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## **Defining Organizational Culture for Entrepreneurs**

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**Abstract**

It appears that innovation, and how an organization can acquire it, is the key to being competitive in the New Product Development (NPD) marketplace. Knowledge that leads to innovation in products, unlike specialized scientific knowledge areas (for which there are designated labor markets to exploit the needed skills), is not home grown, is not the focus of any curriculums in our educational institutions, and is not associated with our typical project management processes. An organization must make a deliberate, on-going effort to develop innovation. If organizations can capture lessons learn from NPD experiences, and develop the characteristics that make the NPD projects successful, then the whole organization will have a better competitive posture. Organizations must have senior management that set clear goals and encourage employees to participate in the decision making to be successful on NPD projects. Since all decisions in traditional organizations are made by managers without the input of their employees, it becomes evident why traditional management approaches are not successful on NPD projects, which must be a collaborative effort. To encourage organizational innovation, NPD project success factors such as maintaining effective supplier relationships, tracking the location and capabilities of innovation clusters, maintaining collaboration between marketing and engineering teams, and implementing a progressive organizational structure, should be implemented.

## Contents

Traditional Management Techniques are not Effective for Product Development .....	4
Factors that Contribute to Product Development Success.....	5
Profiling Success through Human Collaboration and Organizational Culture .....	6
The Role of Entrepreneurship in Organizational Culture.....	7
Overcoming New Product Development Project Obstacles .....	8
Summary and Conclusions .....	8

## Defining Organizational Culture for Entrepreneurs

### Traditional Management Techniques are not Effective for Product Development

Traditional PM techniques have not worked well on new product development (NPD) projects (Belassi, Kondra & Tukel, 2007). Clancy and Stone (2005) found that consumer product projects in the United States failed 95 percent of the time. Although alarming at first, this is not that surprising when one considers the requirements imposed on new products, such as: the need for innovation, timing to market, collaboration of cross functional teams and cost competitiveness. New products can span across several technology areas and have a global focus that tends to reduce market segmentation and diminish the ability to leverage local opportunity knowledge. Globalization increases pressure to keep costs down since competitors can leverage cheap labor costs in other areas of the world. Greater domestic and global competition means constant pressure to be better, faster, and cheaper. The continuous development of new technologies means even if a NPD project results in a successful product run, it will be of limited duration, and will have to be constantly improved while in production. Existing products are also vulnerable to changing consumer needs and tastes. Function mapping of product capabilities to consumer needs can identify capability gaps, but tracking of competitor core capabilities and technology benchmarking is mandatory to ensure products are not developed that become obsolete by new technologies introduced by competitors.

As challenging as the NPD project is, the typical industry solution to the problem is to use the same project management processes that are only moderately successful on non-NPD projects. Traditional project organizations communicate vertically through classical levels of management. As information travels through the various levels of management to senior managers, it gets deceptively manipulated. In addition to slowing down decision making, such a centralized communications approach is also vulnerable to producing poor or politically based decisions as successive layers of management filter the real issues in the information they pass up the management chain to protect their standing.

Traditional management practices developed for the industrial age of assembly-line requirements are being taught to present day project managers. Management by objectives, quotas, incentive pay, strategic business plans, put together separately, independently, in a vacuum, division by division, result in a disjointed stove pipe management approach that is not adaptable enough to handle

NPD challenges. Independently and collectively, organizational managers do not have the requisite understanding of their core competency areas, upcoming technologies or local opportunity knowledge to successfully develop new products. There is an aspect of entrepreneurship that is missing.

### **Factors that Contribute to Product Development Success**

To understand why NPD projects have such an alarming failure rate, consider what it takes to sell a product. Madique and Zirger (1984) identified factors that contribute to success in new product marketing in the electronics industry. First, a deep understanding of the consumer's needs is required to successfully market a product. Linking the product's features to consumer need would logically improve sales of any product. Second, a high performance to cost ratio of a product that has needed features will increase the value of the product to the consumer and make it difficult for them not to buy it. Third, being an early entrant into the market with a product incorporating desirable features and high performance to cost characteristics will, because of the reduced competition, improve sales significantly. Fourth, large amounts of marketing expenditures will improve sales, but cannot be made to the point where the products contribution margin decreases significantly and profits are diminished. Finally, greater cross-functional teamwork among research and development (R&D), engineering, manufacturing, and marketing teams from beginning of the product development will help ensure a successful product. These factors require a human interaction and collaboration at a level most traditional management approaches fail to achieve.

Peters and Waterman (1988) established the importance of enthusiasm, energy, humanity and spontaneity to offset the traditional "plan-the-error-out-of-it" management approach. In their seminal book, *In Search of Excellence*, they studied 47 of America's most successful companies and identified eight common characteristics they exhibited. All the characteristics revolved around people, customers, and action. The list included, among others, a bias for action, close customer relations said to encourage learning from the people served by the business, and autonomy and entrepreneurship. Pfeffer and Viega (1999) identified practices such as sharing information, careful hiring, and employing self-managed work teams as behaviors that reflected successful organizational cultures. Again, the factors require human collaboration that has not been taught in traditional project management curriculums or in actual on-the-job experiences.

## Profiling Success through Human Collaboration and Organizational Culture

Organizational culture has been defined by Pascale and Athos (1982) as the philosophy that guides an organization's policies toward employees and/or customers. The author prefers to think organizational culture is related to how a manager acts when they lead. While differences in national culture have been found to not influence NPD project success (Lynn, 2002), the positive effect of organizational culture on the performance of NPD projects has been demonstrated "by profiling successful innovative organizations" (Belassi et al, 2007, p. 22). To support their contention that organizational culture influences NPD project success, Belassi et al. (2007) did a survey of existing research with respect to "strategic-level variables" that have been found to impact the success of NPD projects, and then noted that each one of the factors, one by one, could be positively influenced by organizational culture (p. 13, 20-21). Having good relationships with suppliers, for example, allows getting them involved early in the product development process and can result in "innovative products, faster product development, and lower developmental costs" (Belassi, et al (2007, p. 20). Focusing on why organizations maintain close supplier relationships can be enlightening. Since time is so critical due to short product development schedules, having a continuous relationship with key suppliers means the project manager can move out quickly when a new effort begins. Disclosure Agreements can already be in place, relationships are in place and on-going, and there is an awareness of the supplier's products and capabilities. All of which speed up the new product development process. By constantly meeting with suppliers and assessing the products they are offering, and that will be rolling out in the future, the project manager is building a better knowledge base for developing the design solution on their next project. The relationship between R&D and marketing teams is another example of a strategic variable influencing NPD success that is said to be a function of organizational culture. By collaborating with marketing teams early on, researchers can ensure the new capabilities they are developing will have the feature set necessary to generate sales. This is another example of human collaboration that is not required, at least to the same level or extent, in non-NPD projects. An organization's structure is another example of a factor influencing NPD project success that is a function of organizational culture. As previously mentioned, traditional organizations relying on vertical communications through the management structure have to deal with a communication barrier that will slow them down when compared to competitors with a progressive organization communicating within a flat structure where employees have better access to managers.

In conclusion, project teams that wish to successfully develop new products must embrace an organizational culture that supports “a positive work environment with strong management leadership” (Belassi, et al, 2007, p. 22). Simply said, if an organization’s culture does not encourage innovation, then the organization is not likely to have it. This explains the phenomenon of why corporate leaders are “increasingly interested in actively managing corporate culture” (Belassi, et al., 2007, p. 14). Essentially, they are taking a crash course on how to get their organizations to have the human collaboration skills required to adopt the NPD project success factors described above.

## **The Role of Entrepreneurship in Organizational Culture**

Entrepreneurial orientation is not only conducive to the success of NPD projects, it is essential for instilling innovation in how a team solves problems. Entrepreneurs discover and exploit profit opportunities in different ways, ranging from buying and selling goods at a profit, to complex activities involving creation of new products or services. If an entrepreneur notices that they can buy raw materials on the cheap at one location and gain a competitive advantage when they improve the goods, by converting them into a product for sale at another location, then they will feel compelled to exploit the local opportunity knowledge. According to Andersson (2005), there is a spacial positioning of entrepreneurs due to alertness of profit opportunities which is dependent on location. Spacial relationships therefore link locations with knowledge about profit opportunities. Each location is said to have a “unique agglomeration of knowledge” (Andersson, 2005, p. 23) associated with it. In practical terms, this means entrepreneurs can track the spacial positioning of centers of innovation, such as Silicon Valley, as an example, where special skills and capabilities can be leveraged to manufacture information technology products and increase their alertness to profit opportunities. The essential aspect of the profit opportunity is merely an awareness of where these product innovation clusters exist, and the current levels of capabilities that exist there. By understanding the current state of the art in product manufacturing in their core competency market areas, the entrepreneur is primed to recognize new consumer needs and correlate those to potential product features which are mapped to innovation clusters/locations that have a competitive advantage relative to developing the new products.



## Overcoming New Product Development Project Obstacles

Remembering the factors that researchers have identified to help NPD projects be successful, it can now be demonstrated why they contribute to NPD successes. Factors like: where the innovation clusters are, relationships with suppliers, relationships between marketing teams (that are knowledgeable about the product features customers desire), and engineering teams (with the knowledge of how to provide the features), etc., all tend to give the organization competitive advantage because they make it alert to potential opportunities. They allow managers to stay knowledgeable and up-to-date with available product technologies. Notwithstanding the competitive advantage, there are still a number of obstacles to overcome regarding NPD projects even for innovative organizations. NPD projects have tremendous cost pressure to maintain profitability margins high enough so they meet investment criteria for the organization. Due to the complexity involved, cross functional teams are typically required to develop new and innovative products. When the obstacles a NPD project must overcome are compared to a non-product development project, which are typically focused on construction of facilities or structures, or the acquisition of composite systems comprised of commercial-off-the-shelf (COTS) products that do not require a large technology extension, it becomes evident just how difficult developing an innovative product solution can be. NPD projects have all the challenges of non-NPD projects, plus the additional burden of being innovative, alert to profit opportunities, constrained by cost and, in general, require mapping product features to the consumer's changing needs in a dynamic marketplace that is extremely competitive and, as a result, requires that the product's development lifecycle be short and sweet. It is now starting to seem amazing that even five percent of the NPD projects are successful.

## Summary and Conclusions

It appears that innovation, and how an organization can acquire it, is the key to being competitive in the NPD marketplace. Knowledge that leads to innovation in products, unlike specialized scientific knowledge areas for which there are designated labor markets to exploit the needed skills, is not home grown, is not the focus of any curriculums in our educational institutions, and is not associated with our typical project management processes. To develop it, therefore, an organization must make a deliberate, on-going effort. If an organization can capture lessons learned from the NPD experiences, and develop the characteristics that make the NPD projects successful, then the whole organization will have a better posture for the future.

Belassi, et al (2007) studied the effect of organizational culture on NPD project performance. A review of the factors necessary to be successful on NPD projects indicates the organization, to be commercially successful, must have a senior management that sets clear goals, and encourages employees to participate in the decision making. Since all decisions in traditional organizations are made by managers without the input of their employees, it becomes evident why traditional management approaches are not successful on NPD projects, which must be a collaborative effort. It is also clear that the role of organizational culture is paramount in developing new commercial products. The few companies that have effective organizational cultures have competitive advantage in terms of opportunity awareness to successfully develop new products.

To encourage organizational innovation, the NPD project success factors should be implemented, such as maintaining effective supplier relationships, tracking the location and capabilities of innovation clusters, maintaining collaboration between marketing and engineering teams, and implementing a progressive organizational structure.

## References

- Andersson, D. (2005, Summer). The spatial nature of entrepreneurship. *The Quarterly Journal of Austrian Economics*, 8(2), pp. 21-34.
- Belassi, W., Kondra, A. & O. Tukul (2007). New Product Development Projects: The Effects of Organizational Culture. *Project Management Journal*, 38(4), p. 12.
- Clancy, K. & Stone, R. (2005). Don't blame the metrics. *Harvard Business Review*, 83(6), pp. 26-28.
- Lynn, L. (2002). Engineers and engineering in the U.S. and Japan: A critical review of the literature and suggestions for a new research agenda. *IEEE Transactions on Engineering Management*, 49(1), pp.95-106.
- Maidique, M. & B. Zirger (1984, November). A Study of Success and Failure in Product Innovation: the Case of the U.S. Electronics Industry. *IEEE Transactions on Engineering Management*, pp. 192-203.
- Pascale, R. Athos, A. (1982). *The art of Japanese management: Applications for American executives*. New York: Simon & Schuster.
- Peters, T. & Waterman, R. (1988). *In search of excellence, Lessons from America's best run companies*. New York, NY: Warner Books, Inc.
- Pfeffer, J. & Viega, J. (1999). Putting people first for organizational success. *Academy of Management Executive*, 13 (2), pp. 37-48.