



Emergent Innovation: A New Strategic Paradigm

Gary Oster

In perilous economic times, fresh ideas and innovation are the lifeblood of every corporation. Emergent innovation is a strategic innovation methodology. Emergent innovation does not impose new and foreign innovation techniques on company employees, but instead seeks out, recognizes and helps promote useful innovation methodologies already at work in the organization. To overcome historical corporate constraints to innovation and promote emergent innovation, leadership must intentionally clarify corporate ideals, draw ever closer to customers, seek and uncover existing invisible corporate innovators, share successful innovation methodologies with other employees and welcome productive internal friction. Progress is often quick, results are usually sustainable and emergent innovation may be broadly applied. Rather than massive corporate change, emergent innovation seeks to uncover and extend “small wins,” which may develop momentum and beget many more “small wins.” Changes in employee behavior coincide with changes in understanding. Local success is easily seen to be the forerunner of larger, systemic change. Small wins are generally finite, complete, implemented innovation, which may ultimately attract internal allies, deter opponents and lower resistance to further innovation in the organization.

For who has despised the day of small things?

Zechariah 4:10

In both good and bad economic times, protracted, successful innovation is critical to corporate competitiveness.¹ Innovation helps a company grow faster, better and smarter than its competitors and may allow it to influence the direction of its industry.² Although getting “better” is important when a company has reached its limit of efficiency, being “different” is a matter of life and death.³ The only reason investors should consider a position in a company, is confidence in its ability to innovate.⁴ This is a first exploratory article on emergent innovation, a new and intentionally low-risk innovation methodology. Most modern innovation techniques impose drastic changes on corporate employees, including alterations to the organization, values,

policies and procedures. Instead, emergent innovation seeks out, recognizes and helps promote innovation methodologies already at work in the organization. Emergent innovation mirrors the efforts of a surgeon who sets aside blood and tissue from a patient well before surgery, so that it will be available if necessary and has little chance of being rejected if utilized.

To help overcome historical corporate constraints and promote emergent innovation, this article suggests that corporate leadership must:

- Intentionally clarify company ideals
- Encourage employees to draw ever closer to customers
- Seek and uncover existing invisible corporate innovators
- Share successful innovation methodologies with other employees
- Welcome productive internal friction

Rather than significant change, emergent innovation seeks to uncover and extend “small wins,” which may develop positive momentum and beget many more “small wins” in the organization. Local innovation success may be recognized as a precursor to systemic change. Emergent innovation uses that which is already successful in a company, albeit on a small scale, and leverages it to expand corporate innovation.

Historical Constraints to Workplace Innovation

Severe economic downturns often provide substantial clarity about the historical internal machinations of the corporation. That which was hidden or thought inconsequential is suddenly thrust to center stage. During these times, corporate leaders often discover that they have either directly discouraged corporate innovation or have fostered an environment that has made it consistently impossible. Some employees may have been innovating covertly, but they have hidden it from peers and superiors due to a work environment that is toxic to innovation. Leaders are often against new ideas because the innovation seems out of step with the historical trajectory of the firm or they feel that they need to protect the organization from disruptions from outside forces. Many now realize that this kind of thinking are placing their organizations at risk of becoming outdated and left behind in the marketplace.⁵

Empirical research has shown that the internal infrastructure, motivation and methodologies of innovation are oftentimes distorted during downsizing⁶ or when a new CEO is recruited to run the organization.⁷ In some instances, corporations aid and abet innovation resistance by

rewarding employees for their allegiance to the historical past of the company,⁸ while sanctioning any change from the earlier corporate trajectory.⁹ In a work environment that is very controlled,¹⁰ it is likely that the corporation is providing little support for those who have questioned tradition, orthodoxy and legacy strategies.¹¹

On a very human level, people generally dislike receiving new ideas, especially if that knowledge is conveyed by people seemingly different from them.¹² The qualities that make for great innovation—passion, drive, out-of-the-box thinking—traditionally have been viewed as arrogance, unreasonableness and uncompromising behavior by many peer employees and organizations¹³ and cause for formal or informal sanction.

Organizations often fail to recognize or combat an enemy from within, usually referred to as an innovation antibody, organizational antibody or devil's advocate. This is an intransigent employee who may effectively drown new ideas in negativity and shortstop innovation.¹⁴ Organizations obsessed with the goals of efficiency often develop strict policies and procedures that, in fact, encourage the corporate antibodies. One well-placed innovation antibody can quietly reinterpret 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. The greater the past successes of the company and the higher the current level of complacency in the company, the greater are the organizational antibodies.¹⁵

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.¹⁶ Innovation antibodies are determined to slow or eliminate innovation and change in the organization. A historical review of innovation demonstrates that personal rejection has often been the reward for innovative people¹⁷ and that those who were successful at innovation bravely ignored, dismissed or overcame the organizational antibodies that inevitably came out to attack and defeat innovations.¹⁸ It is an important role of corporate leadership to recognize corporate antibodies in all of their forms and help them successfully integrate into the productive fabric of the company or excise them.

Corporate leadership should also institute employee training based on the importance of institutional learning, the necessity of identifying and end-running the "right" rules,¹⁹ and alerting employees to the presence and substantive danger of corporate antibodies.²⁰ Companies cannot create the future by imagining entirely novel solutions to customer needs and

dramatically cost-effective ways of meeting those needs unless they abandon their historical trajectory and the shackles of policy, tradition and orthodoxy.

New Ideas Always Lead To Innovation

In our increasingly nonlinear world, only nonlinear ideas have the power to change customer expectations, alter industry economics and redefine the basis for competitive advantage.²¹ The primary method to acquire some innovative and useful ideas is to generate many ideas. Only challenges and surprises can move a company forward.²² To routinely generate valuable innovative ideas requires intentionality. If enterprises are to efficiently allocate increasingly scarce resources to create wealth for individuals and society, they must function much like a constructive intellectual arena, where new ideas are constantly pitted against each other and the best ideas win out.²³ There must be routine significant variation in what people think about, do and produce. To build an organization where innovation is a way of life requires employees to discard, and often reverse, their deeply ingrained beliefs about how to consider ideas, make decisions and manage the implementation of related changes. Individuals and companies focused on efficiencies and near-term profits often consider these changes to be counterintuitive, troubling or even downright wrong.²⁴

Innovative organizations regularly change the “rules of engagement” with ideas,²⁵ isolate and define problems in new and unusual ways and look harder for plausible solutions.²⁶ Ultimately, firms must discover the internal sources of those “one-off” ideas that will allow them to alter their traditional corporate trajectory. While highly innovative employees may possess a broad range of skills and backgrounds coupled with diverse ages, race, country of origin, gender, education, etc., it is just as likely that they are simply intellectually curious, motivated by things different from other employees or simply like difficult challenges. Innovators may be slow learners, heretics, eccentrics, crackpots, weirdos, just plain original thinkers or they may be strong team players. Finding invisible innovators may require effort. The key is to locate corporate misfits with ideas, many ideas. While only “stupid questions” create new wealth²⁷ so too do they require new (or “stupid”) answers.

Encouraging Emergent Corporate Innovation

Copying the successful strategies of one’s competitors and peers will *never* provide the differentiation so important to successful innovation. The company must instead pioneer new and substantively different directions.²⁸ For any hope for positive change to occur, the company must intentionally disengage from the press, pundits and academics who typically parrot the

status quo promulgated by corporate peers and competitors. In order to demonstrate fiscal responsibility, especially in economically challenging times, companies traditionally have required activities to be eminently measurable, highly predictable and to promise a specific return on investment. In difficult economic times, internal emphasis is on the absolute elimination of the possibility of failure: before something new is tried, its ultimate success must be proven beyond a shadow of a doubt. Instead, a corporate culture that consistently encourages unusual ideas must be developed intentionally. This includes encouraging small experiments and prototypes that sometimes fail.²⁹ Failure to observe real or perceived rules is critical to successful innovation. True innovators consistently disdain, proudly ignore and often publicly flout virtually every corporate rule. The cost is worthwhile because they also generate a large pool of ideas, especially innovative ideas.³⁰ New ideas require more ideas and more ideas require intellectual freedom.

Innovation, regardless of how small or seemingly insignificant, is already occurring in the organization. If it were not, the company would already be insolvent. The only possible ways that the corporation could still be alive in the marketplace without innovation occurring in the depths of the company, is if it was a relatively new company with a single product that held significant market share or if it regularly “borrowed” innovative ideas from peer corporations. More likely, there are many low-level employees who are quietly developing innovative ideas “off-radar” and are successful despite lack of funding, corporate support and vicious internal innovation antibodies. These invisible innovators already have determined how to recast imposing corporate problems into small, tangible and quickly solvable opportunities. They use innovation to achieve continuous, rapid small wins. Each of these small wins has a fragmentary character and is driven by opportunism and dynamically changing market situations.³¹ Regardless of its traditional antipathy to innovators, every corporation must search for, recognize, communicate with, support, reward, publicly thank and emulate the actions of its quiet “positive deviants.”³²

Working with, instead of against, the corporation’s silent innovators will require a significant shift in corporate ideas regarding risk, something that is difficult to do in trying economic times. Firms must be intentional in creating an environment where appropriate risk is welcome and corporate incentives must likewise be designed to reduce risk-averse behavior. An environment must be cultivated where long-term results are valued³³ and where taking risks on breakthrough innovation is recognized as valuable to the company.³⁴ In order to achieve truly valuable breakthroughs in the long term, it is necessary to accept (and learn from) failures in the short term. Regular and methodical failure is essential to eventual innovative success and yet most

corporations brutally sanction failure. Leaders must make sure that employees do not find it difficult or dangerous to try something and must do so by their support of the company's invisible innovators. The right kinds of failure are very important and contain valuable information and should be "listened to."³⁵ An important role for leaders of innovation is to clearly signal the propriety of failure and to distinguish between "good failure" and "bad failure." Bad failure is that which is repeated and nothing new is learned from it. Good failure happens often, but the same event is not repeated because something is learned from it, duly recorded and disseminated to others.³⁶ Increasing the number of successful innovation "hits" is simply a function of an exponential growth in the right kind of failures.

Simplify and Clarify Corporate Ideals

Not all innovation has the same value or promise to the corporation. The value of innovation developed internally usually is greater if intentionally aligned with the corporate ideals, their values, mission, vision and strategies. For that reason, corporate leadership must be sure that the ideals are based on reality, are simple and are easy to understand. The foundation of useful corporate ideals is honesty, realism and transparency.³⁷ Although most businesspeople consider themselves to be realists, it is more common to find wishful thinking, denial and other forms of reality avoidance deeply embedded in most corporate cultures.³⁸ In successfully innovative companies, leaders always deal in reality, speaking the truth and demanding the same of subordinates. In scores of surveys conducted throughout the world and over decades, honesty has been selected consistently as the most important leadership characteristic in the leader-constituent relationship.³⁹

Similarly, corporate ideals must align with legacy corporate values. Values are constant, passionate, fundamental beliefs collectively called a "world-view," that propel the actions of individuals and corporations. An individual's values provide needed order and direction to his or her life. In essence, an individual's core values answer the question, "Why do we do what we do?" and serve as constant standards or criteria to guide judgment, choice, attitude, evaluation and action. Values serve as core conceptions of the desirable within every individual and society and serve as standards to undergird choice, judgment and action.⁴⁰ Personal values are acquired through education, observation and experiences. They may be taught or influenced by parents, friends, work associates, religious institutions, community, culture, personality or significant societal events. Organizations are composed of people and as a result, organizations similarly hold values. Since personal values are capable of being openly articulated, advocated, exhorted and defended, they ultimately shape, and in turn can be shaped by, organizational values. All

activities of an organization are considered through the lens of corporate values, which therefore have major import to the long-term viability and growth of an organization. In many organizations, the personal values of the founder and early employees continue to shape the actions of the corporation decades and even centuries after their passing.⁴¹

An important activity that should take place coincident with the search for internal invisible innovators is a thorough evaluation and refining of corporate metrics or measurements. Metrics must be clearly stated, valid, reliable and expansive.⁴² The rule of thumb is, “what gets measured gets done,” so it is essential that the firm winnow the volume of metrics to the half-dozen or so measurements accurately encapsulating the key activities of the company.⁴³ This can only be achievable through appropriate support of the invisible innovators.

To the uninitiated “small wins” gained through innovation may seem hopelessly naïve.⁴⁴ It is crucial that new metrics are not clouded by legacy strategies;⁴⁵ that they focus more on outputs than inputs;⁴⁶ that all activities of the organization tie back to this small number of measurements;⁴⁷ that employees are appropriately motivated to achieve these metrics;⁴⁸ and that they continue to be the subject of review and internal conversation.⁴⁹ Most importantly, corporate metrics must accurately measure those innovation efforts tied specifically to how a company makes money⁵⁰ and be appropriately translated into individual day-to-day performance requirements that are clear, aggressive and unconstrained.⁵¹ Developing and successfully using innovation metrics in support of both creativity and value creation, is essential to corporate success.⁵²

Draw Closer to Customers

Every innovative idea starts and ends with a current or prospective customer in mind. It has become obvious that standard market research methods continue to yield progressively less useful information.⁵³ Traditional market research methods are inherently incomplete, because research subjects are generally imprecise communicators, often using verbal shorthand, metaphors, body language and facial expressions that can provide ambiguous information.⁵⁴ Therefore, the single most important step for a corporation struggling through difficult economic times is to know, understand and communicate with customers at a much deeper and broader level.⁵⁵

To focus solely on efficiency turns the corporate focus away from customers and inward toward organizational mechanisms to the ultimate detriment of the corporation. Every business enterprise should be obsessed with the needs of its customers.⁵⁶ Every possible mechanism

should be employed to recognize both the public and unrecognized needs and desires of current and prospective customers.⁵⁷ Although traditional market research will continue to yield benefits, new methods for listening to customers must also be fully employed, including electronic, social networking and empathic research methods.⁵⁸ Primary research such as direct observation of much smaller cohorts and their compensatory behaviors will reveal more useful information than traditionally gained via traditional secondary research.⁵⁹ Detecting compensatory behavior through empathic research, provides valuable information about the unfulfilled and unspoken needs of consumers and help companies enjoy a higher acceptance rate of future product changes, as well as substantial competitive advantage.⁶⁰ Invisible innovators who have already been developing new products and services, should be given exclusive opportunities to interface directly with current and prospective customers. Through intensive study of the broader context of customer lives and activities⁶¹ and a view beyond stale industry orthodoxies and corporate precedent, corporations may imagine new and more cost-effective solutions to meet customer needs.⁶²

Although important customer information may be discovered through statistical analysis of regular market research data, qualitative empathic research translates into a rich body of lore to be systematically shared with co-workers, ultimately leading to helpful hypotheses and ideas. The ultimate goal is to form close partnerships with current and prospective customers to ensure the swift and comprehensive innovation of products, services and ideas that perfectly match both their realized and unarticulated needs.⁶³

Seek Invisible Corporate Innovators

Instead of finding willing corporate employees and attempting to inculcate the attributes of innovation into them, this methodology finds those who are already successfully innovating within the corporation and builds corporate innovation practices around that which is already working. In brief, the goal is to look for the “positive deviants” in the organization and try to understand what is specifically different about their behavior.⁶⁴ Invisible innovators are not actually invisible: they have been hiding their innovation efforts to avoid the glare of public scrutiny. These are the slow learners, corporate heretics, eccentrics and original thinkers who routinely devise many successful and unsuccessful answers to problems plaguing the company. Employees who propagate valuable innovation ideas often possess an unusual personality or routinely disagree with company policies or methodologies. The intentions of invisible innovators may be difficult to fathom, because they may in be charge of projects that are not done on time, are done poorly or have to be redone. They may not publicly share their

knowledge, instead choosing to sit in stony silence in staff meetings.⁶⁵ Almost by definition, innovative employees eschew conventional wisdom and are thinking differently about the business. They may be mavericks who are dissatisfied with the direction of the business or they may be talented outliers in technology or sales departments with insights into customers and technologies providing them with ideas for new businesses.⁶⁶ Innovative employees are almost never insiders or corporate types on the fast track. Instead, they often lack traditionally accepted credentials or exist on the margins of their professions.⁶⁷ Innovators are often recognized by the simple, inexpensive prototypes of new ideas that they consistently surround themselves with and are often found in the workplace at “odd hours.” Successfully innovative companies welcome those who routinely dissent, often have the zeal of recent converts and harbor personal idiosyncrasies.⁶⁸ They generally solve problems by being unconventional, determined or even obtuse, far different from the majority of people who are normally, “thinking in train tracks.”⁶⁹

The fundamental goal is to commence an informal, protracted conversation with each individual invisible innovator. He or she may be wary of talking, especially if castigated for innovating in the past, and the conversation may need to remain “off radar” for some time. Sometimes an intermediary person initially has to mediate between leadership and the invisible innovator. As the ongoing conversation quietly progresses, corporate leadership seeks to discover internal impedance to the efforts of the invisible innovator, without labeling it with a value judgment. Invisible innovators do not outline impediments that are not actually a problem. Next, leadership needs to cooperatively determine what will help the invisible innovator succeed easier and faster, what internal mechanisms may be dismantled to encourage quicker scaling of innovation. Invisible innovators often are rewarded by a clearer pathway for implementation of their innovations.

With the innovator’s direct permission, leadership should thank and reward the invisible innovator for his or her experimentation. While money as incentive may be appreciated, innovators also covet thanks and recognition. Innovators should be rewarded for doing and failing, but not for “not doing.” Finally, leaders should urge innovators to complete rapid, rough and inexpensive prototypes of virtually all their innovative ideas in an effort to enlarge the conversation to include others in the company. A key goal is to promote a multitude of bold, rapid, inexpensive experiments in all areas of the company and to gain a clearer idea of how to make the corporate environment more conducive to those occurrences.

Share Successful Innovation Development Methodologies

Leadership must surreptitiously study what has made the invisible innovators successful, oftentimes despite an environment hostile to any change. After leadership has, over time, won the trust of the invisible innovators by supporting their projects and streamlining the requirements to bring innovation to the forefront, it is time to train others to accomplish the same type of work. Although formal programs have worked in some companies, more often informal, “apprentice-type” programs seem to work even better. Innovation should be broadly inclusive and be promoted in ten key areas: the corporation’s business model, networking, enabling process, core process, product performance, product system, service, channel, brand and customer experience.⁷⁰ When managers learn about the efforts of senior leaders to expand innovation, they often have a list of employees who have been quietly engaging in innovative activities for years. Corporate leadership has only to provide a specific amount of release time for employees to work together on new projects.

One of the first changes usually witnessed by organizations who seek to discover and aid invisible innovators, is a substantial increase in formal and informal institutional learning. Innovative people and organizations consider transmission of personal knowledge to others to be the central activity of the knowledge-creating company.⁷¹ Appropriate information must be recognized, evaluated, shared and utilized. Institutional learning is predicated on a transparent internal market for information and ideas, freely open for all to utilize.⁷² New information is embraced, not feared. Formal mechanisms is established for finding new information, ushering it into the organization and placing it into the hands of the people who can best use it.⁷³ Those who have created knowledge must quickly and efficiently come to the attention of those who seek knowledge creation.⁷⁴ Employees must engage in frequent and free dialogue for the necessary connections to occur spontaneously. In effect, there must be drastic expansion of the suggestion box, whether it is called a water-cooler, blue sky room or war room, but new ideas must be graphically “mapped out” and available to all employees. This, in turn, requires a culture of trust, respect and curiosity, as well as the recognition that information sharing is important to corporate success.⁷⁵

Organizational silos, formal communications filters and other internal barriers to communications, must be intentionally disassembled;⁷⁶ the number of voices participating in conversations related to innovation must be increase;⁷⁷ formal and informal communications networks developed;⁷⁸ and incentives for effective sharing of information implemented.⁷⁹ Leaders must intentionally lower the barriers between them and their subordinates, necessary to

constantly remove physical and organizational barriers hindering information sharing⁸⁰ and to lead by welcoming surprising information and emulating the positive deviants in their midst.⁸¹

One of the first signs that innovation is not only accomplished by those who manage to remain “off-radar” and is now blooming in other parts of the organization, is an explosion of quick, inexpensive, rough prototypes to elicit feedback from current or potential customers and peers.⁸² Prototypes may be regularly produced using paper, computer simulations, clay, foamcore, process maps, spreadsheets, bubble charts, videos, digital pictures and virtually any other inexpensive and malleable material.⁸³ A prototype, regardless of its type, is not meant to represent a final idea: a mountain of prototypes is utilized to get and refine many possible ideas on the path toward a smaller number of useful ideas.⁸⁴ Prototypes encourage staff to temporarily suspend reality in order to be inspirational and expansive, while considering new insights⁸⁵ and “try on” a multitude of possibilities.⁸⁶ Developing a “prototyping culture”⁸⁷ is a critical step toward effective corporate innovation.

Welcome Productive Friction

One reason invisible innovators choose to stay “off radar” in an organization is to avoid clashing with other more “normal” employees. Highly innovative people are often accompanied by personal idiosyncrasies, a strong will, a touch of hubris and arrogance and a tendency to ignore or reject the organizational code.⁸⁸ Recognizing and promoting their corporate innovation efforts is likely to lead to additional friction with other employees, who often view them as problems within the organization rather than potential channels of solutions. These difficulties between employees with varied backgrounds, experiences and skills sets is referred to as productive friction, creative abrasion or dynamic tension.⁸⁹ If properly harnessed, this friction can become very productive, accelerating learning, generating innovation and fostering trust between diverse participants. Productive friction from intentionally setting of opposing forces into direct conflict or competition with each other, is thought by some to be essential for breakthrough thinking.⁹⁰ Productive friction often requires difficult negotiations among people with very different skills, experiences and mind-sets.⁹¹ 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 viewpoints⁹² At the same time, leaders must prevent that conflict from becoming personal or from going underground where the pressure of resentment can build. Over time, the dysfunctional aspect of diversity can be overcome when (and only when) heterogeneous group members learn to interact with each other.⁹³ In summation, innovative companies must learn to embrace friction, even to seek it out and to encourage it

when it promises to provide opportunities for learning and capacity building. Additionally, innovative companies must develop institutional frameworks that can foster productive friction, encourage team members to be willing to listen to and understand different viewpoints, to questioning each other's assumptions.

Conclusion

Emergent innovation is one of a myriad of innovation methodologies available to corporations. What makes it unique and oftentimes effective is that it does not impose new and foreign innovation techniques on company employees, but instead seeks out, recognizes and helps promote the innovation methodologies quietly at work in the organization. Progress is often quick, results are usually sustainable and emergent innovation may be broadly applied. In contrast to massive corporate change, emergent innovation seeks to uncover and extend "small wins" that may develop momentum, begetting many more "small wins." Changes in employee behavior are expected to coincide with changes in understanding. Due to the fact that employees often trust peers more than superiors, innovation antibodies may be won over without significant effort. Local success is easily seen to be the forerunner of larger, systemic change. Small wins are generally finite, complete, implemented innovation, which may ultimately attract internal allies, deter opponents and lower resistance to further innovation in the organization.⁹⁴ In perilous economic times, emergent innovation may be one of the few tenable options available to help corporations survive and thrive.

Endnotes

¹ Kelley, T. (2001). *The art of innovation*. New York: Currency Doubleday.

² Davila, T., Epstein, M., & Shelton, R. (2006). *Making innovation work*. Upper Saddle River, NJ: Wharton School Publishing.

³ May, M. (2007). *The elegant solution*. New York: Free Press.

⁴ Schwartz, E. (2004). *Juice: The creative fuel that drives world-class inventors*. Boston: Harvard Business School Press.

⁵ Grysiewicz, S. (1999). *Positive turbulence*. San Francisco: Jossey-Bass.

⁶ Oster, G., & Gandolfi, F. (2008). Innovation during an era of downsizing. *Review of International Comparative Management*, 9(5), 125-145.

⁷ Oster, G. (2008a). Corporate innovation and the disruptive CEO. *Organisations & People (UK)*, 15(3), 49-54.

⁸ Pfeffer, J., & Sutton, R. (2000). *The knowing-doing gap*. Boston: Harvard Business School Press.

⁹ Sutton, R. (2002). *Weird ideas that work*. New York: Free Press.

¹⁰ Manu, A. (2007). *The imagination challenge*. Berkeley, CA: New Riders.

¹¹ Hamel, G. (2002). *Leading the revolution*. New York: Plume.

¹² von Krogh, G., Ichijo, K., & Nonaka, I. (2000). *Enabling knowledge creation*. Oxford, UK: Oxford Press.

¹³ Horibe, F. (2001). *Creating the innovation culture*. New York: Wiley.

¹⁴ Oster, G. (2008d). Effective antidotes for innovation antibodies. *Effective Executive*, 11(10), 33-40.

¹⁵ Davila, Epstein, & Shelton (2006).

¹⁶ Oster, G. (2008c). Divining the need. *Regent Global Business Review*, 2(2), 14-18.

¹⁷ Berkun, S. (2007). *The myths of innovation*. Sebastopol, CA.: O'Reilly Media.

¹⁸ Davila, Epstein, & Shelton (2006).

¹⁹ Kawasaki, G. (1999). *Rules for revolutionaries*. New York: HarperCollins.

²⁰ Davila, Epstein, & Shelton (2006).

²¹ Hamel (2002).

²² Davila, Epstein, & Shelton (2006).

²³ Sutton (2002).

²⁴ Ibid.

²⁵ Kawasaki (1999).

²⁶ Schwartz (2004).

²⁷ Hamel (2002).

- ²⁸ Lafley, A., & Charan, R. (2008). *The game changer: How you can drive revenue and profit growth with innovation*. New York: Crown Business.
- ²⁹ Oster, G. (2008e). Radical innovation: risk mitigation techniques. *Global CEO*, October, 2008.
- ³⁰ Sutton (2002).
- ³¹ Weick, K. (1984). Small wins: Redefining the scale of social problems. *American Psychologist*, 39(1), 40-49.
- ³² Sternin, J., & Choo, R. (2000). The power of positive deviancy. *Harvard Business Review*, 78(1), 14-15.
- ³³ Fraser, H. (2008). How design thinking enables personal growth and enterprise success. *Rotman Magazine*, 79-82.
- ³⁴ Davila, Epstein, & Shelton (2006).
- ³⁵ Schwartz (2004).
- ³⁶ Bennis, W., & Biederman, P. (1997). *Organizing genius*. New York: Addison-Wesley.
- ³⁷ DePree, M. (1989). *Leadership is an art*. New York: Dell.
- ³⁸ Bossidy, L., & Charan, R. (2004) *Confronting reality*. New York: Crown Business.
- ³⁹ Kouzes, J., & Posner, B. (2002). *The leadership challenge*. San Francisco: Jossey-Bass.
- ⁴⁰ Rokeach, M. (1979). *Understanding human values*. New York: The Free Press.
- ⁴¹ Labovitz, G. (1997). *The power of alignment*. New York: Wiley.
- ⁴² Davila, Epstein, & Shelton (2006).
- ⁴³ Andrew, J., & Sirkin, H. (2006). *Payback: Reaping the rewards of innovation*. Boston: Harvard Business School Press.
- ⁴⁴ Weick (1984).
- ⁴⁵ Manu (2007).
- ⁴⁶ Hamel (2002).
- ⁴⁷ Pfeffer, & Sutton (2000).
- ⁴⁸ Davila, Epstein, & Shelton (2006).
- ⁴⁹ Charan, R. (2007). *Know-how*. New York: Crown Business.

- ⁵⁰ Charan (2007).
- ⁵¹ Bennis, & Biederman (1997).
- ⁵² Oster, G. (2008b). Derailing design thinking. *International Journal of Leadership Studies*, 4(1), 107 – 115.
- ⁵³ Stevens, T. (1999). Lights, camera, innovation. *Industry Week*, 248(14), 32–34.
- ⁵⁴ Fournies, F. (1994). *Why customers don't do what you want them to do—and what to do about it*. New York: McGraw-Hill.
- ⁵⁵ Taylor, J., Wacker, W., & Means, H. (2000). *The visionary's handbook*. New York: HarperBusiness.
- ⁵⁶ May (2007).
- ⁵⁷ Nonaka, I. (1991). The knowledge-creating company. *Harvard Business Review*, 69(6), 96-104.
- ⁵⁸ Brown, T. (2005). Strategy by design. *Fast Company*, 52-54.
- ⁵⁹ Suri, J. (2005). *Thoughtless acts?* San Francisco: Chronicle Books.
- ⁶⁰ Kelley, T. (2005). *The ten faces of innovation*. New York: Currency Doubleday.
- ⁶¹ Fraser, H. (2008). How design thinking enables personal growth and enterprise success. *Rotman Magazine*, 79-82.
- ⁶² Hamel (2002).
- ⁶³ Brown, T. (2005). Strategy by design. *Fast Company*, 52-54.
- ⁶⁴ Sternin, & Choo (2000).
- ⁶⁵ Horibe (2001).
- ⁶⁶ Day, G., & Schoemaker, P. (2006). *Peripheral vision*. Boston: Harvard Business School Press.
- ⁶⁷ Bennis, & Biederman (1997).
- ⁶⁸ Bennis, & Biederman (1997).
- ⁶⁹ Dyson, J. (2003). *Against the odds*. New York: Texere.

- ⁷⁰ Tekes (Finnish Funding Agency for Technology and Innovation) (2007) *Seizing the white space: Innovative service concepts in the United States*, Tekes Technology Review 205/2007, Helsinki.
- ⁷¹ Nonaka (1991).
- ⁷² Bennis, & Biederman (1997).
- ⁷³ Gyskiewicz (1999).
- ⁷⁴ von Krogh, Ichijo, & Nonaka (2000).
- ⁷⁵ Day, & Schoemaker (2006).
- ⁷⁶ von Krogh, Ichijo, & Nonaka (2000).
- ⁷⁷ Manu (2007).
- ⁷⁸ Bennis, & Biederman (1997).
- ⁷⁹ Kawasaki (1999).
- ⁸⁰ May (2007).
- ⁸¹ Sternin, & Choo (2000).
- ⁸² Brown (2005).
- ⁸³ Kawasaki (1999).
- ⁸⁴ Brown, T. (2008). Design thinking. *Harvard Business Review*, 86(6), 84-92.
- ⁸⁵ Jones, M., & Samalionis, F. (2008). From small ideas to radical service innovation. *Design Management Review*, 19(1), 22.
- ⁸⁶ Schrage, M. (2000). *Serious play*. Boston: Harvard Business School Press.
- ⁸⁷ Kelley (2001).
- ⁸⁸ Sutton (2002).
- ⁸⁹ May (2007).
- ⁹⁰ May (2007).
- ⁹¹ Hagel, J., & Brown, J. (2005). *The only sustainable edge*. Boston: Harvard Business School Press.

⁹² Hirshberg, J. (1998). *The creative priority*. New York: HarperBusiness.

⁹³ Tsui, A., & Gutek, B. (1999). *Demographic Differences in Organizations*. New York: Lexington Books.

⁹⁴ Weick (1984).
