

PART ONE

The Landscape





The Evolving Business Landscape

To say that we are living in uncertain times is an understatement. Never before has the rate of change been so swift and unrelenting. Business Intelligence, a term that encompasses all the capabilities required to turn data into intelligence, has emboldened companies to strive for the ultimate goal: getting the right information to the right people at the right time through the right channel. The result is an information explosion. New sources, channels, and applications are being created, automated, and accessed every day. This abundance of information and the new opportunities it creates places unprecedented pressure on companies to reexamine their organizational models. Traditional models of operation and styles of management often lack the agility and flexibility to fully leverage these new opportunities. This dilemma is not isolated to any one industry or geographic area. It affects companies in every industry around the globe.¹

Most large companies have the desire to change. The typical approach is to start the process by reorganizing. The scenario is: Call a meeting; analyze the problem; assign responsibilities and accountabilities; and allocate resources to make the necessary changes. It was the old function-follows-form approach. When the need for change was occasional, this approach worked. In today's business environment, however, there are several obstacles to this approach.

The difficulty arises from the enormous complexity of redesigning processes, management structures, and measurement systems to accommodate a continuously changing business climate. And all this must be done while continuing to operate the business. Another challenge is

the uncertainty inherent in the climate. The organizational models that worked in the past are not flexible enough. How does a business organize to an unknown business landscape? And then how does it continue to adapt as the landscape evolves? In other words, how can we allow form to follow function?

The first step is to look at the way we define the organization. In some ways, the common definition does not fit our current landscape. For business, it implies a fixed entity made up of elements such as systems, standards, rules, and personnel designed to achieve a purpose or goal. Organizational change was a term to define the act of adjusting those elements to meet new business demands. This was adequate in an industrial economy. However, in today's service-oriented economy, it makes more sense to think of the organization as emergent.²

The organization that survives in the new business landscape will be flat, team-centered, and dynamic with a workforce that is self-reliant, internally motivated, and connected. According to *Fortune* magazine, the organization will be composed of

a vertiginous pattern of constantly changing teams, task forces, partnerships and other informal structures . . . teams variously composed of shop-floor workers, managers, technical experts, suppliers and customers will join together to do a job and then disband, with everyone going off to the next assignment.³

To gain some perspective on the acceleration of change, consider some early inventions and the pace at which they influenced local and global economies. Historians tell us that the wheel was invented in one part of the world and used for hundreds of years before it gained universal acceptance. It took almost 100 years for the knowledge about the smelting of iron ore to move across one continent. Cultural traditions such as languages and social behaviors stayed localized for many centuries.

Compare that with a few decades ago when we landed on the moon. The knowledge of this historic achievement reached every point on the globe in 1.4 seconds. Today, when a new microchip is introduced, it gets implemented around the world within weeks. And of course, any new social or cultural idea can be transferred instantaneously through the Internet. Even the formation of life is being accelerated through genetic engineering.⁴

NAVIGATING UNCHARTED WATERS

The effect of constant change on a business can be daunting and stressful. However, understanding its underlying nature and accessing its power can unveil enormous opportunities.

In *The World Is Flat*, Thomas Friedman states that the rate of change we see today is

happening at warp speed and directly or indirectly touching a lot more people on the planet at once. The faster and broader this transition to a new era, the more likely is the potential for disruption. To put it another way, the experiences of high-tech companies in the last few decades who failed to navigate the rapid changes brought about in their marketplace by these types of forces may be a warning to all the businesses, institutions, and nation-states that are now facing these inevitable, even predictable, changes but lack the leadership, flexibility, and imagination to adapt—not because they are not smart or aware, but because the speed of change is simply overwhelming them.⁵

Globalization is here to stay. Emerging markets in Asia, Africa, India, and South America offer new opportunities as well as competitive pressures as their economies expand their global reach. Global talent exchanges are leading to very diverse workforces.

Advances in technology over the last two decades have enabled companies to obtain, organize, analyze, store, and retrieve huge amounts of information. These capabilities allow instant communication and connection. As a result, consumers have more power to influence their buying experience than ever before. They can shop from markets anywhere in the world. As they gain access to global products and services, they demand better quality, lower prices, and faster delivery. Companies are feeling increased competition. Regulation is often insufficient and inconsistent. Corporate mergers and acquisitions are becoming more common as businesses look to expand and leverage new opportunities.

In his book, Friedman describes 10 events that flattened the world. In other words, these events enabled the creation of a truly global economy. These “flatteners” laid the groundwork for companies with viable Business Intelligence strategies to expand rapidly. As a result, they are able to make decisions faster and with more accuracy. However, the flattening effect also accelerated the need for new types of organization models to

emerge, models that are agile, adaptable, and able to dynamically realign amid constant change.

Flattener 1. 11/9/89: When the Walls Came Down and the Windows Went Up

The collapse of the Berlin Wall marks the beginning of a major shift. Friedman describes how this event “tipped the balance of power across the world toward those advocating democratic, consensual, free-market-oriented governance, and away from those advocating authoritarian rule with centrally planned economies.”⁶ This shift had a cascading effect as it unleashed “enormous pent-up energies for hundred of millions of people in places like India, Brazil, China, and the former Soviet Empire.”⁷

The power of this tremendous economic expansion served to further flatten societies within these countries by “strengthening those below and weakening those above.”⁸ It also “paved the way for the adoption of common standards—standards on how economies should be run, on how accounting should be done, on how banking should be conducted, on how PCs should be made, on how economics papers should be written.”⁹

Just as these economies were hungry for communication, the IBM personal computer (PC), along with its Windows operating system, was ready for mass distribution. This just served to enhance the power of the individual at a time when the desire was at its peak. However, this platform has some architectural limits. The next flattening broke through those limits.

Flattener 2. 8/9/95: When Netscape Went Public

The shift from the PC-based platform to the Internet-based platform was the next big flattener. It takes little effort to imagine how organizations that use Business Intelligence would be different without this flattener. The shift to a seamless exchange of information greatly accelerated the transfer of information as well as the demand for the hardware and infrastructure to support it. The digitization of music, books, photos, and, of course, data are all instrumental in the birth of the Age of Information. This rapid expansion led to the dot-com bubble and hyperinvestment in the fiber-optic cable that turned Bangalore into a suburb of Boston. Each year, the technology at each end of the cable improves. So even after the bubble burst, the benefits are continuing.¹⁰

Flattener 3. Workflow Software—Let’s Do Lunch: Have Your Application Talk to My Application

The next flattener is particularly powerful for the Business Intelligence community. Prior to the introduction of workflow software, the sales department recorded an order on paper, and then walked it over to the shipping department. Someone from the shipping department walked it over to the billing department, where an invoice was generated and mailed to the customer. Today, as a result of advances in workflow software along with data description languages such as XML and SLAP, every step in the sales process or any other process can be performed electronically from anywhere on the planet.

This shift has enabled the use of Business Intelligence on a global scale. The explosion in growth of companies like eBay and PayPal are showing the way. According to Friedman, this phase brings workflow automation to everyone’s desktop. Workflow software connects existing Business Intelligence processes to optimize tasks, timing, and people.¹¹

Flatteners 4 through 10

The remaining seven flatteners—open sourcing, outsourcing, off-shoring, supply-chaining, insourcing, in-forming, and the steroids—all share a common trait in that they take advantage of connectivity and virtual adjacencies to enable collaboration and resource sharing. To truly unleash their potential, these new capacities and capabilities demand a different type of organizational model.¹²

SHIFTING FROM REACTIVE TO PROACTIVE

Everything that has been called the IT Revolution these last 20 years— I am sorry to tell you . . . that was just the warm-up act . . . that was the forging, sharpening and distribution of the tools of collaboration. We find ourselves at the end of the beginning. What you are now about to see is the REAL IT revolution!

—CEO AT A MAJOR HIGH-TECH COMPANY

The explosion of Business Intelligence is changing the way companies operate on a day-to-day basis. Traditional approaches that forecast yearly

demand and then plan production to balance inventories and budgets are being replaced by real-time sensors that continuously assess customers' needs and fill those needs at revolutionary speeds with a myriad of customized product and services. To quickly acquire the technological sophistication needed to operate at this level, many large companies that historically tried to do it all are now forming strategic partnerships or acquiring companies with complementary assets and competencies.

Over the last half century, many large industrial companies flourished within the make-and-sell paradigm. They are characterized by complex, top-down management structures with highly detailed annual budgeting systems and well-defined operational functions at every level. This structure enabled their factories to produce a variety of complex products, such as automobiles, computers, ships, and airplanes, on a massive scale with great efficiency. With such a history of success, it is difficult to look at a completely different model based on determining what the customer wants and then producing it.

In the last decade, the leading information technology (IT) firms have been the main ones to experience success in the new sense-and-respond model. Software, partially due to its virtual nature, is being developed with higher degrees of functionality and complexity in shorter and shorter time frames. The nonphysical nature of software products has also enabled developers to go one step further than "sense and respond." They have engaged virtual communities of users to literally participate in development. This preemptive feedback loop ensures that the end customer is getting what he or she wants.

STRATEGIES FOR CAPTURING VALUE

Given this relentless pressure to adapt our business models, companies are embracing innovative technologies and developing new strategies for capturing value.

Embracing the Power of the Network

The evolution of IT can be viewed as three overlapping organizational learning curves representing the introduction and maturation of three dominant technologies: centralized mainframe computers (the Data Processing Era), decentralized personal computers (the

Microcomputer Era), and now interlinked networks of computers (the Network Era).

—STEPHEN P. BRADLEY AND RICHARD L. NOLAN,
SENSE & RESPOND: CAPTURING VALUE IN THE NETWORK ERA

The aforementioned “flattener,” fiber-optic cables, along with broadband and advanced routing and switching capabilities, is accelerating the move from the hierarchical organizational structure toward the more integrated network organizational structure of the future. This integrated structure opens up a lot of opportunities for gathering information outside the company walls through Web tracking and social networking. According to Stephen P. Bradley and Richard L. Nolan in *Sense & Respond*, companies can “go beyond the walls of their organizations to monitor their customers continuously, not merely sensing their needs but actually anticipating their unrecognized needs, developing new capabilities to meet those needs, customizing their offerings to micro-segments, and competing with each other on speed in delivering products and services.”¹³ These new insights invite companies to customize their offerings to niche markets and compete on speed. Many products are becoming commoditized while the ease of ordering and speed of delivery can command higher prices. New and smaller companies now have an advantage to outperform their larger competitors. Again, this advantage leads to more collaborative partnerships, mergers, and acquisitions.

Discovering New Business Opportunities

Several years ago, Lester Thurow made this observation and posed several timely questions: “The old foundations of success are gone. For all of human history the source of success has been controlling natural resources—land, gold, oil. Suddenly the answer is ‘knowledge.’ The king of the knowledge economy, Bill Gates, owns no land, no gold or oil, no industrial process. How does one use knowledge to build wealth? How do societies have to be reorganized to generate a wealth-enhancing knowledge environment? How do they incubate the entrepreneurs necessary to bring about change and create wealth? What skills are needed? The knowledge-based economy is asking new questions, giving new answers, and developing new rules for success.”¹⁴

This statement highlights several important characteristics of the information economy. The assets themselves are often intangible. This inherent instability makes the market even more volatile. Early movers such as America Online were able to gain a strong foothold by giving away their software and charging a monthly fee for their service. But within a few years, market pressures forced them to change their model. Luckily, they have been able to adapt and maintain their value. Other companies, such as Bloomberg, Dow-Jones, Reuters, and Quote.com, provide real-time, aggregated data for the financial services industry. News is delivered from every major news source through the Internet. And blogs have become sources of news as well as forums for questioning the veracity of information.

Many back-office and outsourcing businesses have grown out of virtual connectivity. Services such as bookkeeping and answering the phone that were historically performed within the same building are now done in other cities or continents. Today, some are surprised to learn that most taxes are prepared and X-rays are read in India.

Morphing Current Businesses

Many traditional businesses are adapting their business models based on customer behavior. Amazon.com, the online bookseller, has grown into an Internet giant while many brick-and-mortar bookstores have closed. The publishing world has seen a change as authors enter the market independently using print-on-demand services.

Many small businesses are now gaining access to world markets. And larger, more established retail businesses, especially those with a traditional catalog presence, are creating sophisticated shopping experiences for their customers on the Web.¹⁵

Why are Amazon.com, Lexus, and Disney partnering with lesser-known online companies to sell products? According to *Wired* magazine's Ian Mount, the large companies are moving toward the manufacturing-as-a-service model to stay competitive. It has become necessary to compete with the small entrepreneurs who are producing and distributing products on demand. The production of products has become a commodity. Because of the low cost of entry, anyone with a good idea can compete in this market.

New businesses that leverage this model are popping up everywhere, and many have global reach. Jeffrey Wegesin, a furniture designer, advertises his designs on the Web. Upon receiving an order, he contracts with an on-demand manufacturing service in New Zealand to create and ship each piece. He has no inventory or other up-front costs. His business is pure profit.

Designers of clothing, jewelry, robots, you name it! The model is inherently charming because of its efficiency and simplicity. Individual musicians and authors can market their goods without any up-front investment. With little more than a product idea and a good design, anyone can become an instapreneur.¹⁶

MOTIVATION FOR CHANGE

Clearly the first 40 years of the computing revolution have been a preamble. Much greater changes lie just ahead. The marriage of computer and communication networks is transforming most aspects of business and consumer activities. Organizations face enormous changes, many occurring simultaneously.

—DONALD TAPSCOTT, *BLUEPRINT TO THE DIGITAL ECONOMY*

Seven Realities that Jeopardize Business Survival

In *Information Revolution*, Jim Davis, Gloria J. Miller, and Allan Russell discuss the “seven realities that jeopardize business survival.”¹⁷ Each reality illuminates the need for new business models as well as styles of leadership.

Business Reality 1: Business Cycles Are Shrinking In today’s Web-enabled economy, speed within all parts of the business model is the great differentiator. To accommodate changing markets and consumer preferences, product development and testing that used to take years has been shrunk to months or even weeks. Today, the first to market often enjoys the competitive edge.

This shortened cycle challenges managers to make decisions with less time for consideration or analysis. As a result, they must depend on

a combination of accurate, actionable information and intuition. And their decision must be in alignment with the overall strategy of the company.

Business Reality 2: You Can Only Squeeze so Much Juice Out of an Orange The goal of improving operational efficiency drove a majority of the investment in the last decade. Initially the returns were high and provided a competitive advantage. However, now that enterprise resource planning (ERP) software is available, the field has been leveled. The next step is greater innovation and agility.

Business Reality 3: The Rules Have Changed; There Is No More “Business as Usual” The days of following a typical path to business success are over. The same factors apply: profitability, customer satisfaction, stakeholder value, and competition. However, the path to success is very different and is fraught with new challenges:

- Mergers and acquisitions have hindered agility and cohesiveness.
- Productivity advancements have increased expectations from both customers and management.
- Advancements in IT have overwhelmed the abilities of some companies to manage and leverage the knowledge.
- The technologies that were introduced as the key to success often failed because the human issues were overlooked.

Business Reality 4: The Only Constant Is Permanent Volatility This is a common theme but bears repeating: The company that is most agile and adaptable will gain and maintain a competitive advantage. Instead of just relying on past results to predict the future, companies need to tap into current trends through social networking, Web analysis, and employee feedback.

Business Reality 5: Globalization Helps and Hurts Globalization presents many advantages, especially to small companies seeking a worldwide presence. Any company that is connected to the Web can strategically partner, outsource, or insource with relative ease. The downside is increased complexity when dealing with international languages, standards,

and cultures. Strong communication skills are essential for navigating this terrain.

Business Reality 6: The Penalties of Not Knowing Are Harsher than Ever In the new era of billion-dollar corporate scandals, personal accountability at the highest levels is not only prudent, it is now legally mandated. The Sarbanes-Oxley Act was designed to systematize ethical behavior. In addition to the need for strong, honest leadership, information systems to handle this complex business data are essential.

Business Reality 7: Information Is Not a By-Product of Business; It Is the Lifeblood of Business The seventh business reality is a direct result of the first six. Due to shrinking business cycles, level playing fields, changing rules, volatility, globalization, and the cost of ignorance, information has become the lifeblood of many businesses. Today, accurate, accessible, actionable information is necessary to compete in the global economy. There are strong pressures to achieve more results while spending less time and money. Companies need up-to-the-minute information about their customers, suppliers, competitors, and markets.

These realities also point to the need for new business models as well as visionary leadership. With the complexity of business today, decisioning throughout the entire organization has to operate like a well-oiled machine.

Parts Two and Three expand on optimal organizational structures as well as the core competencies, or success factors, necessary to operate at this level.

Information Evolution Model

As companies build their infrastructure and move into more sophisticated levels of Business Intelligence, certain human and organizational competencies are critical to success. These core competencies are discussed within the context of the Information Evolution model described by Davis, Miller, and Russell in *Information Revolution*. The model is based on the belief that a company's success is a function of its infrastructure, process, people, and culture. The model presents a phased maturation of an organization through evolutionary stages.¹⁸

To unveil the subtleties of the Information Evolution model, each level is examined over four major dimensions:

1. *Infrastructure.* This dimension addresses all of the hardware, software, and networking tools and technologies that handle every phase of the information process. The assessment, purchase, implementation, and use of these components should be part of the overall Business Intelligence strategy. Therefore, a high level of clarity is required in the communication of needs and intentions to ensure that all decisions are optimal.
2. *Knowledge process.* This dimension focuses on the strategic as well as specific uses of the information infrastructure. Included are the policies, best practices, standards, and governance of all aspects of the information cycle. Also included are performance metrics, reward systems, and the commitment to strategic use of information at the highest levels. For this dimension to operate smoothly, a cohesive, collaborative leadership team is essential.
3. *Human capital.* This dimension speaks directly to the success factors, as it is defined by the level of competency of every employee along with the hiring practices and the training and evaluation systems established by the company.
4. *Culture.* Within the Information Evolution model, this dimension is defined as the “organizational and human influences on information flow—the moral, social, and behavioral norms of corporate culture (as evidenced by the attitudes, belief, and priorities of its members) related to information as a long-term strategic asset.”¹⁹ When considering culture in terms of the success factors, this dimension is broadened to include organizational and human influences on every activity within the company.

The five levels of the Information Evolution model are hierarchical and reflect aspects of maturity across the four dimensions. Generally, companies fluctuate within different levels across the four dimensions during this evolution. The five levels of the Information Evolution model are operational, consolidation, integration, optimization, and innovation.

According to Davis, Miller, and Russell, 70 percent of today’s organizations are operating below Level 3. Future competitive pressures deem

it necessary to develop the competencies and achieve the strategic alignment required to evolve to Level 3 and beyond.

Level 1: The Operational Enterprise Most small businesses, start-ups, and silo-based companies operate at this level. The *knowledge process* is uniquely individual, which allows “information mavericks” to emerge. With a focus on day-to-day tactics, information access, analysis, and implementation are not standardized. Information management positions are structured to compete. Job security is gained through individual control.

Level 1 people (*human capital*) tend to thrive in unstructured environments. The information technicians are often self-motivated risk takers. They tend to strive for differentiation and recognition, which might serve a company that is still operating at an entrepreneurial level. However, they resist change and loss of control, which may inhibit maturing to the next level.

Level 1 *culture* is well suited for charismatic leaders and self-starters. There is little consistency in how information is shared or used. With the right talent, a business can thrive at this level up to a certain point or in a limited market. As it tries to grow, the individual focus can lead to inefficiencies, redundancies, and errors. Since there is little intention to coordinate silos, alignment does not play an important role. Skills in social interaction and teamwork are of little value.

Level 2: The Consolidated Enterprise Organizations at this level have integrated information management within a silo or department. Typically, knowledge processes are optimized to support operations within the functional areas.

Level 2 *infrastructure* features all data management hardware and software that is designed to optimize information and decision processes at a departmental level. Departmental discrepancies and duplication of effort are common pitfalls.

Level 2 *knowledge process* supports decision-making at the department level. This may result in inconsistencies and suboptimal outcomes on an enterprise level.

Level 2 *human capital* and *culture* dimensions are not managed with an intention toward integration. Teamwork may be encouraged in small, homogenous areas, but strategic and interdepartmental collaborative

efforts are challenged by the competitive structure of the organization. Communication may also be challenging without the benefit of a shared vision or enterprise-level goals.

Level 3: The Integrated Enterprise An enterprise-wide approach to data management and decisioning characterizes organizations at this level. Integrated knowledge systems generate value by standardizing processes that promote coordinated marketing efforts. Resources are mobilized around market and customer relationships that optimize long-term value.

Level 3 *infrastructure* features a seamless, enterprise-wide system of hardware, software, and networking that supports data reporting, analysis, and auditing while delivering a single version of the truth.

Level 3 *knowledge process* enables the company to optimize reporting and analysis to meet enterprise-wide goals and objectives. The focus shifts from a product focus to a customer or market focus with emphasis on relationships and long-term value. All information access and quality is aligned and standardized. Performance management is automated. This level of interdepartmental cooperation requires highly developed communication and collaboration skills.

Level 3 *people* are able to balance their departmental goals with those of the enterprise. Their holistic view and emotional intelligence allows them to contribute to and champion the efforts of enterprise.

Level 3 *culture* views Business Intelligence as a corporate asset and essential strategy. Training and organizational development focus on the importance of enterprise-wide access and intelligent use of information.

As the gains of rapid decision-making, enhanced customer relationships, and shorter time to market are realized, alignment become crucial as departments strive to coordinate the actions to achieve enterprise goals. As the enterprise promotes cross-functional collaboration, competencies in the areas of communication and collaboration become even more critical.

Level 4: The Optimized Enterprise Adaptability is the distinguishing competency of organizations at this level. The ability to constantly realign with changing markets allows Level 4 organizations to maintain a competitive edge.

Level 4 *infrastructure* enhances Level 3 by linking internal business systems across the supply chain, from back-office functions through customer

touch points. This enhances communications, data exchange, and connection to partners and customers across functional areas.

Level 4 *knowledge process* focuses on bringing the information systems to a higher level of quality, access, and relevance. All work-flow patterns have been modeled across the entire information value chain to optimize continuous measurement, decision-making, and real-time analytics leading to consistent and immediate customer response. Closed-loop feedback processes ensure continuous evaluation and improvement.

Level 4 *people* have many similarities to the people in Level 1. They are independent, adaptable, innovative, and driven, and take calculated risks. However, their approach to the organization is more holistic. They, along with their peers, are focused on enterprise-level goals. So along with being innovative and adaptable, they must be highly skilled in the areas of communication and collaboration.

Level 4 *culture* empowers individuals across the organization to take on leadership roles. Along with access to rich quantitative information, they are given the autonomy to continuously fine-tune the business model by making incremental improvements. Doing this requires clear communication of the goals and vision from top management as well as the willingness and skills to collaborate and share ideas across departments. Change-readiness is an inherent part of the culture.

Level 5: The Adaptive, Innovating Enterprise Innovation is the distinguishing competency of organizations at this level. These organizations are continuously seeking ways to reinvent and transform their value proposition. This proactive model, based on Business Intelligence and creative energy, allows organizations to stay continuously competitive.

Level 5 *infrastructure* is designed to be an “intelligence architecture” with the ability to integrate and expand quickly and seamlessly based on the needs of the organization. An advanced combination of analytic tools allows new ideas to be tested and perfected in a virtual environment, thus reducing the time to market. Innovation is systematically fostered and supported through information access and sharing.

Level 5 *knowledge process* is designed to encourage innovation at the highest levels. Extensive analytics are used to model the future while minimizing risk. As a way of stimulating new ideas, collaboration is encouraged and facilitated on an enterprise-wide basis. The entire innovation

process is documented, analyzed, and communicated throughout the organization.

Level 5 *people* are whole-brain thinkers (described in Chapter 2). With a keen eye for the bottom line (left brain), they are proactive, creative thinkers (right brain). They thrive on juggling many roles and activities. They actually enjoy change and get bored if things start to feel stagnant. They know that their competitors are able to reach Level 4 with cutting-edge technology. But at Level 5, they can always outpace their competitors by continuing to innovate.

Level 5 *culture* embraces whole-brain thinking. All ideas, even the most absurd, are encouraged. Processes are designed to facilitate creativity and support an intuitive flow of ideas. Constant change is the norm. Inquiry and collaboration as tools for innovation are embedded in all aspects of the Information Model to ensure sustainable and consistent success.

According to Davis, Miller, and Russell, no organization has truly reached Level 5. Some have pockets of Level 5 competencies, but most organizations find it difficult to deal with constant change.²⁰

THE EVOLVING ORGANIZATION

In the mid-1990s, an issue of Fortune magazine had an unusually arresting cover. It was two pictures, actually one above the other. The upper picture was a group of half-dozen or so men in bathing suits, sitting disconsolately with their backs to each other on a raft-like contraction that was obviously sinking. The picture below it was of a similar group on a raft, only this time they were happily facing each other as they paddled their buoyant and well-constructed craft across a lake.

The story inside was about new ways of conducting executive development programs in corporations. The two groups on the cover were all executives from one Fortune 50 company. They had each been given identical sets of materials and time limits to build a raft that would take them across the lake. There was only one difference: To build their raft, one team was required to follow all of the company's policies about new product development, planning, budgeting, and organizational

structure. The other team—the happy crew of the seaworthy raft—had been left free to proceed in the best way they saw fit.

—PETER VAILL, FOREWORD TO EDWIN E. OLSEN
AND GLENDA H. EOYANG, *FACILITATING ORGANIZATIONAL CHANGE*

The lesson from this exercise is described succinctly by Peter Vaill in the foreword of Edwin E. Olsen and Glenda H. Eoyang's book *Facilitating Organizational Change*:

The lessons are about the power of participation; about the energy that is released when command-control top-down management is reduced or removed; about the innovations that emerge when formal structures are made more flexible and responsive; and about the capacity of teams to gel around a shared vision and to exhibit extraordinary determination to fulfill that vision.²¹

This creative exercise easily illustrates the limitations and risks of a highly regimented management style. While it may be difficult to pinpoint each team to a level on the Information Evolution model, it is easy to determine which management style is more suitable for a highly volatile business environment.

So what impedes a company from reaching Level 5? What does a company need to address? How can it transform to support this evolution? New models from science and nature are emerging that offer understanding and frameworks for creating and managing a company that is adaptable and innovative.

■ NOTES

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