

# Extreme Diversity

**Gary OSTER**

School of Global Leadership & Entrepreneurship

Regent University Virginia Beach, USA

E-mail: garyost@regent.edu

## *Abstract*

*During the past decade, most corporations have made considerable efforts to become more efficient, or “better.” Frenzied global competition and the recent economic downturn have revealed that efficiency efforts have limitations, and corporations must also become “different.” That difference is their capacity to innovate. Innovation is based on a continuous stream of new and fresh ideas that come from a diverse cadre of employees. Corporations historically have believed that a uniform workforce promotes harmony, unity, and efficiency, and have relied on homosocial reproduction and innovation antibodies to maintain the traditional corporate trajectory. This paper contends that the scope of diversity present in a corporation’s employee base and the volume of valuable innovative ideas bubbling up from inside the company are correlated. In order to more fully leverage the broad expertise of an intentionally diverse workforce, organizations may wish to consider reorganization, refocusing compensation from individuals to teams, and expanding institutional learning programs. To effectively lead an appropriately diverse organization, executives must provide clear objectives supported by simple metrics, encourage employees to focus their extraordinary capabilities on customers and on worthwhile experiments to ascertain customer needs, and to channel and productively use creative abrasion that naturally occurs between talented people to propel corporate innovation.*

**Keywords:** *Diversity, extreme diversity, innovation, homosocial reproduction, innovation antibodies*

**JEL classification:** L25, M19

## **Introduction**

During the past decade, most corporations have made considerable effort to become more efficient, initiating just-in-time delivery of raw materials, significantly shortening supply chains, and extending the use of virtually every corporate asset. Frenzied global competition and the recent economic downturn have revealed that efficiency efforts have limitations. It is no longer sufficient to become “better”: now corporations must also become “different” (Martin, 2004). What makes companies “different” is their capacity to innovate (Kelly, 2001),

which provides opportunities to grow more rapidly than competitors and to ultimately influence the direction of their industry (Davila et. al., 2006). Innovation is based on a continuous stream of new and fresh ideas, which come from a diverse cadre of employees, and only decidedly nonlinear ideas are likely to create new wealth (Hamel, 2002).

In the past, corporations believed that a uniform workforce promoted harmony, unity, and efficiency. In hiring, companies have traditionally used homosocial reproduction, relying on observable outward characteristics to determine who is the “right sort of person” to fit into the organization (Sutton, 2002). After employees are part of the organization, innovation antibodies slow or eliminate innovation and change in the organization because of fear of the new and different (Kelley 2001; Oster, 2008b). This paper contends that there is an important correlation between the amount of diversity present in a corporation’s employee base and the volume of valuable innovative ideas bubbling up from within the company. The fundamental goal is to achieve extreme diversity, where the organization is populated by employees having a broad range of traits, including age, race, country of origin, sex, education, experiences, perspectives, attitudes, etc. Akin to the increased viability of species in nature due to genetic variation, organizations need substantive variation in capabilities, motivation, perspectives, and ideas. Relative to innovation, broad diversity is more useful than significant expertise in a narrow range of subjects. In order to more fully leverage the broad expertise of an intentionally diverse workforce, organizations may wish to consider reorganization, refocusing compensation from individuals to teams, and expanding institutional learning programs. To effectively lead an appropriately diverse organization, executives must provide clear objectives supported by simple metrics, encourage employees to focus their extraordinary capabilities on customers and worthwhile experiments to ascertain market needs, and to channel and productively use the creative abrasion that naturally occurs between talented people, to propel corporate innovation.

### **The need for extreme diversity**

To succeed in the dynamic modern global economic environment, companies must continually develop new, fresh ideas into viable products, services, and processes. The only way to get better ideas is to get more ideas (Salk, 1972). Internally, companies must function much like a constructive intellectual arena, where new ideas are constantly pitted against each other and the best ideas win out (Sutton, 2002). There must be routine, significant variation in what people think about, do, and produce. “Diversity” is entirely defined by “difference.” Heterogeneity in decision-making and problem-solving styles is an important avenue to innovative ideas (Gryskiewicz, 1999; Sutton, 2002). Innovative organizations regularly change the “rules of engagement” with ideas (Kawasaki, 1999), isolate and define problems in new and unusual ways, and look harder for plausible solutions (Schwartz, 2004).

Contrary to prevailing contemporary business thought, a thorough review of technological history demonstrates clearly that simple increases in the level or quality of capital or labor were inconsequential to the invention of the automobile, steamboat, vacuum tube, and iPod. For protracted innovation to occur, a team composed of individuals who are all expert in a single specific field is almost always less successful than a group composed of individuals with widely diverse skill sets, interests, and attitudes (Page, 2007). The successful generation of new, *different* ideas is based largely upon the diversity of motivations, experience, and thought among corporate employees (Sutton, 2002). Such diversity is intentional (Amabile, 1998) and must extend far beyond race and gender (Andrew & Sirkin, 2006). Diversity must not only be increased quantitatively, but must also be expanded qualitatively, so that companies are filled with diverse “T-shaped individuals” (Kelley, 2005). The mixing of different skills and abilities, attitudes and behaviors generates enthusiasm, refreshing new ideas, and remarkable new opportunities (Andrew & Sirkin, 2006). Broad skill sets and attitudes are important, positive factors in the development of innovative ideas in organizations (Bennis & Biederman, 1997; Andrew & Sirkin, 2006; Skarzynski & Gibson, 2008). Innovative ideas may be sparked when alignment occurs among the right persons in the right place with the right skill sets, motivations, and approaches (Andrew & Sirkin, 2006). Creativity in teams may be likewise substantially enhanced by deliberately seeking divergent pairs of employees (Hirschberg, 1998), and selecting members with a broad range of backgrounds and skills (Gryskiewicz, 1999).

Because employees are the locus of innovative ideas in a corporation and those ideas are limited by their rational boundaries (Manu, 2007), the organization’s hiring practices are very important. To hire the appropriate mix of employees to support successful innovation, there must be intentionality in the identification of needed capabilities and recruitment of new employees (Taylor, 2006). Although companies often make an effort to support racial diversity, that alone is grossly insufficient to enhance innovation efforts. In most industries, current hiring procedures both buttress and homogenize the existing character and orientation of a company, but they do not necessarily strengthen it. The purpose of hiring is quantitative expansion, but qualitative expansion, including enlarging the range of a company’s capabilities and the breadth of its vision, is far more important (Hirschberg, 1998). The concept of diversity itself must be reframed. Innovation-driving diversity must include age, race, country of origin, sex, education, and other salient personal characteristics. In addition to characteristics obvious to the observer, an innovative workforce is also composed of people with diverse experiences, perspectives, and attitudes (Skarzynski & Gibson, 2008), what has been termed a “network of possible wanderings” (Amabile, 1998). Identity diversity is but a proxy for requisite cognitive diversity, which provides crucial diverse perspectives and interpretations (Page, 2007). “Extreme diversity” is “extreme” because it is orders of magnitude beyond diversity traditionally observed in organizations, and includes the intentional recruiting, hiring, development, and positioning of employees to fully leverage as many unique individual capabilities

as possible. Because only “stupid” questions can create new wealth (Hamel, 2002), and those questions reside in the heads of employees (Page, 2007), diversity needs to be *deeper*. While many organizations would consider extreme diversity to reflect errors and mutations in a system meant to do old things in old ways, it is actually the lifeblood of innovation (Sutton, 2002).

Corporations can expect to gain a number of positive benefits from intentional extreme diversity in their organization:

a. **New Skills** - An expansion of employee diversity typically enlarges the breadth of skills available within the corporation. This often has an immediately effect upon the type and volume of innovative ideas generated.

b. **Customer Representation** – By expanding employee diversity it is more likely that the internal employee base may become more representative of the external customer environment, aiding in the recognition and fulfillment of customer needs.

c. **Additional Perspectives** – An intentional increase in employee diversity, coupled with appropriate and visible channels for sharing information, wide knowledge of the questions guiding the scan, and incentives for sharing useful information, will bring valuable new perspectives to institutional learning (Day, 2006). Employees must engage in frequent and free dialogue for necessary connections to occur spontaneously, which requires a culture of trust, respect, honesty, and curiosity, and the recognition that information sharing is important.

d. **Cross Fertilization** - Bringing together different skills and capabilities, attitudes and behaviors through extreme diversity engenders excitement, new ideas and opportunities (Andrew & Sirkin, 2006) The cross fertilization of talent often generates results that exceed the sum of participants’ separate abilities (Liedtka & Friedel, 2008). Creating new common ground and shared perspectives among diverse employees also improves internal support of new ideas and increases shared confidence (Suri, 2006).

e. **Escape from Orthodoxy** - To imagine entirely novel and cost-effective solutions to customer needs, companies often must abandon their historical trajectory and the shackles of precedent, tradition, and orthodoxy (Hamel, 2002). Extreme diversity in a workforce may provide requisite non-linear ideas, as employees who propagate valuable innovation ideas often possess an unusual personality, lack traditional credentials, exist on the margins of their professions (Bennis & Biederman, 1997), routinely disagree with and ignore company assumptions, policies or methodologies, and are slow learners of the “organizational code” (Sutton, 2002). By definition, innovative employees eschew conventional wisdom and are thinking differently about the business.

f. **Innovation in Fragments** - Innovation always begins with the realization something is missing somewhere in the network that produces value for customers (Davila et. al., 2006), that a real or perceived gap between what a customer needs and what is available is noticed (Schwartz, 2004). Extreme diversity in a workforce encourages the exaggeration of what is new and small (Hamel, 2002), and a constant scanning for frustration, friction, anomalies, faulty assumptions, and

fragments of information that don't yet fulfill any customer need. Diverse innovation teams build ideabanks that, when properly utilized, ultimately yield major breakthroughs.

### **Historical constraints to diversity**

If broad diversity is vitally important to innovation and corporate viability, why is there so little employee diversity in contemporary organizations? In brief, there is little diversity because of a misguided belief that homogeneity within a corporation is an important antecedent to organizational success. Western society has long focused on individual talent and achievement and has heretofore ignored the inherent value of collective differences (Page, 2007). Company leaders wrongly believe that a uniform workforce promotes harmony and unity in the work-place and leads to efficiency. This perception of a need for conformity, control, and internal harmony, means firms are much less sanguine about 'different' employees and their ideas (Oster & Gandolfi, 2008). The erection of barriers to protect against the disruptions from outside forces, and intentional hindering of new ideas because they seem out of step with the historical trajectory of the firm, puts the organization at immediate risk of becoming outdated and left behind in the marketplace (Gryskiewicz 1999). It is "normal" for modern corporations to disdain and purposely hinder any deviation from its preferred archetypical employee. Through human resource policies, hiring and training procedures, and managerial preference, many corporations are *intentionally* populated with employees who are alike, severely limiting important new ideas and actions.

Although detrimental to innovation in a company, the desire for a uniform workforce shapes hiring and promotion policies, resulting in what has been termed "homosocial reproduction" (Kanter, 1977). Corporate staff guard power and privilege by relying on outward characteristics to determine who is the "right sort of person" to fit into the organization (Sutton, 2002), and it is not unusual for corporations to purposely hire the vast majority of workers from a specific geographic area, school, religious institution, fraternity, club, or sport. The "uncertainty quotient," causes management to become so socially restrictive; to develop tight inner circles excluding social strangers; to keep control in the hands of socially homogenous peers; to stress conformity and insist upon a diffuse, unbounded loyalty; and, to prefer ease of communication and thus social certainty over the strains of dealing with people who are "different" (Kanter, 1977). In times of financial exigency, new executives seek to gain immediate control of the organization through a hyper-version of homosocial reproduction: current corporate executives are replaced by confidantes of the new CEO, usually those who worked with the CEO at a previous company, whose honesty and loyalty the CEO trusts, and who are routinely agreeable and positively responsive when called on by the CEO (Oster, 2008a). In an effort to reduce the uncontrollable and ensure harmony and unity of purpose, new employees across the organization are chosen who most resemble an archetype represented by the CEO. In addition, companies

often use downsizing as a thinly-veiled opportunity to excise those who are “different” or “difficult.” Homosocial reproduction limits the range of a company’s innovation capabilities and may ultimately derail the future success of the organization.

While homosocial reproduction ensures that only the “right kind” of person becomes part of the organization, ongoing sanctions causing employees to carefully maintain the corporation’s historical trajectory are applied by an individual known as *innovation antibody*, *organizational antibody*, or *devil’s advocate*. A well-placed innovation antibody can quietly reinterpret new corporate strategies to co-workers and ultimately wreak havoc on the corporation’s future. Typically, the more radical the innovation and the more it challenges the status quo, the more and stronger are the antibodies. Also, the greater the past successes of the company, the greater are the organizational antibodies (Davila et al., 2006). Innovation antibodies are considered by many to be the most dangerous idea-wreckers, as they always assume the most negative possible perspective, one that sees only the downside, the problems, the disasters-in-waiting, and that drowns every new initiative in negativity (Kelley 2001; Oster, 2008b). Innovation antibodies are determined to slow or eliminate innovation and change in the organization. The success of innovation antibodies intimidates other employees (Dundon, 2002), preventing them from asking questions, offering new insights, or sharing their ideas. A historical review of innovation demonstrates that personal rejection has often been the reward for innovative people (Berkun, 2007), and that those who were successful at innovation ignored, dismissed, or overcame the organizational antibodies that inevitably came out to attack and defeat their innovations (Davila et al., 2006). Corporations aid and abet innovation antibodies by rewarding employees for their allegiance to the historical past of the company (Pfeffer & Sutton, 2000) and sanctioning any change from the earlier corporate pathway (Sutton, 2002). Regardless of the quality of the idea, *any* deviation from standard operating procedure is considered a defiance of authority (Sutton, 2002). If a company is to innovate and change, it is an important role of corporate leadership to help corporate antibodies successfully integrate into the productive fabric of the company, or to be abruptly removed. There are additional useful methods for thwarting innovation antibodies. First, early innovation efforts should begin with small, rapid, inexpensive experiments that most often keep innovative ideas “off radar” to organizational power brokers (Hamel, 2002). Secondly, corporate leadership must intentionally deconstruct the barriers in work habits and ecologies (Manu, 2007), and develop leadership styles that focus on first identifying and then incorporating polarized viewpoints (Hirshberg, 1998). Finally, to neutralize innovation antibodies, the organization must develop learning systems and activities that allow the firm to differentiate good change from bad change. Otherwise, innovation antibodies become unselective, attacking and disrupting *all* change (Davila et. al., 2006).

By definition, diversity means that people are *different* from each other. In general, however, people rarely appreciate or like those who are significantly different from themselves. Employees who enjoy the familiar and comfortable find the fresh ideas and change brought by innovators to be confusing, disruptive, and threatening (Griskiewicz, 1999), and view the changes with skepticism and FUD—fear, uncertainty, and doubt (Carlson & Wilmot, 2006). While the creativity and passion of innovators is welcomed, their inability to build coalitions or even follow normally accepted rules can make them difficult to fit into an organizational environment. Every different idea or behavior of an innovative person is considered idiosyncratic or “strange.” The qualities that make for great innovation—passion, drive, out-of-the-box thinking—are often viewed as arrogance, unreasonableness, and uncompromising behavior by many peer employees and organizations (Horibe, 2001). Until employees recognize new viewpoints and ideas as “different” as opposed to “dangerous,” there can be no innovation in the organization.

### **Preparing the organization to integrate “wild ducks”**

Integrating the broad abilities of “wild ducks,” those quirky, individualistic, highly intelligent employees who ignore corporate attempts to make them more efficient, must be intentional and ongoing, but can never be fully realized (Horibe, 2001). As opposed to attempting to change the “wild ducks,” all company personnel should instead be trained on the importance of individual capabilities and innovation to the future of the organization, and how to celebrate and work with those who are “different.” Extreme diversity is only effective when employees know why and how to leverage their differences into profitable change within the organization. Part of the intentionality to utilize the capabilities of all employees is to lower the existing transaction costs of corporate interpersonal communication. A reduction in the visible signs of rank and power are an important first step, and may include changes in workplace attire, parking privileges, meeting attendance and agendas, level of formal vs. informal communications, workplace vocabularies, etc. While human resource policies and procedures relative to recruiting and hiring can be easily altered, only time, training, and experience can help those with seriously different abilities, viewpoints, and attitudes work together toward common goals.

Three additional key changes in the organization can help incorporate the ideas from a wildly diverse employee base:

a. Reorganize to a project-based organization – Because most large organizations in the United States are historically modeled after the hierarchy of the military, railroads, and mills, employee roles are rigidly and permanently defined with clear responsibilities, economic incentives tightly linked to those responsibilities (Martin, 2005) and ongoing tasks. Status is fundamentally based on size of staff and budget. By reorganizing around projects, work has defined limitations and requires extensive interaction with peers and clients (Martin, 2004),

staff capabilities may more easily “flow” to where they are most useful, and status is based on solving “wicked problems” (Martin, 2004).

b. Compensate on team success – Corporate metrics must be changed so that an important portion of employee compensation is based on team innovation success. All forms of employee compensation, including money, recognition, appreciation, release time, etc. must recognize and support the important capabilities of team members and the team’s ability to use those capabilities in the innovation of products, services, and processes.

c. Build an institutional learning system – Successful innovators share information effectively (Bennis & Biederman, 1997). An extremely diverse employee base is valuable only if the fresh, new ideas they acquire can be received, stored, and efficiently shared with others in the organization (Gryskiewicz, 1999). Institutional learning systems may be either formal or informal (Nonaka, 1991), and are crucial to positive organizational change (Day, 2006). For learning systems to be rendered effective, internal barriers to communication must be intentionally disassembled (Von Krogh, 2000) and new, non-traditional alliances developed both internally and externally (Dyson, 2003).

### **Leading an intentionally diverse organization**

Changing the innovation results in any organization requires proactive management (Davila et. al., 2006), and virtually every company that succeeds at integrating the capabilities of a diverse employee population to enhance corporate innovation has a strong and visionary head (Bennis & Biederman, 1997). Corporate leaders provide organizational objectives which are characterized as few in number, extremely clear and easy for all employees to understand, supported by regular corporate metrics, and promoted with a defined timeline. Others in the same industry may consider some or all of those objectives to be “unreasonable” (Hamel, 2002). Company-wide and individual performance requirements must be clear, aggressive, and unconstrained. At the same time, to fully leverage the broad capabilities of an extremely diverse workforce, corporate objectives should serve only as the collective broad structure (“what”) within which autonomous employees have freedom to determine and realize personal goals (“how”) (Bennis & Biederman, 1997). Corporate leaders must, in effect, communicate strong goals accompanied by a “soft hand” of administration.

Though undesirable, it is easy and common for organizations composed of brilliant minds to drift off task. Leadership must continually walk a difficult line between encouraging the achievement of individual employee goals while promoting the necessity of accomplishing corporate goals. As outlined below, in addition to providing unambiguous corporate objectives, leadership also must continually focus employee attention on customer needs, experimentation, and productive friction.

a. Customer focus – Rather than focusing on the capabilities of an extremely diverse workforce, the organization must instead continually consider

how those capabilities might be utilized to meet the needs of customers more quickly and with substantially less cost (Lojacono & Zaccai, 2005). A laser-like concentration on current and potential customers yields an entirely new set of opportunities to be harvested (Fraser, 2006). To achieve fresh, original insights about customer needs (Brown, 2005), companies will likely need to reach beyond traditional numerical market research and observe first hand the activities and behaviors of customers in their homes, workplaces, and public environments, often called “empathic research” (Suri, 2005). Only through direct observation may corporations discover the unarticulated, subconscious feelings of customers, which the customer himself may consider irrelevant, insignificant, embarrassing, or of which the customer may not be conscious (Lojacono & Zaccai, 2005). A focus on customer needs, including research based on direct observation, captures unexpected insights and helps produce innovation more precisely meeting the real needs of consumers (Brown, 2008).

b. Continuous experimentation – Since not all innovative ideas will be successful, corporations must value and consistently encourage unusual ideas and small experiments that sometimes fail (Davila, et. al., 2006). Failure on small, rapid, inexpensive, iterative hypotheses and experiments provides highly valuable information (Schwartz, 2004) that may lead to answers that substantively meet customer needs (Suri, 2006). Developing a corporate prototyping culture is an essential element of this experimentation (Brown, 2005). A prototype, regardless of its type, is not meant to represent a *final* idea: an explosion of prototypes is utilized to acquire and refine *many* possible ideas on the path toward a smaller number of useful ideas (May, 2007). Co-creating with current and prospective customers requires the subjects to view and consider many early prototypes, which they either approve or reject along the way (Davila et. al., 2006). Prototypes provide valuable information about the strengths and weaknesses of ideas and identify new directions for additional research to take (Brown, 2008). Inexpensive and rapidly developed ‘models’ should be regularly produced using paper, computer simulations, clay, foamcore, process maps, spreadsheets, bubble charts, videos, digital pictures, or any other malleable material (Peters, 1995; Kawasaki, 1999). Prototypes help people to experience a possible future in tangible ways, encouraging them to revise their thinking about a particular subject and to ‘try on’ a multitude of possibilities (Schrage, 2000). The ability to translate ideas into two- or three-dimensional portrayals of the ideas is therefore an essential competency in innovation, and prototyping is an essential step in translating ideas into actions (Junginger, 2007).

c. Creative abrasion - The intentional mixing of people who possess diverse backgrounds, experiences, and skill sets to solve important customer problems often generates friction—that is, misunderstandings and arguments—before resolution and learning occur (Hagel & Brown, 2005). Highly innovative people are often accompanied by personal idiosyncrasies, a strong will, a touch of hubris and arrogance (Bennis & Biederman, 1997), and a tendency to ignore or reject the organizational code (Sutton, 2002). This is referred to as *productive*

*friction, creative abrasion, or dynamic tension*, and it is a necessary precursor to breakthrough thinking (May, 2007). If it is properly harnessed, this friction can become *very* productive, accelerating learning, generating innovation, and fostering trust between diverse participants. Productive friction often requires difficult negotiations among people with very different skills, experiences, and mind-sets (Hagel & Brown, 2005). The goal of leaders in innovative companies is not to reduce friction by diluting or compromising positions, but instead to develop leadership styles that intentionally identify and incorporate polarized viewpoints (Hirshberg, 1998). At the same time, leaders must prevent that conflict from becoming personal or from going underground where the pressure of resentment can build (Horibe, 2001). Even minor variations between employees can produce program-squelching conflict if creative abrasion is not properly recognized and channeled. Innovative companies must learn to embrace friction, even to seek it out, to encourage it when it promises to provide opportunities for learning and capacity building, and develop effective group norms to render it productive.

### **Conclusions**

It is likely that the turbulent global economic marketplace will continue to trend toward more competition and will require companies to routinely innovate faster and cheaper than their peer companies. Extreme diversity within the employee population is essential if companies are to have appropriate variation in the skills, abilities, attitudes, and behaviors necessary to effectively innovate in the dynamic global economy. The “invisible hand” of the market will abruptly and profoundly sanction any firm that does not choose extreme diversity as a foundational pillar of its innovation program. In many respects, the lack of extreme diversity in a company will become increasingly costly. Only those firms that intentionally and consistently hire and fully integrate remarkable “wild ducks” (without reducing their “wildness”) into their organization will thrive in the turbulent decades ahead. As Jerry Hirschberg, CEO of Nissan Design International said, “The goal remains the same: to select and accommodate a broad and diverse cast of players for roles in dramas not yet conceived” (Hirshberg, 1998).

### **References**

1. Amabile, T. (1998). “How to kill creativity”. *Harvard Business Review*, 76 (5), 77-87.
2. Andrew, J., & Sirkin, H. (2006). *Payback: Reaping the rewards of innovation*. Boston: Harvard Business School Press.
3. Bennis, W., & Biederman, P. (1997). *Organizing genius*. New York: Addison-Wesley.
4. Berkun, S. (2007). *The myths of innovation*. Sebastopol, CA.: O’Reilly Media.
5. Brown, T. (2005). “Strategy by design”. *Fast Company*, 52-54.
6. Brown, T. (2008). “Design thinking”. *Harvard Business Review*, 86 (6), 84-92.

7. Carlson, C. & Wilmot, W. (2006). *Innovation: the five disciplines for creating what customers want*. New York: Crown Business.
8. Davila, T., Epstein, M., & Shelton, R. (2006). *Making innovation work*. Upper Saddle River, NJ: Wharton School Publishing.
9. Day, G., & Schoemaker, P. (2006). *Peripheral vision*. Boston: Harvard Business School Press.
10. Dundon, E. (2002). *The seeds of innovation*. New York: Amacom.
11. Dyson, J. (2003). *Against the odds*. New York: Texere.
12. Fraser, H. (2006, Spring). "Turning design thinking into design doing". *Rotman Magazine*, 24–28.
13. Gryskiewicz, S. (1999). *Positive turbulence*. San Francisco: Jossey-Bass.
14. Hagel, J. & Brown, J. (2005). *The only sustainable edge*. Boston: Harvard Business School Press.
15. Hamel, G. (2002). *Leading the revolution*. New York: Plume.
16. Hirshberg, J. (1998). *The creative priority*. New York: HarperBusiness.
17. Horibe, F. (2001). *Creating the innovation culture*. New York: Wiley.
18. Junginger, S. (2007). "Learning to design: giving purpose to heart, hand and mind". *Journal of Business Strategy*, 28(4), 59–65.
19. Kanter, R. (1977). *Men and women of the corporation*. New York: Basic Books.
20. Kawasaki, G. (1999). *Rules for revolutionaries*. New York: HarperCollins.
21. Kelley, T. (2001). *The art of innovation*. New York: Currency Doubleday.
22. Kelley, T. (2005). *The ten faces of innovation*. New York: Currency Doubleday.
23. Liedtka, J., & Friedel, R. (2008). "Possibility thinking". *Rotman Magazine*, Winter, 15-19.
24. Lojacono, G., & Zaccai, G. (2005, Winter). The evolution of the design-inspired enterprise. *Rotman Magazine*, 10-15.
25. Manu, A. (2007). *The imagination challenge*. Berkeley, CA: New Riders.
26. Martin, R. (2004). "The Design of Business". *Rotman Management*, Winter, 10.
27. Martin, R. (2005). "Embedding design into business". *Rotman Magazine*, Fall, 4-7.
28. May, M. (2007). *The elegant solution*. New York: Free Press.
29. Nonaka, I. (1991). "The knowledge-creating company". *Harvard Business Review*, 69(6), 96-104.
30. Oster, G. (2008a). "Corporate innovation and the disruptive CEO." *Organisations & People (UK)*, 15(3), 49-54.
31. Oster, G. (2008b). "Effective antidotes for innovation antibodies". *Effective Executive*, 11 (10), 33-40.
32. Oster, G. & Gandolfi, F. (2008). "Innovation during an era of downsizing". *Review of International Comparative Management*, 9(5), 125-145.
33. Page, S. (2007). *The difference*. Princeton, NJ: Princeton University Press.
34. Peters, T. (1995). "Do it now, stupid!" *Forbes (ASAP)* 156(5), 170-172.

35. Pfeffer, J., & Sutton, R. (2000). *The knowing-doing gap*. Boston: Harvard Business School Press.
36. Salk, J. (1972). *Man unfolding*. New York: HarperRow.
37. Schrage, M. (2000). *Serious play*. Boston: Harvard Business School Press.
38. Schwartz, E. (2004). *Juice: the creative fuel that drives world-class inventors*. Boston: Harvard Business School Press.
39. Skarzynski, P., & Gibson, R. (2008). *Innovation to the core*. Boston: Harvard Business Press.
40. Suri, J. (2005). *Thoughtless acts?* San Francisco: Chronicle Books.
41. Suri, J. (2006). "Informing our intuition: design research for radical innovation". *Rotman Magazine*, Winter, 52–57.
42. Sutton, R. (2002). *Weird ideas that work*. New York: Free Press.
43. Taylor, W. & LaBarre, P. (2006). *Mavericks at work*. New York: HarperCollins.
44. von Krogh, G., Ichijo, K., & Nonaka, I. (2000). *Enabling knowledge creation*. Oxford, UK: Oxford Press.