Praise for *Making Innovation Work*,
First Edition

“This is the book I wish I had read thirty years ago. *Making Innovation Work* is an important resource for leaders who are trying to improve innovation in their organizations. It’s crammed with examples and practical ideas that can trigger improvements in innovation, starting tomorrow!”

—Lew Platt, Chairman of Boeing, former Chairman and CEO of HP, and former CEO of Kendall-Jackson Wine Estates

“Davila, Epstein, and Shelton remind us that even if the end product is rocket science, the process need not be. To the contrary, tried-and-true practices of management, process, metrics, and incentives are all that it takes to let innovation happen consistently.”

—Andrew Beebe, President, EnergyInnovations

*Making Innovation Work* is a fresh approach to systematically managing innovation. It integrates the innovation management literature in a way that is insightful, creative, as well as pragmatic. Davila, Epstein, and Shelton have particularly fresh insights on learning, culture, leadership, and executing change. This book will be of great help to those managers leading innovation and change.”

—Michael Tushman, Paul R. Lawrence MBA Class of 1942 Professor of Business Administration, Graduate School of Business, Harvard University, and author of *Managing Strategic Innovation and Change* and *Winning through Innovation*

“This impressive book offers specific techniques for driving systematic, repeatable, and managed innovation at all levels in your company. It will help you build a balanced portfolio that integrates both incremental and radical innovations—so you can sustain growth indefinitely, instead of flaming out.”

—Guerrino de Luca, President and CEO, Logitech
“Making Innovation Work provides an excellent roadmap to innovation: its various facets, why each facet matters, and how they can be enhanced—separately and collectively—in any organization. It also debunks a few tenacious myths, starting with the oft-heard excuse that innovation is an inherently unpredictable and uncontrollable process. Based on their vast research and consulting expertise, Davila, Epstein, and Shelton convincingly argue that innovation performance is indeed controllable and improvable, and they provide a powerful framework to do so. If you’re interested in improving your organization’s innovation performance and potential, this book will tell you how. If you’re not, it will tell you why you should be!”
—Jean-François Manzoni, Professor of Leadership and Organizational Development, IMD (The International Institute for Management Development, Lausanne, Switzerland)

“Making Innovation Work is an informative and practical overview of the managerial side of innovation, showing that payoffs come when innovation projects are carefully conceived and measured.”
—Rosabeth Moss Kanter, Harvard Business School, author of Confidence

“Making Innovation Work explains why companies lose their ability to innovate and how they can get it back. And though most organizations aren’t ‘wired’ for innovation, the authors make it clear that sustained innovation is not a ‘nice to have’—it’s mandatory for survival. Effective execution of innovation is one of the major determinants between winners and the losers and of who survives and who disappears from the scene. This book picks up where other books on the subject fall short; it shows you how to make it happen.”
—Ladd Greeno, President and CEO, AgION Technologies

“An excellent overview on the importance of innovation and how to manage it successfully; must-reading for executives who wish to break out of the commodity trap.”
—Robert S. Kaplan, Marvin Bower Professor of Leadership Development at Harvard Business School and co-developer of the balanced scorecard
“Making Innovation Work is a must-read for would-be innovators at all levels. The seven practical Innovation Rules lay out the things you need to know and show you how to put them to use in your organization, no matter what the industry. Even self-diagnosed ‘good’ innovators will learn how to take their companies to the next level.”

—**Howie Rosen**, VP, Commercial Strategy, Gilead Sciences, Inc., former CEO, Alza

“Any startup that cannot effectively manage what the authors describe as the natural tension between creativity and delivering value from creativity is not likely to survive. *Making Innovation Work* shows how to manage creativity and value creation together without compromising either one. It’s must-reading.”

—**Arthur L. Chait**, President and CEO, EoPlex Technologies

“*Making Innovation Work* will help you think about innovation in new and extremely productive ways. From the seven ‘innovation rules’ at the beginning of this book to the powerful execution advice for leaders at the end, this book is replete with ideas you’ll actually use. If you’re ready to get past the clichés and conventional wisdom about innovation, read it—the sooner, the better.”

—**Alex Vieux**, CEO of Red Herring
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Introduction to Updated Edition

Today more than ever, the C-suite believes the company’s growth depends on robust, sustained innovation. And the most recent economic turmoil has only underscored the importance of innovation. CEOs across Asia, Europe, and the United States agree on one thing: Success is all about growth and innovation.¹

The lessons and approach to innovation that we presented in *Making Innovation Work (MIW)* continue to ring true today. Innovation is an integral and fundamental part of all businesses and aspects of society. It can and should be managed to produce a stream of innovations that create value for the company in several ways. First, it provides incremental improvements to existing products and services that help maintain market share and support margins. For that reason, a large part of the innovation portfolio focuses on incremental innovations. But incrementalism does not provide significant growth. For that, companies need breakthrough and radical innovations that change the rules of the game and produce the *next new thing*. Successful breakthroughs and radical innovations create new competitive and customer dynamics and drive significant growth. Combined in a properly balanced portfolio, incremental, breakthrough, and radical innovations permit a company to weather the toughest economic conditions, sustain existing businesses, and continue to grow. Nestlé is an example of a company in which breakthrough innovation—Nespresso—is part of an innovation portfolio that includes internal incremental innovation of existing products and that also seeks
acquisitions to enter new categories and expand into different regions and distribution channels.

Successful innovators have harnessed the power of combined technology and business innovation. In 1994, the new company Amazon used the Internet to create a business model that transformed the way people buy books. More recently, Amazon shook up the publishing business again with the introduction of Kindle. Amazon combined a new e-book technology with a business model that radically changed all facets of the book business—the way people publish, buy, and read popular books. Similarly, Inditex, the company behind Zara, has created a new way of interpreting fashion that leverages the most advanced logistic technologies. Inditex has developed multiple brands that leverage its knowledge of rapid design, distribution, and retail. Likewise, the emerging space tourism industry is relying on cutting-edge aerospace technology and innovative ways to sell an experience that so far only professionals have lived.

The very best innovators also have a deep-seated culture of innovation. Successful companies construct the right mix of behaviors to foster both value creation via creativity and value capture via disciplined commercialization. As MIW describes, the right metrics and motivators are essential to generate and reinforce behaviors that allow both creativity and disciplined commercialization. A culture that tolerates one without the other is not truly innovative.

Executives have learned the importance of combining strong innovation with operational excellence. Microsoft, GE, and Siemens have married a careful attention to executing their process with a constant flow of innovative products that has kept them at the forefront of their industries since the early days of these industries As MIW points out, it is not sufficient to be good at one or the other—success depends on a healthy mixture of the two. Dominant operational excellence limits innovation and diminishes the growth and profitability prospects. Where operational excellence is marginalized, the
company lacks highly reliable, scalable systems to generate profits and meet emerging threats and opportunities. Growth comes in spurts but fails to generate a sustained flow of revenues and profits.

Mergers and acquisitions still achieve growth, and they can be important tools to bring into the company building blocks of innovation. But they cannot provide the same sustained lift as robust organic innovation. Too often, mergers and acquisitions are used as a substitute for the growth that solid innovation capabilities should have provided. But the demonstrated capability of innovation to drive profitable growth in both mature and emerging markets has convinced more CEOs of the importance of innovation in their executive toolbox. Cisco has dominated a dynamic industry for several decades now. It became the dominant player for the Internet infrastructure by combining both an aggressive acquisition strategy to access the best ideas and a focus on integrating these ideas with its own. Its recipe has been nurturing its innovation pipeline from external as well as internal ideas.

We saw early signs of a significant rise in the importance of innovation among executives in 2009. Companies were just emerging from the massive 2006–2008 financial downturn. Despite the depth of the recession, fully 100% of the CEOs surveyed in Caught in the Crossfire Executive Survey said they were depending on innovation to drive growth. But many executives also expressed significant concerns about the ability of their company to harness the full potential of innovation. They were that convinced strong innovation was a business imperative, especially given the challenging business climate. However, they were skeptical that they had found and fully implemented the right innovation elements to deal with all the facets of innovation they would need in the years ahead. They still needed to finish designing, implementing, and growing the necessary elements of the operational model described in MIW.
MIW’s Formula for Success

Despite the continued upheaval in world economies, painful currency fluctuations, and resource price volatility during the past five years, CEOs have become much more positive. How is that possible? The positive outlook stems from CEOs’ belief that their companies can outperform by harnessing the power of innovation.2

In the years ahead, CEOs expect the business challenges to multiply and change. But the path to success is clear. The following sections describe seven major insights from MIW that continue to be the keys to success.

1. Technology and Business Model Changes Define Innovation

MIW described a new way of looking at innovation—a simple, powerful way to understand the types of innovation available and the way to generate them. Innovation occurs when you change any of the major pieces of the technologies and the business model of the products and services you deliver.

A company should have a firm handle on six major levers of innovation to capture the full growth and profitability potential (see Figure I.1).

Technology Innovation

Technology continues to be a critical source of innovation. Nanotechnology and its promise to revolutionize almost every aspect of our lives through miniature products, biosensors and telemedicine, driverless cars, distributed energy grids, and new cancer therapies will reach people through business structures. Because technology plays such a central role in bringing creativity to people, most companies have developed strong technology change capabilities. Sometimes a new technology is a visible part of an innovation. Other times, the new
technology operates behind the scenes, visible only to select people in the company. Either way, technology change is core to innovation. A company has three levers:

- Product and service offerings
- Process technologies
- Enabling technologies

![Image of Six levers of innovation]

**Figure I.1** Six levers of innovation

A change to the product or service is the most visible form of technology change, apparent to customers, competitors, and partners. Less visible are changes to the processes used to create the product or services. Likewise, changes to enabling technologies, such as quality or inventory control, are hidden to all but a select few. Chapter 2, “Mapping Innovation: What Is Innovation and How Do You Leverage
It provides a complete description and numerous examples of how companies use the technology levers.

Some companies depend almost exclusively on technology innovation. But many times competitors quickly match technology innovations. When that occurs, the technology investment creates huge competitive churn but little or no competitive advantage.

In recent times, some companies have found it difficult to keep a well-stocked pipeline of technology innovations. Many pharmaceutical companies have seen skyrocketing costs for discovery, development, and commercialization of new drugs. At the same time, the number of new drugs actually reaching market has plummeted.

But in other industries, technology change is still critical. Wireless switches that skip the need to wire from the bulb to the switch are based on piezoelectric technology and are the foundation of new start-up companies. Genome-based therapies promise to reconceptualize our approach to medicine. Smart objects based on tiny microprocessors open new opportunities to a diverse set of industries.

But innovation is more than changing technologies to create products and services that are better, cheaper, and faster. Innovation also thrives on business model innovations.

**Business Model Innovation**

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
- Value networks
- Target customer

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 value. 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.

Henry Ford realized the power of a new business model with the mass production of the Model T. Throughout the twentieth century, business models have continued to be an important source of innovation. Dell came to dominate the PC industry by redesigning the way PCs moved from the manufacturer to the end user, skipping distributors and retailers. Zara redefined fashion retail by challenging the assumption of season collections and bringing fashion to the stores every week. Peer-to-peer lending is an emerging industry that is poised to challenge some of the most traditional aspects of banking. And since the first edition of MIW, a large number of exciting new models have been commercialized. Nespresso started as an experiment of a group of researchers in the 1960s and become a dominant player in the coffee market. It reached this position by improving the technology to produce excellent coffee and then searching for a business model until it found the end consumer who wanted an upscale coffee experience. Nespresso is today very profitable and has expanded to business channels such as offices, hotels, restaurants, and cafeterias, which proved to be challenging in the past. Now Nespresso has expanded from telephone services to Internet and retail stores. It offers limited coffee collections, uses innovative advertising campaigns, and is starting to move into other experiences, such as chocolates.

Leading companies have demonstrated many ways to change business models using the three levers. Here are ten types of business model innovation.

**Revamping the Value Proposition**

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 better way (see Figure I.2). They can do this in several ways:

- **Bundle products and services.** Companies can combine products and services to create valuable new offerings. Bridge-stone, for example, started not just selling tires, but also leasing tires, charging for tread wear, and offering roadside service in Europe. It shifted to a bundle of products and services, to make it easier for truckers to replace worn tires and keep moving. As a result, the company swapped one-time product purchases for long-term relationships, creating a major new revenue stream in the process.

- **Unbundle products and services.** Sometimes a company can carve off a product or service and sell it as a standalone offering. IBM began to do this in the late 1990s by aggressively licensing technologies in its hefty patent portfolio that were no longer central to its business. Recently, the company collected more than $1 billion a year from these licenses.

- **Expand boundaries of the business.** Companies can expand their businesses into adjacent economic sectors by leveraging their assets. For decades, Marvel made most of its revenues from publishing comic books. It also licensed its characters, icons such as Spider-Man and the Hulk, but it didn’t generate much revenue that way. Marvel realized it needed to change its business model when three Spider-Man movies generated billions of dollars for Sony Pictures but only millions for Marvel. Sensing that they were leaving money on the table, Marvel shifted its business model. Changing its name to Marvel Entertainment, the company moved into the movie business and leveraged its iconic assets. The result? Marvel’s Iron Man and X-Men movies together grossed more than $800 million in theater sales. Taking note of this success, Disney acquired the firm for a large premium.
• **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. Schlumberger, originally a surveyor of oil fields, expanded its offerings in this way. Today Schlumberger manages oil fields for some national and regional oil companies. The service enables customers to focus on the activities that bring them the most value: exploration and the development of new fields.

![Figure I.2 Business Model Innovation Levers: #1—Change What Value You Offer.](image)

**Rewiring the Value Network**

Companies can innovate their business models by rethinking the ways they deliver and capture value (see Figure I.3). In this case, a firm doesn’t necessarily make major changes to the value it offers to customers, but rather 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 costs. ZeroStock Retail, in Hyderabad, India, which does business under the name of Cornerstone, is changing how clothiers offer value to their customers by merging elements of traditional and mail-order retailing. Using a zero inventory approach, Cornerstone’s menswear stores carry only test garments for customers to try on. When a customer determines his size, he picks fabrics that he wants for his clothing from samples in the store and places his order. Thanks to large inventories at its warehouses, Cornerstone can ship the purchase to customers in just two days. This approach allows the company to offer greater selection and conveniences like home delivery at lower prices than competitors while simultaneously holding down inventory costs.

- **Partner aggressively.** Another option is to seek out alliances with companies that offer complementary products and services. To stake out a market—tea drinkers on the go—Lipton partnered with PepsiCo to produce bottled iced teas. Lipton brought to the partnership more than 100 years of experience with tea, as well as a brand that consumers trust. Pepsi contributed its extensive bottling and distribution network. The partnership has provided major revenues and profits that neither could have earned alone.

- **Build and monetize social networks.** Companies worldwide are using social networks to increase revenues and brand loyalty while lowering marketing and sales costs. MobME, a mobile media and entertainment company based in Chennai, India, saw that fishermen depended on real-time information to know which waters to fish and which to avoid. Traditionally, they’d shared information by word-of-mouth, and inevitably some fishermen missed out on the latest intelligence. MobME created social networks that enabled them to share information on weather, market conditions, and the most promising fishing grounds. In doing so, it acquired a new group of subscribers.
• **Change the revenue, cost, or margin model.** 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 to sell than airlines that rely on more conventional strategies.

**Figure I.3** Business Model Innovation Levers: #2—Change How You Deliver or Capture Value

### Changing the Target Customer

Many companies focus on satisfying the needs of customers they have served in the past. As a result, the 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 (see Figure I.4). They don’t settle for easy answers. They keep looking for customers that competitors have missed. These new customers fall into two categories:

• **Identify unserved 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.

• **Find 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. Recognizing that millions of Indians couldn’t afford a car, last year Tata introduced the Nano, the world’s cheapest auto. Instead of trimming costly features from existing car designs, Tata’s designers started anew. They rethought what a car required and identified ways to cut costs while maintaining safety and reliability. The result: the Nano, a $2,500 two-seater with a small trunk. Some redesigns have been needed to fix problems, but the concept is sound. Western carmakers are already copying the approach. Renault-Nissan announced in November 2011 that it would team up with an Indian motorcycle maker to offer an even cheaper car. Toyota, GM, Fiat, and Volkswagen could soon follow.

Business models can be powerful tools in the hands of adept innovators. Really talented innovators do not limit their efforts to using only one lever. Amazon innovated its business model using not one, but four of these ten levers. Adding the Kindle product expanded the boundaries of its business, introduced bundled products and services, and built a new network of partnerships. Although the supply chain for electronic readers existed well before Amazon entered the market, the Kindle dramatically changed the way customers new to the device purchased and experienced books and other printed matter.
Likewise, Rolls-Royce changed both the value delivered and the monetization model when it launched Power by the Hour, a bundled package of jet engines, maintenance, and fuel services that provided airlines with guaranteed availability of airplanes.

**Business Model Innovation**

<table>
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<tr>
<th>Value Proposition (What)</th>
<th>Change to whom you deliver value</th>
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<td>• Find unserved customers</td>
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<td>• Find non-consumers</td>
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</tbody>
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**Target Customer (To Whom)**

- Find unserved customers
- Find non-consumers

**Figure 1.4** Business Model Innovation Levers: #3—Change To Whom You Deliver

**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 insights to explore emerging opportunities, spark creativity, and identify potential innovations. Deep insights into customers, markets, trends, and technologies illuminate possible innovations and allow prototyping and experimentation. Later in the process, after an initial design has been completed, insights guide development and commercialization.
Insights include these:

- Market and customer insights, covering changes in market structure, demographics, use patterns, and latent and emerging unmet needs
- Regulatory and policy insights, covering regulatory or political shifts concerning privacy, piracy, digital rights, intellectual property, global trade, and more
- Societal insights, covering changing concerns and attitudes regarding health, poverty, and global responsibility
- Technology platforms insights, covering emerging technologies that redefine how things get done
- Product and service platforms insights, covering bundling or changing combinations or product and services that could change the industry landscape (as in home health care)

Insights also spark conversations that help define the boundaries of innovation in a company—what is in bounds and what is out of bounds. Many companies rely on all five models of insight and consider all of them to define the types of innovation they will pursue. However, 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,” Jobs 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.”

2. The Innovation Strategy Links Innovation to the Business Objectives

Matching the innovation strategy to business goals provides the critical alignment between business objectives and innovation investments and activities (see Figure I.5).
The most recent economic turmoil has created significant stress within the C-suite, not the least of which is the business challenge of reinvigorating growth. These days, executives are focusing more on establishing the right innovation strategies and the right amount of innovation to respond to changing market conditions.

Figure I.5 Innovation alignment and linkage

The innovation strategy addresses three questions:

- How much innovation do we need?
- Where do we focus?
- What types of innovation do we need?

How much innovation is needed? The greater the need to respond to competitors, support eroding margins, protect market share, and grow revenues, the more innovation is required. Too little innovation will fail to meet those critical business needs. But assuming that more innovation is better is a mistake. Past a certain point, pursuing more projects and programs is counterproductive. Achieving the right balance is one of the important roles of senior management.

The second element, focus, is the topic of many heated C-suite discussions. As stated earlier, trying to do too much innovation is generally recognized as a fool’s errand. It spreads valuable resources too broadly and too thinly to make significant contributions. But narrowing the focus remains a contentious topic. Nokia’s focus on listening to existing customers without taking bold bets prompted by engineers led the company into a dangerous negative spiral. PARC’s focus on breakthroughs and its little attention to commercializing made PARC the best-known source of great products that somebody else brought to the market.
Today’s executives are especially concerned about the third element: What types of innovation do we need? Leading innovators determine where they need to innovate modestly with incremental innovations and where they need to achieve significant breakthrough innovations to drive significant growth.

The MIW approach is to create an innovation strategy for each major part of the organization. Some companies require an innovation strategy for each Business Unit (BU); others require one for each brand or product. And the company’s overall innovation strategy is the roll-up of the innovation strategies for each of its parts—BU, brands, and regions.

The innovation strategy selected needs to match the strategic business objectives for the specific part of the organization (see Figure I.6). A BU with a leading position in a mature market with entrenched competitors might decide that its business needs are more defensive and its innovation options are limited. In this situation, a company might select a Play Not to Lose (PNTL) innovation strategy. PNTL focuses on protecting and maintaining market share or managing to combat margin erosion.

Another BU in the same company, operating in a less mature market and more dynamic competitive environment, might see significant opportunity for innovation to drive higher levels of growth. In that case, a Play to Win (PTW) innovation strategy focused on building high potential brands and growth platforms best fits the objectives.

![Figure I.6 Innovation strategy spectrum](image)

PTW and PNTL innovation strategies have different amounts of incremental, breakthrough, and radical innovations in their investments portfolio. Incremental innovations deliver most of what a
PNTL innovation strategy requires. Maintenance of revenues, share, and margins is well served with a solid dose of incremental innovations. Almost no breakthrough or radical innovations are needed.

In contrast, PTW strategies, focused on higher growth, need more breakthrough and radical innovations in the portfolio. Breakthroughs create growth by changing the rules of the game. Amazon has done this several times in the book industry. Radical innovations also create entirely new industries. Virgin Galactic is readying its first space tourism launch, signaling commencement of an entirely new industry.

Everything boils down to this: Breakthrough and radical innovations drive growth. Incremental innovations sustain existing products. You need both, but the right mix depends on whether you have a PTW or PNTL innovation strategy (see Figure I.7).

![Figure I.7 Innovation Matrix](Image)

Getting the innovation strategy right—and making sure it stays right—has become a top priority. Increasingly, executives have said that the importance of innovation strategy has increased significantly. Recently, many executives reformulated their strategies in response to the threats and opportunities in the post-recession economy. This is an amazing shift. At the time of the first edition of MIW, many, but not all, innovation leaders used explicit innovation strategies. Significant numbers of companies did not have an innovation strategy or
even think they needed one. But in today’s world, innovation strategies are recognized as critical elements.

Currently, one of the biggest challenges companies face is timing a shift in strategy, such as determining when to start investing more heavily in the breakthrough innovations to fuel higher growth. Approximately half the executives surveyed had already made growth a business priority and developed an innovation strategy to support this objective. The other half was pursuing a more conservative business strategy: selecting a hybrid innovation strategy that splits efforts between maintenance and opportunistic growth.

That brings us to the third and perhaps most important element of MIW: turning innovation strategy into business reality.

3. The Central Message of MIW Still Holds True: How You Innovate Determines What You Innovate

As leading companies tweak and shift their innovation strategy to match new business objectives and competitive realities, they adjust their operating model accordingly. A MIW maxim is: You have the perfectly designed operating model to give you the results you are getting. If you are generating incremental innovations and want to generate more breakthroughs, you can’t get those by pressing harder on the operating model you have. You must change the operating model.

MIW laid it out in plain terms: You can’t shift from a PNTL to PTW innovation strategy without also changing the innovation operating model (the organization, resources, processes, and metrics). How you select and arrange the operating models determines what types of innovation you get and the business benefits that accrue. The innovation operating model must match the innovation strategy—breakthrough innovations must be conducted via processes and with resources that match the needs of breakthrough. You can’t get breakthrough or radical innovations from processes designed and operated
to deliver incremental innovations. Conversely, processes for radical and incremental innovations are poorly suited to the requirements and pace of incremental innovation.

For many companies, especially those focused exclusively on operational excellence, incremental innovation is pretty much all they know how to do. Adding new operating model elements specifically designed to deliver significant growth via breakthroughs is different from the norm and takes some getting used to. That is why a recent survey showed most executives were not convinced they had found the right combination of operational model and execution to deliver the growth.$^8$

Four more lessons from MIW still ring true.

4. **Metrics and Motivators Drive Innovative Behavior**

Metrics and motivators are pivotal in achieving the behaviors required for well-balanced innovation results and, ultimately, an innovative culture that endures (see Figure I.8). We said it seven years ago, and it is still true today: Companies don’t pay enough attention to metrics and motivators.

Companies cannot summarize innovation in a single number. They can’t look at a single metric to determine whether they are more innovative than their competitors or more innovative than a year ago. Innovation is a process. As such, it requires an integrated set of measures. Without a full view of the process, companies will make myopic decisions that likely will not to lead to the best outcome. A good measurement system provides information based on resources and actions to stimulate ideas on the selection, execution, and delivery of innovation.

Motivating people to innovate is harder than motivating them to put forth effort—and this latter one is already quite challenging. MIW outlined how organizations need to provide an economic incentive structure in which people feel that they are fairly rewarded for their
risks and effort to come up with ideas and work on them. Flat compensation is usually not the answer. When the economic structure is out of the way, the other motivational levers come into the picture: inspiring vision, encouraging passion for the work, and recognizing efforts and risk taking. Most organizations ignore recognizing people for taking actions beyond their job descriptions, and bureaucracies specialize in eliminating passion from passionate people.

**Figure I.8** Metrics and motivators as change agents

Getting people in an organization to embrace and execute innovation effectively requires active, insightful leadership; an organization attuned to the needs of innovators that is capable of learning and improving; and a culture that favors valuable change. But experience of leaders demonstrates that those elements are not enough. An organization also needs effective metrics and motivators (see Figure I.9).

*MIW* broke new ground when it singled out the importance of metrics in not only managing innovation, but also communicating the innovation strategy within the company—in other words, making the strategy tangible to people by making clear how innovation was part of their job. This is even more important these days, with the changes companies are making to their innovation strategy.
As important as metrics and motivators are, they need to change over time as an organization grows and matures. In the early stages of developing innovation capabilities, a company needs to focus on the measuring and motivating activities associated with the building capabilities. That includes training people, acquiring strong partners in the ecosystem, and implementing top-notch processes. As the company matures, the metrics and motivators shift more to operations (quality of insights, robustness of the portfolio, speed of prototyping) and performance (number of completed projects, revenues from new products and services, and strength of the brand).
5. Mitigate Organizational Antibodies or Prepare to Fail

MIW introduced the concept of organizational antibodies seven years ago, and they are every bit as relevant—and dangerous—today.

Antibodies are an organization’s natural response to change. Incremental changes are usually tolerated well; the changes are small and not very threatening. However, breakthroughs and radical innovations are rightfully perceived as disruptive to the way things usually work. The innovation might change the way traditional business is done in such areas as revenue and margin generation and product and service delivery. Sometimes the innovation could cannibalize existing business. That type of change evokes a strong antibody response from the existing business.

Unchecked, organizational antibodies grow strong and eventually overwhelm the proposed breakthrough innovations. In one extreme situation, we witnessed fierce organizational antibodies stop a major innovation, restructure the innovation group, and change the career path of the leader.

Companies cannot completely eliminate organizational antibodies. But they can mitigate them. Leadership needs to make it clear that it supports innovation and depends on it to meet business goals. Properly used metrics and motivators are major forces of mitigation.

6. Manage the Inherent Tension Between Creativity and Commercialization

When you walk into the building of a leading innovator, you see clear manifestations of two different forces of innovation. The creative force is clearly present in the way people energetically explore new opportunities and wrestle with ways to see and solve problems in ways others have missed. Creativity is expressed in people’s workspaces, language, and clothes—even in the processes they use to get the creative job done. The creatives in a company live to find the really cool next new thing and won’t rest until they do.
But in that same building, you also get a sense of people’s deep commercial discipline. You see it in their flawless launch planning, well-groomed supply chains, and relentless adherence to specs. They cannot let a detail go unchecked or a nit go unpicked. They have ways of talking and tools for analysis that match their buttoned-down demeanor. For these people, everything centers on commercial success.

These two forces coexist in successful innovators because leaders understand that it takes both to win. The hiring, firing, nurturing, and guided growth that takes place in the company values both and ensures that both can thrive.

7. Leadership Plays a Pivotal Role in Design, Operation, and Culture of Innovation

Leadership requires a vision of where the company needs to go. It is not enough for the company executives to say, “Bring us innovations. We will know a good one when we see it.” Leadership needs to lead the charge in defining the innovation strategy and encourage truly significant value creation. Leaderships must provide guidance on the types of innovation the organization should seek, where to explore for ideas, how to create great value, and, most important, what a great innovation looks like.

To turn the vision into reality, leadership needs to make innovation a fundamental part of the business mentality and ensure that the processes and organization are aligned with the strategy. That includes balancing the creativity and value capture to generate great ideas and get maximum return on investment. It includes overseeing the creation of innovation networks inside and outside the company—networks, not individuals, are the basic organizational building blocks of innovation.

Putting in place the right metrics and motivators is a leader’s responsibility; leaders must make innovation manageable and produce
the right behavior. This includes mitigating the organizational antibodies from the good ideas and innovation teams because they are different from the norm. But leaders should not stop there: They also should remove the disincentives to innovation.

In the years since the first edition, we have learned that one of the most important jobs for leaders is securing an adequate budget. That requires both forward- and backward-looking perspectives. The forward-looking perspective involves a hard look at the business objectives and innovation strategy. This determines how much and what types of innovation the business needs.

The backward-looking perspective is generated by reviewing recent innovation performance—for example, reviewing how the funds were spent and the delivered benefits. Assuming merely that more innovation requires more funds is not enough. For any budget changes to be credible across the organization, there has to be an honest look at how the funds were spent and the results obtained. Honest analysis will often determine that spending more is not the best solution. Often, improving how funds are spent is a better approach.

Finally, a leader needs to guard against the negative effects of success. Success is one of the most dangerous threats to innovation. When an organization feels that it is successful, it is lulled into believing that it can rest on its laurels and becomes complacent and dogmatic. Leaders must fight complacency and keep alive the drive for valuable change. Complacency at the top leads to complacency within.

New Perspectives Emerging from Recent Experience

When it comes to framing how to think about innovation and implementing it in an organization, MIW nails it. Recent events have only reinforced MIW’s robust approach introduced seven years ago. But innovation management has changed in one notable way over
the past seven years. A surge of new operating models has emerged. Companies have been complementing their traditional innovation operating model (such as stage gate) with new approaches. The goal? To drive more growth via breakthrough innovations.

The traditional innovation operating model typically delivers incremental changes to technologies, products, services, and business models; it excels in protecting market share and supporting margins. However, in recent years, the traditional operating model has not generated the level of growth companies need or desire.

Companies began experimenting with some new approaches that, in collaboration with the traditional approach, could provide breakthrough technologies, products, services, and business models to drive growth. No roadmap for design and development existed. Companies were exploring new territory in search of approaches that could deliver more growth.

One of the first experiments with new operating models was Open Innovation. Open Innovation’s approach was simple but revolutionary: to look outside the company for ideas and resources for great ideas, and include changes to both the business model and the technology. In 2000, Procter & Gamble implemented the Connect + Develop operating model based on Open Innovation. A few years after implementation, P&G saw significant improvements to the number of successful new product introductions.

Many other operating models have been developed since then:

- **Incubators**: Incubators operate like small, lean startups nestled inside the company. They are staffed by intrapreneurs, a special breed of innovators who have an entrepreneurial spirit and capabilities but can also leverage corporate strengths. Incubators use prototyping to test new business models and technologies and learn which ones are winners. They experiment at a clock speed that is four to ten times faster than in traditional
R&D. IBM, Google, Ericsson, and Microsoft use incubators for breakthrough innovations.

• **Open innovation**: Open innovation breaks from traditional approaches by including outsiders in the innovation process. For significantly lower costs than traditional R&D, open innovation puts a billion IQ points in play for any company that can figure out how to collaborate effectively and find the right people. Those external partnerships can extend to joint ventures in noncompetitive spaces with competitors. Clorox’s partnership with P&G has enabled it to use diaper business technology in its trash bags to make them stronger and more elastic, with less impact on the environment—all good things, from the consumer’s perspective. Leading companies have now embraced the idea that innovation is a looking-out concept and have departments scouting the market for technologies and startups. EPFL, one of the leading technology universities in Switzerland, has a space where companies locate a group of employees to constantly interact with faculty and students to identify great ideas early on.

• **Co-creation**: Co-creation goes a step further than open innovation. Customers are formally included in the innovation teams, putting them at the crux of the creative process. Directly involving the customer in the innovation process—rather than just getting their opinion or observing them—creates positive new insights and creative dynamics. The direct involvement stimulates new thinking and decidedly different outcomes than in traditional R&D. Nike uses its website Nike+ to get people deeply involved in idea generation and product design.

• **Design thinking**: Design thinking approaches innovation problems in a manner similar to that employed by cultural anthropologists or ethnographers. Insight is gained from carefully observing what users do when they engage a product or service. Similar to incubators, design thinking approaches use
rapid prototyping to drive exploration and development, making frequent sanity checks on the underlying assumptions related to the value and commercial potential of the proposed innovation. The Design School at Stanford University has been applying the concept of design thinking for almost a decade now. Brainstorming, creativity, and divergent thinking processes mix with observation, testing, and prototyping to converge before challenging the progress and enter a new exploration cycle.

- **Corporate venture capital**: Corporate venture capital captures companies in early stages of development inject their intellectual property into the investing company. This is particularly effective for quickly building expertise in new areas in which the target companies have a head start. Many companies use CVC, including Philips, Intel, BMW, and Nestlé.

- **Reverse innovation**: Instead of stripping down existing Western products to meet the needs of developing economies, reverse innovators start with a clean sheet in the less developed countries. Reverse innovation generates “in country, for country” ideas focused on meeting local needs in the target country (such as a heart monitor that does not require specialized training to use). When that hurdle is crossed, these companies move on to the “in country, for the world” phase, adapting and scaling products for global use.

- **Frugal innovation**: Frugal innovation is characterized by the careful and insightful use of resources, both human and material, although it is not tied to a specific geography as reverse innovation is. Frugal innovation is driven by a *less is more* philosophy—advocating simple, rugged, and maintenance-friendly products—and energized by constraint. Mobisante’s frugal innovation is a smartphone ultrasound probe called the Mobius that works like its full-size big brother but fits into the consumer’s pocket like a mobile phone. It can be used for fetal ultrasounds and imaging of organs such as kidneys, gall bladders,
and glands. The device sends the image by mobile phone signal to a remote specialist to read, bringing the benefits of a full-blown scanning clinic to rural areas that have no expert in reading ultrasound scans—or even a steady electricity supply.  

These new innovation operating models are providing companies with more breakthrough innovations and greater levels of growth. Initially, many companies implemented one of these to augment their traditional stage gate operating model. However, increasingly, leading companies such as Philips, P&G, and GE have added several new operating models, each providing different types of entrepreneurial capabilities and breakthroughs. But the lesson is clear: The entrepreneurial operating models complement the traditional stage gate approach and generate higher growth than stage gate models alone.

Conclusion

The rich content in MIW was gleaned from years of working with the leading innovative companies around the world. In addition, we delved deeply into academic literature to embrace the key lessons. MIW defined seven central lessons for powerful, sustained innovation. It provides executives with the frameworks and actions required to make innovation a reality in their organization.

Since the publication of the first edition of MIW, the world has become more turbulent and dynamic. Businesses have been forced to take a hard look at pre-existing strategic assumptions and traditional operating models. As a result, the importance of innovation has increased across all business sectors around the world. Companies realize that they need more organic growth from innovation to escape further financial buffeting and gain higher ground.
Since the first edition, we have continued to work with innovation leaders and aspiring companies to build stronger innovation engines to drive growth. And we have continued to read and contribute to the leading literature in innovation management. Our continued work has made it abundantly clear: MIW still provides the essential building blocks and formula for growth via innovation. The world has changed, but the core lessons of MIW still work. And companies continue to use MIW to build stronger organizations that can harness innovation for business benefits.

**Endnotes**


2. Fully 40% are “very confident” in prospects for revenue growth in their own companies in the next 12 months. *PwC 15th Annual CEO Survey*, 2012.


5. www.brainyquote.com/quotes/ authors/s/steve_jobs_5.html#EMmx2H2dQT7kOi0S.99


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