



Managing for Innovation: Reducing the Fear of Failure

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Organizations today face the problem that innovations are quickly arising from all over the world and changing the marketplace, with the pace of innovation and change increasing. Radical innovations are causing creative destruction in the marketplace and forcing out established products and services faster and faster. Management is mainly responsible for success or failure, so they must find ways to increase innovation, especially radical innovation, within the organization. One significant method of doing this is to reduce the fear of failure, which is caused by negative management reactions to both radical innovation and failures from attempts at risky new ideas. That fear of failure inhibits innovation by hiding failures, suppressing new ideas, and avoiding risky concepts. Leadership practices that discourage innovation must be replaced with ones that encourage innovation, including accepting risk, viewing failure as a learning opportunity, allowing sufficient time for innovative ideas to develop, and encouraging champions to help overcome resistance and find resources. Management needs to make the organization an ambidextrous operation that can continue to improve the efficiency of current products and services with incremental innovation, while simultaneously encouraging the discovery, adoption, and implementation of radical innovations, without the fear of failure, to increase the organization's ability to be competitive.

Management must find a way to increase innovation within the organization to compete with new products and services from around the world that can quickly reduce the organization's profits. Deming discusses how leadership is responsible for the majority of the success or failure in an organization. One of his fourteen points is focused on reducing the fear of failure, which can inhibit anyone from innovating. When management reacts negatively to a new idea or a failed attempt it can create a fear of failure that limits innovation. In such an environment, failures are punished and everyone will try to hide failures as much as possible to minimize the negative ramifications. In a positive management model these failures are accepted as part of the process to be used as tools to determine better what will succeed.¹ While much of the literature on management's encouragement of innovation is focused on the positive behaviors,² fear of failure can have a significant negative impact and needs more study.

The most competitive industries deal with high technology and require radical innovation, but most industries face significant change from radical innovation.³ New innovations are appearing with greater speed,⁴ which forces each organization to deal with the potential destruction of their market.⁵ While incremental innovation is the essential mode of operation for normal business, radical innovation has become essential to develop new markets, find new customers, and remain competitive. Organizations must be able to function ambidextrously in both innovation modes to remain competitive.⁶ Thus, the task for management is to increase radical innovation to remain competitive.

Need for More Radical Innovation

The need for innovation today is becoming increasingly important as competition from around the globe increases.⁷ These innovations are rapidly changing the landscape of the competitive marketplace.⁸ In addition, the speed of introduction for these innovations is increasing.⁹ While incremental innovations are necessary to provide updates to existing products and services, if an organization does not implement more radical innovations, the process of creative destruction will enable the competition to leapfrog ahead and become dominant.¹⁰ This escalation in competition requires existing organizations to develop radical innovations that will become the new products and services to compete in this marketplace. Since organizations normally develop incremental innovations to the existing products and services, the problem that management needs to solve is how to encourage more radical innovation in the organization so they can remain competitive.¹¹

New technology and other innovations can change a competitive situation quickly. The Internet changed business-to-business operations by enabling customers to shop online. Service functions are available over the Internet and cell phones, and may need to work with customers using social media, such as Facebook and Twitter, in the near future. Many innovation changes are related to new technology, which can affect many organizations. There are also many discoveries and new technologies being developed, so any industry could have an innovation change its market. Applying green concepts, changing technology and processes, or using the Internet to reach a different customer base can shift an industry in radical ways. These changes have already occurred in many areas such as dating services, mobile banking, electronic money transfers, and the news industry. Any industry can have innovation, which is how the marketplace grows and provides more value to the customer.¹² Organizations need radical innovation to change the market and remain competitive against those also implementing radical innovation. Management must work towards enabling the organization to discover, adopt, and implement these radical innovations.

Creative Destruction

Creative destruction is a concept where an organization brings a radically innovative product or service to market that, once successful, will start to destroy the existing market. Competing against the innovation will be difficult, if not impossible, because the innovation is more advanced and attracts a large customer base. The new idea, product, or service will change the market radically and make the existing one obsolete.¹³

Christensen¹⁴ describes how leadership can make what appears to be a sound, logical, and profitable decision to not adopt and implement a radical innovation because it does not have a proven market, does not meet existing customer needs, and does not appear to provide the profitability necessary for the organization. That radical innovation is implemented by another organization and it develops a new market. The innovation eventually improves to where it can compete with and begin to take over the existing market. The organization that implemented the radical innovation becomes the dominant organization. Thriving organizations often fail to innovate sufficiently with less than half of the original Fortune 500 organizations from 1955 still surviving. In other top lists, the majority of organizations are either falling off the lists or ceasing to exist. Organizations today need radical innovation or they can fail.¹⁵

An excellent example of this process is in the computer information storage industry, where each new generation of technology allowed hard drives to be smaller, more rugged, and use less power. Christensen's classic description of the disruptive innovation in the hard disk industry, where successive generations of technology first developed a new market and eventually improved enough to compete with the previous products, appears to be happening again with the adoption of the solid-state memory to replace hard disks. This new technology could not initially compete on cost or storage capacity for the existing computer customers, so it found a new market in products such as the iPod and other portable electronic devices. These solid-state drives are starting to become cheap enough and large enough to be used in high-end laptop computers, such as the MacBook Air, which indicates that they are beginning to compete in the mainstream market. Personal computer usage is also shifting towards mobile devices, which use the new solid-state memory technology.¹⁶

Management must be able to adopt radical innovation, implement it using compatible management processes, and develop new markets. The new innovation must be allowed to creatively destroy the current market before another business does. It may seem counterintuitive because it reduces a profitable business line, but it will allow the organization to build a new market. Apple successfully brings out new iPods that creatively destroy their own products, but the new iPods build the market instead of a competitor's product. The ability to cannibalize an existing product is a key factor for being able to change the marketplace. If an organization is not willing to produce that next generation of product then another will bring it to market and the result for the older product will be the same, but the original organization will be in a much lower competitive position.^{17, 18}

Ambidextrous Organization

An organization's ability to compete, especially over the long-term, is directly related to its ability to increase its operational efficiency. An organization needs to improve productivity, reduce costs, and improve profitability. More efficient processes mean less waste and a higher output for the resources invested. Most organizations focus on incremental innovations, which are essential to improving existing products and services to meet current customer expectations. Incremental innovation is the normal method to improve operational efficiency and it has been demonstrated to be effective. The incremental innovations have less risk since they are mainly improvements. What is not taken into account is that a radical innovation can significantly improve a process, or change the entire market.¹⁹ A focus on incremental efficiencies can also set

up a culture of performance that may exclude more radical innovations because they do not fit the existing business patterns. It is difficult for an organization to be able to become efficient in its operational processes and be open to change and radical innovation, which has been shown to build competitiveness and creative destruction.^{20, 21} Thus, organizations need to balance the management of incremental innovations with the development of radical innovations. Radical innovations happen less frequently, but they bring significant changes to the market. The radical innovations can also have a high risk of failure and loss. Since there is an increase in the pace of innovation, radical innovation is happening more frequently. Ambidextrous organizations need to work on both aspects at the same time to maintain or potentially improve competitiveness.²²

Management and Innovation

Management is the Fulcrum

Edward Deming²³ describes the concept that management is the main reason for the success or failure of an organization. He determined that all business processes in an organization are subject to problems through statistical variations, and that management is responsible for 85 percent of that variation. He later increased the effect of management on the difficulties in an organization and the potential for improvement to 94 percent.²⁴ That variation essentially means that the basic problems of an organization are caused by management policies, decisions and positions. Deming's work focused on how to reduce those problems to improve quality.²⁵ The point of this concept is that management is the most significant factor in an organization's ability to be able to change to reduce fear and increase innovation.

Innovation and Management Decisions

Organizations that have a good innovation development process to identify, adopt, and implement innovations as a normal part of business are more robust and produce new products and services to remain competitive. Those organizations that do not have these capabilities tend to miss opportunities and have a more difficult time recovering from failures.²⁶ A problem can happen in innovative organizations that are initially successful. Management can rely on what they believe is a successful formula, which can prevent them from seeing an innovation that does not fit their formula.²⁷

A significant problem with radical innovation is that it often does not meet existing customers' requirements, or meet current management's expectations concerning market share or profitability.²⁸ An innovative idea may take time to develop, and/or it may need different business considerations, such as that the profitability may be lower or the market smaller at first. One example is the Apple Newton introduced in 1993. Even though it sold more than the first Apple computer, management did not believe it sold well enough. Against that management failure, Apple later took the time to redevelop the concept, even when the current fad was netbooks. They introduced the Apple iPad in 2010, which some negatively compared to the previously failed Newton. It has since rapidly become the technology that is altering the computer experience for many sectors of the population.²⁹ Unless management is willing to approach a radical innovation with a perspective that acknowledges that this innovation may be different from the existing market, management may miss a significant opportunity.³⁰

Most managers do not consciously work toward discouraging innovation. Management needs to make sound financial decisions concerning the resources and profit. The conflict arises when sound and logical business decisions do not take into account adopting radical innovations that could profit the organization even if it creatively destroys part of the existing market.³¹ The organization's process controls can be too restrictive to take advantage of opportunities because of profitability requirements, budget reviews requiring set percentages, funds that are already committed in planned budgets, or meeting current performance review standards.³² Mumford et al.³³ discusses studies that show other management controls that can reduce innovation, including establishing tight completion dates, tight financial controls, and rigid process controls that are typically focused on ensuring efficiency instead of innovation.

Managing Against Innovation

Discouraging Innovation

The point where an innovative idea is presented to management is critical for its adoption. An organization will see how management reacts to new concepts.³⁴ Innovation can be discouraged through management behaviors. These behaviors can range from things such as not listening seriously to new ideas and facial reactions that communicate disapproval, all the way to review processes that do not appear to accept anything other than incremental innovation. Also, if management always seems to find flaws and potential problems, innovations will decline. People will not want to put forward an idea if it will be automatically discouraged, denied, or criticized.³⁵ Management discouragement can also occur from how management interacts with those under their supervision. Micro-management is one example of a lack of trust by an organization's leadership that de-motivates people and decreases innovations.³⁶

Risk taking is a necessary activity for innovative ideas to develop and mature and there will be failures. If management punishes failure and risk taking, it will significantly discourage creativity and innovation.³⁷ Management can state their encouragement for innovation, but it is the demonstration of acceptance for radical innovation that shows whether the support is truly there. People will only want to attempt something risky when there is little threat of significant negative consequences to their work or their career from a failure. Discouragement from management will quickly dry up innovations and force the organization to only focus on incremental innovations.³⁸

Fear of Failure

Deming³⁹ is well known for his fourteen points for improving management. One important point concerns his focus on driving out fear. It is the fear of management's negative reaction to failures that keeps people from bringing up new ideas or pointing out potential problems that could benefit from innovation. Fear will also keep people from admitting to failures that may cost the organization, or withhold a radical innovation that can mean developing a significant new market.⁴⁰ It is this fear of failure that management must fight throughout the entire organization. Management's reaction to failure determines whether fear will be a major inhibitor of innovation; this fear can be present at all levels of the organization.⁴¹ Management itself may be afraid to accept and implement innovations for fear that they will fail. When management does not accept failures as part of the innovation process, the fear of failure will cause the

organization to focus on incremental innovations that are safer and have less risk. The more radical innovations that can change the industry will be avoided because of fear.⁴²

Innovation Failures

Any creative process is not one of straightforward discovery and can include missteps and a wandering search for innovative solutions.⁴³ When only the general end goal is known, and the path to reach that goal has not been determined, it is just like exploring a maze. There will be lots of choices and dead ends that will not lead to the correct goal. There may even be a few paths that will reach the goal, but not be the best route.⁴⁴ Management needs to understand that not all innovations will succeed and not all implemented concepts will be profitable and thus there is an inherent risk.⁴⁵ Management needs to accept the risks inherent in innovation development. Even when everything is done in a reasoned business process, there will still be failures as a normal and acceptable part of innovation development. Without that acceptance, the fear of failure will inhibit the creation of innovative ideas and the attempts to make risk-laden innovative ideas a reality.⁴⁶

Admitting Failure

One example for handling the problem with failure comes from Video Arts, a consulting company focused on improving business practices, in a presentation by John Cleese⁴⁷ where he describes the value of accepting mistakes. The essence of the concept is that a guided missile must repeatedly receive input on its performance and make adjustments to its trajectory to be able to hit the target. In the business context, if no one admits to mistakes, there will be no corrections and the objective will be missed. If the mistake is only found out at the end, there will typically not be enough time to fix the problem. Thus, admitting to a small mistake, with management accepting these mistakes as a normal part of determining the best course for the business, is far superior. If everyone in the organization is afraid to admit failures when they are smaller, then there will be few corrections until the problem is much worse, and a far higher likelihood that the objective will not be reached.

Accepting Risk

Experimentation can be essential to innovation, but may result in failures. The ability to accept risks when exploring new ideas and trying to develop them into marketable concepts can be a valuable management trait. The optimum situation is for management to have a well-defined innovation development process that includes failures as an accepted part of business.⁴⁸ There are many examples of products that failed to meet management expectations for the current marketplace, but then quickly improved to the point where they became the dominant technology. The personal computers developed by Apple and IBM were not products for their existing customers that needed serious computing power. In fact, major electronics and computer companies did not want to produce the first personal computers because they did not see a market for such a product. Apple and IBM managements were willing to take the risk to develop a new product and a new market.⁴⁹

Innovations can be wasteful with experimentation and failures, but they can also lead to learning and new directions.⁵⁰ Drucker⁵¹ explained that failures could allow an organization to glean

information about why it failed and from that knowledge develop an innovative perspective that could change the marketplace. His example is the well-known failure of the Edsel, which was highly researched and planned according to the market assumptions throughout the auto industry at the time. That failure forced management to examine why the product had failed and discover a new market paradigm that was very successful, with the Thunderbird and Mustang. That failure analysis was the key to finding success through innovation.

Managing For Innovation

Encouraging Innovation

The process to discover new concepts and turn them into successful innovations relies on individuals. To be creative and innovative, people need to have the opportunity to work through ideas, combine disparate concepts, and have some time to recombine them into new ideas and innovations. Too much time pressure can reduce creativity innovation, but so can too much time. Management must be able to balance the need to take the time to define the problem, and the need to meet schedules. The ability to take the time can be a challenge with the pace of innovation, so it requires a structure to keep the process from taking too long.⁵²

Creative people need an interesting challenge, the freedom to do the work in the most efficacious manner, the necessary resources, and supervisory encouragement, which includes recognition of the effort involved.⁵³ Leadership needs to encourage creative people and support their innovations. The leadership sets the climate for the organization and there are some identified characteristics for encouraging creativity, including building trust, allowing risk taking, establishing challenges, and encouraging open communications.⁵⁴

Leading Innovation

Management has a direct impact on the overall organizational climate, which influences those creating innovation. Creativity and innovation in an organization can be directly affected by all levels of leadership, but they are most directly affected by the immediate supervisor.⁵⁵ A supportive environment created by management can encourage creativity and innovation.⁵⁶ When the organization has a culture of collaborating and exchanging ideas, as well as receiving expert and creative management feedback on the ideas under development, it can be more innovative.⁵⁷ Management decisions concerning the strategy, policies, operations, goals, and more, if done with innovation at the core, can work to reduce fear and increase the acceptance of risk within the organization.⁵⁸

The leadership must establish a clear vision for the future and how innovation works with the strategy to fulfill that vision. The leadership must demonstrate their commitment through their behavior, including providing the necessary resources, structures, processes, and rewards. They must also communicate their positive focus on innovation to help reduce fear, especially concerning more radical concepts.^{59, 60}

Management creates the structures that can encourage innovation, which may include an objective group to determine the merits, feasibility, and adoption of decisions. Having an independent group can help reduce problems of personality generated management decisions and

can help provide a more balanced approach to move innovation from idea to implementation, which can help manage the risk and reduce fear. It also makes the decisions to move forward an organizational decision so that the risk is spread and those spearheading a particular course of action do not become scapegoats if it fails, which can also reduce fear.⁶¹

Champions

Champions can have a significant positive influence on the acceptance and development of an innovative idea. They can help overcome resistance, especially from other members of management, help to secure resources, and be a significant factor toward success. When an idea is first introduced it has to overcome the natural tendency to resist anything that goes against the status quo. A champion can help to reduce the fear of failure in addition to reducing the lack of resources. The more radical an innovation, or the more significant the change, the more it needs this advocacy.^{62,63} Also, the more uncertain the outcome of the innovation and its impact, the more a champion is needed to assist in the adoption and implementation of that innovation.⁶⁴ One significant characteristic of champions that needs to be emphasized is their willingness to take a risk on an innovation, and to put their efforts behind encouraging and promoting it so it has a better opportunity for success.⁶⁵

Conclusion

Management today faces a difficult situation where innovations are increasing competition, which means they need to find ways to increase innovation development within the organization. Incremental innovations are essential for improving existing products and services and for making operations more efficient. Radical innovations, which can change the market significantly, are essential and management must find ways to increase them within the organization before another organization creatively destroys the existing market. Radical innovations have more risk, which can increase the fear of failure. Management must reduce the fear of failure, which can hinder people from discovering and bringing innovations to the attention of management. Since good business processes will have failures, management must change those failures from a source of fear and punishment into a learning tool to improve innovation. Once new ideas are encouraged, they can work through an innovation development process to find the most effectual innovations. The leadership needs to determine the best methods for encouraging the discovery, adoption, and implementation of innovations. Ensuring that there is a solid vision for how innovation is a significant part of an organization's strategy, building a structure that facilitates innovation, and having the leaders of innovation development have the requisite expertise to manage the effort effectively are essential. Encouraging champions to help overcome the inherent resistance to achieving successful innovations is a good tool. Even though it can be counterproductive to an efficient operation and cost the organization time and money, radical innovation development is the best way to introduce the significantly different products and services that will improve competitiveness in the marketplace.

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¹ Amabile, T. M. (1998). How to kill creativity. *Harvard Business Review*, 76(5), 76-87.

² Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, 15(1), 5-32.

³ Desouza, K. C., Dombrowski, C., Awazu, Y., Baloh, P., Papagari, S., Jha, S., & Kim, J. (2009). Crafting organizational innovation processes. *Innovation: Management, Policy & Practice*, 11(1), 6-33.

⁴ Kurzweil, R. (2005). *The singularity is near: When humans transcend biology*. New York: Viking Penguin. Kindle Edition.

⁵ Christensen, C. M. (1997). *The innovator's dilemma: When new technologies cause great firms to fail*. Boston: Harvard Business School Press. (p. 14-24).

⁶ Tushman, M. L. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, 38(4), 8-30.

⁷ Mumford, D. M., Hunter, S. T., Eubanks, D. L., Bedell, K. E., & Murphy, S. T. (2007). Developing leaders for creative efforts: A domain-based approach to leadership development. *Human Resource Management Review*, 17(4), 402-417.

⁸ Desouza, Dombrowski, Awazu, Baloh, Papagari, Jha, & Kim (2009).

⁹ Kurzweil (2005).

¹⁰ Christensen (1997).

¹¹ Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154-1184.

¹² Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The Leadership Quarterly*, 13(6), 705-750.

¹³ Schumpeter, J. A. (1943/2010). *Capitalism, socialism, and democracy*. New York: Routledge. Kindle Edition.

¹⁴ Christensen (1997).

¹⁵ Duboff, R. S. (2008). Share the dialogue. *Marketing Management*, 17(2), 26-30.

¹⁶ Haney, M., & Mahoney, J. (2010). Testing the goods: The new MacBook airs. *Popular Science*. Retrieved from <http://www.popsoci.com/gadgets/article/2010-11/testing-goods-new-macbook-airs>

¹⁷ Nijssen, E. J. (2005). Unraveling willingness to cannibalize: A closer look at the barrier to radical innovation. *Technovation*, 25(12), 1400-1409.

¹⁸ Pietersen, W. (2002). The Mark Twain dilemma: The theory and practice of change leadership. *Journal of Business Strategy*, 23(5), 32-37.

¹⁹ Benner, M. J., & Tushman, M. L. (2003). Exploitation, exploration, and process management: The productivity dilemma. *Academy of Management Review*, 28(2), 238-256.

²⁰ Adler, P. S., Benner, M., Brunner, D. J., MacDuffie, J. P., Osono, E., Staats, B. R., Takeuchi, H., Tushman, M. L., & Winter, S. G. (2009). Perspectives on the productivity dilemma. *Journal of Operations Management*, 27(2), 99-113.

²¹ Potts, J. (2009). The innovation deficit in public service: The curious problem of too much efficiency and not enough waste and failure. *Innovation: Management, Policy & Practice*, 11(1), 34-43.

²² Tushman (1996).

²³ Deming, W. E. (2010). *Out of the Crisis*. Cambridge, MA: The MIT Press. (p. 314-318).

²⁴ Deming, W. E. (2002). Chapter 6. In J. Beckford, (Ed.). *Quality: A critical introduction* (p. 65-83). London: Routledge.

²⁵ Deming, W. E. (2008). Quoted in *Guide to management ideas & gurus* by T. Hindle. New York: Bloomsberg Press. (p. 233-234).

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- ²⁶ Desouza, Dombrowski, Awazu, Baloh, Papagari, Jha, & Kim (2009).
- ²⁷ Tushman, M., & Nadler, D. (1986). Organizing for innovation. *California Management Review*, 28(3), 74-92.
- ²⁸ Christensen (1997).
- ²⁹ Bower, J. L., & Christensen, C. M. (1995). Disruptive technologies: Catching the wave. *Harvard Business Review*, 73(1), 43-53. Furfie, B. (2010). Is the iPad a game changer? Will Apple's iPad be the 'game changer' to realize the tablet computer's potential, or will it join the 'Newton' graveyard? *Engineering & Technology*, 5(4), 34-35. DOI:10.1049/et.2010.0406. Carr, D. F. (2011). Gartner sees iPads as transformational. *Information Week*. Retrieved from <http://www.informationweek.com/news/personal-tech/tablets/229402925?queryText=gartner+sees+iPads+as+transformational>
- ³⁰ Kanter, R. M. (2006). Innovation: The classic traps. *Harvard Business Review*, 84(11), 72-83.
- ³¹ Amabile (1998).
- ³² Kanter (2006).
- ³³ Mumford, Scott, Gaddis, & Strange (2002).
- ³⁴ Delbecq, A. L., & Mills, P. K. (1985). Managerial practices that enhance innovation. *Organizational Dynamics*, 14(1), 24-34.
- ³⁵ Amabile (1998).
- ³⁶ Amabile, Schatzel, Moneta, & Kramer (2004).
- ³⁷ Mumford, Scott, Gaddis, & Strange (2002).
- ³⁸ Amabile (1998).
- ³⁹ Deming (2010).
- ⁴⁰ Deming, W. E. (1985). Transformation of western style of management. *Interfaces*, 15(3), 6-11.
- ⁴¹ Amabile, T. M. (2008). Creativity and the role of the leader. *Harvard Business Review*, 86(10), 100-109.
- ⁴² Mumford, Scott, Gaddis, & Strange (2002).
- ⁴³ Mumford, M. D., & Licuanan, B. (2004). Leading for innovation: Conclusions, issues, and directions. *The Leadership Quarterly*, 15(1), 163-171.
- ⁴⁴ Amabile (1998).
- ⁴⁵ Nijssen (2005).
- ⁴⁶ Amabile (1998).
- ⁴⁷ Cleese, J. (1982). *The importance of making mistakes: Adventures of Gordon the guided missile* [Motion picture]. (Available from Video Arts, Elsinore House, 77 Fulham Palace Road, Hammersmith, London, W6 8JA, www.videoarts.com). Retrieved from <http://www.johncleesetraining.com/index.php/Program/Title/The-Importance-of-Mistakes-Customer-Service-Training/Item/150>
- ⁴⁸ Desouza, Dombrowski, Awazu, Baloh, Papagari, Jha, & Kim (2009).
- ⁴⁹ Bower & Christensen (1995).
- ⁵⁰ Potts (2009).
- ⁵¹ Drucker, P. F. (1985). *Innovation and entrepreneurship: Practice and principles*. New York: Harper & Row (p. 50-52).
- ⁵² Mumford, M. D. (2000). Managing creative people: Strategies and tactics for innovation. *Human Resource Management Review*, 10(3), 313-351.
- ⁵³ Amabile (1998).
- ⁵⁴ Mumford, Scott, Gaddis, & Strange (2002).
- ⁵⁵ Amabile, Schatzel, Moneta, & Kramer (2004).
- ⁵⁶ Amabile, Conti, Coon, Lazenby, & Herron (1996).
- ⁵⁷ Mumford, Hunter, Eubanks, Bedell, & Murphy (2007).
- ⁵⁸ Mumford, Scott, Gaddis, & Strange (2002).
- ⁵⁹ Tushman & Nadler (1986).
- ⁶⁰ Mumford & Licuanan (2004).
- ⁶¹ Delbecq & Mills (1985).
- ⁶² Desouza, Dombrowski, Awazu, Baloh, Papagari, Jha, & Kim (2009) .
- ⁶³ Nijssen (2005).
- ⁶⁴ Shane, S., Venkataraman, S., & MacMillan, I. (1995). Cultural differences in innovation championing strategies. *Journal of Management*, 21(5), 931-952.
- ⁶⁵ Howell, J. M., & Higgins, C. A. (1990). Champions of technological innovation. *Administrative Science Quarterly*, 35, 317-341.