

Innovation is for CFOs, too

By Tony Davila, Marc J. Epstein, and Robert D. Shelton

Corporate innovation isn't just for the research and development (R&D) or design teams. It's for the organizational functions as well as the products. If companies want to infuse an innovation culture throughout their organization, they must think beyond what exciting products R&D can develop and get all employees thinking about how they can be more innovative in their jobs.

The accounting and finance functions are an important place to start. Although accounting has changed incrementally over time, we're grounded in a model that was developed 500 years ago, and we still use that same basic model. That's okay. The development of information technologies has changed the way we process transactions—and the speed—but the basic model hasn't changed. Yet approaches to financing organizations and managing cash have changed dramatically over the years. Maybe most important, the role of the CFO has been totally expanded in the last decade or two. Although regulations in accounting and finance constrain some innovation in the corporate finance function, there's still so much that can be done. Senior accounting and finance executives need to think not only about how their company can be more innovative in its product and service offerings but also how they can drive improved

results by making significant innovations in the finance function.

One way to begin is by examining some of the ways companies have innovated, which we've outlined here, and then figuring out how to apply the techniques to accounting and finance.

Both Technology and Business Model Innovations Are Critical

In our newly released book, *Making Innovation Work: How to Manage It, Measure It, and Profit from It*, we identify six levers of innovation (see Figure 1). CFOs who have carefully considered how each of these levers can be used in the finance function often find surprising ways they can improve both the efficiency and effectiveness of their activities. High-performing companies innovate by leveraging both new business models and improved technologies—and use them both internally and externally.

BUSINESS MODEL CHANGE

Business model levers change how a company creates, sells, and delivers value to its customers. Business model change can drive innovation in three areas:

- ◆ **Value Proposition.** What is sold and delivered to the market.
- ◆ **Value Network.** How it is created and delivered to the market and captured by the company—i.e., monetized.
- ◆ **Target Customer.** To whom it is delivered.

A company innovates its business model in three basic ways. It can revamp its value proposition, modifying *what* value it delivers to customers. It can rewire the value network, transforming *how* it delivers and captures values. Or it can change its target customer, altering *to whom* it delivers value. These are three fundamental elements of every business strategy and logical focal points for innovation.

Value Proposition

Changes in the value proposition of the product or service—essentially, what you sell and deliver to the marketplace—may be an entirely new product or service or an expanded proposition for an existing offering. When companies aim to innovate their business models, they need to examine their value proposition from all angles. They must zero in on what's critical in the value they currently offer customers and consider how they can enhance that value by offering it in a different or a better manner. They can do this in several ways:

Bundle products and services. Companies can

combine products and services to create valuable new offerings.

Unbundle products and services. Sometimes a company can carve off a product or service and sell it as a stand-alone offering.

Expand boundaries of the business. Companies can expand their businesses into adjacent economic sectors by leveraging their assets.

Enhance customers' asset utilization. Instead of selling services a la carte, companies can assume management of a business-to-business (B2B) customer's subsidiary or division, enabling the customer to better leverage its assets.

Value Network

The second element of innovative business model change is the value network—*how* value is created and delivered to the market. Changes to the value network are usually “behind-the-scenes” changes that customers typically don't see. These include modifications of the supply chain and cost model for the delivered products and services. This type of business model change affects steps along the value network, including the way an entity organizes, partners, and operates to produce and deliver its products and services. Also, value network changes can result from combining parts of the supply chain that typically are provided by different companies. Innovations may also come from redefining relationships with suppliers. Walmart tweaked the traditional retail value network by integrating more closely with its suppliers to lower costs and speed supply.

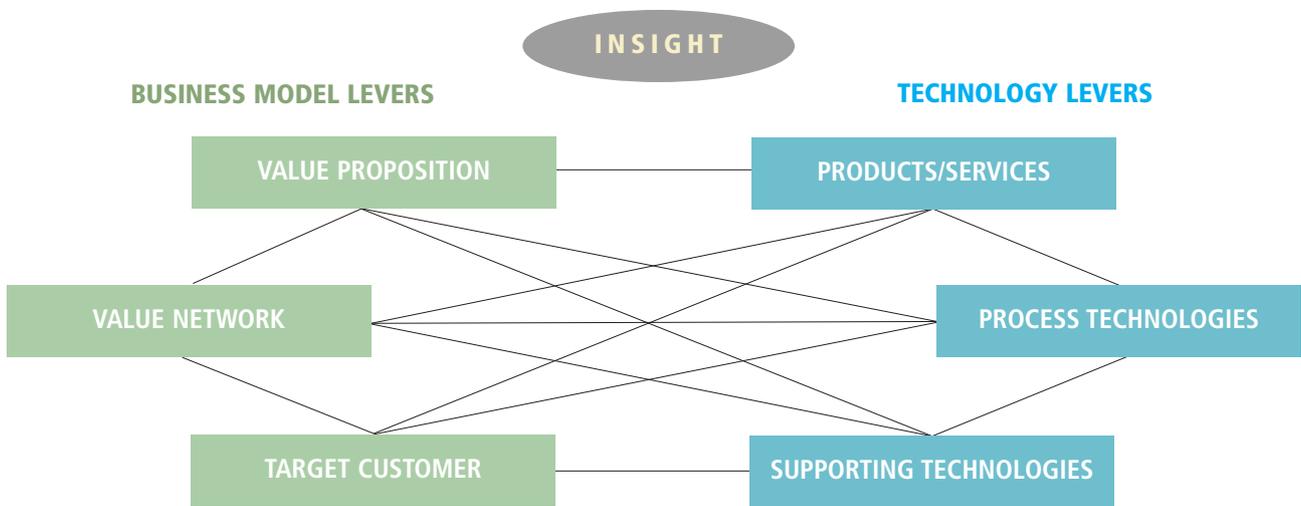
Companies can innovate their business models by rethinking the ways they deliver and capture value. In this case, a firm doesn't necessarily make major changes to the value it offers to customers. Instead, it focuses on *how it delivers and monetizes the value*. Leading-edge innovators have changed the value network four major ways:

Radically change the supply chain. By reworking its supply chain, a company can improve the customer experience while reducing its own cost.

Partner aggressively. Another option is to seek out alliances with companies that offer complementary products and services.

Build and monetize social networks. Companies worldwide are using social networks to increase revenues and brand loyalty while lowering marketing and sales costs. The Nike Community and its dedicated millions of participants is a powerful example of engaging the social network electronically to boost sales and build brand loyalty.

Figure 1: Six Levers of Innovation



Change the revenue, cost, or margin model. Let's look at an example in the airline industry. Most airlines, even those with discount fares, derive the bulk of their revenue from ticket sales and pay airports for the use of gates. In contrast, Ryanair has persuaded airports to pay the company for bringing flights to them. In exchange for a fee, it commits to delivering a specified number of passengers to an airport and then offers cheap airfares to meet its commitment. It also receives a portion of the sales generated by the airport's retailers. The new revenue streams subsidize its cheap tickets, creating even more traffic. For Ryanair, a ticket is a marketing tool—even a loss leader—that creates more opportunities for it to sell than airlines that rely on more conventional strategies.

Target Customer

Changes in *to whom* you sell—the target customer segments—usually occur when an organization identifies a segment of customers to whom it doesn't currently direct its marketing, sales, and distribution efforts but who would consider its products and services valuable. Many companies focus on satisfying the needs of customers they have served in the past. As a result, these companies spend a lot of time examining and segmenting familiar markets. But studying the same old customers can stifle and limit innovation. Many innovators explore beyond their existing customers and identify entirely new groups. They don't settle for easy answers. They keep looking for customers competitors have missed. These new customers fall into two categories:

Unserviced customers. A firm targets people who have bought similar offerings from competitors. An example

here could be the German brothers who copy Internet models that work in the United States and bring them to Europe.

Noncustomers. You can also target the people who have never bought your kind of product or service from anyone. Indian automaker Tata Motors did just that when it designed the Nano, a \$2,500 two-seater with a small trunk. The company targeted the Nano at millions of people in India who couldn't previously afford a car.

Business models can be powerful tools in the hands of adept innovators. Really talented innovators don't limit their efforts to using only one lever.

TECHNOLOGY CHANGE

Sometimes new technologies are a major part of an innovation, and they stand out and garner significant attention. Other times, the new technologies are hidden and can be seen only by the technical people servicing them. Either way, technology change can fuel innovations in three distinct ways, namely in:

- ◆ **Product and service offerings,**
- ◆ **Process technologies,** and
- ◆ **Enabling technologies.**

Product and Service Offerings

A change to a product or service that a company offers in the marketplace—or the introduction of an entirely new product or service—is the most easily recognized type of innovation because consumers see the changes firsthand. In today's fast-changing market, consumers have come to expect significant and recurring technological innovation of this type. They have been conditioned to expect prod-

uct innovation to such an extent that now it's common for people to time their purchases—for example, waiting for the release of a new model of a cell phone with additional features. New “block-buster” prescription drugs are also the result of this type of innovation. And McDonald's introduced a low-fat oil in its cooking to capture an emerging market segment—health-conscious consumers.

Process Technologies

When we think about technology innovation, we think about innovation that drives the performance of the products or services that a company offers. For example, when we think about memory chips, we think about capacity, access speed, or even energy consumption. Product innovation comes to mind because it quickly translates into functionality that the customer can value and price. But product innovation is only one application of technology.

Changes in the technologies that are integral parts of product manufacturing and service delivery can result in better, faster, and less expensive products and services. These process technology changes are usually invisible to the consumer but are often vital to a product's competitive posture. Examples include food processing technologies, automobile manufacturing, petroleum refining, electricity generation, and manufacturing in every industry. Process technologies also include the materials used in manufacturing because manufacturing and materials are intimately connected. For service providers, process technologies are those elements that allow the service to be delivered: the equipment that sends and receives the telephone signals that make up phone service, the package-sorting stations, delivery trucks that allow packages to be delivered by express package service companies, and the airplanes and airports that provide air transport services. For products and services, process technologies are an essential part of the innovation equation.

Companies continually strive to make changes to the process technologies that could reduce cost and improve the quality of existing products or services. This is especially true in commodity products or services where it's increasingly difficult to differentiate the product or service; in commodities, cost is often the only way to compete. Certainly the electric utility industry feels this cost pressure in production, transmission, and distribution of electricity. Yet the competitiveness of all products and

services benefits from improvements in process technologies. Visa's new offering, the digital wallet service V.me, combines digital technology behind the scenes to provide streamlined processing of payments, stronger customer support, and additional value-added services.

Supporting Technologies

A third source of technology innovation resides in supporting technologies. Rather than changing the functionality of a product or process, supporting technologies help a company execute its strategy much faster and leverage time as a source of competitive advantage. For example, information technology facilitates the exchange of information among the various participants in the value chain. This includes improved security and increased transaction speed between payment companies (charge cards) and banks. Closer communication speeds up business processes from product development to supply chain management.

Change in Financial Concerns

Though it's least visible to customers, change in enabling technologies, such as information technologies, can be very important because such changes help ensure better decision making and financial management. For example, Walmart has made important changes to its enabling information management technologies for direct order fulfillment with suppliers that significantly improved its ability to track and manage its partners, the supply chain, and finances.

Insight's Role in Innovation

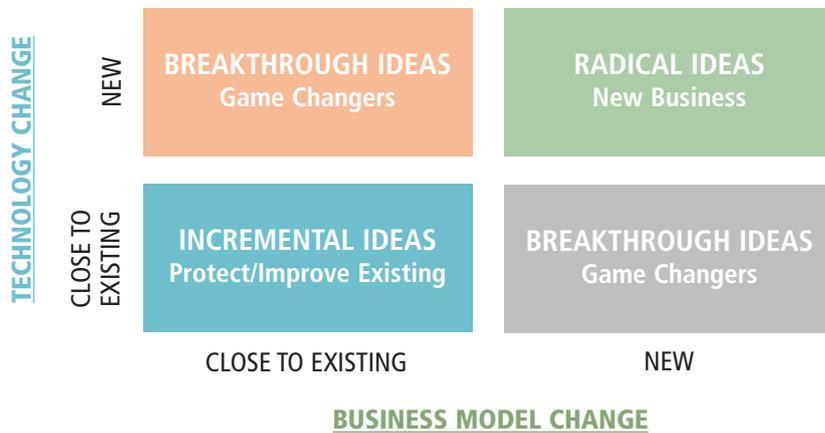
Insight inspires and informs the six innovation levers. Without insight, a company has no way to tell whether a proposed change to the technology or business model makes sense or stands a chance of being successful.

The smartest innovators use insights in two ways. Initially, they use them to explore emerging opportunities, spark creativity, and identify potential innovations. Deep insights into customers, markets, trends, and technologies illuminate possible innovations and allow or encourage prototyping and experimentation. Later in the process, after an initial design has been completed, insights guide development and commercialization.

There are five models or types of insights:

Market and customer insights, which cover changes in market structure, demographics, patterns of use, and

Figure 2: Innovation Matrix



latent and emerging unmet needs.

Regulatory and policy insights, which cover regulatory or political shifts concerning privacy, piracy, digital rights, intellectual property, global trade, and more.

Societal insights, which cover changing concerns and attitudes regarding health, poverty, and global responsibility.

Technology platform insights, which cover emerging technologies that redefine how things get done.

Product and service platform insights, which cover bundling or changing combinations of products and services that could change the industry landscape (as in home healthcare).

Insights also spark conversations that help define the boundaries of innovation in a company—what is in bounds and what is out of bounds so you know what to act on and what areas to avoid. Many companies rely on all five models of insight and consider all of them to define the types of innovation they will pursue. Some companies employ only one or two. Steve Jobs made it abundantly clear he favored pursuing technology and product and service platforms over understanding customers. “This is what customers pay us for—to sweat all these details so it’s easy and pleasant for them to use our computers,” the former Apple CEO said. “We’re supposed to be really good at this. That doesn’t mean we don’t listen to customers, but it’s hard for them to tell you what they want when they’ve never seen anything remotely like it.”

Incremental, Breakthrough, and Radical Innovations Are Critical

As we mentioned earlier, accounting and finance historically have been slow to change. For some aspects that’s important—e.g., high-risk areas that need to be con-

trolled. And for some aspects, we may not want too much creativity! But for other aspects, more innovation—and maybe some that is breakthrough and radical—is critical. Figure 2 provides a framework for different types of innovation that can be applied to the finance function to find a new approach to solving current problems—such as how to close the books faster—and seizing emerging opportunities—such as raising capital from new sources.

Not all innovations using the six levers we discussed are created equally. They don’t entail the same risks or provide similar rewards. The generic types of innovation include:

- ◆ **Incremental**,
- ◆ **Breakthrough**, and
- ◆ **Radical**.

Incremental innovation leads to small improvements to existing products and business processes. Think of it as an exercise in problem solving where the goal is clear but we need to solve how to get there. At the opposite end, radical innovation results in new products or services delivered in entirely new ways. Think of it as an exercise in exploration where there might be something relevant in a particular direction but we don’t know what we’ll find. In order to make the best strategic decisions regarding innovation, it’s necessary to understand the characteristics of each type and when it’s appropriate to use each.

For periods of time, a company or a specific function, such as the finance function, can be tremendously successful with only incremental changes to its technology. A traditional model of technology change predicts relatively long periods of evolution (incremental innovation) punctuated by short periods of revolution (where incremental innovation is useless and a radical technology is re-

quired). In the finance function, an example of a period of incremental innovation may be improvements that shorten the close by a few days, while a radical innovation may be a new technology and process that shorten the close to only hours. Incremental innovation may be sustainable for long periods of time before a revolution shakes the industry. For the finance function, this means that a company can remain competitive with incremental improvements for long periods, but it must radically innovate at some point to gain or maintain competitive advantage.

This framework provides a powerful way to guide your decisions about innovations. Because *how* you innovate affects *what* you innovate, it's vital to understand the nature of the change required so that the innovation effort can be managed, funded, and resourced appropriately.

Some people work under the misconception that innovation is always about making something new. Actually, all three types of innovation include a mixture of old and new. Incremental innovation always firmly embraces the existing technologies and business model. Although some elements may change slightly in incremental innovation, most stay the same. Breakthrough innovations include few or no changes to the levers of one of the innovation drivers—either the technology or the business model. Radical innovations include changes to levers in *both* the technology and business model but usually not to all six levers of innovation. Innovation is always about combining something old and something new from the technology and business model levers.

Incremental Innovation

Incremental innovation is the most prevalent form of innovation in most companies and is a way to wring out as much value as possible from existing products or services without making significant changes or major investments. While incremental innovation may sound like a minor piece in the equation, it's, in fact, a cornerstone. It's extremely valuable in providing protection from the competitive corrosion that eats away at market share, profitability, or both. By providing small improvements via changes in both the technology and the business model, a company can sustain its product market share and profitability for a longer time. Likewise, small improvements in the finance function can keep it competitive with other organizations and keep the focus on value-added activities. For example, Infosys is able to

close its books and report quickly, ahead of its industry and nonindustry peers, as a result of incremental improvements to its enterprise resource planning (ERP) system. The company feels that investors are happy with the fast reporting and efficiency of its operations.

The problem with incremental innovation is that it represents constrained creativity, where only small changes are permitted, and it often becomes the dominant form of innovation and crowds out other potentially more valuable changes. Companies often become addicted to incremental innovation and its relative safety only to find that they can't venture beyond it even if they urgently need to.

Breakthrough Innovation

A breakthrough innovation can provide crucial changes to the competitive environment that an incremental innovation can't. Breakthrough innovation involves substantial change to either the business model or technology of an organization—but not to both. Change in one dimension is often linked to change in the other, although the concomitant change may not be as dramatic or disruptive. For example, breakthrough change in technology, such as a completely new ERP solution, may require incremental improvement in the business model, such as what needs to be done to close every month, and vice versa. Any breakthrough change in either the business model or technology always requires some degree of change in the other. But the change in one element (either technology or business model) is much larger and more important to the success of the innovation than the other.

The two areas in the breakthrough innovation space are interrelated, and innovations created in one area (such as technology change or business model change) often create important new opportunities in the other. For example, the iPod technology and iTunes business model created opportunities for each other. This two-stage innovation in the breakthrough space is a major dynamic of innovation that companies need to manage, and it's an area of huge potential value creation that's overlooked or undermanaged by many organizations.

Radical Innovation

A radical innovation is a significant change that simultaneously affects a company's business model and technology. Radical innovations also usually bring fundamental changes to the competitive environment in the industry.

For finance functions, this means that a radical innovation can give the entire company an important competitive advantage. Square, the new mobile approach for credit card transactions, is a significant departure from traditional technology and biz model for payments.

While radical innovation can create tectonic shifts in an industry and put a company in the lead, investments in radical innovation need to be approached with caution. Radical innovations are by their very nature low-probability investments. Investing in too much radical innovation—based on unrealistic expectations that “the next new thing” will change the fate of the company—can waste valuable resources that could be better employed on breakthrough or incremental innovations. The key is to maintain a balanced portfolio of radical innovations so that the investment matches the business needs.

Innovating Innovation

Over the past 10 years, new approaches to innovation have appeared. Driven by the need to create more revenue and profits, leading companies have looked at new ways to create value by innovating their business model—i.e., the value proposition they offer, how they deliver that value, and their target customers. New business models led to the creation of novel and profitable services and solutions. For example, Walmart and other grocery retailers moved into clinical medical services by building on their pharmacy businesses. And some companies adopted high-speed prototyping of business models and product technology to accelerate development, lower costs, and create radical new offerings. Dyson, for instance, generated as many as 5,127 prototypes in just four years of development before releasing its revolutionary—and highly successful—cyclonic upright vacuum cleaner.

The new ways to innovate include incubators, which are essentially small startups inside a company that provide intrapreneurial zeal and speed through activities such as rapid prototyping, to foster fast commercialization of radical innovations. Leading companies, including Procter & Gamble (P&G), Google, and Philips, are using incubators. Co-creation is another new technique that has been applied with success. It uses systematic development of networks of individuals, stakeholders, and enterprises to create value together through engagement platforms. It’s similar to leveraging customer insights but includes a broader range of stakeholders and involves them directly in the innovation process. Nike has harnessed its social network to gain valuable consumer

insights and direct interaction with consumers during development.

These new operating models are particularly applicable to the finance function. They are proven ways to create innovations—especially breakthrough and radical innovations. And they are particularly suited to changing the underlying business models. Citibank is currently using an incubator to develop significant new breakthrough innovations.

Be Innovative in the Finance Function

As senior financial executives have increasingly become more critical members of the C-Suite and important business partners throughout the organization, they have made significant contributions to corporate profitability. They have even encouraged and helped develop important innovations in technologies and business models throughout their organizations. But often they haven’t developed and applied the same concepts of innovation to the finance functions. Leading organizations and leading financial executives apply these same concepts within accounting and finance. Using both technology and business model innovations and developing breakthrough and radical innovations in addition to incremental improvements can make significant contributions to organizational short-term and long-term profitability. **SF**

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Note: This article draws heavily on the 2013 book, Making Innovation Work: How to Manage It, Measure It, and Profit from It, Updated Edition, by Tony Davila, Marc J. Epstein, and Robert D. Shelton, and published by FT Press.