BUSINESS BOOK Summaries®

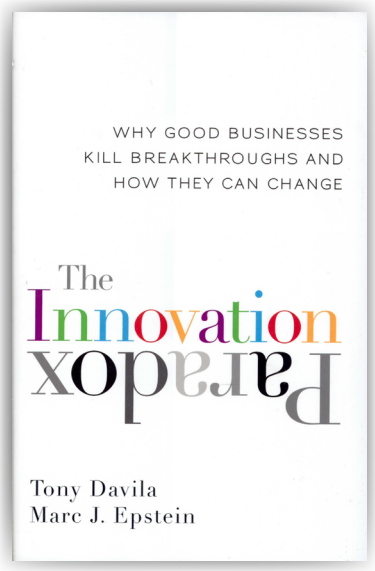
November 23, 2014

The Innovation Paradox

Why Good Businesses Kill Breakthroughs and How They Can Change

Tony Davila and Marc J. Epstein

ISBN: 978-1-60994-553-4



Key Concepts

- There are different faces of innovation, and each requires a distinct management approach. The kind of innovation developed by an organization has much to do with how it is managed.
- Business units are typically strong in promoting incremental innovation and challenged to embrace breakthrough innovation efforts. They have the advantage of being able to execute on the vision of their leaders.
- Startup companies live and thrive in uncertain environments and "not-yet" markets. They are also the major players when it comes to breakthrough innovation.
- Companies can overcome the innovation paradox by leveraging both the breakthrough potential of startups and the resources and execution ability of established organizations.
- The activities leading to successful innovation can be messy, and no two processes of discovery are alike. Companies must use many different tools and solutions to manage each aspect of the innovation process.
- Successful organizations are ones that have developed strong and positive cultures—ones in which innovation is fostered and resources that are necessary for developing ideas and supporting discovery are provided to innovators.
- Innovative leaders play a number of roles in fostering environments in which innovation thrives. Breakthrough innovation is dependent, in part, upon the right leadership.
- Innovative organizations must have soft foundations—including culture and leadership—as well as hard foundations—including strategy, incentives, and management systems—if they really hope to deliver successful results.

Introduction

As Tony Davila and Marc J. Epstein explain in **The Innovation Paradox**, the complexity of today's business world and society at large means that innovative solutions are increasingly complex. The combination of the growth of the Internet and the emergence of the venture capital model has given the competitive advantage to fast-moving startups. The benefits of pursuing operational excellence and incremental innovation can present liabilities for breakthrough innovation. The same organizational design that is good for improving organizational excellence and developing incremental innovation can impede breakthrough innovations that many leaders seek. This is what is known as the *innovation paradox*.

What is the Innovation Paradox?

Most established businesses have many visionaries within their fields and networks. The challenge is to bring these visionaries together to create breakthroughs. Because established companies, nonprofit organizations, and startups alike all coordinate the contributions of millions of people, the managers of these organizations are a crucial link to the well-being of today's society.

Few leaders have more winning visions than losing ones. Those who do are business geniuses who more often than not get the future right and build it.

Incremental innovations are defined as gradual, regular improvements to existing products and services. *Breakthrough innovations* are those that disrupt markets and create new ones. The innovation paradox occurs when the aggressive pursuit of operational excellence and incremental innovation crowds out the potential for achieving breakthrough innovation. Also often true is its opposite—that companies with a focus on developing breakthroughs can lose their starting-line positions to companies with more effective execution strategies. Operational excellence and incremental innovation feed the success of existing business models, but they can also feed failure with respect to creating new ones. Incremental innovation delivers results as long as industry structures remain stable. It can fail miserably, however, when breakthroughs redefine industries. At times when breakthrough changes make existing strategies obsolete, what once made companies great can be their largest liabilities.

At opposite ends of the spectrum, the two extremes of innovation are so different that they cannot be managed in the same way. Breakthrough innovation deals with much higher levels of uncertainty and risk as well as lower levels of knowledge than incremental innovation. Incremental innovation operates with relatively low levels of uncertainty, large amounts of knowledge, and usually large pools of resources. Winning in established markets requires executing faster through incremental innovation cycles. Even in maturing markets, the end-winner is typically the company that is better able to execute. Incremental innovation can result in rapid improvements for both customers and organizations, and it can boost employee morale by maintaining movement.

Breakthrough innovation can redefine and shift existing paradigms. It offers new ways to look at the world and is much riskier than incremental innovation. It can be swift and spectacular, but it can also evolve over longer periods of time as it fully transforms industries. The quest for breakthrough innovation often fails, but when it succeeds, it creates new markets and redefines industries. It creates and leverages new technologies that rapidly make existing ones obsolete and can actually upset the status quo. Breakthrough innovation is about questioning values, beliefs, and assumptions; it is also about learning from failures; however, it needs to be followed by a constant flow of high-quality incremental innovation in order to remain competitive.

Top-down innovation requires a different management approach than *bottom-up innovation*. The Apple-Google contrast illustrates this distinction. Apple's Steve Jobs had the vision and courage to take risks and steer the company into previously unexplored markets. This, by design, is a top-down vision. On the other hand, Google's breakthrough innovation model is based on letting ideas bubble up from all throughout the organization. It

encourages its employees to toy with new ideas and relies on letting inspiration flow naturally. A company with a strong top-down orientation is unlikely to get breakthrough ideas rising from the bottom.

The innovation models and processes an organization has in place shapes what it can do. Many companies already excel at developing continuous progress innovations that improve on their current technologies and top-down models of incremental innovation. Whereas continuous progress induces people to be creative to meet their goals, emergent improvements result from the structured process of stimulating and capturing ideas from the bottom. Part of the challenge is to motivate people, stimulate their curiosity, and give them channels for bringing their ideas to decision makers.

Strategic bets are leader-centric, execution-driven breakthroughs that depend on people at the top having the right visions and organizations ready to execute them. *Strategic discoveries*—the subject of this book—are breakthroughs that result from bringing together many visionaries from throughout organizations and their networks to create breakthrough masterpieces. Breakthrough innovation is about experimenting and uncovering which assumptions are right and which are wrong, and determining what works and what does not work. Both incremental innovation and breakthrough innovation are immensely important to the survival of an organization.

A business plan is a tool to organize a thought process and to explain it to outsiders, but the entrepreneur knows what she needs to move to the market to truly test her ideas.

The Benefits and Limits of the Business Unit

While business units are razor focused on execution, and incremental innovation is integral to staying ahead of competitors, it often cancels out breakthrough innovation in the business unit design. Business units, which are based on functional structures, are hard to beat in periods when an industry structure is stable. A business unit's focus on execution and incremental innovation can become a handicap when rapid or profound changes occur. Business units are best designed for predictable industries. They often respond to radical changes in industry structure by reinforcing previously successful strategies—the very strategies that are becoming obsolete.

Successful, established companies are superb at execution, and they have the ability to encourage incremental innovations that advance existing strategies through targeted resource allocation. The way top management allocates investments greatly affects how existing strategies are advanced. By carefully planning and monitoring progress, top management generates continuous improvement. As long as the associated risks are well-managed, demanding targets lead people to be creative in finding incremental innovation opportunities.

Getting an organization to fall in line behind a visionary leader is easy when the company's performance is deteriorating. In such circumstances, employees and investors are in agreement that change is needed, and they are much more likely to be ready and willing to support new leaders who are ultimately betting their companies on a vision of the future. However, visionary leaders can have wrong visions or can fail to implement them successfully. Breakthrough innovation is a risky business, and, more often than not, turn-arounds can fail to happen. Few leaders have more successful visions of the future than unsuccessful ones. Leaders who can leverage the ability of their business units to execute on their visions of the future are the ones who succeed.

The Success of Startups

Startup companies have been major players when it comes to breakthrough innovation over the last 20 years, and, despite their limited resources, they quickly rise to dominate industries. Some of the unspoken principles that guide innovation at successful startups include copying and combining from others, learning as quickly

and as cheaply as possible, managing risk effectively, governing transparently, and executing. Each of these principles contributes in a unique way to a startup's ability to develop breakthrough innovations.

Creativity is derived from copying existing ideas and combining them with new ones, and imagination always plays a significant role. A startup's innovation involves very little actual planning in the traditional sense of the word. Planning is more about managing in stable, predictable environments; meanwhile, breakthrough innovation requires managing in uncertain settings. Startup plans tend to be about short-term experimentation, exploration, and discovery. On the other hand, breakthrough innovation is about managing ignorance rather than knowledge. The right technology and business model are discovered and shaped through smart experimentation.

Innovating in the context of a startup is about risk management. Success is largely a numbers game, and entrepreneurs need to be able to quickly test whether their ideas have potential. They also need to be equally quick to pivot or discard bad ideas altogether. They cannot let their passions blind them. Successful governance of a startup brings together an experienced and diverse group of people willing to contribute to its success. Board members who are senior people in the entrepreneurial community provide the advantages of access to knowledge, access to networks, credibility, support, and stability. Ultimately, winners in the entrepreneurship world are those who execute better through careful design and creation of experiments.

Once a startup discovers a winning business model, its growth is really more about speed and efficiency than it is about discovery. It is also not as much about breakthrough innovation as it is about incremental innovation, and this is where many startups struggle. The few startups that achieve success often end up selling their businesses. In some instances, startups remain independent companies and become established players in their industries. Discovery can be *goal-driven* or *curiosity-driven*. The former leads to searches around a narrow set of options and contributes to incremental innovation, whereas the latter inspires more unique discoveries. Curiosity-driven research relies on freedom and serendipity, and breakthrough ideas typically emerge at their intersection. Most breakthrough technologies occur without a specific application in view.

The management of breakthrough innovations cannot rely on existing knowledge, because oftentimes there is none. There are no visible milestones, and visualizing the future is hard. Breakthrough innovations require a frame of mind different from that of typical business units.

The Startup Corporation: The New Kid on the Block

Google encourages curiosity-driven work and fosters an environment ripe with ideas by giving its engineers 20 percent free time in pursuit of their own projects. By providing its workers unstructured free time to explore their own areas of interest and expertise, Google has engineered an environment in which thinking is radically encouraged. The startup corporation looks and feels like a startup, but is a more powerful concept because of its fast access to global resources. While startups have an edge when it comes to curiosity-driven development, established companies have the advantage of bringing breakthrough innovation to the market. They benefit from leveraging not only the insights of their employees, but also those of the outside world. Strategic discoveries benefit from maintaining balance between market and company forces, internal resources and knowledge, and open networks.

Large corporations need to design their environments and structures to inspire people; otherwise, short-term pressures absorb all their attention and the likelihood of developing breakthrough innovation internally diminishes. They also need to attract and develop new ideas. Acquisitions are often used as a mechanism to bring ideas into established companies. *Combination* is a fundamental step toward strategic discoveries. This guiding principle of combining brings together different perspectives to develop something new. Established compa-

nies have the ability to combine partial solutions into larger, system-wide solutions. Strategic discoveries depend on experiments, and experimenting is far less about whether a particular experiment failed or succeeded than it is about what can be learned from the results. Learning requires resources and management support. When it comes to learning in startup corporations, the goal is to try as many ideas as possible at the lowest possible costs. However, established companies have the ability to mobilize and scale innovations quickly across markets. Strategic discoveries work best when they are part of complex innovations that leverage the advantages of established companies with access to knowledge, resources, and networks.

Implementing the Startup Corporation

Often the most difficult part of pursuing strategic discoveries is the front end of the breakthrough innovation process, which consists of inspiring, attracting, combining, and learning. When these early activities are well designed, the chances of crafting a successful breakthrough are greater. The back-end activities—leveraging and integrating—are necessary to pursue strategic discoveries, but they tend to be overlooked. They require more resources and a higher level of commitment. Design units, stealth innovation, and bounded innovation are three tools for inspiring internal solutions.

Design units are departments that are fully devoted to creating and shaping new ideas. They are generally focused on particular goals and concepts that are in line with a company's existing strategy. However, these units are sometimes given the objective of creating new concepts. Some of the tools design units use to stimulate innovation include:

Innovation is fragile, and destroying an innovative culture is much easier than building one. A risk-averse, defensive company will need a powerful leader to change its culture into one conducive to fostering strategic discoveries.

- *Import-in innovation*: Importing ideas from other fields and industries.
- *Design thinking*: Anthropological techniques that observe and question how different people use products. These techniques identify any needs that may yet be unfulfilled by existing products.
- *Lead-user innovation*: Inspiration that comes from studying advanced users of products rather than average customers.
- *Value innovation*: Innovation that uncovers and challenges the deeply held assumptions of an industry.
- *Future life*: Emerging trends that project future markets.
- *Big data*: Detailed data that identifies trends that might otherwise be hidden.

Stealth Innovation relies on the ingenuity of a company's existing employees to complete projects that generally require a great deal of time. Strategic discoveries can happen if people have the time to network and experiment as well as the motivation to explore opportunities outside their companies' current strategies. Like stealth innovation and design units, *bounded innovation* can happen as a stand-alone effort that leads to the development of a specific product, or it can target complex systems that require multiple technologies and networks.

Management solutions for attracting ideas and innovations from outside networks include corporate venturing, discovery units, and competitions:

- *Corporate venture capital* attracts radical ideas and takes equity positions in startups and is effective in gaining access to external hubs of innovation.
- *Discovery units* focus on partnering with open networks to attract ideas and identify breakthrough opportunities.

- *Innovation tournaments* rely on competition as a powerful way to stimulate effort and creativity. The structure of this type of competition is designed to deliver incremental ideas.

Solutions for combining include:

- *Incubators* support the unique needs of strategic discoveries in their early phases.
- *Accelerators* play a role in the later stages, when the discovery process is closer to the market.
- *Co-creation* relies on the wisdom of crowds and is embedded in the larger concept of crowdsourcing. Startups also create solutions rather than individual products, and they often require the collaboration of a number of parties outside the original company.
- *Corporate venturing* can be used for combining when investments are needed to add new products to larger breakthrough efforts.

Overcoming the Innovation Paradox: Designing the Startup Corporation

Even when an innovation reaches the market, there is still work to be done to fully realize an effective business model. Scaling up is often more difficult than coming up with an idea. Still, most efforts at companies, nonprofits, and governments focus on idea generation rather than scaling up. Discovering the right technology and business model for a breakthrough requires fast experimentation cycles that maximize learning.

Prototypes can be used not only to test physical products, but to test assumptions as well. The concept of the *minimum viable product* describes the most basic version of a product that can be released to the market. It lacks many of the features that will eventually be part of the product, but its objective is to quickly enter the market to accelerate the learning from interacting with customers. Strategic discoveries can become integrated as a new division, spun off as a separate company, or reconfigured into an existing business unit, with the fit between the new business and the current corporate strategy determining the choice.

Motivation for pursuing innovation involves passion. People go after breakthrough innovation and work long hours because they believe in their idea and are fervent about it.

Innovative Cultures

One of the foundations of established organizations that influences startup corporations is *culture*. Culture can be the fertile soil that nurtures developing ideas, or it can be the hard ground that thwarts their growth. Cultures in which people who contribute ideas are accountable for them but are not given resources to pursue them will quickly kill bottom-up innovation. Strong and positive cultures foster organizations that enjoy lasting success. Culture is built through years of accumulated experiences and comes down to a common way of thinking that drives a common way of acting. Altering an organization's culture requires modifying its thinking, and most cultural change programs fail because they ignore a long-known aspect of human functioning: that people act rather than think their way into new attitudes. Reshaping an organization's culture requires reshaping the behavior of enough people for long enough for the new behavior to be internalized. Personal behavior may only take months to change, but cultural changes may take years. A persistent and consistent management style is needed to translate new behaviors into new cultures.

The recruitment of talented people is also crucial, as is employees' motivation to innovate, but their ability to do so is equally relevant. Diverse talent is central to innovation, and innovative cultures depend on hiring talented, passionate people and then keeping them. Careful and thorough recruiting along with establishing clear ways for people to leave their organizations are important aspects of attracting and retaining the right talent. Nurturing activities that support exploration and innovation, such as job rotations and external interactions, are ways

to maintain interest and engagement. Customer focus is also a cultural issue, and the better an organization understands its customers' experiences, the better able it will be to improve them.

One way to push employees to improve their performance is to set *stretch goals*. These provide strong motivation but demand time, resources, structures, and management support if they are to be successful. Leaders need to embrace goals but also convey the message that performance evaluation will be fair. The culture of an organization is best reflected in top managers' attitudes. People look to management for cues about what behaviors are accepted. Company values and traditions that are at odds with top management behaviors create unsustainable tensions.

Breakthrough innovation requires the social skills to create internal support and external networks to experiment with the model. It also requires taking risks—the risk of failing, but also such risks as leaving a comfortable career path to try something uncertain.

Leading for Breakthrough Innovation

Innovative leaders play a number of roles in fostering environments in which innovation thrives. Trust in leadership takes time, but it can quickly erode. Most managers and their organizations know how to execute, but pursuing breakthrough innovation is different, and leaders must not let their current strategies receive all their attention and resources. Strategic discoveries depend on leaders who believe their people will innovate into the next growth platform. Innovation strategists must screen new ideas, make choices, and have the courage to turn down exciting projects that do not fit their strategies.

Leaders must maintain regular contact with their teams without micromanaging them. They must act like organizational architects, ensuring that key processes and capabilities are developed. They must also find ways to free up resources to make them available for innovation, keep processes under control, eliminate non-value-adding activities, and ensure decision-making processes are efficient and effective.

Innovation requires both passion and energy, and it needs constant reinforcement since it is not part of the day-to-day work of most organizations. Leaders need to remind people of their organizations' greater purposes. Employees who succeed need to be recognized, while leaders must seize opportunities to laud progress in all its forms.

Hard Foundations

While *soft foundations* of organizations are their cultures and leadership styles, *hard foundations* consist of strategy, incentives, and management systems. Innovative organizations that hope to deliver need to have both soft and hard foundations. Strategies define companies' playing fields, ambitions, and what industries they are involved in. Incentives play a central role in innovation. Striking a balance between limited and steep economic incentives moves organizations in the direction of more and better innovation. For passion to drive innovation, economic incentives need to be perceived as fair. *Social rewards*, such as promotions or access to resources to pursue new ideas, also serve as good incentives. Management systems are the structures and processes that facilitate the exchange of information, coordination, and resource allocation, thus providing the necessary infrastructure for information and resources to flow to decision makers and innovators. As companies grow, it is imperative that they provide structure to these functions.

Wrapping Up

Breakthrough innovation works with a different management model than does the traditional business unit. It encourages discovery and vision rather than efficiency and short-term financial goals. Business units innovate and want breakthroughs, but their processes are designed to deliver incremental innovation. Strategic discover-

ies need to be managed, and startup corporations are providing the management models for nurturing them. Startups are founded on these principles:

- Be exposed to different environments.
- Copy and combine to learn and invent.
- Migrate ideas to new contexts.
- Link people and ideas.
- Communicate and share.
- Take risks.
- Play with new combinations.
- Leverage existing networks.

The main weakness in developing breakthroughs is often the failure to manage the entire innovation process. Some organizations avoid the expense of fostering real breakthroughs and find themselves merely incrementally innovating for vanishing markets, while others have the ideas but are unable to bring them to market. This is the essence of the innovation paradox, and startup corporations are best suited to respond to the challenge.

Features of the Book

Estimated Reading Time: 3–4 hours, 217 pages

In **The Innovation Paradox**, Tony Davila and Mark J. Epstein identify the hidden impediments to innovation that are found in most established organizations and provide solutions for overcoming them. They identify operational excellence and incremental innovation as sources of both competitive advantage and the seeds of breakthrough innovation failure. Charts, tables, and graphs that illustrate and reinforce the concepts presented are interspersed throughout the book. Each chapter concludes with "Questions for Action," lists of self-assessment questions, and a notes section precedes the index. The book should be read in chapter order.

Contents

Further Information

Information about this book and other business titles:
www.bkconnection.com

Click Here to Purchase the Book

Related summaries in the BBS Library:

Challenge the Ordinary
Why Revolutionary Companies Abandon Conventional Mindsets, Question Long-Held Assumptions, and Kill Their Sacred Cows
By Linda D. Henman, PhD

Ninja Innovation
The Ten Killer Strategies of the World's Most Successful Businesses
By Gary Shapiro

About the Authors

Tony Davila heads the Entrepreneurship and Innovation Center and the entrepreneurship department at IESE Business School in Barcelona, where he is also a professor in the accounting and control department. He is the coauthor of *Making Innovation Work: How to Manage It, Measure It, and Profit from It* and *Performance Measurement and Management Control Systems to Implement Strategy*. His work has been published in diverse journals, including *Harvard Business Review*, *California Management Review*, *Journal of Business Venturing*, and *Research Policy*.

Marc J. Epstein is the Distinguished Research Professor of Management at Jones Graduate School of Business at Rice University in Houston. Prior to joining Rice, he was a professor at Stanford Business School, Harvard Business School, and INSEAD (European Institute of Business Administration). His coauthored book *Making Innovation Work: How to Manage It, Measure It, and Profit from It* has had worldwide success. His 20 authored or coauthored books and more than 200 professional papers have won numerous top academic, professional, and business awards.