Designed emergence as a path to enterprise sustainability

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Daniel Twomey

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Abstract

The combined forces of globalization, rapid and unpredictable change, management scandals, and business failures raise questions about the viability of contemporary business organizations. From the perspective of 21st century trends, a paradigm is developed that challenges prevailing notions about how businesses/enterprises are understood, managed, and evaluated. A model that focuses on emergent dynamics and long-term societal benefit is proposed. The sustainable enterprise that utilizes emergent dynamics is contrasted with the conventional organization that hierarchically directs and controls with a focus on the short term. The emergent dynamic increases the innovation, energy, and adaptability of the enterprise, especially in turbulent environments. The sustainable enterprise model systematically supports emergent dynamics and coevolves with the industry and environmental agents toward sustainability.

Introduction

There is a growing concern about the ability of markets and business to serve society effectively. Henderson (2000) said, “[P]olls in the United States show public outrage at corporate greed escalating, with 69% favoring government action to promote more responsible corporate behavior and penalize bad corporate citizens. Seventy percent believe greed, not competitive pressures, explains corporate downsizing.” The focus on short-term profit is blamed for the sub-optimizing decisions on a broad range of issues, for example many firms leveraged debt to push quarterly profits during the strong economy of the late 1990s. This became a major burden when the economy weakened.

Furthermore, several authors (Ali, 2000; Kochan, 2002; Child, 2002; Garten, 2003) raise questions about a system that allows and/or encourages top executives of many firms to risk the future of the firm for short-term profits, with a focus on the needs of shareholders and the salaries and bonuses of top management. This dynamic is linked to a defeat-the-competitors approach to business — an approach that often fails to benefit the employees, society, and even stockholders in the long run. Given this situation, a framing question is, “What dynamic and organizing processes might prompt behaviors that would lead toward sustainable enterprise?” (Senge *et al*., 2004).

The conventional organization is understood as a structure and process designed by management with important decisions being made by top management and communicated/implemented downward. In large part the business/enterprise is evaluated in terms of its growth and profitability or “the increase in shareholder value,” especially in the short term. Conventional organizations display a wide range of behaviors, yet some characteristics are common enough to identify a pattern. Ghoshal (2005) distinguishes bad management theories and good management practices. The bad theories are associated with “conventional” popular management practices, starting with the absolute dictum of maximizing shareholder value, to top-down surveillance and controls due to lack of trust based in the belief that the employees are win—lose opportunists. Ghoshal’s distinctions about the conventional organization parallel those of Argyris and Schön’s (1996) Model I and Model II that are used here to illustrate the role of governing principles.

In the model developed here the enterprise is understood as a responsible societal agent; that is, it serves social, environmental, as well as economic/financial needs. It defines itself as responsible beyond the narrow legal requirements of an organization. It is managed by shared decision making, enterprise-wide governing principles, and enterprise intent, where managers are catalysts for emergence at all levels and where the integrity of the enterprise is primarily from self-direction and self-control rather than by directives, controls and rewards. The enterprise is evaluated on how effectively it evolves to meet its own economic/financial needs as well as societal and environmental needs. In essence, the conventional organization is a mechanical, directable system with determinable, narrow, short-term outcomes; that is, shareholders’ wealth. In contrast, the sustainable enterprise is an organic, mutually emergent system that is connected economically, environmentally, and socially to the world.

Context for emergence

An assumption that underlies the proposed model is that the context of enterprise both enables emergence and makes it more necessary. As the world becomes more interconnected and the speed of change increases, hierarchical structuring is overrun. Actions and outcomes increasingly emerge from interactions of a variety of forces. The lowering of barriers opens previously protected industries to world-wide competition, putting a premium on innovation and performance. Innovation in complex

systems, while created through individual efforts, increasingly relies on innovation based on the interactions of large and small groups of people. Likewise, performance at the highest levels increasingly depends on teams and cooperation. These interactions and their outcomes can only be partially planned; much or most of it emerges from the dynamic interplay of the group or network. Therefore, for long-term success, an enterprise should nurture emergence, not just of teams but of the entire enterprise. Hence, designing and supporting the emergent forces is a path to sustainability.

Societal and environmental dynamics

Interdependence among people, organizations, and nations, as well as among disciplines and technologies, will increasingly be a 21st-century societal and environmental characteristic. As interdependence increases and boundaries diminish, the interface among people, units, businesses, organizations, nations, and so on will change. Relationships will shift from hierarchical to egalitarian networks, and with that shift the nature of the transactions will become more fluid and complex (Miles*et al.*, 2000, Friedman, 2005). Also, there will be increases in uncertainty, economic-social-technological transitions, dispersion of specialized expertise, and a merging of science and practice (Nowotny*et al.*, 2001). These changes will produce both the need and the opportunity to create organizations that are diverse, responsive, innovative, and integrated, and whose competitive advantage will be the ability to learn and change in ways that serve society (Friedman, 2005).

Interdependence, turbulence, and emergence

The turbulence created by increased rapidity, complexity, uncertainty, and interdependence limits the effectiveness of autocratic plans and procedures and prompts emergence. The emergence may be chaotic or patterned, depending on the network of governing principles and the conflicts within the system. In either case, whether chaotic or patterned, the outcomes will not be controlled directly by the hierarchy, but rather will arise from dynamic interactions. Chaos and complexity theories provide a holistic understanding of an organization's underlying dynamics; that is, organizations are self-organizing, non-linear systems whose elements are interdependent and mutually causal.

An organization can be defined by its underlying order and the principles that give rise to its characteristics (DNA). With clear and consistent underlying principles, intended patterns may be achieved, making it possible for an enterprise to be fluid and disciplined at the same time. Some processes of the enterprise may be designed to be close to the edge of chaos to foster innovation, while other processes might be designed to encourage integration; thereby, innovation and integration are achieved in a complex and chaotic environment without the enterprise itself becoming chaotic (Brown & Eisenhardt, 1988; Anderson, 1999; Lichtenstein, 2000; Eisenhardt & Sull, 2001).

Two responses to a turbulent context

To illustrate some of the dynamics of emergence, two sources, one in the*Harvard Business Review* and the other in the *California Management Review*, are summarized in Table 1 to show contrasting management approaches. Excerpts from these sources are integrated into the text. Southwest Airlines, as compared to American Airlines, utilizes governing principles, self-directed and self-controlled behaviors, organization design, and leadership styles that encourage emergence. Southwest Airlines performed substantially better than American Airlines in flight turnaround times.

Dynamics of sustainable enterprise

The purpose of the sustainable enterprise is different from that of the conventional organization. The sustainable enterprise creates long-term success for itself by serving societal needs. It is proposed that sustainability is derived from synergistic relationships and interactions, for example self-directed and trusting attitudes, behaviors, and feedback loops (see Figure 1). The connectivity and force that emerge from the enterprise's governing principles and enterprise intent are strengthened by an increase in interdependence and turbulence

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Southwest Airlines vs. American Airlines

Southwest Airlines is contrasted with American Airlines. While Southwest Airlines may be unique, American Airlines is similar to many other firms. The airline industry, and especially the daily landings and departures, operates in a turbulent and highly interdependent context; therefore, this example may inform other enterprises as they move into more complex and dynamic environments (Gittell, 2000, 2001).

Southwest Airlines

Governing Principles

Southwest's success is attributed, in large part, to core principles that govern behaviors and relationships among all employees at all levels, as well as with customers, unions, etc. The principles are deliberately and continuously embedded at all levels, so that employees actually live them. The principles act to empower all employees to work together, take ownership, and learn rather than blame.

Leadership

These governing principles are also evident in top management who advocate, and create procedures for, being supportive and not punitive. There is quick and easy access to, and two-way communication with, top management from all levels. The primary role of front-line management is to facilitate learning and to enable employees to do what they think is right. Also, supportive relationships are central to leadership, e.g., supervisors consider their reports to be internal customers.

Organization Design

The environment in which most employees work is highly interdependent and turbulent, with substantial conflicts over customers, time, costs, and safety. There is a premium on rapid response to unpredictable occurrences. Synergistic relationships enable timely problem solving and coordinated implementation, essential to high performance. Southwest's front-line employees coordinate directly, on their own, and on the spot. The organization design diffuses blame and encourages learning.

American Airlines

Governing Principles

For American Airlines, there did not appear to be a robust core of governing principles. Employees are valued for technical skills, but not for team or cross-functional skills. The governing principles appear different at different levels and they do not support collaborative relationships — it is reported that pilots are hired for "self-assured arrogance." The internal focus is on competition and competence and not on cross-functional teamwork. Also, top-down unilateral control is valued at American Airlines.

Leadership

Leadership at American Airlines appears to be task oriented and autocratic, with faith in impersonal measurements and controls. Employee behavior is directed and motivated by continuous — e.g., daily — standards, measurements, and sanctions. Blaming is frequently mentioned as the means of dealing with problems. Risk taking, self-directed behaviors, and relationships at all levels, except at the top, are discouraged.

Organization Design

The organization design at American Airlines reflects a greater trust in numbers and impersonal metrics than in the employees. Also, it puts more emphasis on top-down control and punishment than on relationships or learning. Employee interactions and even their conflicts do not seem to be of interest or importance to the firm. There is a conflict-resolution process for employee grievances filed against management.

Table 1*Southwest Airlines vs. American Airlines*

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Fig. 1: Sustainable Enterprise

and a decrease in hierarchical control. The emergent behaviors from these two forces (governing principles and enterprise intent) influence and are moderated by the enterprise's competitive mode, organization design, and leadership, which in turn create the enterprise's competitive posture. Competitive posture, mediated by industry competition and environmental agents, determines the enterprise's performance, innovation, and sustainability. Failure to enable the emergent process and/or to align the various elements will lessen the likelihood of sustainability; for example, if competitive posture and management decisions for actions/strategy are not aligned, there will be a lessening of effectiveness and efficiency — dissidence and entropy.

Surrogate model

Argyris and Schön's (1996) Model I and Model II theories-in-use are introduced as surrogates for the governing principles that underlie and distinguish "conventional" and "sustainable" enterprises. Model I exemplifies "conventional" hierarchical structures and Model II exemplifies the transformation-emergent dynamic and the "sustainable enterprise."

Governing principles

Argyris and Schön (1996) make a distinction between "espoused" theories and theories-in-use. They state, "By *espoused theory* we mean a theory of action which is advanced to explain or justify a given pattern of activity. By *theory-in-use* we mean a theory of action which is implicit in the performance of that pattern of activity." A theory-in-use is not a proclamation that is advocated, but rather it is what is evident in any pattern of action. In this paper governing principles (principles-in-use) are distinguished from espoused principles in a similar manner. They are the core principles and values evidenced in ongoing behaviors and relationships. An example of principles that are "governing" (in-use) rather than merely "espoused" is evident in a statement made by Bill Hewlett when asked about Hewlett-Packard's enduring success. He said, "The *HP Way* as it became known, reflected a deeply held set of core values that distinguished the company more than any of its products." Collins (2001) concludes, "[C]ore values are essential to enduring greatness."

Argyris and Schön identify two sets of dissimilar governing variables — Model I and Model II theories-in-use, which generate particular learning and performance dynamics. Model I generates dysfunctional behaviors and routines, thereby limiting commitment, deep learning, and change. Alternatively, Model II facilitates deep inquiry/learning and openness to change. These two theories are used to demonstrate the role of governing principles in the sustainable enterprise. It is not to suggest that Model I and Model II are the only sets or that Model II is the exclusive positive set of governing principles. Yet, the nature of the outcomes of Model II would be generally consistent with positive governing principles, such as trust building. McKnight *et al*., (1998) and Das and Teng, (1998) suggest that building trust is a prerequisite for successful interorganizational activities.

Governing principles are manifested in the behaviors and behavioral routines of relationships. These principles influence performance, learning, and innovation. "Like DNA, routines are the genetic material from which organizations are reproduced" (Feldman & Pentland, 2003: 99). Behavioral and relational routines by their nature provide stability, but by themselves do not direct or motivate (Feldman & Rafaeli, 2002).

Enterprise intent

Enterprise intent is the commitment to an ongoing role and to both short-term and long-term outcomes. Also, it may or may not be limited to a particular organization, for example it may include organizations that are partners with regard to their roles, commitments, and decision making. It is different from strategic intent, as defined by Hamel and Prahalad (1989), in that it does not have the 3—5-year timeline with metrics and rewards to control behaviors. It is less directed toward competitors and more directed toward its role in society. Like strategic intent, it should create a sense of urgency especially about whether or not the competitive posture, strategy, and enterprise intent are aligned. Also, enterprise intent is distinguished from "vision" in that enterprise intent is about commitments to the short term as well as the long term — not about the organization's future, but rather about the role and outcomes to which the enterprise is committed on an ongoing basis.

To be effective, enterprise intent must be shared and aligned at all levels. Intentions have the potential to coalesce individuals and groups into highly energized and coordinated actions, but such actions are also dependent on the social structures of the enterprise. The social structures that communicate and validate the intent have their own values and governing principles (Granovetter, 1985; Pappas & Wooldridge, 2002).

Actions that are not transparent — not open to public observation or testing — are called "self-sealing behaviors" by Argyris (2000). Self-sealing and defensive reactions fracture the social structure and limit the social network's effectiveness. Conversely, Model II's principles of shared information and free choice, and the trust that it prompts, not only enable the social network, but also reinforce and align the social structure with the enterprise intent.

Enterprise intent is similar to Von Krogh *et al*.'s (2000: 103) "knowledge vision." It provides a mental map for the enterprise in three related domains: "1) the world they live in, 2) the world they ought to live in, and 3) the knowledge they should seek and create." This vision is a beacon that signals commitments and opportunities to stakeholders and potential partners. It serves to attract talent that is aligned and motivated by this intent. The sustainable enterprise would seek and create the link between enterprise intent, strategic intent/strategy, and societal value, for example by developing strategies that incorporate social and environmental sustainability (Marshall & Brown, 2003).

UN global compact: The role of principle and intent

The declared intent of the United Nations Global Compact is to address, through businesses, United Nations' goals such as eliminating hunger and poverty. The Global Compact has ten principles that more than 2,000 business members support. There is no central planning or control for the Global Compact members. Their actions emerge from Global Compact principles and intent as well as their own. "The United Nations Global Compact asks participating companies to embrace, support, and enact, within their sphere of influence, a set of core values in the area of human rights, labour standards, the environment, and anti-corruption. This set of core values now includes nine principles" (Witte & Reinicke, 2005).

Adaptive components

Three components of the enterprise — competitiveness mode, organization design, and leadership — play an important role in three spheres that shape and channel actions. The spheres are: 1) external relationships; 2) organizational level interactions; and 3) individual influence. The governing principles and enterprise intent create only a general direction and general relationships and processes, which might support a wide array of actions. Therefore the enterprise further adapts the enterprise intent and governing principles, focusing and making the emergent forces more robust and action oriented. The greater the alignment and positive downward causation between the adaptive components of governing principles and enterprise intent, the greater will be the power of emergence.

Competitiveness modes

"Competitiveness mode" is the manner in which businesses/enterprises relate to industry rivals and other stakeholders in the marketplace. Some firms relate to the marketplace in ways that are self-serving, with limited concern for building the industry or serving society (Child, 2002; Garten, 2003). In order to examine the connection between governing principles and enterprise intent at the business—industry level, two dichotomous modes of competitiveness are identified. One represents a "conventional" perspective — dominance. The other represents the emergent attitudes and behaviors of sustainable enterprise — balance (Twomey, 2001).

Dominance: "Competitiveness" reflects ongoing relationships within an industry, for example enhancing the ability to perform at a high level. It is distinct from short-term "competition" between rivals, such as increasing the percentage of market share for a particular quarter. The "dominance" competitiveness mode is defined as behaviors designed to unilaterally control an industry by building one's strengths while weakening or limiting others — akin to Model I governing variables. Governing principles are sometimes evident in managers' use of words like "war" that speak to destroying or diminishing. The focus is on controlling and winning each battle in an effort to increase one's influence in that marketplace. Limiting "choice" for consumers and for society is one outcome of dominance. In the "dominance" mode, executives are apt to see their role as serving the stockholders and themselves rather than society, for example they may subscribe to Milton Friedman's concept that the purpose of the firm is to increase shareholder wealth. In like manner, terms such as "profit maximization" imply Model I governing variables — everything is subservient to the firm's profits.

Behaviors that emerge from firms' competitiveness modes affect, whether directly or indirectly, the firms' and the industry's value to society. Drawing on the parallels between Model I and dominance, one might conclude that "dominance" mode decisions and behaviors would include a preference for unilateral control, strategies to maximize winning and minimize losing, and smoothing over and rationalizing underlying differences.

Balance: The "balance" competitiveness mode is defined as behaviors designed to raise the overall value of the industry to society and at the same time compete forcefully. The "balance" mode integrates cooperative and competitive behaviors by sharing information and influence as well as by fostering collaboration on industry and societal issues. The resultant focus on both short and long term, and the valuing of rivals within the industry, contributes to the industry's wellbeing as well as to the welfare of society. In an increasingly networked economy, disregarding the welfare of other industry members is not a viable strategy. Barabási (2003) uses the Compaq—Cisco Systems outsourcing network collapse to show how hierarchical (win—lose) thinking does not fit a network economy. Unilateral actions to protect oneself do major damage to all. Porter (1998), in describing competitive advantage, shows how cooperative—competitive clusters enhance the success of both the industry and the firms within the cluster.

Firms with "balance" competitiveness modes engender positive synergies within industries and markets, raising the value of the industry to society. Furthermore, they will be better positioned within the industry for long-term competitive advantage and collaborative opportunities. In essence, firms increase industry value by cooperatively creating a level playing field. For example, professional sports associations actively address the issue of industry value by giving the weakest team the first choice for new players for the next season, in an attempt to raise the competitiveness within the league to sustain fan support.

Potential Consequences: Firms engaged in "dominance" competitiveness modes tend to focus on the competitors rather than the customers, and foster an "attack—defend" dynamic with its associated negative synergies. Industries in which the largest firm is in the dominance mode often stagnate and become less competitive across the industry, until the dominant member

loses its grip on the market. Typically, at that point, the dominant firm is unable to sustain itself. Examples include AT&T, major airlines, and steel companies. Dominance as defined here is not about leadership or market share within an industry. For example, a firm in the balance mode with a large market share would be a positive force for the industry and society.

The consequences of these two opposing modes are more apparent in environments that allow greater degrees of freedom for participating firms. For example, domestic markets, within the USA and other developed countries, are governed by many laws and regulations that, in essence, create a “level playing field” for all the industry members. When operating internationally, especially in small developing countries, MNCs frequently have overwhelming size and economic impact. This, along with fewer and less rigorous laws about employees’ rights, environmental protection, competition and restraint of trade, and so on, gives substantial power and freedom to the MNC. Those in a dominance competitiveness mode, with a narrow focus on winning, for instance increasing the short-term wealth of stockholders, can easily slip into exploitation of a country’s economic and natural resources (Crossette, 2000).

If we view the effects from a macro economic perspective, the “dominance” mode, with its accompanying decisions and behaviors, could be seen as driving a dynamic that contributes to economic disparity, especially between developed and developing countries. “The [World Bank] economists said that while the global economy grew by 2.3% a year between 1965 and 1998, the gap between rich and poor countries is 10 times wider than it was 30 years ago” (Hofheinz, 2000: 2A).

Organization design

The formal and informal structures, roles, and relationships within an organization influence how effectively employees will perform. The governing principles and enterprise intent provide a basis for organization designs that foster the emergence of self-directed and self-controlled behaviors and cooperative action. These designs, in turn, reinforce the governing principles and strategic intent. Of particular importance in a turbulent competitive environment are *knowledge creation* and *integrity*. Innovation depends on the conceptualization of tacit knowledge, and control depends on the infusion of integrity. Both knowledge creation and integrity require self-initiated and self-directed behaviors. With diminishing hierarchical control these emergent behaviors are increasingly influenced by the firm’s governing principles.

Organization design has been evolving in ways that reflect a context of greater interdependence and complexity, both internally and externally. An effective design enables productive relationships and effectively connects resources to produce products and services. Today’s organization designs must also meet the expanding need for learning and rapid response capabilities. Employees today, with greater levels of expertise and a growing array of interactive communication technologies and skills at their disposal, are better prepared to responsibly and innovatively self-manage. Freeman and Louca (2001) describe historical changes in organization design, from partnership to networks: 1) middle 19th century — partnerships; 2) end 19th century — joint stock companies; 3) early 20th century — professional management; 4) middle 20th century — hierarchies; and 5) late 20th century — networks, local and global.

Organization design, according to Aldrich (1999), has three functions: 1) identifying and disseminating the aims of the firm; 2) regulating the flow of information and resources; and 3) specifying and governing the duties, rights, and roles of its members. Child and McGrath (2001) identify emerging perspectives for each—aims and goals are more decentralized, flows of resources are more network based, and rights, duties, and roles are more general and adaptive. The three traditional functions mentioned by Aldrich mirror Model I variables, while Child and McGrath’s emerging perspective mirrors Model II variables.

The conventional design incorporates short-term and top-down control by means of rewards and blame; this requires the day-to-day attention of managers, and drives out the longer-term focus (Janger, 1980; Mintzberg, 1983). Conversely, the emergent design is a co-managed network where the goal is to create synergies between the firm and the industry. In networks, the preferred option is often creating interdependence and trust over the long haul (Powell, 1996). At its core, the network design is about governing principles, behaviors, relationships, and synergies in service of a common goal or vision (Malnight, 2001; Galunic & Eisenhardt, 2001). Emergent designs produce higher energy, less stress and aggression, more innovation and creativity, as well as higher levels of performance (Child & McGrath, 2001; Rindova & Kotha, 2001). In like manner the design of Southwest Airlines (Table 1) emerges from its core principles that drive synergistic relationships, prompting cooperation and high performance. On the other hand, American Airlines’ control and blame processes generate behaviors that limit cooperation and drive out learning (Gittell, 2001).

Knowledge Creation: In the sustainable enterprise model, knowledge creation and knowledge transfer are central to the firm’s ongoing competitive advantage. The conventional organization design may facilitate some information sharing at the explicit-to-explicit level, but it is unlikely to either effectively develop tacit knowledge (insights) or convert it to explicit knowledge. Nonaka *et al*. (2000) show that knowledge creation depends on a complete cycle (spiral) of “tacit to tacit” (developing trust and insights), “tacit to explicit” (conceptualizing insights), “explicit to explicit” (organizing information), and “explicit to tacit” (developing insights from implementation).

Action learning, another aspect of the knowledge creation spiral, where insights for improvement are derived from implementation (explicit to tacit), relies on inquiring behavior rather than blaming or controlling behavior. Win—lose and control designs, and reward-focused organizations, engage mostly in top-down “explicit-to-explicit” knowledge creation and transfer.

There is little space or support for other parts of the knowledge-creation spiral. Furthermore, knowledge creation cannot be forced or demanded; it can only be enabled. Tacit knowledge creation requires a change from an aggressive and competitive internal culture to one that is more caring and trusting because the knowledge-creation process is a social and team-based relational activity (Boiral, 2002; Von Krogh *et al*., 2000). In Table 1, American Airlines' top-down measurement system, in the absence of effective countervailing governing principles, appears to block learning. This is in sharp contrast with Southwest where the governing principles, management systems, and supervisory leadership all support learning (Gittell, 2001).

Leadership

Managers and leaders may initiate and/or reinforce governing principles and enterprise intent, but they have the particular role of providing the direction, focus, and motivation to move the organization to action. Leaders can enhance the emergent forces or they can distort or limit them. To demonstrate leadership distinctions that relate to sustainable enterprise, conventional "hero-celebrity" leadership is contrasted with "sustainable" leadership. There is growing evidence that the leaders and leadership styles that were lionized in the late 20th century do not create sustainable success.

Hero-Celebrity Leaders: Some leaders of conventional organizations manifest a belief that, to a high degree, top leaders determine the success of the firm. In a study of 1,435 large international firms, Collins (2001) found that most company leaders had "gargantuan personal egos that contributed to the demise or continued mediocrity of the company." The win—lose dominant style characterized by these leaders appears to reflect Model I governing principles.

Sustainable Leadership: Collins (2001) identifies the characteristics of leaders who "build enduring greatness" — sustainable enterprises — which have much in common with Model II governing variables. Collins found that successful leaders:

1. *Confront brutal facts with optimism and faith.* This is consistent with Model II's "sharing valid information."
2. *Are catalysts who rely on inspired standards*. This is consistent with "allow free and informed choice."
3. *Create a culture of discipline in the people–not in the hierarchy.* This is consistent with "mutual monitoring of implementation."
4. *Are self-effacing, quiet, reserved, and humble*. It is not about the leader; it is about the people and their intent.

These four leadership characteristics, like Model II, are synergistic — they create and support internal motivation, learning and change. The Southwest Airlines motto, *"Create a culture of discipline in the people — not in the hierarchy,"* fits well with Collins' leadership characteristics.

Competitive posture

Competitive posture is the inclination toward particular actions and the relationships that support those actions. It reflects mutuality with governing principles and enterprise intent, shaped by competitiveness mode, organization design, and leadership. Also, it encompasses the preferences, resources, experiences, and

Table 2

Competitive posture (Twomey, 2001)		
	Conventional Enterprise	**Sustainable Enterprise**
Purpose	Controlling and winning, mostly in a win—lose context.	Creating/preserving wellbeing of firm, industry, society, and environment.
Process	Developing strategies for defeating, dominating others.	Building capabilities for aligning and creating synergies with others.
Focus	a. On outcomes/results of actions, e.g., short-term financial. b. Maximizing strengths and minimizing weaknesses to exploit opportunities and/or to block threats.	a. On principles, competencies, processes and relationships. b. Building diverse and flexible capabilities for known and potential opportunities.
HR	Attracting and rewarding top-level talent. Squeezing other employees.	Attracting and developing talent at all levels and in all regions of the world.
Societal	Neutral unless it directly impacts operations. Self-sealing on social and environmental issues.	Align capabilities with societal needs (e.g., empower global executives to advocate for societal needs).
Sports analogy	This game and next; beat the opposition.	This season and next; raise the level of play.
Competitors	Someone to beat, outperform, and diminish.	Short run, someone to outperform; long run, one to leverage by developing industry and environmental synergies.
Customer value	Increase firm's value and decrease competitors' value.	Increase the total value of the industry and for society.
Tactics	a. Stretch the rules to win for personal advantage. b. Control/limit information. c. Develop exclusive advantages.	a. Change rules and build relationships to add value. b. Generate and share knowledge. c. Align competitive advantages.

beliefs that have emerged. It is what the enterprise is ready, willing, able, and inclined to do. It is, of course, not always what the enterprise actually does. Competitive posture might be viewed as an enterprise's fitness landscape, which portrays all its components and the connectivity of its mutually causal chain. A multidimensional graphing of an emergent enterprise would show a robust landscape with many high and medium peaks. A similar graphing of a conventional organization would probably show a few high and mostly low peaks — a less robust landscape with less behavioral richness.
Self-organization and mutual causation now include coevolving with industry and environmental agents. The performance and innovation that lead to sustainability emerge from this process. Unlike the conventional organization where the response to the environment—industry—markets is short term and driven by explicit top-down communication, the emergent sustainable enterprise has a robust network of downward causality, which provides much deeper levels of learning and behavioral change in response to these higher-level properties.

Table 2 portrays the major competitive posture differences between conventional and sustainable enterprises. The conventional enterprise here reflects Model I governing variables and the corresponding competitiveness mode, organization design, and leadership characteristics. "Conventional" and "sustainable" firms represent generalized dichotomous types; it is understood that actual firms are more diverse and complex. As indicated earlier, conventional firms tend to be positioned for winning, dominating, and short-term outcomes. Conversely, the sustainable enterprise takes a longer-term, more holistic view that assumes the potential for positive-sum outcomes.

An example of competitive posture and its antecedents is the USA with regard to the Iraq war. The competitive mode is largely one of dominance. The USA sees its role as shaping world-wide politics including the right and responsibility to act unilaterally.

The organization design and the formal roles and relationships give the military and related agencies substantial, widespread, and autocratic power. The leadership of the Bush administration is pro-active, not fully trusting of the UN and other international bodies. Also, the administration puts great emphasis on pre-empting threats to the US and its close allies. The administration does not appear to have the openness to feedback that is characteristic of “sustainable leadership.” One might reasonably assume that the resultant competitive posture played an important role in the invasion of Iraq.

Summary and conclusion

The objective of this paper is to provide a new perspective on managing and transforming enterprises as a means of encouraging inquiry, testing, and debate by both practitioners and researchers. A paradigm that provides an alternative to prevailing notions about how businesses/enterprises are understood, managed, and evaluated is developed. Keys to sustainability are the enterprise’s ability to innovate and perform at the highest levels, which will require the best use of human creativity and abilities, and their alignment with the needs of society. This will increasingly be determined by the quality of the interactions of all people within the enterprise.

Compared to the conventional organization, little is known about organizations or enterprises that foster emergence as a principal source of innovation and performance. Some issues to explore include:

1. How to give a language to designed emergence and its underlying complexity theory, to make it easier for practicing managers to understand and manage system components in ways that encourage and/or reduce barriers to emergence.
2. The role of developing tacit knowledge, largely an emergent process, vs. acquiring explicit knowledge, largely a non-emergent process, as part of an innovation strategy.
3. How optimum dynamics might be managed so that the evolving enterprise effectively balances chaos and stability to achieve both innovation and efficiency.
4. How the triple bottom line can be used to encourage managers to use self-initiating and self-controlling behaviors and the resulting emergence.

Managers can use the ideas here to examine and possibly change their day-to-day behaviors at the individual, team, and business levels to increase professional and personal effectiveness. At the individual level, managers might reflect on how they lead, how they motivate, and especially how they perceive their role as managers. At the team level, where trust and openness and internal commitment are important, the underlying values of Model II and the sustainable leadership style provide a guide to both the team and team members. Researchers may wish to compare and contrast these concepts with empirical data and with other conceptual models, in the evolving business context.

At the senior level, identifying and comparing competitive posture, strategy, and enterprise intent may prompt some important insights about sustainability. Management tools, such as the triple bottom line that measures social, economic, and environmental results, can be effective means of raising issues about competitive posture and its alignment with strategies and actions.

Generally, to achieve an understanding of emergent dynamics the manager needs new and different lenses. The typical lenses of a fixed goal and single-loop feedback need to give way to an awareness of the larger system, mutual causality, and double-loop feedback. Managers need to recognize principles — not just rules; value timely inquiry, mutuality, and autonomy; have a historical perspective; and embrace paradoxes to appreciate the dynamics of emergence. This shift has implications for how managers are developed and the need for reflection as well as action (Torbert & Associates, 2003).

Researchers and academics can play an important role by providing conceptual and empirical foundations, especially the applied research in which practitioners help determine the issues, language, and research objectives, so as to create actionable knowledge. Practitioners need alternative ways of understanding, managing, and evaluating organizations, if they are going to take the risks of trying new approaches. Theories and concepts, case studies, and collaborative action-research projects are some of the ways in which academics and researchers might support experimentation with emergent practices.

The gap between complexity theory and the language of management sometimes limits our awareness of emergence. Collins and Porras (1997) studied what it takes to build an enduring, great company — those that stood the test of time. It was the values and principles of the firm and its commitment to a larger purpose and role that distinguished such a company. Later, Collins (2001) extended this work in a study that took a closer look at why and how firms went from good to enduring greatness, which is similar to sustainability. While not emphasized by Collins in this report, one of the things that distinguishes the great firms from the good ones are practices that encourage emergence, as reflected in the summary statements, “Enduring great

companies preserve their core values and purpose while their business strategies and operating practices endlessly adapt to a changing world" (Collins, 2001: 195). "We learned that under the right conditions, the problems of commitment, alignment, motivation, and change just melt away. They largely take care of themselves" (Collins, 2001: 176). These are signposts on a path to enterprise sustainability.

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