Categories of Innovative Strategies

Because innovative strategies are about delivering unique value through a business model that differs from the competition, there are many different ways to offer them. It would be impossible to put each new strategy into a predefined category, because new innovative strategies are often unique relative to strategies being used by established firms. That's the power of innovation. However, over the years strategists have noticed that some types of innovative strategies enable disruptive innovation through similar tactics and patterns—or what some strategy scholars have referred to as a similar *dominant logic*.¹⁷ By dominant logic, strategists mean the primary logic behind how the company is trying to deliver unique value to customers.

For example, the dominant logic behind the strategies of Netflix (versus Blockbuster) and Amazon (versus Barnes & Noble) was to lower costs by eliminating retail stores and shipping directly to the customer. The categories of innovative strategies we identify in Figure 10.2 can be useful as a guide to launching a disruptive innovation. In this section we examine a few of the most well-known patterns of innovative strategies as identified by various strategy scholars.

- •Value Chain Reconfiguration to Eliminate Activities
- •Low-End Disruptive Innovations
- •High-End Disruptive Innovations
- •Value Chain Reconfiguration to Allow for Mass Customization
- •Blue Ocean Strategy-Create New Markets by Targeting Non-Consumers
- •Create a Platform to Share Assets
- •Free Business Models

Figure 10.2Categories of Innovative Strategies

Reconfiguring the Value Chain to Eliminate Activities (Disintermediation)

One type of innovative strategy is based on reconfiguring the value chain to eliminate activities or steps. The most typical pattern is to eliminate a step in the path from production to customer, such as eliminating a store, which also eliminates the need for salespeople and inventory. This allows the disruptor—the firm launching the game-changing strategy—to offer lower prices for similar products and services. This is the approach that Netflix used to gain a cost advantage against Blockbuster. Amazon used this same approach—selling books over the Internet—to offer books at lower cost than Barnes & Noble (see Figure 10.3).

Innovative Strategies That Change the Nature of Competition



Figure 10.3 Value Chains of Barnes & Noble versus Amazon.com

The approach of eliminating stores and selling products over the Internet has worked well for products such as books and movies—items that are standardized and predictable. But can this work for a product that people like to try out before buying? What about a mattress? The company 1-800-Mattress has been quite successful selling mattresses online as well as over the phone. Since the company sells mattresses that are similar to models sold in stores, customers can go try one out to see what they like. Their strategy is to sell mattresses for 20 to 30 percent lower than the competition and deliver it to your home. Not only that, but if the customers are not satisfied, they can exchange it for another mattress, satisfaction guaranteed.

Southwest Airlines has used a similar strategy of eliminating steps in the value chain to offer low airfares relative to other airlines. By eliminating meals, seat reservations, and luggage transfers, Southwest is able to lower total costs and offer less expensive airline tickets to its customers.

Low-End Disruptive Innovations

A second type of innovative strategy is called a low-end disruption.²¹ Rather than eliminating steps in the value chain, some firms use a different set of activities or technologies from their rivals to produce a low-cost product or service. Harvard professor Clayton Christensen observed a pattern in a number of industries in which a firm leverages new technologies to launch a product at the *low end*—the most price-sensitive segment of the market —and then gradually moves upmarket as it improves its technology and processes.

For example, Nucor used this approach to disrupt integrated steel producers such as US Steel. Nucor pioneered a new way to create steel products using small electric arc furnaces to melt scrap metal in mini-mills. This process was much simpler and less expensive than the traditional method of melting iron ore and other ingredients in enormous blast furnaces. When mini-mills first emerged, the quality of their output was poor, which meant they could only make rebar (steel rods) used to reinforce concrete. This was a low-margin market

that the big steel makers were happy to abandon because of the low profitability. But as Nucor's mini-mills improved their processes and product quality, their cost advantage enabled them to offer lower prices than the integrated producers in higher-margin products such as angle iron, structural beams, and sheet steel. Eventually, many of the integrated steel companies such as Bethlehem Steel were unable to compete because of their cost disadvantage, and they went bankrupt.

In a similar fashion, Honda started at the low end in the automobile industry by offering 50cc and 150cc motorcycles. When Honda first launched, Harley-Davidson wasn't concerned about the competition because its market was superheavyweight motorcycles. Harley-Davidson's CEO even proclaimed that Honda's entry was good for Harley-Davidson because Honda would get more people riding a motorcycle and eventually they would graduate to a Harley.²² But over time, Honda used profits from its large volume of small motorcycles to invest in the development of larger motorcycles and eventually entered the superheavyweight motorcycle categories with bikes that were less expensive but more technologically advanced than Harley-Davidsons (See Strategy in Practice: Why Incumbents Don't Respond Effectively to Low-End Disruptions).

Strategy in Practice The Internet as a "Disruptive" Technology

The Internet has frequently been described as a "disruptive" technology—one that has enabled innovative strategies that are disruptive—by allowing digitized information and products to be easily accessed by anyone throughout the world. By now, we are all familiar with the impact that the digitization of music, books, and movies has had on bricks-and-mortar retailers such as Virgin Records, Borders, and Blockbuster. Web applications such as TurboTax and LegalZoom are replacing professional tax accountants and attorneys, and online gaming is the fastest-growing segment in the \$97 billion video-game industry.¹⁸ The Internet, and the online digitization it enables, can be either a threat or an opportunity.

The primary impact of the Internet on companies is that it has become a low-cost distribution channel for anyone wanting to sell a product or service. As a result it has dramatically lowered the barriers to entry into new markets. Just when Barnes & Noble and Borders thought they had created barriers to entry by building large book superstores, Amazon entered selling books over the Internet. The business models of Amazon, Netflix, and eTrade would not have been possible without the Internet. The Internet has enabled new entrants to create new business models and deliver value in innovative ways while lowering costs.

As a result of the Internet lowering the cost of distribution, it has enabled business models that rely on the *long-tail phenomenon*, where broader inventory can be offered to meet a wider variety of consumer needs. Before the Internet, products and services were usually sold through bricks-and-mortar stores that could handle only limited inventory. As a result, only those products fortunate enough to get widespread distribution were big sellers. The "long-tail" phenomenon explains that 80 percent of offerings in a product category (books, songs, movies, clothing, etc.) are *not* big hits and only account for about 20 percent of units sold, whereas 20 percent of offerings account for 80 percent of sales.¹⁹

This phenomenon is captured by the *Pareto principle*, also known as the 80-20 rule, which says that roughly 80 percent of effects come from 20 percent of the causes. The Pareto principle is named after Italian economist Vilfredo Pareto, who observed in 1906 that 80 percent of the land in Italy was owned by 20 percent of the population.²⁰ The Pareto principle is applied to many situations in business but perhaps most notably to sales,

where in most cases 80 percent of a company's sales come from 20 percent of its customers. The Internet provides an opportunity for online retailers to benefit from marketing the "long tail," which is the remaining 80 percent of offerings as outlined in Figure 10.4.

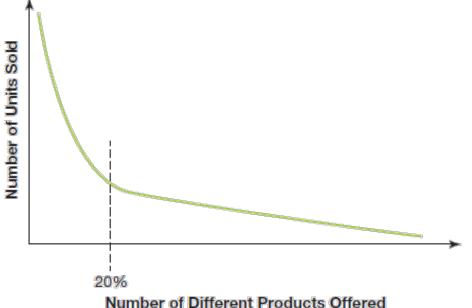


Figure 10.4The Long-Tail Phenomenon

Online retailers can "sell less of more" by taking advantage of unlimited virtual shelf space. This is what allowed Netflix to offer 90,000 different movies versus 1,000 at a Blockbuster store, and Amazon to offer 5 million book titles versus 100,000 at a Barnes & Noble store.

The Internet has also allowed more companies to employ a free revenue model because the marginal cost (the incremental cost of producing one additional unit) of producing and distributing most digital products is zero. After a software program has been written, it can be copied and shared at virtually zero cost. Skype would not be able to provide free phone calls, nor could Zynga provide free games without the Internet.

Another example is Skype's cheap—and often free—phone service that has been gradually moving upmarket as the quality of calls improves and the technology allows for video conferencing and other higher-end business services. Skype has already taken over about one-third of all long-distance international phone calls from AT&T and other long-distance providers.²³ It will be interesting to see if Skype's free phone service will eventually be disruptive to the cell phone giants such as Verizon, AT&T, Sprint, and T-Mobile.

High-End/Top-Down Disruptive Innovations

High-end, or top-down, disruption is as revolutionary as a bottom-up disruptive innovation. But in stark contrast to the low-end variety, high-end disruptive innovations actually outperform existing products when they're introduced, and they sell for a premium price rather than at a discount.²⁴ History provides a number of examples: Apple's iPod outplays the Sony Walkman; Starbucks's high-end coffee drinks and atmosphere drowns out local coffee shops; and flash drives fly past zip drives and floppy disks. Products created through high-end

disruptive innovations are initially purchased by the most discriminating and least price-sensitive buyers, and then they move steadily downward, into mainstream markets. New entrants launching high-end innovations typically rely on "radical" or leapfrog technological innovations that are expensive initially, but with improvements in technology, and as they are produced in larger volumes with greater scale, the costs gradually decline.

A high-end disruptive innovation may initially serve the specialized, high-end niche of a market for years before it finally trickles down to mainstream markets. Such was the case with cell phones, which originally cost \$3,995, only appealed to the high-end niche.²⁵ But as the price (and size) of the phones dropped, they became accessible to a much larger segment of the market. Today, almost 36 percent of homes are "wireless only" households.²⁶ The cell phone example also introduces an important point: high-end disruptive innovations don't need to be superior on every product feature relative to incumbent product offerings. But they do need to be superior on at least some attributes that customers care about. While cell phones offered the superior advantage of portability, they were disadvantaged relative to landline phones in terms of sound quality. But over time, sound quality has improved and is now comparable to landlines. In similar fashion, digital cameras offered inferior picture quality relative to 35 mm cameras. As the picture quality improved, digital cameras began to dominate the camera market.

Tesla is another company that is pursuing a high-end disruption strategy. CEO Elon Musk has long maintained that Tesla's strategy is to sell highly desirable electric vehicles in the high-end niche—such as the Model S and Model X–and then gradually move downmarket offering more affordable cars such as the Model 3. Indeed, Tesla has already received more than 400,000 reservations for the Model 3, a vehicle slated for production in 2018. By starting at the high end, Tesla has developed a loyal customer base, a premium brand, and has started to generate enough volume and scale to make more affordable cars. Some research shows that Tesla is reducing its cost per vehicle by more than 20 percent with every doubling of volume.²⁷ If Tesla can continue to bring down the cost of electric cars at a faster rate than combustion engines improve, then Tesla's chance of disruptive success goes way up. Whether Tesla can successfully move down to mainstream markets and generate high volumes is still uncertain. But as Tesla builds scale, offers new and cheaper models, and makes charging more convenient with its supercharging stations, the company should be able to follow the path of other successful high-end disruptors.

Strategy in Practice Why Incumbents Don't Respond Effectively to Low-End Disruptions

In many cases, rivals do not attempt to respond to a new low-cost offering. Why don't they respond? They see little to gain by selling what they view as an inferior, inexpensive product to a price-sensitive niche market. After all, why would Harley-Davidson want to offer an inexpensive motorcycle? The margins are small, and Harley might tarnish its brand by offering an inexpensive, possibly inferior, motorcycle. Instead, companies like Harley focus on the needs of their most profitable customers, who tend to ask for more features and better performance from their products. By the time they realize that the new low-end product has improved its performance enough to attract their mainstream customers, incumbents find it is too late to respond. Some organizations also find it difficult to respond because a response would require them to develop a new set of resources and capabilities. Integrated steel makers would have to learn how to make steel using mini-mill technology. Harley-Davidson would have to learn to produce smaller motorcycles in large volumes at low cost. In some cases these new resources and capabilities are viewed as incompatible with the firms existing set of resources and capabilities. For example, it would be very challenging for Harley-Davidson to simultaneously manufacture and sell mostly customized heavyweight motorcycles while producing high volumes of standardized smaller motorcycles as does Honda. The production processes that Honda uses to produce millions of motorcycles each year differ significantly from Harley's production processes that produce fewer than 250,000.

Finally, some companies are afraid of cannibalization. They are concerned that if they provide a less-expensive offering, customers will switch to it, resulting in a loss in revenues and profits. In the long run, this can be a recipe for disaster as customers eventually move to the low-end offering and the incumbent loses significant profits. For example, AT&T did not want to offer free phone service over the Internet like Skype because it would cannibalize the paid phone service that AT&T was providing. AT&T didn't want to do anything to encourage customers to move from paid phone service to free phone service.

High-end disruptions are new products or services that offer either superior performance on some existing product features or offer new features customers are willing to pay for. In most cases, these new top-down products are possible only because of innovations in technology that leapfrog the technologies used in earlier products.

Reconfiguring the Value Chain to Allow for Mass Customization

Some firms, such as Build-A-Bear Workshop, Dell, and Timbuk2, have launched innovative strategies based on a concept that is known as mass customization. Mass customization is an oxymoron, like "jumbo shrimp" or "act naturally." Until recently, most products in business were either mass-produced OR customized, but not both. However, new technologies and processes have allowed for the mass production of individually customized goods or services.

Take Build-A-Bear Workshop, for example. Customers "build" their own teddy bear or other stuffed animal by choosing from a large variety of body styles, after which the animal is stuffed at the store to the customer's liking. Customers can also add a heart or sound box during stuffing, enabling the animal to "talk" or play music. After helping to stuff their animals, customers can dress their furry friends in outfits of their choice from a soccer uniform, or witch costume, to a sequin shirt and jeans, and they can even add shoes. In short, the components of the teddy bear are mass-produced but put together in a customized way by each individual customer. But mass customization isn't just for children. Online retailer Timbuk2 uses a similar approach, allowing customers to choose from a set of modules to design their own bag or purse.²⁸ Both Build-A-Bear and Timbuk2 find that many customers enjoy the experience of creating their own unique product. Dell used a similar strategy when it successfully launched its PC business using the "Dell Direct model." Dell sells directly to customers and allows them to choose the components that matter most to them; they then

custom build and ship the PC to the customer within 48 hours. Dell's ability to mass-produce customized PC's requires a flexible and responsive assembly system and supply chain.

Mass customization seems to work best in markets in which customers have a variety of different needs and many want a product that is personalized to those needs. It also works best when the product can be broken into modules that offer different features or performance. This requires that the product be designed as separate modules that can be mass produced but that can be quickly and easily linked together to create a functioning product.

Blue Ocean Strategy—Creating New Markets by Targeting Nonconsumers

INSEAD professors Chan Kim and Renee Mauborgne identify another type of innovative strategy that they call blue ocean strategy. They argue that a company can succeed by creating new demand in an uncontested market space. Where sharks competing for the same scarce food create a *red ocean* of blood because of intense rivalry, blue ocean success relies on swimming to empty water. In other words, offering value that is *very* different from anything on the market.

For example, when Cirque de Soleil opened its first show, it was clear that it would be nothing like a Ringling Brothers circus. A Cirque de Soleil show combines elements of a traditional circus, acrobatic troupe, street performers, and a Broadway show to offer a unique entertainment experience. Cirque's shows are so original that there is no direct competition. The tagline for one of the first Cirque productions was revealing: "We reinvent the circus." Moreover, it attracted a new group of customers who were willing to pay several times the price of a conventional circus ticket for a unique entertainment experience.

As companies try to create new demand, they sometimes target *nonconsumption*—individuals who do not currently purchase a product or service—with an offering that might induce consumption. For example, more than 70 percent of households in India do not have a refrigerator because they are large, expensive, and require continuous electricity to run. So, appliance maker Godrej decided to try to create an innovative small refrigerator targeted at nonconsumption—those 125 million households without a refrigerator. Using battery technology and solid-state thermo electric cooling, it created a \$59 cooler-size refrigerator—called Chotukool, which translates as "little cool"—to bring affordable refrigeration to everyone in India. One challenge Godrej had to overcome was how to give Indians in the poorer rural areas of India access to Chotukool. Since these potential customers didn't have access to an appliance store, Godrej thought of a unique way to distribute Chotukool: through the Post Office. Since the postman goes to every home in India and is often viewed as a trusted friend, Godrej partnered with the India Post Office as the distribution partner for Godrej in many parts of India. By selling a unique product through an innovative distribution channel, Godrej was able to create new demand in a market without any direct competition.

According to Kim and Mauborgne most companies focus on incremental improvements to existing offerings rather than seeking to create new markets. In a study of business launches in 108 companies, they found that 86 percent of those new ventures were line extensions—incremental improvements to existing industry offerings—and a mere 14 percent were aimed at creating new markets or industries. Although the line extensions did

account for 62 percent of the total revenues, they delivered only 39 percent of the total profits. By contrast, the 14 percent invested in creating new markets and industries generated 38 percent of total revenues and 61 percent of total profits.²⁹ Clearly, success in new markets brings much greater rewards.

However, organizations don't necessarily have to venture into distant waters to create new markets. Indeed, many new markets are created from within, not beyond, existing industries. Godrej's Chotukool represents a good example. Godrej was already in the appliance business but was able to create a new refrigerator market within the industry (see Strategy in Practice: Where Do Innovative Strategies Come From?). Chrysler did the same thing in the automobile industry when it launched the first minivan targeted to families who wanted more room than a station wagon but didn't want a huge van. The minivan—a vehicle that was essentially a hybrid between a sedan and a van—created an entirely new category of vehicle and was the staple of Chrysler's profits for years.

Create a Platform to Coordinate and Share Private Assets

Uber and Airbnb have ushered in the sharing economy by building coordination apps that help consumers coordinate and share private assets. In the case of Uber, individuals use their personal car as a taxi, receiving requests for rides and getting paid for driving. With Airbnb home owners rent out spare rooms to guests. And while Uber and Airbnb are among the most well-known sharing platforms, more than 9700 such companies with more than \$8.5 billion in funding now exist according to Mesh (meshing.it). Companies have built apps for sharing everything from washing-machines and office space to boats, lawn mowers, and cocktail dresses. To truly transform industries, however, coordination and sharing platforms must target significant pockets of consumption, as Uber and Airbnb have done with transportation and lodging. The companies' efforts have proven disruptive to incumbents. The San Francisco Cab Drivers Association (SFCDA), reported that one-third of the 8,500 or so taxi drivers in San Francisco—more than 2,800—ditched driving a registered cab in the last 12 months to drive for a private transportation startup such as Uber or Lyft, and taxi use has dropped by 70 percent. And Airbnb, founded in 2008, now offers more rooms (more than 1 million) than any other hotel chain in the world.

Several keys make the strategy to coordinate and share assets work. First, sharing solutions seem to work best when asset value is high, but use of those assets is low, as is the case with cars and spare rooms. However, the high asset value must also be combined with a way to effectively manage risk. Existing insurance policies, such as auto insurance and homeowner's insurance, naturally cover drivers and homeowners even while sharing. But bigger challenges exist with assets that are not insured but that can be easily destroyed by a non-owner (e.g., a designer cocktail dress).

Second, companies that use this approach must build scale in the network itself—through the set of buyers and sellers who use the platform. To grow, these companies must overcome the classic two-sided market paradox: They won't have buyers until they have sellers; and they won't have sellers until they have buyers. That's why Uber focuses so intently on driver recruitment as it expands to new markets. The company heavily subsidizes drivers while giving steep discounts to riders. This explains the more than \$1 billion loss the company incurred as it tried to expand to China. To be successful, companies must have a path to building network scale in local

markets.

Third, the sharing economy is fueled by the uniqueness of Millennial culture and attitudes. Millennials value community, authenticity, frugality, and genuine experiences. Therefore, companies who wish to transform industries using a platform to leverage private assets will need to create brands and communities that appeal to this Millennial culture.

Free Business/Revenue Models

A final category of innovative new business or revenue models involves offering products or services for "free."³⁰ During the past two decades, we have witnessed the emergence of "free" products and services in a way never seen before. Free newspapers (Metro), software (Google Docs), stock trades (ZeccoTrading), telephone calls (Skype), and cell phones (AT&T and Verizon bundle free phones with contracts). Free product strategies, once the exclusive province of the digital realm, have also been popping up in markets far removed from the Internet. From free prescriptions for expensive pharmaceuticals, to free airline tickets, and even free automobile leases, the "free" business models popularized by software companies such as Google, Adobe, and Mozilla are spreading across markets everywhere, in some cases eliminating rivals. One example is Wikipedia, which destroyed Encyclopedia Britannica and Microsoft Encarta.

Although many companies offered short-term "freebies" in the past—for example a 30-day free trial of software —these products and services are perpetually free. What are the characteristics of products or services that are most likely to succeed being offered for free? And how is it that firms such as Google are making lots of money by not charging users? What is their revenue model? Here are three "free" strategies that companies use:

Strategy 1: Cross-Sell (Freemium) Strategy

The cross-sell strategy involves offering a free basic product to gain widespread initial use, after which users are offered a nonfree *premium version* (often called *freemium*) or are sold products not directly tied to the free product. Virtually every app on the iPhone uses the cross-sell strategy (e.g., Zynga games), as does Skype, which offers free phone calls but makes money on the add-ons, such as voicemail and calls to landlines or cell phones. One tactic is to offer a free version of the product to consumers to use at home, but offer a paid version with additional features to the enterprise market.

For example, Adobe charges only corporate customers for its Reader software—it is free to all others. Craigslist uses a version of this approach by offering free listings in every category but one—jobs—which is free for job seekers but not for companies.

Large-scale success with this strategy requires either: (1) a free product that appeals to a *very large product user base* (e.g., roughly 1.5 billion people with computers are interested in using Skype to make phone calls); or (2) a high conversion rate, meaning a high percentage of free users are willing to convert to paid customers for premium features. Skype is successful because of the sheer total numbers of customers that use its free product. Even if Skype has a low conversion rate, (the general rule is 5 percent of free product users tend to become paying customers) it still can make money because it has more than 400 million product users. In contrast, Flickr, the photo-sharing site, has a much smaller total market. The number of camera users who

want to use a photo-sharing service is much smaller than the market for making free phone calls. Moreover, the conversion rate to Flickr Pro is relatively low because for most users, the free version is good enough. The fact that Skype appeals to more users with a conversion rate that is better than Flickr's translates into a superior business model. This explains why eBay was willing to pay \$2.6 billion for Skype, whereas Yahoo! reportedly paid only \$22 to \$25 million for Flickr.³³

Strategy 2: Third-Party Pay Strategy

Firms using a third-party pay strategy—sometimes called a two-sided market—provide free products to a community of product users as a method of generating revenue from a third party that pays to access those users. In the digital age, Google is the poster child for this strategy, offering free Internet search services while companies pay Google to advertise to its millions of product users. Google's approach works well because product users type in key search words and identify themselves as prime candidates for advertisers. For example, typing in "skis" or "snowboards" allows companies selling or servicing those products to advertise to those targeted customers.

Strategy in Practice Where Do Innovative Strategies Come From?

What makes a business innovator such as Thomas Edison, Steve Jobs, or Jeff Bezos different from a typical manager? How did they come up with the innovative ideas that helped them found General Electric, Apple, and Amazon.com, respectively? Is it genetic? Where they born intuitive and divergent thinkers? Research by Jeff Dyer, Hal Gregersen, and Clayton Christensen reported in *The Innovator's DNA* confirms others' work that creativity skills are not simply genetic traits endowed at birth, and that they can be developed. In fact, the most comprehensive study confirming this was done by a group of researchers, Merton Reznikoff, George Domino, Carolyn Bridges, and Merton Honeymon, who studied creative abilities in 117 pairs of identical and fraternal twins. Testing twins 15 to 22 years old, they found that only about one-third of the performance of identical twins on a battery of 10 creativity tests could be attributed to genetics. In contrast, roughly 80 percent of twins' performance on general intelligence (IQ) tests could be attributed to genetics. So general intelligence (at least the way scientists measure it) is basically a genetic endowment, but creativity is not. Nurture trumps nature as far as creativity goes. That means that about two-thirds of our innovation skills comes through learning—first, from understanding the skill, then practicing it, and ultimately gaining confidence in our capacity to create.

If innovators can be made, then how did Edison, Jobs, and Bezos come up with their great ideas? Five discovery skills distinguish innovators from typical executives.³¹ First and foremost, innovators count on a cognitive skill called *associational thinking*, or simply associating. Associating happens as the brain tries to synthesize and make sense of novel inputs. It helps innovators discover new directions by making connections across seemingly unrelated questions, problems, or ideas.

Innovative breakthroughs often happen at the intersection of diverse disciplines and fields. Author Frans Johanssen described this phenomenon as the *Medici effect*,³² referring to the creative explosion that occurred when the Medici family brought together creators from a wide range of disciplines—sculptors, scientist, poets, philosophers, painters, and architects—in fifteenth-century Italy. As these individuals connected, they created

new ideas at the intersection of their respective fields, spawning the Renaissance, one of the most innovative eras in history. Put simply, innovative thinkers connect fields, problems, or ideas that others find unrelated. The other four discovery skills trigger associational thinking by helping innovators increase their building-block ideas. Specifically, innovators engage the following behavioral skills more frequently.

Questioning

Innovators are consummate questioners who show a passion for inquiry. Their queries frequently challenge the status quo, or push people to think differently. One of Steve Job's favorite questions was: "If money were no object, what kind of product would we create?" He wanted Apple engineers to imagine the perfect product and then try to design and build it. Innovators ask questions to understand how things really work, why they are that way, and how they might be changed or disrupted. Collectively, their questions provoke new insights, connections, possibilities, and directions.

Observing

Innovators are also intense observers. They carefully watch the world around them and their observations of customers, products, services, technologies, and companies help them gain insights into and ideas for new ways of doing things. Steve Jobs's observation trip to Xerox's research lab, the Palo Alto Research Center (PARC), provided the insight that was the catalyst for both Macintosh's innovative operating system and mouse and Apple's OSX operating system.

Networking

Innovators spend a lot of time and energy finding and testing ideas through a diverse network of individuals. They actively search for new ideas by talking to people who may offer a radically different view of things. For example, Steve Jobs was told by Apple Fellow Alan Kay to, "go visit these crazy guys up in San Rafael, California." The crazy guys were Ed Catmull and Alvy Ray, who had a small computer graphics operation called Industrial Light & Magic (the group that created special effects for George Lucas's movies). Fascinated by their operation, Jobs bought Industrial Light & Magic's computer animation group for \$10 million, renamed it Pixar, and eventually took it public for \$1 billion. Had he never chatted with Kay, he would never have purchased Pixar, and the creative *Toy Story, Monsters Inc.*, and *Finding Nemo* films might not have been produced.

Experimenting

Finally, innovators are constantly trying out new experiences and piloting new ideas. Experimenters explore the world intellectually and experientially, holding convictions at bay and testing hypotheses along the way. They visit new places, try new things, seek new information, and experiment to learn new things. Jobs, for example, tried new experiences all his life—from meditation and living in an ashram in India, to dropping in on a calligraphy class at Reed College. All these varied experiences triggered ideas for innovations at Apple.

Collectively, these discovery skills—the cognitive skill of associating and the behavioral skills of questioning, observing, networking, and experimenting—constitute "The Innovator's DNA," or the code for generating innovative business ideas.

The secret to third-party pay is to provide a valuable free service that attracts either: (1) a very large community of product users that can then be segmented in a particular way for advertisers (the way Google does with search); or (2) a targeted community of users that comprises a customer segment, or group of individuals similar on a key dimension (e.g., this similarity could be based on demographics, for example "teenagers" or "retired people;" or more need based, such as "video-game players" or "new mothers"). Blyk, a Finnish telecommunications company that was acquired by France Telecom, competes by offering free cell phone service to 16- to 24-year-olds. Product users in the desired demographic fill out a detailed survey about their preferences and are given 217 free minutes each month if they agree to receive advertisements. Blyk makes money by selling access to that particular demographic and providing information on their preferences.³⁴ Blyk also benefits by using freemium, since many customers go over their free minutes and end up paying a premium for those minutes.

In similar fashion, Ryanair offers a small percentage of its airline seats for free by using a combination of freemium and third-party pay. The company makes money on the add-on services: \$25 per customer for checked or carry-on bags, \$5 for seat reservations and credit card use, and \$4 for priority boarding. Flight attendants sell food, scratch-card games, perfume, digital cameras, and MP3 players. Ryanair also uses the flight as a platform for advertisers. When your seat tray is up, you may see an ad for a cell phone from Vodaphone, and when it is down, you may see an ad from Hertz. Flyers are a captive audience for advertisers targeting travelers. The key to third-party pay is to deliver a captive audience, preferably a specific customer segment, to an advertiser willing to pay for access to that audience.

Strategy 3: Bundling Strategy

A bundling strategy involves offering a free product with a paid product or service. For example, Hewlett-Packard may give away a free printer with the purchase of a computer, or Verizon may give away a free cell phone with the purchase of a service contract. Of course, the "free" effect here is largely psychological, since the customer must actually pay in order to get the product for free.

Offering a free product as part of a bundle works well when the product requires ongoing maintenance or complementary goods (e.g., Hewlett-Packard makes money by selling ink for its free printers). For example, Better Place is a company that introduced free electric car leases in Israel. It is able to lease the car for free because it bundles the car with an energy/maintenance contract. Customers pay 10 cents per mile (less than the cost of gas) to get their electric car battery packs swapped out at a Better Place service station. Instead of stopping for gas, you stop for a battery swap. But the battery swap costs Better Place less than 10 cents per mile, so it makes money on the difference. It also makes money through third-party pay because the Israeli government—like many other governments—is trying to cut down on pollution, so it subsidizes Better Place's operations.³⁵

Additionally, bundling works particularly well when a company offers a broad array of products. Banks are increasingly bundling free services—free accounts or stock trades—when a customer uses other services (e.g., keeps investment balances above some minimum). But the bundled product doesn't have to be related to the free product. Banks sometimes give away free products, such as iPods or iPads, to customers opening accounts.

Hypercompetition: The Accelerating Pace of Innovation

During the past 25 years, we have witnessed an accelerated pace of innovation that has had a significant impact on the nature of competitive advantage. In fact, Dartmouth Professor Rich D'Aveni coined the term hypercompetition to refer to his argument that competitive intensity has increased, and that periods of competitive advantage have decreased.³⁶

Recent research provides evidence that the increased pace of change has made it harder to sustain competitive advantage.³⁷ In fact, one study found that in 1950, when a firm reached the Fortune 500, on average it stayed in the Fortune 500 for 12 years. However, by 2000, the average firm that reached the Fortune 500 stayed there for only 7 years because of the emergence of new, faster-growing firms.³⁸ This all suggests that established companies need to be constantly looking over their shoulder for new entrants who might be launching new products with innovative strategies. It also suggests that established companies cannot rest on their laurels. They must continue to be inventive and offer new products and services if they hope to continue to grow. If they don't, their current products and businesses will eventually proceed through the famous "S-curve," which means that after the growth phase they will eventually mature and decline.



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