

# Chapter 1

## Strategic Integrity

**S**trategic integrity is established by aligning strategy and execution at all levels of the organization.

Every firm has two strategies. The first is explicit, defined by official strategy white papers, memos, and presentations to turn executive vision into a series of competitive moves.<sup>1</sup> The second is implicit and defined by execution, and arises from the pattern of decisions and actions undertaken by the firm.<sup>2</sup> The first notion of strategy is “directed” since it stems from the top-down directions of senior management. The second notion of strategy is “emergent” because it materializes from bottom-up performance and originates from the aggregate behavior of the firm’s middle managers and line employees. As organizations grow in size, and as uncertainty in the business environment increases, creating alignment between these two notions becomes increasingly difficult. A lack of alignment will fuel an unproductive duality that destroys strategic integrity and leads to catastrophic business failure.

Directed and emergent strategies diverge because strategy and execution are usually disconnected, defined at disparate points in time, placed in separate organizations, and driven by different people. But rapid change in the business environment requires constant adaptation and reassessment, which in turn necessitate an increasingly tight and responsive connection between top-down strategic priorities and the actual patterns of operational execution. Rethinking the strategy development processes, organizational capabilities, and decision-making systems to provide a better connection between top-down priorities and bottom-up

actions has become one of the most important priorities on the agenda of today's executives.

Drawing from specific examples and detailed descriptions, this book describes a general approach for organizations to achieve a single, shared strategic perspective. Strategic integrity is driven by specific approaches to organization, planning, and decision making. Beyond the establishment of measurement systems that track performance to strategic objectives, matching strategy to execution incorporates many concepts and approaches that are traditionally separated from the strategy creation process. Not only should strategy match organizational capabilities, but the specific configuration of organizational capabilities should be part of the strategy development process. Also, successful strategy benefits from a much deeper and more participatory planning process than previously recognized. Participation drives alignment and promotes teamwork, while planning connects strategic vision to execution tactics. Together, these factors mold emergent and directed strategies into one.

## **The Enterprise and Its Unrealized Potential**

Despite the devoted efforts of managers everywhere, the potential of an enterprise often remains unrealized. Companies today are confronted by unprecedented challenges caused by the unpredictability and complexity of their competitive environment. From automobiles to financial services, from consumer electronics to computers, many recent managerial missteps have created a common belief that established enterprises can no longer compete effectively. Large companies are often slow, driven by the wrong incentives, trapped in the wrong value systems, or simply too rigid and entrenched to adapt to turbulence. In the extreme case, these problems have caused spectacular failures, as seen in the telecom industry during the dot-com era or in financial institutions leading up to the financial crisis that resulted in the recession of 2008 and 2009. It may appear to some people that once a business achieves the very success it strives for, the next step must inevitably be failure. But there must be more opportunity for success as part of an enterprise; otherwise many waste a great deal of effort.

Bridging the gaps between conflicting strategies in large organizations is essential. Enterprises drive our economy and are essential to innovation. From the phones that we use to the media that carry their

signals, products and services are increasingly complex and their businesses require constant innovation. Any notion that small ventures or volunteer communities can produce all of the innovations that society requires is untenable. Countless innovations require, by their very nature, significant resources, capabilities, and investments. While start-ups and spin-outs can and do create important new technologies, new businesses, or even new markets, they simply cannot solve the class of problems that is addressed by larger and more established firms. One cannot develop a spacecraft to explore Mars, revolutionize transportation to address environmental challenges, drive innovations in biotech and pharmaceutical research to deliver cures, or engineer an operating system that serves one billion customers without mastering the management of complex, multibillion-dollar organizations. There is a pervasive need to find new ways to align and manage large enterprises, especially given the nature of the problems that society must solve.

The challenges and opportunities in managing the enterprise are amplified by the fact that today's products are most often produced in partnership with many firms. Companies are embedded in business ecosystems, which are made up of large networks of partners, suppliers, and competitors that influence the value of products and services by producing complementary or competitive offerings.<sup>3</sup> Having impact in such a setting requires an organization that not only reaches internal integrity, but also has the strategy and capability to align external communities. MS-DOS and then Windows were both successful because they created opportunities for millions of external software developers. Even Linux, originally developed by Linus Torvalds and a dispersed community of engineers, dramatically increased its impact when companies such as IBM, HP, Novell, and Red Hat aligned key parts of the community around a new strategy for success (focusing on the enterprise). Beyond software, automobile, appliance, and electronics companies must align suppliers and dealers, while pharmaceutical companies must connect with regulatory agencies and scientific communities. Ultimately, enterprises have great strategic potential because they shape and influence vast assets and capabilities, both internal and external to the firm. If they manage to align these resources, in a way that remains coherent through times of change, their potential will translate into enormous impact on both business and social dimensions. But without alignment, the same potential is virtually certain to remain unfulfilled.

## Strategy, Execution, and Inertia

Management research has examined the challenges enterprises face in translating potential into impact. The research spans a broad variety of studies that examine thousands of organizations across every industry, from cement kilns to digital photography, and from automobiles to financial services.<sup>4,5</sup> These research studies converge on the idea that organizations accumulate a kind of “inertia” over time, through the processes, incentive systems, routines, and relationships that shape operational execution. These routines and processes enable an organization to perform complex tasks, ranging from management of customer orders to interpretation of market research, and from choice of design features in product development to specific steps taken in driving to a particular operational improvement goal (e.g., “We always do it this way”). These same routines shape how the organization works, and are reinforced by the company’s incentive systems, to make it efficient to do the same types of tasks over and over again. However, what makes it easy to perform repetitive tasks can make it nearly impossible for the organization to change.

Over time, routines established to optimize efficient execution converge into a pattern of behavior that defines the emergent strategy of the organization. Strategy therefore becomes the product of the firm’s incentives, structures, and patterns of behavior, not the other way around. Over time, a very large gap can emerge between emergent strategy and any top-down, directed strategy, causing the firm’s potential to stay unrealized. This may go unnoticed for some time, but will rapidly come to a head if the firm’s environment begins to evolve.<sup>6</sup>

In times of change, attempts by management to alter the strategic direction of the company can easily expand the gaps between directed and emergent strategy. If the management of the enterprise recognizes the need for change and articulates new directions, subordinates will too often reject it and stay focused on established patterns of behavior. The organization will often tend to stay the old course either because it has not been given a new definition of success that applies to daily tasks and priorities, or because that new definition has not been fully embraced. Even if the need for change is recognized in certain operating units, more gaps may open as different units move in different directions. Gaps between strategy and execution will destroy alignment and make it difficult for the enterprise to respond effectively to competitive pressures.

## **Dell: Inertia, Failure, and Renewal<sup>7</sup>**

Before 2006, Dell had often been hailed as the world's most successful personal computer company. For 20 years, Dell enjoyed tremendous success in the personal computer industry, driven by a powerful business model, which competitors repeatedly tried to imitate, and failed. The situation changed dramatically in recent years, with Hewlett Packard (HP) taking the lead and Dell falling behind. How did this come to happen?

Unlike most other computer manufacturers, Dell sold directly to its customers and established a unique information flow between customers and suppliers. This rapid and rich information exchange was matched by a high-velocity supply chain, and Dell was able to match customer orders with a lead time that was an order of magnitude shorter than competitors'. This had a direct impact on reducing inventory, returns, and even component costs, while dramatically improving cash flow and overall profitability. The speed of Dell's system enabled the company to respond to changes in customer needs and market requirements with unmatched velocity and efficiency. Dell was the darling of customers and Wall Street analysts alike, as its sales and stock price increased by orders of magnitude between 1984 and 2004.

Dell was perfectly optimized to fit its quick response model. The model influenced all aspects of the organization, from a ruthless cultural focus on efficient execution to a financial emphasis on rapid cycles, closing the books, and emphasizing "making the numbers" on a weekly basis, sometimes even on a daily basis. The people it recruited were focused on operational excellence and rewarded for the rapid and efficient completion of operational tasks. Dell did not always emphasize product innovation, since its computers were designed conservatively and exhibited a relatively small number of similar models, which could be stocked efficiently and shipped quickly to customers. As the organization grew rapidly during the 1990s and early 2000s, this model was continually reinforced, and its routines became second nature to the company's employees. The organization stayed efficient but, as it grew, lost its flexibility. Managers were doing "the right things" not because they were the right things to do but because it was the same way they had always been done. Their model became a driver of organizational inertia. As an insider stated, "The business model became cast in concrete, and business processes became increasingly ossified."<sup>8</sup>

In 2005, the personal computer industry continued to undergo incremental changes. Growth opportunities shifted increasingly to the consumer market, which favored notebook computers over desktops. This gradual shift increasingly challenged Dell's operating model, since consumers valued design innovation and liked shopping retail, particularly for notebooks. Dell evolved its strategies toward an increased focus on notebooks and on consumers, but unlike HP and Apple, which made significant investments in design and in retail presence,<sup>9</sup> Dell's operations simply did not follow suit. Dell continued to execute as it had in the past, focusing on supply chain management, channel efficiencies, and economies of scale, which provided an increasingly ephemeral advantage. Dell's relative lack of design innovation, R&D, sales channel diversity, and absence of focus on the consumer business led to increasingly poor financial performance.<sup>10</sup>

Dell's story is particularly surprising because the challenges it encountered were so gradual and incremental. The increase in notebook share is very incremental and predictable. This is not the Internet transforming the competitive landscape overnight, but a much more gradual transition, which takes place over essentially a ten year period. Could Dell's managers, immersed in their competitive environment, really fail to notice such incremental changes?

Most Dell executives were certainly aware of the changes way before 2004, but their knowledge did not translate into significant actions. Inertia had set in and it had become impossible for individual managers to change the company's course and react in a coherent fashion, until it was much too late. Despite a top-down strategy calling for change, the company was only able to form pockets of activity that argued for a new operational direction, increasing a focus on design, investing in a retail presence, with many separate groups advocating different approaches. However, these groups did not reach critical mass and succeeded only in creating stress, without real impact. This caused major fractures in the organization, especially when Dell began to miss its financial targets, and then "things really hit the fan . . ." <sup>11</sup> The organization lost its coherence, with different executives arguing for different strategies, blaming each other, and creating a managerial panic that resulted into significant financial mismanagement.<sup>12</sup>

In early 2007, Michael Dell came back as Dell's CEO in order to turn things around and realign the organization around a new strategy. Dell urged every manager to rethink his or her individual job in light

of the new strategy and reexamine every aspect of the Dell model. Dell showed significant promise by mid-2008, when its performance was further challenged by recession.

Michael Dell rolled out changes in many key areas. He reorganized the businesses, which had hollowed out and lost key talents and skill sets. He rebuilt management capability, flattened the organization, and invested deeply to bring in new, hand-picked employees at every level, from the top executives to entry-level engineers. He moved to reinvigorate R&D to catch up with competition, particularly in consumer designs.<sup>13</sup> Dell expanded the company's product line breadth and focused resources on designing PCs in new ways, predicting features ahead of demand, stocking more inventory, and implementing new approaches to product distribution. In its most observable move, Dell moved to the retail channel, and now has its products in more than 10,000 retail outlets around the world. The company also redesigned its manufacturing process for lower-margin laptops—with less configurability, focusing more on build to stock and less on build to order. Additionally, Dell improved its customer support function and increased its competency in dealing with a less-technical customer base.<sup>14</sup>

It took significant managerial energy to repair old fractures and execute the new strategy in a coherent fashion. Michael Dell motivated his organization to develop, evolve, and communicate a new detailed plan and present progress on a weekly basis, with many meetings personally attended by him. The system went both up and down: He emphasized close top-down supervision while encouraging (and requiring) bottom-up participation. Gradually, the results began to emerge, and Dell appears once again positioned to succeed, even in these very difficult economic times.<sup>15</sup>

Why was it so difficult for Dell to change course? Dell's organization had learned over time how to live by a certain business model, and it was very successful. Management had optimized everything in the company to emphasize quick supply chain responsiveness, minimum inventory, and ultimate manufacturing efficiency. However, the routines that evolved did not lend themselves to the different challenges of the last few years, which required regaining an emphasis on notebook computers, design innovation, and product differentiation. Dell managers faced a significant challenge in changing course, since they had tightly aligned the organization's processes and incentives around the old environment,

and the massive organization suffered debilitating inertia. Until Michael Dell came back and broke the dominant patterns, replanned activities from scratch, and changed organization, processes, and incentives, managers had no space to make different decisions and they continued doing the same old things, measured in the same old way, and driven by the same old incentives and goals.

There are many factors explaining Dell's challenges. The company had a great tradition of success in a relatively predictable environment. The organization also rewarded project managers for execution excellence and for hitting their numbers, providing an urgent incentive to execute on immediate tasks, but no incentive to look ahead. As the environment changed, even though it did so gradually and incrementally, the organization did not have the flexibility to adapt. The pressure that built up in the organization was not being released by means of any real changes in overall direction, and instead gave rise to fractures between groups and between directed and emergent strategies. As a result, the company kept going through its traditional motions without responding to the changing desires of its customers.

Inertia can make matching new strategies to execution as difficult as steering an ocean liner. Making the problem set harder is the fact that organizations are more fragile than most people imagine. If one attempts to take an organization in a new direction, without the right foundation, much of that organization will remain pointed in the old direction, creating stress, fractures between groups, confusion, delays, and poor execution. These fractures fragment the business and prevent an efficient flow of information, making it impossible to gain the critical mass needed for change. The fractures cause people to make the wrong decisions and can lead to business "failure."<sup>16</sup>

Inertia, with the stress and organizational fractures that it can cause, destroy the match between strategy and execution in countless examples. Inertia that may exist in engineering, marketing, general management, and finance, or between business partners and customers, will prevent teams from sharing information and making informed decisions. This wrecks the alignment between strategy and execution. Inertia and stress can do damage at different levels, including detrimental behavior of CEOs and other executives all the way down to mistakes made by engineers.

Inertia is challenging but not insurmountable, as the Dell example illustrates. Laying the groundwork to fight inertia takes time and enormous



attention to detail and consistency across the many factors that drive the coherence and responsiveness of an organization. Much like turning an ocean liner too quickly or without the right infrastructure, inertia can lead to the creation of fissures large enough to sink the whole ship. On the other hand, with appropriate strategy and framework of operational principles, the enterprise can successfully counteract inertia and develop the coherence and flexibility required to do extremely well in today's turbulent business environment.

## **A Participatory Approach to Strategic Integrity**

Breaking inertia and matching execution to new and evolving strategies hinges on the idea of strategic integrity. More than just ensuring that a strategy has traction, a close match between strategy and execution is crucial to be sure that we have the right strategy in the first place. Strategic integrity is not about crafting brilliant strategy or about having the perfect organization: *It is about getting the right strategies done by an organization that is aligned and knows how to get them done.* It is about matching top-down-directed perspectives with bottom-up tasks.

Creating a match between strategy and execution is rare. Historical research in strategy, innovation, and operations has shown that companies often isolate strategy development, marketing, and planning processes from the very groups that are responsible for execution, such as engineering, product, or operations. Additionally, these functions further fracture into increasingly small departments, teams, and subgroups without creating any processes or systems to reintegrate the disparate subgroups. Human nature tells us that few are likely to accept at face value a strategy handed “down” and even fewer are likely to execute it according to an inevitably poor plan, lacking the necessary detail. This fragmentation not only prevents strategy from being absorbed and implemented by the operational functions, it also prevents the right operational information to migrate up to inform and redirect strategy. Beyond financial information, this includes information about more difficult issues such as project schedules, customer needs and trends, technical feasibility, and partner viability. Above all, this separation avoids organizational accountability at every level—those responsible for the strategy can point to failed

execution and those responsible for execution can point to a strategy doomed to failure. The effects of separation, fragmentation, and lack of accountability are exacerbated by increasingly static incentives and measurement systems. This pattern creates and amplifies misalignments and can contribute to stress and major fractures in the organization. This pattern also destroys the organizational coherence required for strategic integrity.

There are better ways to run an enterprise. Achieving strategic integrity depends on maintaining coherence in the organization and achieving a high degree of fit with evolving customer needs and environmental trends. Imagine an organization in which the articulation of strategy is not contained within the purview of a small number of senior managers or executives but is instead shared broadly across the organization. Engaged in a participatory planning activity that examines the creativity and feasibility of the strategy, the organization feeds back comments, arguments, challenges, and new opportunities. In this world, the organization not only improves the strategy, but also connects strategy to execution with integrity. Once execution kicks off, the organization is behind it. And when execution runs into challenges, the problems are visible across the organization and the strategy changes to overcome the obstacles that come into its path. Emergent and directed strategies are one and the same thing.

This book will show how the search for strategic integrity focuses on three drivers: planning, organization, and decision making. These drivers can create the kind of transparency, coherence, and fit that indicates a high-integrity organization and keeps strategy matched to execution during times of change.

### ***Planning***

Planning is the first driver. Planning is the main way the bulk of the organization participates in strategy development. In contrast with traditional top-down, basic financial planning, this planning process involves pervasive participation and combines top-down, bottom-up—and “middle-out”—inputs to examine high-level vision, tactical details, and everything in between. This kind of planning emphasizes carefully structured flexibility and transparency and drives alignment between disparate groups. In fact, the more participatory the planning process, the stronger the alignment of

separate parts of the organization. And with more teams used to operating in concert, enterprises can avoid the fissures that so often plague strategic changes. In contrast with many management stereotypes, this kind of planning process increases the flexibility and responsiveness of an organization, not the other way around. It provides a clear framework for decision making and outlines a path for the framework to evolve and adapt as necessary without losing internal consistency.

### ***Organization***

Organization is the second driver. Integrity depends on building an organization with a reservoir of deep capabilities and on fostering the integration necessary to translate the potential created by these capabilities into impact. This implies building a deep foundation of traditional “disciplinary” excellence. By “disciplinary excellence” we refer to both generic knowledge of, say, engineering, sales, and marketing disciplines, and also to deep knowledge of the specific subdisciplines required. Additionally, integrity requires an organization to be structured for coordination and integration, with processes and behaviors that maximize the translation of knowledge into action.

### ***Decision Making***

Decision making is the third driver. Decision-making foundations start with the definition of transparent roles and responsibilities for members of the organization and continue with the establishment of clear levels of empowerment and accountability. Furthermore, the foundations extend to a system of shared values. These values are built on ethical behavior, but go way beyond it to include transparency, customer and partner focus, technical excellence, openness, and directness.

In essence, operating with strategic integrity implies teaching an enterprise an internally consistent set of principles for planning, organizing, and making decisions. Furthermore, it means using these principles to drive execution, guide choices, and make strategies come alive.

## **Windows Strategy and Execution**

In March 2006, Steven Sinofsky was asked to manage the newly formed Windows and Windows Live R&D organization.<sup>17</sup> Leaving his current

assignment as the Senior Vice President of Microsoft Office, Steven started working with the Windows and Windows Live (WWL) teams as the latest product generation, Windows Vista, approached shipment. Steven would focus on the next product release, which would become known as Windows 7 and also on realizing the vision of a suite of software and services to complement Microsoft Windows, known as Windows Live.

Windows is built on a tradition of achievement, with extensive revenues drawn from a sequence of successful products, starting with Windows 3.0 in 1990. With Windows 3.1 in 1992, Windows greatly improved its user interface and its internal design, which enhanced its ability to multitask, edging out competitors such as IBM's OS/2. Windows 95 was possibly the most successful introduction. With enthusiastic customers lined up the morning before the product's launch, Windows 95 included important innovations in the product's graphic user interface, access to the then-nascent Internet, support for powerful plug-and-play standards, and 32-bit microprocessor architecture. Other successful releases followed, such as Windows NT (for workstations and servers), Windows 98, and Windows XP, introduced in 2003.

Although the success of Windows is undisputed, by 2006 the business had come under pressure. The Internet, hailed by many as a "disruptive" force, was transforming the software industry and powering new generations of services and applications. These created new risks for Windows. New companies were gaining rapidly in influence, such as Google, which might come to dominate a new world of Web-only software. Additionally, older companies such as Apple had found a new life, introducing an impressive array of competitive products that were gaining share and threatening the core business. Some of Microsoft's responses to these challenges had not gone as anticipated. Analysts and the press had been quick to point out that Windows Vista was not achieving its promised targets of schedule, features, or quality.<sup>18</sup>

## **The Search for Strategic Integrity**

This book describes a journey, with strategic integrity as its final destination. It is organized in two parts. Chapters 2 through 4 frame the main concepts and describe the setting of the book, providing its context and

foundations. Chapters 5 through 9 focus on implementation and articulate the search for strategic integrity in detail, examining real, practical implications for planning, organization, and decision making. Chapter 10 concludes by summarizing and framing the book's ideas and connecting these experiences to other companies and industries.

Chapter 2, "Strategy: A Participatory Approach," exposes the core framework of the book by providing an overview of the strategy development and execution transformation driven through the Windows organization. It begins with the original expectations by the leadership team and continues with a summary of key changes made. The chapter describes a framework for strategic integrity, driven by planning, organization, and decision making. The chapter introduces the framework to discuss the management of the Windows and Windows Live business as well as the external approach used in reaching out to the ecosystem.

Chapter 3, "The Foundations of Strategic Integrity," hones in on the concept of strategic integrity, motivates it, and explains why it is the key to keeping the enterprise aligned, innovative, and adaptable in types of change. The chapter provides the grounding for the framework discussed in Chapter 2 and relates the idea of strategic integrity to concepts of integrity from other fields, motivating the importance of organizational coherence, and fit, and adaptability. The chapter relates the concept of integrity to the drive for innovation, and the translation of potential into impact. The chapter then focuses on strategic integrity in action in the Windows organization and examines its responsiveness, organizational coherence, and fit with customer needs.

In a changing environment, the match between strategy and execution cannot be static and survive. This implies that achieving and sustaining strategic integrity is founded on flexibility, adaptation, and, especially, innovation. Chapter 4, "Integrity and Innovation," focuses on the role of innovation in matching strategy to execution. Matching strategy to execution must build on innovation and leverage the complex capabilities of the enterprise while avoiding the classic pitfalls of inertia and disruption. The chapter articulates some key ideas for meeting these challenges and for crafting and executing innovative strategies at Microsoft, specifically, and in the enterprise more broadly.

Chapter 4 concludes the four foundation chapters of the book that define strategic integrity, link it to planning, organization, and decision

making, and discuss its general implications. The planning, organization, and decision-making framework is discussed in great detail in the following five implementation chapters, which examine in depth each of the strategic integrity drivers.

Chapter 5, “Planning: Innovation, Risk, and Agility,” homes in on planning as the first driver of the strategic integrity framework. The chapter starts by arguing that strategic vision is matched to execution by instituting planning at all levels in the organization. The planning approach described is iterative and integrative, top down, bottom up, and middle out. The chapter describes the planning process in detail and draws from the actual planning methods that are used in the Windows group.

Chapters 6 and 7 focus on the second strategic integrity driver, organization. Chapter 6, “Organization: Matching Capabilities to Strategy,” focuses on how to achieve the deep foundation of disciplinary excellence and the strong cross-functional integration that is necessary to achieve high-integrity execution. A high-integrity organization will focus on the people that really do the work—there is no substitute for real deep capability and understanding. At the same time, it is also crucial that the right skill sets are combined and integrated to achieve a coherent result. The chapter describes Microsoft’s approach to creating functional excellence and cross-functional integration, including an approach for organizing product development. Chapter 7, “Organization: What Managers Do,” narrows in on management. It examines how managers can build the capability, effectiveness, and trust that coaches, empowers, and inspires an organization. The chapter is full of detail on the pragmatic approach taken and on the resulting impact on the organization.

Chapters 8 and 9 examine the third strategic integrity driver. Chapter 8, “Decision Making and Value Systems,” describes core decision-making values, such as accountability, delegation, and empowerment. Additionally, it describes values employed behind specific types of decisions, such as those influencing quality and customer and partner needs. Furthermore, it discusses learning, as it impacts both value systems and specific processes. The chapter relates how a strong value system, and more traditional integrity notions, complement an effective planning process and an efficient organization to strive for strategic integrity. Chapter 9, “Personal and Organizational Growth,” takes the perspective of the growing manager. It articulates a value system and specific approach toward personal growth and career development.

Chapter 10, “Lessons from Aligning Strategy and Execution,” concludes the book, summarizes its ideas in a comprehensive framework and expands the discussion to companies in other industries.

## Notes

1. See H. Mintzberg, J. B. Quinn, and J. Voyer, *The Strategy Process* (Upper Saddle River, N. J.: Prentice Hall, 2003), p. 4; and K. Andrews, *The Concept of Corporate Strategy* (New York: McGraw-Hill: 1987).
2. Ibid. See also R. Burgelman and A. S. Grove, *Strategy Is Destiny* (New York: The Free Press, 2002); R. H. Hayes, G. P. Pisano, D. M. Upton, and S.C. Whelwright, *Operations, Strategy, and Technology* (Hoboken, N.J.: John Wiley & Sons, 2005); and G. Gavetti and J. W. Rivkin, “Seek Strategy the Right Way at the Right Time,” *Harvard Business Review* 86, no 1 (January 2008): 22–23.
3. M. Iansiti and R. Levien, *The Keystone Advantage* (Boston: Harvard Business School Press, 2004).
4. There are many papers and books on this topic, including P. Anderson and M. L. Tushman, “Technological Discontinuities and Dominant Designs: A Cyclical Model of Technological Change,” *Administrative Sciences Quarterly* 35 (1990): 587–605; R. Henderson and K. Clark, “Architectural Innovation: the Reconfiguration of Existing Product Technologies and the Failure of Established Firms,” *Administrative Science Quarterly* 35 (1990): 9–30; and C. Christenson, *The Innovator’s Dilemma* (Boston: Harvard Business School Press, 1997).
5. M. Iansiti, *Technology Integration* (Boston: Harvard Business School Press, 1997).
6. The classic example here is probably Intel’s exit from the DRAM business, chronicled by Burgelman and Grove, *Strategy Is Destiny* (Free Press: 2001).
7. Marco Iansiti’s research has focused on a large number of enterprises struggling with organizational inertia, including this study of Dell Corporation.
8. Interview with a senior member of the Dell turnaround team, August 20, 2008.
9. See, for example, P. Kunkel, *AppleDesign: The Work of the Apple Industrial Design Group*, with photographs by Rick English (New York: Graphis, 1997).
10. From 2005 through 2007, Dell’s consumer sales as a percentage of its revenue, fell from 15.5 percent to 12 percent.
11. Interview with a senior member of Dell’s turnaround team, August 21, 2008.
12. Ibid.
13. Michael Dell acknowledges importance of fashion in the consumer technology market: “We are kind of in the fashion business. We have been putting quite a bit more energy into this. It will be reflected in future products.”

14. Interviews with members of the Dell turnaround team.
15. Ibid.
16. See, for example, Henderson and Clark, “Architectural Innovation: the Reconfiguration of Existing Product Technologies and the Failure of Established Firms”; Tushman and Anderson, “Technological Discontinuities and Dominant Designs: A Cyclical Model of Technological Change”; Iansiti, *Technology Integration*; and Gavetti and Rivkin, “Seek Strategy the Right Way at the Right Time.”
17. As announced (“Microsoft Realigns Platforms & Services Division for Greater Growth and Agility: Steven Sinofsky joins PSD to lead Windows and Windows Live development, *Microsoft PressPass*, March 23, 2006, <http://www.microsoft.com/presspass/press/2006/mar06/03-23PSDR.orgPR.msp>), Steven’s responsibilities included managing the development of the Windows client operating system and the Windows Live suite of services (internally known as Windows and Windows Live or abbreviated as WWL throughout this book). He would later be joined by Bill Veghte, the senior vice president for the Windows Business, and Jon DeVaan the senior vice president for the core operating system development. The three worked as peers in partnership with Steven to “assume[ing] responsibility for process and planning of future versions of Windows.”
18. See Robert A. Guth, “Microsoft Delays Windows Vista Again,” *Wall Street Journal*, March 22, 2006.