich and S. D. Eppinger, “Identifying Customer Needs,” in *Product Design and Development*, 4th ed. (New York: McGraw-Hill/Irwin, 2008).

4. J. B. Barney, “Firm Resources and Sustained Competitive Advantage,” *Journal of Management* 17, no. 1 (1991): 99–120.

5. See C. Perez, *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages* (Northampton, MA: Edward Elgar Publishing, 2003) for a more detailed discussion on life cycles. Also see DeMeyer and Loch, “Technology Strategy,” for an excellent discussion of this topic. The initial research in this area goes back to W. J. Abernathy and J. M. Utterback, “Patterns of Industrial Innovation,” *Technology Review*, June–July 1978, 41–47.

6. G. A. Moore, *Dealing with Darwin: How Great Companies Innovate at Every Phase of Their Evolution*. (New York: Portfolio, 2005) discusses how several industries evolve.

7. James Utterback, *Mastering the Dynamics of Innovation* (Boston: Harvard Business School Press, 1994).

8. Daniel Snow, "Extraordinary Efficiency Growth in Response to New Technology Entries: The Carburetor's 'Last Gasp,'" Academy of Management Conference Series, 2004.

9. For more discussions on innovation strategy, see Rita G. McGrath and Ian MacMillan, *The Entrepreneurial Mindset* (Boston: Harvard Business School Press, 2000); also see G. Hamel and C. K. Prahalad, *Competing for the Future* (Boston: Harvard Business School Press, 1996).

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