Regent
Global Business Review
exploration innovation transformation

SEPTEMBER 2012 VOLUME 5 ISSUE 2

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Global Business Review
explorationinnovationtransformation

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ON THE COVER
London City Hall

 ISSN: 1936-3141

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Global Business Review
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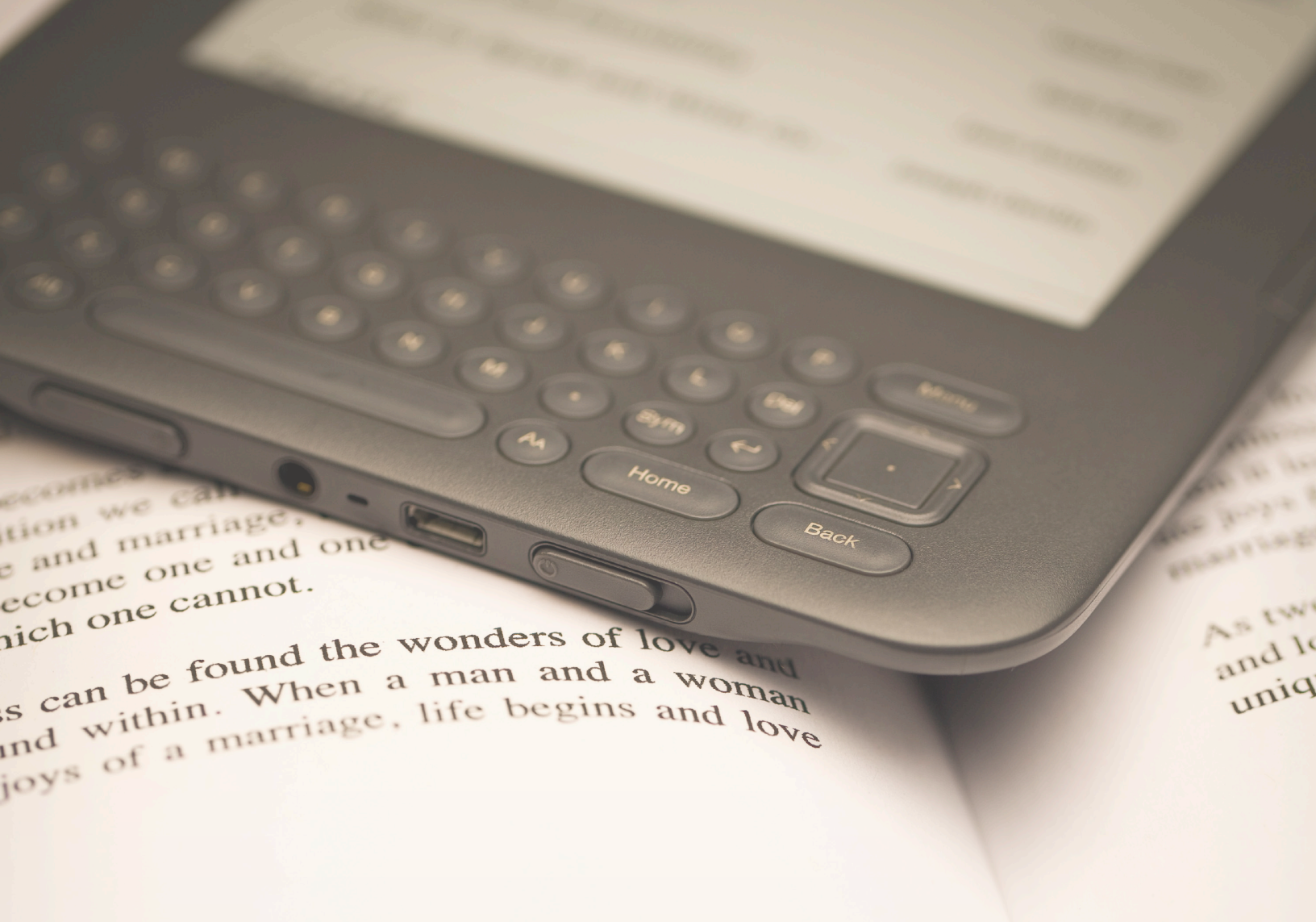

Strategic Thinking:

A Matter of Organizational Survival

Leo Wiltshire

All of us at some point must plan for the future. The better we plan, the more secure our future will be. This is especially true for organizations, but with one major difference. Organizations that do not plan for the future, or plan poorly, may not be around to see it. This is where the concept of strategic thinking comes into play.

To figure out exactly what strategic thinking is, we should look at this quote from consultant Glenn Ebersole: "Strategic thinking is the way people think about, assess, view and create the future for themselves and others... It is proactive, not reactive and focuses on creating a better future and adding value. Strategic thinking always involves change and imagining the results we can achieve in the future." In other words, consider everything that your organization does. From there, look at the market you serve. T. Sanders (1998) wrote that the great leader will "anticipate where the change is going and make sure their organizations get there first." Do you, as leader, have a strategic plan for your organization?

The Harm in Bad Strategic Thinking

How important is smart strategic thinking to the survival of your organization? Let's consider what happened to one company that failed in its use of the concept. Until recently, Borders Books, established in 1971, was a leading national retailer of books, periodicals, music, and movies. But, beginning in 2001, several missteps by the company's leadership set in motion a decline that led to the chain's bankruptcy and eventual demise in the summer of 2011.

The first bad strategy came in 2001 when, according to an article by Matt Townsend, Borders contracted with Internet supersite Amazon to run its online store. Townsend wrote (2011), "Amazon's online store was already giving consumers an excuse to avoid physical locations." Astonishing. Borders contracted with the company that was already eating its online lunch to take customers off its hands? Townsend stated that "Amazon founder Jeffrey Bezos had sent a case [of champagne] to show his gratitude" to Borders' then-CEO Gregory Josefowicz. It's surprising that Bezos didn't send two cases.

The second bad strategy at Borders involved poor timing for aggressive expansion and an unfortunate merchandise mix. An article by Laura Owen (2011) highlighted this problem, citing that problems rolled as, "[Borders's] emphasis on CD and DVD sales (not a great strategy in the iTunes era) and rapid expansion of stores, even as sales declined, at the cost of a beefed-up online strategy." According to Owen, while Borders finally cancelled the Amazon contract in 2008, "... it lost years of managing its own digital strategy." As for the CD/DVD emphasis, did the Borders leadership team not notice that retailers Tower Records and Virgin Music, which specialized in CD and DVD sales, were being put out of business due to Internet competition from iTunes and other file-sharing sites?

The third and final bad strategy of Borders that will be highlighted here pertains to organizational foot dragging. In this age of the Internet, almost everything is going digital, including books! Amazon launched its electronic book reader, the Kindle, in 2007. Barnes and Noble followed with the Nook in 2009. Ms. J., a Borders store manager, confided that Borders had been experimenting with selling a Sony e-reader, but by the time the company got around to releasing its official e-reader in partnership with Kobo in 2010, no one really cared. While losing money in the midst of the great global downturn, Townsend observed (2011), "By then Borders, wracked with annual losses, had little money to spend on a strategy for digital books." When the Kobo was launched, almost everyone was already hooked on the Kindle or the Nook. Why bother with yet another format? By that point, there was really no place for Borders to go, except bankruptcy court.

Some Suggestions for Good Strategic Thinking

How can you be sure that the steps you take with your organization will allow it to avoid the fate of Borders? Will good strategic thinking guarantee your organization's survival? Unfortunately, the answer is "No!" There exists no sure strategy to ensure any organization's success, but good strategic thinking will increase the odds of success and survival, even in difficult times. Here are some suggestions to help guide your organization toward prosperity with good strategic thinking:

1. **Test your ideas before implementing them.** Do you have a good idea for lifting your organization out of a slump in sales or productivity? How do you know it is a good idea? In their book *Hard Facts*, authors Jeffrey Pfeffer and Robert Sutton observed (2006), "Many companies and leaders show little interest in subjecting their business practices and decisions to the same scientific rigor they would use for technical or medical issues." The "shoot first and ask questions later" mentality is a bad idea when spending your organization's precious, limited resources on a new idea. Customer surveys, test marketing, interviews with affected personnel, and even common sense can help determine whether an idea is worth pursuing. A suggestion from Pfeffer and Sutton (2006) is "... unpack the assumptions that underlie the proposed policy, practice, or intervention, and confront those assumptions with your collective wisdom and experience to see if they seem sensible. If they are, proceed; if they are not, don't bother."

2. **Plan ahead.** As mentioned earlier, Borders cultivated aggressive expansion, opening many new stores. Reporter Ryan Beltram noticed (2011), "It opened too many stores and signed too many 15-to-20-year leases, making it more difficult to close unprofitable locations." In the Bible, Jesus even said, "Suppose one of you wants to build a tower. Will he not first sit down and estimate the cost to see if he has enough money to complete it" (Luke 14:28, NIV)? With those words in mind, why would any retailer sign a twenty-year lease without any history of that location making money for the business? Know in advance what your organization will do if your plans do or do not work out favorably.

3. **"Because we've always done it this way..."** The ways of doing things in your organization's past will not work for it anymore, so do not dwell on them. The past is only marketable in an antique shop. Change is part of life and is certainly part of today's global marketplace. Sanders explained (1998), "... the biggest challenge facing any type of organization today is finding a way to keep up with the rate of change - to process and incorporate new information before a crisis arises." Learn to spot and identify coming trends in your market and be ready to serve that market, wherever it is, when the time comes. As this final quote from Sanders states (1998), "... successful strategic thinking has two major components: insight about the present and foresight about the future." Do not let your organization be the major bookseller late to market with an e-reader.

Concluding Thoughts

Good strategic thinking can make your organization a trend-setter of global proportions! Poor strategic thinking or the lack of any strategic foresight at all will doom your organization! Learn from the experiences of Borders Books. Spot the changes coming in the market you serve, test your ideas to find out which ones have the best chance of succeeding (have back-up plans ready), and stop clinging to what has worked for your organization in the past. Use strategic thinking well and your organization can make history. Ignore strategic thinking, and your organization may become history.

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The Evolution of Electronic Systems Technology and its Impact on Methods of Innovation

Kevin Leahy and Dr. Gary Oster

Innovation is the creative development of a specific product, service, idea, environment, or process with the fundamental goal of pleasing customers and extracting value from its commercialization (Rogers, 2003; Oster, 2011). Purposeful differentiation must continue apace to avoid being overtaken by historically known competitors, as well as those who have yet to appear on corporate radar (Hamel, 2002). If the rate of change outside the organization exceeds that inside the company, survival is highly unlikely (Slater, 2004). In this decade, failure to address environmental pressures has caused thousands of companies to slash product development programs, reduce the size of the workforce, merge with other companies, or close down entirely. To survive and thrive in the hyper-competitive global marketplace, corporations, therefore, must produce a steady stream of innovation (Kelley, 2005). Every company is required to have a "pipeline" filled with upcoming innovation releases and must do everything within its power to abbreviate the time required for the development of new innovations.

The nature of innovation by modern product development teams and the opportunities facing next generation innovators can be understood through a close examination of the history of the modern cell phone and the associated advances in electronics technology. As electronic systems have become more complex, the elements within them have become more highly integrated in both functional and physical characteristics. These systems have evolved from large "boxy" structures with many discrete parts, to highly integrated structures with aesthetics designed to catch the eye of the consumer. Consider the evolution of the mobile phone from a large "box" in the trunk of a car into a modern, highly complex multi-function handheld cell phone. The increased complexity, packaging density, and functionality of modern cell phones is metaphorically representative of the change in the composition, skill mix, and tightly collaborative focus of the product development teams who innovate to create them. In fact, a comparison of the technologies used in a modern cell phone with those of the first generation mobile phone serves as a useful metaphor for exploring the changes in the nature and focus of innovation within the electronics industry over the past thirty to forty years. This evolution has resulted in innovations in new products, materials, computer-aided design tools, and manufacturing processes. With the rapid expansion of semiconductor technology and electronics packaging technology, entirely new design and manufacturing disciplines also have evolved. This has changed the nature and focus of innovation, significantly increasing the diversity of design teams and the need for collaboration across technical and business disciplines.

The Historical Evolution of Electronics and the Impact on Innovation

From the first patent issued to Alexander Graham Bell for the Telegraphy in 1876 (Inventors Hall of Fame, 2011), through the invention of the first handheld cell phone by John F. Mitchell of Motorola in 1973 (Absolute Astronomy, 2011), to the most modern personal cell phones of today, the nature of product innovation has taken on as many forms as the changes in the characteristics of the telephone. Product innovation throughout the electronics industry has evolved into a highly choreographed interdependence of technologies, materials, design methods, modeling tools, and manufacturing process development.

Consider the contrasting characteristics of the internal workings of multiple generations of electronic systems represented by the two distinctively different illustrations below. The figure on the left depicts an electronic circuit card assembly characteristic of electronic systems dating as far back as circa 1960 with the introduction of the first circuit board (Wagner, 1999). There are three distinct elements of this assembly: 1) the mechanical structure that houses the delicate electronics, protecting it from the 'human' environment (not shown in photo) (Karger & Murdick, 1980), 2) the (brown) printed circuit card, synthesized from epoxy glass or polyamide materials and metallic inner and outer layers, which provides the electrical and mechanical interconnection medium for the electronic components (Wagner, 1999), and 3) the discrete and varied electronic components that are mounted on the printed circuit card to create the electronic functionality of the system (Katz, 1977). The photograph on the right represents a highly integrated circuit known as a

multi-chip module, typical of a modern cell phone, with much greater functional complexity than the circuit on the left. There are only two distinct physical elements of this assembly: 1) the highly integrated (gray and gold) mechanical and electrical package, synthesized from ceramic or plastic materials and metallic inner and outer layers, that now provides both the housing to protect the electronics and the electrical and mechanical interconnection of the electronic components, and 2) highly monolithic semiconductors and discrete components that combine the functional capabilities of the early generation systems into much more densely integrated electronics (Leahy et al., 1994; Crafts, 1996; Tummula, 1999). The electronic systems of today use "highly integrated and low-cost packaging that can improve performance and reduce cost and size by about a factor of ten" (Tummula, 1999) over comparable printed circuit card assemblies illustrated in the figure on the left. The former distinctions between many of the individual functions are no longer physically discrete in the modern multi-chip module. Remarkably, the structure

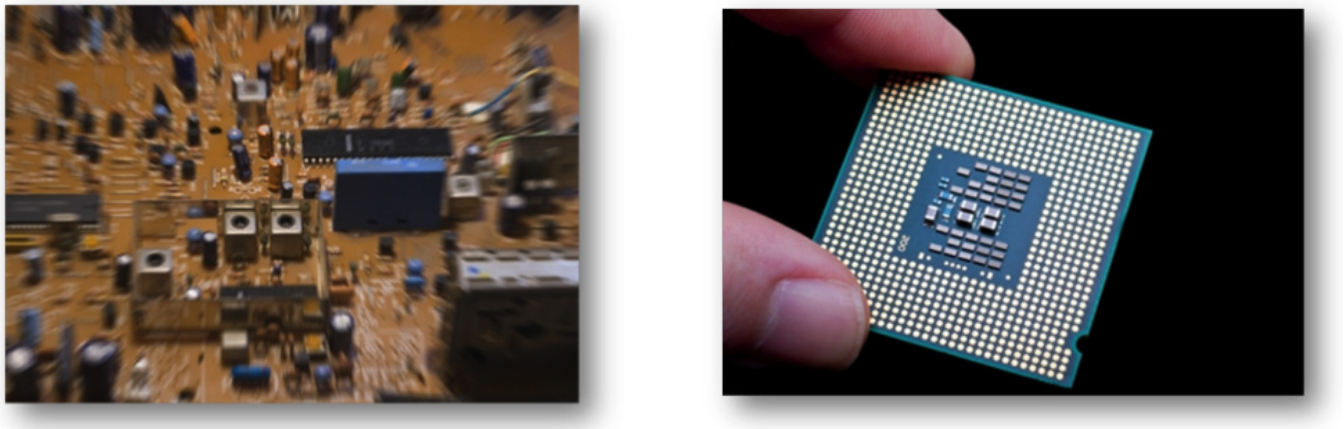

Figure 1. Two electronic assemblies of varying functional complexity and physical integration. (Source: Adapted from The3rdStudio, 2011)

of modern electronic packages and the electrically interconnecting printed circuits are monolithically combined in a manner analogous to the combination of sand, rebar, and stone that form to make cement.

The rapid growth of cellular telephone systems was predicated upon the introduction of low-cost microprocessors and availability of digital switching (Kumar, 2004). Although the integrated circuit was invented in 1958 by Jack Kilby at Texas Instruments, it was more than two decades before the cellular telephone industry began its torrid growth (Farley, 2005). Preceded by an extended period of dominance by landline telephone technology, cellular telephone systems represented a major threat to the established industry. Product innovation, process innovation, market characteristics, the competitive environment, and organizational change progress methodically with the establishment of a dominant design, and stabilize or slow in their rate of change with the length of time a dominant design satisfies the needs and wants of the consumer (Utterback,1994). The introduction of these new semiconductor technologies, and the associated wireless architectures they enabled, represented "the invasion of a stable business by radical innovation" (Utterback, 1996) to the telephone industry. The extensive delay in the introduction of cell phone technologies throughout the U.S. market was caused by bureaucratic challenges, non-stop lawsuits by the major phone companies attempting to protect their major landline investments, and independent radio common carriers and their suppliers who sought an equal playing field.

During this period of nearly forty years, the numerous disciplines required to transform the telephone industry, the skills needed to develop a modern electronic systems product, the complexity and sophistication of the modeling tools, the variety of the materials used, and the physical and functional complexity of the product have changed significantly. The introduction of these technological advancements into the telephone industry represented a radical departure from the dominant design architecture of the landline telephone systems, requiring

a multidimensional effort of diverse teams to transform the telephony industry. The physical and functional changes of the electronics that enabled this transformation required different forms of innovation by electronics product development teams. This illustration reflects not only the growth in functional and physical integration of modern electronic systems, but also mirrors higher levels of collaboration within the product development team and their coordination illustrated in the first column of Figure 2 below. New design disciplines were developed as the complexity of these electronic systems evolved. This increased the multidisciplinary nature and composition of the design team, reflected by the additions and changes to the design disciplines shown in the second column in Figure 2, enabling the additional complexity of product and process innovations.

Typical Electronic Assembly Design Team (Circa 1970).	Additions or Changes to Typical Electronic Assembly Design Team (Circa 2000).
Electrical Engineering Specialties: a) systems design, b) RF and Analog circuit design, and c) digital electronics circuit design.	Add: monolithic integrated circuit design.
Mechanical Engineering Specialties: a) structural design, b) thermal design, and c) multilayered circuit card design.	Add: multilayered integrated packaging design.
Materials Engineering Specialties: a) discrete semiconductor materials, b) multilayer printed circuit systems, and c) metallurgy.	Add: monolithic semiconductor materials.
Manufacturing Engineering Specialties: a) manual systems microelectronics assembly, b) leaded component soldering processes, c) mechanical assembly processes, and d) inspection systems for quality control.	Changed to: a) automated systems for microelectronics assembly, b) semiconductor and interconnect attachment process, c) lid sealing processes, and d) statistical process control for in-process quality assurance.

Figure 2. A comparison of engineering disciplines for typical electronic assembly design teams for circa 1970 and 2000 illustrates changes in areas of focus for product and process innovation. (Source: Adapted from Tummula, 1999; IPC, 2011)(Source: Adapted from The3rdStudio, 2011)

across business development, marketing and sales, and legal teams to innovate at multiple dimensions of the product development and deployment.

The Changing Focus and Methods of Innovation within a Product Development Team

A typical circa 1970 design team, responsible for the development of an electronic assembly, would be comprised of an array of electrical, mechanical, materials, and manufacturing engineering disciplines. Within each of these professions, the team also would include specialists in a wide range of areas, as

The skills reflected in these two examples provide evidence of the change in focus for successful innovation within modern product development teams.

Even more exciting is the increased level of interdependency of design activities over this nearly fortyyear period of technological development. To further understand the nature of this higher degree of collaborative interdependency, consider the characterization of electronic systems in Figure 3 below. This comparison, over the period of approximately thirty years, shows an increase in functional complexity of an electronics assembly ranging from 200 to nearly 500 times, with an associated tenfold cost reduction!

This is due to the increased levels of integration of packaging and semiconductor systems, enabling the more 'monolithic' assembly of modern electronics activities for the circa 1970 design team.

	Circa 1970/ Printed Circuit Board	Circa 2000/ Multi-chip Module	Relative Change
Relative cost to manufacture.	10X	X	10:1 decrease in the cost of manufacturing
Weight of typical cell phone.	>300 grams	<50 grams	>6:1 decrease in the weight for a given functional complexity
Number of transistors per chip.	64,000	256,000,000	4:1 increase in the number of transistors per chip
Packaging efficiencies. (Silicon area / Package area)	~6%	30~70%	5~12:1 increase in packaging efficiency
Relative size.	10X	X	10:1 decrease in the size for a given functional complexity
Increase in functional complexity factor (transistor count x packaging efficiency x size)			~200~480:1

Figure 3. A comparison of key attributes illustrates the changes in electronics over a 30-year period. (Source: Tummula, 1999; Unno, 2007)

and higher use of automated production. These very characteristics reflect the radical nature of the threat presented to the landline telephone industry when implemented in the new wireless architecture.

This evolution resulted, in part, from the aforementioned design disciplines working in a much more collaborative fashion than ever before. Electrical systems engineers today must understand and coordinate a wider range of engineering disciplines to balance electrical requirements than their counterparts of yesteryear (Bevan & Romenesko, 1999). Electrical and mechanical specialists must collaborate in the complex design of highly functional and physically integrated monolithic semiconductor and packaging circuitry (Bevan & Romenesko, 1999). Mechanical and electrical engineers also must develop highly integrated models of structural, thermal, and electrical properties of a packaging design (Bevan & Romenesko, 1999). Finally, materials and manufacturing engineers must work closely with electrical and mechanical engineers in the design of new materials systems and associated manufacturing processes, well in advance of the completion of a design, to ensure the manufacturability of a balanced affordable product (Yang & El-Haik, 2009). These and many other collaborative activities are more complex and interdependent than similar

The Globalization of Development and Production

The development and production of new products often occurs simultaneously in a number of countries worldwide. Engineering staff need significant training and experience in working across borders of geography, languages, cultures, leadership models, and habits (McCall, 2002). In a global marketplace where the advantages of knowledge dissipate rapidly, innovation becomes even more important (Skarzynski, 2008). Unfortunately, there is currently a significant shortage of leaders and regular employees who possess international exposure and experience (Black, 1999; Rosen, 2000).

In addition to enabling work with a diverse team scattered around the world, intentional diversity is important in domestic operations. True diversity includes age, race, country of origin, experience, gender, education, etc. Innovative institutions especially look for "T-shaped people" (Kelly, 2005). Their primary skill (the vertical part of the "T") is deep and technically expert, but they also harbor many additional interests and experiences (the horizontal part of the "T") that help them to engage with others and consider a broad range of possible options. Insatiably curious amateurs

often are preferred over bored narrow subject-area experts (Oster, 2011). In addition to diverse capabilities, employees also must have diverse attitudes (Bennis & Biederman, 1997; Hamel, 2002), with the ability to work across disciplines outside their individual areas of expertise and organizations. The ability and willingness to understand and capitalize on the diverse perspective that comes from this cross-disciplined collaboration has proven to be an underpinning of innovative organizations (Gryskiewicz, 1999).

Implications for Future Innovation throughout the Electronics Industry

Author and researcher Dr. Rao Tummula highlighted the increased importance of electronic packaging in our modern world (Tummula, 1999). The ever-increasing demand for consumer electronics has resulted in significant growth in this industry. Tummula suggests that product development engineers no longer have the time to learn on the job. They must commit to formal cross-disciplinary training throughout their careers to remain effective as innovators in this complex discipline (Tummula, 1999), well beyond the conventional training characteristics of heritage scientific and engineering disciplines. The results of a survey of the electronics industry, taken by Georgia Institute of Technology Packaging Research Center (Tummula, 1999), suggest a wide range of educational needs for our next generation of electronics product development engineers. Classical training at most universities in "fundamentals of engineering," "cross-disciplinary training," and "fundamental science" will no longer be adequate (Tummula, 1999). Indeed, the recent records of many widely respected and historically innovative U.S. companies lack examples of new product lines and business generation, often due to absence of updated institutional learning (Lynn, Morone, & Paulson, 1996). The coming two decades will see an even more rapid convergence of biotechnology, materials science (including nanotechnology), artificial intelligence, robotics, computing, entertainment, and telecommunications (Lacohee, Wakeford, & Pearson, 2003). Product development engineers of today need expanded training to include: "knowledge of manufacturing processes," "communication skills," "management skills," "business economics," "foreign language and culture," and "global markets" (Tummula, 1999).

Of even more importance is the requisite change in relationship between producer and prospective customer. Every innovative idea must focus on the needs and experience of customers. Because the ultimate goal of innovation is to effectively satisfy human needs and wants, new methods to ascertain their spoken and unrecognized requirements must be implemented (Nonaka, 1991; Hamel, 2002; Davila, et al., 2006; May, 2007). Using empathic study based on firsthand observation of and communication with customers, relations are developed that reveal their life frustrations and the products, services, ideas, environments, and processes that meet those realized and unarticulated needs (Brown, 2005; Christenson, 2005; Hagel, 2005; Lojacono & Zaccai, 2005; Suri, 2006).

A wider range of skills, complementing the specialization skills identified in Figure 2 above, suggest rich opportunity for highly-collaborative innovation by future product development engineers and their counterparts in global business and marketing development. They also suggest innovation that goes beyond the now classical multidisciplinary product development team. Engineers today and in the future not only will collaborate across engineering specialties; their collaboration will extend across both engineering and business cultures in a new global marketplace to realize new forms of product and process innovations.

Concluding Thoughts

Global business is experiencing change and upheaval as never before. Reviewing the changes that have occurred in one industry, cellular telephones, serves as a helpful metaphor for change in most other industries. As change continues, employees will need continual education and new skills to help them adjust to the ever-changing environment. Skills enlargement, including capabilities previously possessed only by corporate executives, will be necessary for employees to function in the volatile global economy. Only those equipped and motivated to make nonlinear changes will survive the decidedly nonlinear future ahead.

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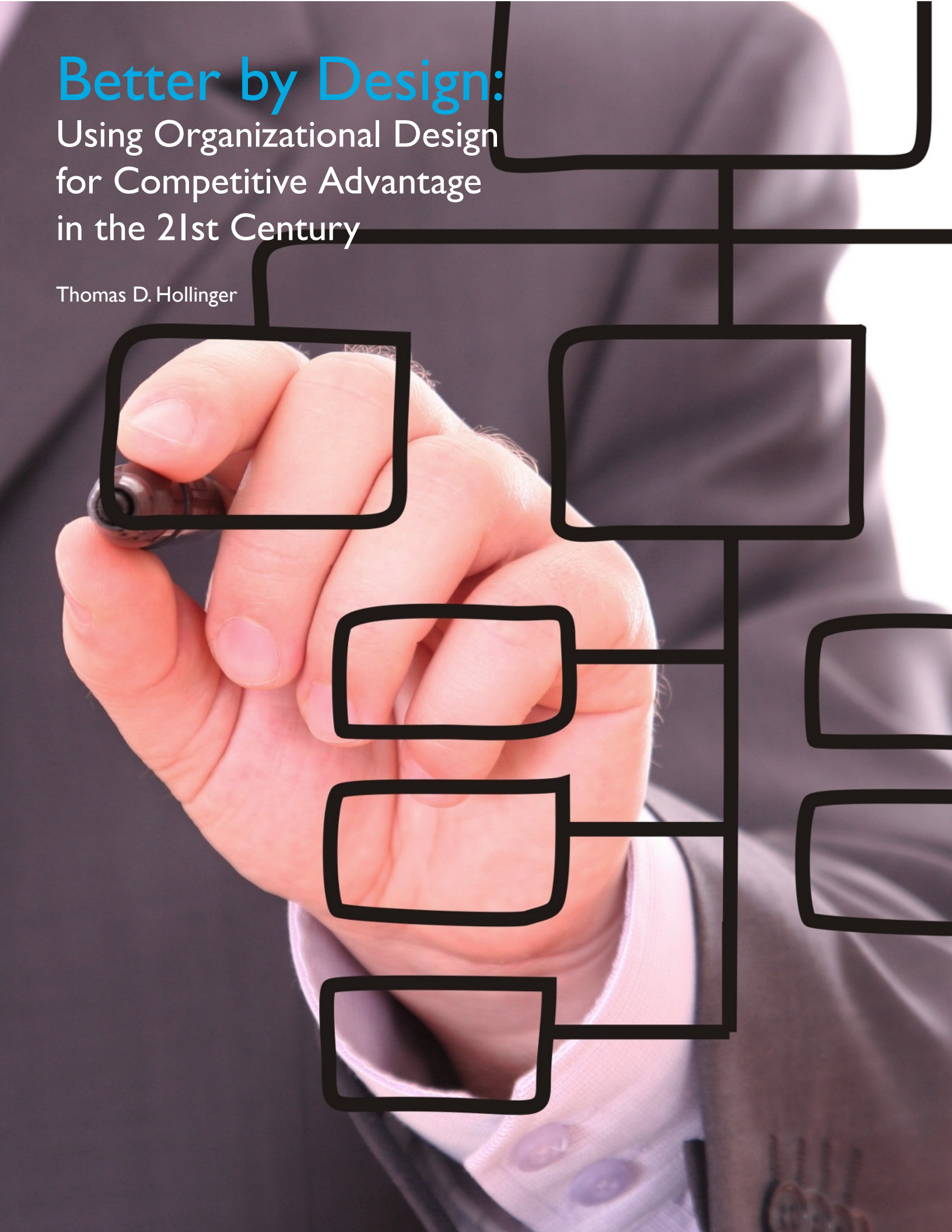
Better by Design:

Using Organizational Design for Competitive Advantage in the 21st Century

Thomas D. Hollinger



Organizational leaders have tried many approaches to improve performance: industry selection, growth, globalization, branding, downsizing, process re-engineering, cost cutting, and deployment of new technologies provide examples of such efforts (Pfeffer, 1998). Unfortunately, because these approaches often fail to account for cultural aspects and the human impact, they can fail to produce the desired results (Pfeffer, 1998; Cameron & Quinn, 2006). Therefore, organizational leaders should consider other options.

This article argues that leaders should focus on organizational design for sustainable competitive advantage. It defines organizational design in the context of traditional vs. contemporary perspectives. Design drivers and the various elements of organizational design establish building blocks for a number of design alternatives. This article considers these alternatives in response to the demands of the 21st century and argues that organizational design provides an excellent vehicle for establishing sustainable competitive advantage. It then identifies implications for today's leaders, concluding with a summary of practical insights.

Organizational Design

Organizational design is not just the creation of an organizational chart and job descriptions. More than ever, organizational experts are thinking of organizational design as the synergistic integration of all organizational facets (Daft, 2007; Galbraith, 2002; Nadler & Tushman, 1997). Nadler and Tushman noted that "organizational design involves decisions about the configuration of the formal organizational arrangements, including the formal structures, processes, and systems that make up an organization" (p. 48). Daft described organizations as "(1) social entities that (2) are goal-directed, (3) are designed as deliberately structured and coordinated activity systems, and (4) are linked to the external environment" (p. 10). These definitions imply the need for complex, intricate, and deliberate processes to facilitate organizational performance through alignment of vision, mission, strategy, work processes, culture, and people. Strategy, structure, and culture must accommodate one another; furthermore, lateral processes must facilitate coordination activities across hierarchical functions (Galbraith, 2002; Cameron & Quinn, 2006).

Traditional vs. Contemporary Thinking

Not long ago, organizational leaders regarded organizational design activities as bureaucratic requirements (Galbraith, 2002). Although organizational charts and job descriptions were common, organizations placed little emphasis on the potential for organizational design to create competitive advantage or a more satisfying work environment. Leaders frequently overlooked the "Human Equation" (Pfeffer, 1998), and the cultural impact of their attempts to improve performance (Cameron & Quinn, 2006). Change initiatives such as downsizing, re-engineering, outsourcing, and other cost-cutting processes often failed because leaders did not fully appreciate the impact that these approaches would have on people and organizational culture.

Another characteristic of traditional thinking on organizational design involved the use of hierarchical structures, which can slow down processes, stifle innovation, and frustrate organizational members (Daft, 2007; Galbraith, 2002; Hamel, 2002). Control over resources and people took precedence over flexibility and cooperation. Today, however, many destabilizing forces are pressuring leaders to view organizational design in a holistic way and with greater reverence. Leaders are beginning to view organizational design as an essential process for accommodating customer expectations, meeting the needs of employees, and maintaining a viable operation.

Organizational Design Drivers

All organizations consist of fundamental components and subsystems that require balance for organizational effectiveness (Daft, 2007). Upper- and mid-level managers direct and coordinate the activities of other personnel in the technical core, technical support, and administrative support areas of the organization (Mintzberg, 1979 & 1981) to "adequately perform the subsystem functions of production, maintenance, adaptation, management, and boundary spanning" (Daft, 2007, p. 16). Daft identified 11 "Dimensions of Organizational Design" (pp. 17-22)

to describe selected organizational attributes. Six of these dimensions are structural: formalization, specialization, hierarchy, centralization, professionalism, and personnel ratios. Five of the dimensions are contextual: size, technology, environment, goals/strategy, and culture. These dimensions blend together to make up the overall design.

As Daft (2007) pointed out, "The whole point of understanding varying perspectives and the structural and contextual dimensions of organizations is to design the organization in such a way as to achieve high performance and effectiveness" (p. 22). Clearly, these are the key drivers for organizational design. However, both the pace and magnitude of change are driving changes to organizational design and how organizations are designing for the future. The requirement for managing organizational complexity across multiple dimensions in a networked environment has helped bring greater attention to the need for more effective organizational designs (Galbraith, 2002). Greater focus on "organizing around the customer" (p. xvi) has also brought attention to the competitive advantages available through effective design. Customers have come to expect greater variety and comprehensive solutions, but they also expect to receive products and services faster than ever before.

Since change will continue to have a tremendous impact (Bennis, 1999; Handy, 1989 & 1995; Wacker, Taylor, & Means, 2000), organizations will need to respond with continuous design processes and customer-focused structures in a virtually oriented environment (Crandall & Wallace, 1998; Galbraith, 2002; Lipnack & Stamps, 2000). Organizational leaders must see and respond to both existing and emerging patterns (Keidel, 1995; Sanders, 1998). They will also need to have the creativity and the imagination necessary for visualization of different alternatives and a brighter future (Morgan, 1997 & 2006).

Organizational Design Alternatives

Different organizational structures and designs facilitate different strategies, organizational activities, and behaviors (Daft, 2007; Galbraith, 2002; Ivancevich & Matteson, 2002). Therefore, selection of an appropriate fundamental structure is critical. In addition, leaders should find ways to link appropriate processes to the coordination needs of the organization. Galbraith identified five basic structures: functional, product, market, geographical, and process. Each of these structures coincides with specific strategies to facilitate their execution; nevertheless, matching structure with strategy is not easy. Typically, no one structure provides complete alignment with an organization's business strategies. However, decision makers can prioritize structural alternatives in ways that create a desirable blend of characteristics, establishing hybrid structures or integrating them with lateral coordination processes.

One example of a hybrid structure exists where planners combine product and market structures to enhance the strategic initiatives of a customer-focused organization. Although these integrated structures can be very effective, they are complicated, which can create friction. Consequently, they require tightly coupled linkages (Galbraith, 2002). According to Galbraith, strategies and activities that involve diversity, rapid change, cross-functional interdependence, use of the Internet, and rapid cycle times drive lateral coordination processes. Unfortunately, these characteristics tend to overwhelm leaders in organizations with simple, functional structures.

Decentralization can help improve decision-making speed, but it will not guarantee better decisions. Furthermore, lateral process teams can pull people from their primary function or customer contact. Cross-functional "pollination" can generate well-thought-out solutions, but it can also increase conflict between people who have competing demands and different views. Therefore, leaders should combine lateral processes with better communication, and training to improve both problem solving and conflict management skills.

Galbraith (2002) identified five types of lateral processes: voluntary, E-coordination, formal groups, integrators, and matrix organizations. Their level of complexity and their requirements for lateral coordination increase in the order listed. However, leaders can mitigate many of these complications by establishing

development programs such as interdepartmental rotation and cross-functional training. They can also co-locate cross-functional activities, mirror functional structures, and integrate performance management systems.

Responding to the Challenges of the 21st Century

The challenges of the 21st century are very different from those in the past. Furthermore, they continue to change at a relentless pace, with radical, perpetual change likely to continue. Globalization, new technologies, changing demographics, economic turbulence, social unrest, environmental concerns, and government intervention will all have a tremendous influence on the future, requiring organizational leaders to respond quickly and with greater flexibility.

The role of organizational design in the 21st century is also changing. Responding to the pace and magnitude of change will require organizational leaders to adapt through an ongoing and flexible design process. Two approaches for dealing with change involve the application of a continuous design/re-design process and designing for a reconfigurable organization (Galbraith, 2002). An ongoing, engaging, and dynamic process can help organizations keep designs current. Building flexibility and adaptability into organizational designs can position organizations to respond better and faster when unexpected changes do occur.

Organizational design also plays an instrumental role in the process of establishing, modifying, and strengthening appropriate organizational cultures. This is particularly true for the increasingly global, boundaryless, and diverse environments of the 21st century (Galbraith, 2000; Ashkenas, Ulrich, Jick, & Kerr, 2002). Cultural differences create unique challenges for global organizations, establishing design criteria for market entry and the partnering process for organizations pairing with indigenous counterparts.

An organization's size and familiarity with another country—in conjunction with any host country requirements—will help determine if a joint venture, an acquisition, or a new start-up makes the most sense (Gailbraith, 2000). Communication needs and the use of technology for cross-country and inter-company cooperation will influence the balance among virtually oriented, boundaryless structures; operational control; and the desire to maintain cooperation (Gailbraith, 2000; Ashkenas, Ulrich, Jick, & Kerr, 2002). Diversity and cultural awareness training is important for people with little international exposure or those who have had minimal interaction with people of other backgrounds.

More than ever, organizational design is essential to an organization's viability. Overlooking its importance can place an organization at risk, resulting in operating inefficiencies, mismatches between strategy and structure, mismatches between structure and culture, and other imbalances. Overlooking the potential for improvement through dynamic organizational design can also place an organization at long-term risk and destroy the potential for sustainable competitive advantage.

Organizational Design and Competitive Advantage

Not long ago, organizational charts and job descriptions were the focus of organizational design (Galbraith, 2002). Obviously, that limited focus is not sufficient for today's chaotic environments where the keys to competitive advantage include speed to market, customer responsiveness, adaptability,

systemic integration, and balance among many competing values. These characteristics make it clear that the organizational design process is inherently complex (Daft, 2007; Galbraith, 2002; Nadler & Tushman, 1997).

Patterns can indicate a great deal about whether an organization is out of balance with respect to control, autonomy, and cooperation (Keidel, 1995). However, it is a completely different matter to determine the reasons for those imbalances and to prescribe appropriate responses while accommodating design requirements for future strategic needs. Many leaders chose to avoid these complexities, attempting to improve performance through downsizing, re-engineering, and a variety of cost-cutting measures. Many of these efforts were unsuccessful because leaders failed to account for their cultural impact (Cameron & Quinn, 2006).

Nadler and Tushman (1997) argued, "The only real, sustainable source of competitive advantage lies … in an organization's 'architecture'—the way in which it structures and coordinates its people and processes in order to maximize its unique capabilities over the long haul" (p. viii). However, creation of those unique capabilities requires more than simple observation of autonomy, control, and cooperation (Keidel, 1995) or naive approaches to performance improvement (Pfeffer, 1998).

Nadler and Tushman (1997) made the profound observation that "environmental conditions, organizational resources, and history cannot be changed in the short run" (p. 29). They also noted that strategy flows from vision, along with decisions on resource allocations in concert with demand, operational constraints, and environmental opportunities. To meet the needs of these various requirements, many organizational design models exist; however, as Galbraith (2002) emphasized, any model used must be the right model for the right organization—at the right time and for the right circumstances. Appropriate selection, implementation, and future integration can help establish and maintain a sustainable competitive advantage.

In conjunction with all of the other considerations for organizational design, it is extremely important to acknowledge the human element. For constructive vertical and horizontal communication, organizations must have positive relationships among organizational members. These relationships have become more important as horizontal communication and cooperation have become more crucial for the facilitation of lateral workflows across functional lines.

Simply stated, to facilitate horizontal processes that have become far more common and to encourage empowerment of the 21st century work force, organizational design must accommodate relationships that are conducive to employee satisfaction for optimal performance. That will require organizational designs fostering cooperation through trusting relationships. It will also require acknowledgment of each person's value.

The Empowering Spirit of Cooperation, Trust, and Shared Values

Organizational members have to establish, build, and maintain viable relationships for lateral processes, communication, and cooperation to occur. Covey (2006) suggested that constructive relationships require credibility, which is a function of character and competency. Unless a person has integrity and wholesome intent, others are likely to question their character. Furthermore, unless a person has capabilities and a record of accomplishments with relevant results, others are not likely to see them as competent. Together, character and competency help establish credibility and trust in relationships, which, as Covey noted, speeds action and reduces costs.

Trusting relationships are essential for cooperation and performance. Autonomy allows organizational members to establish and maintain horizontal relationships; nevertheless, empowerment is more complex than simple authorization to make decisions. Blumberg and Pringle (1982) noted that work performance is a function of capacity, willingness, and opportunity to perform. Therefore, before leaders should empower others, they need to know that others are willing and able. Leaders also need to place others in appropriate positions of opportunity. Empowered performance requires leaders who are willing to release control and capable followers who are willing to accept responsibility.

Common values and cultural alignment are essential ingredients for effective organizational design (Cameron & Quinn, 2006; Ciulla, 2004; Head, 1997; O'Toole, 1996). Implementation of a shared vision and shared values must include modeling of appropriate behaviors, not just communication of desired behaviors (Kouzes & Posner, 1995). As Kouzes and Posner noted, leaders also need to challenge the status quo, encourage the hearts of others, and empower them to act.

With all of the other requirements, it is easy for leaders to overlook the importance of mentoring and performance management. However, to improve employee motivation and to ensure appropriate developmental opportunities, leaders should not overlook these processes. Mentoring builds partnerships for continuous learning (Bell, 2002), which is necessary in the volatile environments of the 21st century. Performance management helps to ensure that the right people receive the right opportunities and that they receive appropriate rewards for their efforts. If leaders want to gain the most from their most valuable resources, design concepts will need to meet the needs of organizational members, encouraging them to bring their best aptitudes and attitudes to the design.

Implications for Today's Leaders

Organizations must continuously respond to the turbulent environments of the 21st century. Unless leaders employ comprehensive and flexible processes that help their organizations adapt through continuous organizational design applications, they are likely to lose competitive advantage. Furthermore, because organizational design is a complex and dynamic process, leaders must take the time to understand the process, and they must be willing to give it serious, ongoing consideration. They must also understand the various dimensions of organizational design, recognizing that there are contextual dimensions as well as structural dimensions. Organizational culture and the social aspects of organizational design are just as important as the structural elements. For that reason, successful leaders will incorporate design elements that foster relationships and facilitate cooperation at all levels of the organization.

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The Value Proposition for Change

Seth Michael Stone

The concepts of change, change management, and organizations of change have become buzzwords in management and leadership discussions at the academic and practitioner levels. Of course, it is not without good reason; some of today's most successful organizations, those positioned to succeed today and in the long-term are those which have adopted an organizational culture where change is always welcome.

Business and commerce cannot be conducted the way it was ten years ago, two years ago, or even six months ago, because with an ever-shrinking global business landscape, change is ever-present and competition is stronger than ever. If organizations of change are the benchmark for a bright future, why are so many refusing, or at least waiting until they are forced, to adopt a change framework?

The answer may be due to the reality that organizations do not run organizations; people do. Most people fear change, and when we fear something, we dig our heels in and resist with all our might. The problem here, of course, is that "Resistance has been classically understood as a foundation cause of conflict that is undesirable and detrimental to organizational health" (Waddell & Sohal, 1998, p. 543). So the question becomes, how do we overcome human resistance for positive organizational growth, as well as human development?

The purpose of this article is to examine resistance as a root cause for opposing change in today's organizations, both from a fundamental perspective and a Biblical perspective. The objective is to present a solution to overcome resistance and create organizations of change where there is value to the organization, as well as its most critical stakeholders, its human capital. This article will begin by examining the basic causes for change resistance. It will then examine resistance with scriptural examples. A proposal for building sustainable positive change is then presented, with concluding remarks summarizing the article.

Resistance

Where is the resistance in our organizations derived? The fact is, it can arise from myriad circumstances, as "internal resistance is often caused by the surfacing of past experiences, fears, or worries the individual has experienced" (Bovey & Hede, 2001, p. 536). Fear is often the greatest stumbling block to change, and this fear is difficult for leaders to control on a micro or macro level. In essence, as leaders, we must understand that our followers are bringing their personal life experiences with them to our organizations. These life experiences could have taken place in other organizations, in the home, and in social situations. Inevitably, these experiences have the propensity to be both good and bad. Cumulatively, they manifest themselves inside each of us, which can largely shape our perceptions, beliefs, and value systems.

Fear and anxiety are closely linked terms. While certainly not one and the same, one can be a by-product of the other, which makes anxiety extremely relative to the resistance discussion. Bovey and Hede (2001), state, "Whether the cause is real or imaginary, anxiety still produces the same psychological responses for an individual. Not only does anxiety arise from perceived dangers, but may also be experienced internally within the individual for no obvious reason" (p. 536). While it is beyond the scope of this article to delve into the clinical psychology of the drivers of anxiety, it is critical to understand that anxiety exists and can be a powerful force within people. Moreover, the fact that it can stem from a very real circumstance or be irrationally perceived means that it has the ability to creep into people's lives and our organizations at any given time.

God created us all uniquely; therefore, we process experiences uniquely. This brings significant challenges when working with a larger group of followers to overcome the fear of change. It would be unrealistic to think that we can calm each and every fear of each and every follower as we press on with the strategic leadership goal of organizational change;

only those believing in a utopian state would think otherwise. However, by gaining a deeper understanding of the needs and fears of organization members regarding change, leaders can develop a methodology by which they can find common ground for all to stand on and move forward, even though organizations will never be devoid of resistance on some level.

A Biblical Perspective

Scripture is clear that most forms of human fear are not of God, especially the irrational types we so desperately try to rationalize. The apostle Paul said, "for God gave us a spirit not of fear but of power and love and self-control" (2 Tim. 1:7, English Standard Version). In discussing the word fear, MacArthur (2010) states, "The Greek word denotes a cowardly, shameful fear caused by a weak, selfish character" (p. 1827). Is this not the very type of fear we see penetrating our organizations when it comes to resisting change?

Scripture clearly addresses fear, but this article has also identified the anxiety that can manifest out of fear, which Scripture has an answer for as well. "And when they bring you before the synagogues and the rulers and the authorities, do not be anxious about how you should defend yourself or what you should say, for the Holy Spirit will teach you in that very hour what you ought to say" (Luke 12:11-12, English Standard Version). Regarding the mention of anxiety in this passage, MacArthur (2010) says it simply means, "do not worry" (p. 1501). This is not to say we are never going to worry about anything; matters in our organizations today cause worry all of the time, but anxiety as it applies to the unknown, or change, is something we must try to temper at every level of our organizations. One might say this is easier said than done. We may cognitively understand that worrying about change does not help our circumstances, but this symptom of anxiety is engrained in the minds of so many that attempting to change this pattern can put people, even Christians, into a form of mental paralysis, even when we see clear evidence from Scripture as to why we should not worry.

Perhaps an example of change in action from a scriptural context will help in this case.

"As Jesus passed on from there, he saw a man called Matthew sitting at the tax booth, and he said to

him, 'Follow me.' And he rose and followed him" (Matthew 9:9, English Standard Version). Was it as easy as perhaps it seemed for Matthew to walk away from his profession and what he knew to follow Jesus? While Scripture clearly indicates Matthew did not hesitate, could there have, at least, been some sense of trepidation in Matthew? Of course there could have been, and likely there should have been. At the point he was called, Jesus did not outline a plan for what the rest of Matthew's life was going to look like; Matthew had to follow on faith alone. Is this dissimilar to the changes our followers must go through in today's organizations? While not to minimize the leader/follower dynamics between Jesus and Matthew, we, as leaders and followers, often do not know what the net result of organizational change will be tomorrow, much less ten years from now. Therefore, we must consider the human element of change, which any scale or scope presents as an ultimate sense of uncertainty.

With the fundamental understanding that change creates uncertainty, which in turn can breed fear and anxiety, how do we create a willingness among followers to embrace change as a state of mind rather than a singular event?

A Solution for Sustainable Change

With a Biblical understanding of change and knowledge of the human element of resistance as it applies to change, how do we create organizations of sustainable change? This can be accomplished by creating a system of organization learning through communication and information sharing. However, what does organizational learning look like? "Learning occurs when information is questioned and tested with existing knowledge to construct and reconstruct new knowledge. Asking employees to share lessons learnt on a particular project, may mean asking them to reveal their mistakes" (Boateng, 2011, p. 8). This notion of learning brings to light a concept unfamiliar to many organizations – open communication of successes and failures at every level.

Looking at some of the fundamental research as it applies to change and learning helps provide an understanding of the challenges and opportunities organizational learning presents. While there appear to be numerous experts on change and learning, some of the foundational research was conducted by Kurt Lewin and Chris Argyris. "Previous studies conducted by Kurt Lewin during World War II revealed how allowing input from employees when changes were needed added to acceptance of the changes with a bonus of increased productivity" (Brisson-Banks, 2010, p. 243). This early research began to shed some light on what employees want, and more importantly need, to welcome the change process and move the organization forward. Followers having input simply means communicating information from a particular perspective, which becomes relevant in the communication component of adopting a learning culture.

"Argyris (1976) popularized the term single-loop learning to describe error catching and correcting activities that do not involve a change in foundational assumptions.

Double-loop learning, on the other hand, he says, is that deeper change involving a questioning of the basis on which decisions are made" (Bochman & Kroth, 2011, p. 329). Argyris's differentiation between single- and double-loop learning drills down to the core of organizational change and organizational learning. When organizational leaders stop looking at how to change isolated issues and begin to focus on why things are done the way they are, a genuine change mentality can start to set in and become part of the organizational culture.

"Importantly, Argyris' distinction between single and double-loop learning is a normative one. Not only are single-loop learning processes a necessary but insufficient condition for organizations to produce substantive transformation, but the conditions for double-loop learning do not exist in organizational practice, and conditions antithetical to it do exist in organizational practice" (Bokeno, 2003, p. 639). Thus, the challenge of creating the learning organization arises, because organizational learning will not happen on its own, according to Argyris' research. As leaders, we cannot will this type of transformation to take place; there must be a systematic approach to doing so.

How do we make the shift to organizational learning and move from the single-loop to the double-loop construct that Argyris proposed? It should be said, "A complete assessment of the current situation is necessary to begin the process of implementing any kind of change in an organization. Unfortunately, this kind of assessment may take longer than management or stakeholders have if the situation is very serious" (Brisson-Banks, 2010, p. 242). Learning and communication processes look different for almost any organization, so, if it's the only route to organizational survival, it is well worth the time and resources to investigate and fully understand how it is applicable.

Bochman and Kroth (2011) state, "organizational learning hinges upon the ability to change and adapt. New information re-contextualizes the operational landscape" (p. 329). If we cannot have organizational learning without the readiness for change, how do we implement such a system, knowing the underlying fear surrounding change? This is where the value proposition arrives. Presenting a framework for learning where organizational members can build skills, communicate with other functional areas, and begin to contribute to projects outside of their normal scope deepens their knowledge base, making them more desirable to their current organizations and other organizations, while giving the follower an identity and sense of value in the learning and change process. A platform for knowledge sharing and learning becomes exponentially more critical than when Lewin and Argyris first introduced their research because our organizational landscape is becoming rapidly more globalized and, in order to communicate effectively across the globe, there must be common ground. "It is especially essential to implement a successful knowledge management environment in order to offer the resources at the right place at the right time to knowledge-workers holding multi-nation and multi-cultural views" (Kuo, 2011, p. 582).

Real learning begins when people are willing to start questioning processes, not just the means to the end, but the desired end itself. It takes a collaborative effort to achieve this mindset. Therefore, if people have the innate desire to have input and communicate, leaders must allow them to contribute to the process. This will provide value for the organization and all of its members, all while imbedding a sustainable model for learning and willingness to change that becomes a rooted component of the organizational culture.

Conclusive Remarks

"Considering that a culture oriented towards learning is essential for promoting learning in and of organizations in a productive and sustainable way, exploration of its relationship with other organizational variables that could interact in its development is an issue that is of interest to academics and practitioners" (Rebelo & Gomes, 2011, p. 174). One cannot just say one wants to build a learning organization. There are many functional components and organizational nuances to consider, which is exactly why this topic deserves further research and practice.

Based on the framework presented, it is evident change does not happen overnight, but as leaders, we should not be dismayed, because just as human experiences build over time causing fear and resistance, change organizations are built over time for the long-term. When merging organizational change and human emotion, perhaps to an extent, it boils down to what Winston (2002) said, "doing the right thing at the right time for the right reason" (p. 5). While this may sound overly simplistic, we will have the ability to create learning organizations that better our organizations and enrich the lives of those who serve within them if we are able to address our followers' needs and fears, while maintaining an appropriate Biblical perspective.

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