

## **Organizational culture and innovation: A literature review**

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**Keywords:** Creativity; Innovation; Management; Organizational culture.

**Abstract.** In the rapidly changing business environment of the 21<sup>st</sup> Century where change is fuelled by digital technology and increased competition, innovation has become the key to success and survival of any organization. However, organizational culture is the element that drives organizations and therefore developing an organizational culture which stimulates innovation and creativity, is a key and strategic option for strengthening the organization and making it more competitive. This paper reviews the literature on the organizational culture' dimensions which influence organizational innovation and creativity to provide an integrative understanding of the existing literature.

### **1. Introduction**

Organizational culture is a crucial issue that has a significant impact on innovation, an essential source of growth and development for each organization. In today's knowledge-based society, creativity is the basis of innovation.

In order to generate continuous and sustained value, organizations need to devise and implement an innovation culture which enables them to develop the capabilities required to compete successfully both now and in the future. No matter the organization's size or industry, a culture of innovation is essential to evolve and succeed in the era of globalization and the high demands of the dynamically changing business environment.

“One cannot be creative without learning what others know, but then one cannot be creative without becoming dissatisfied with that knowledge and rejecting it for a better way.” [1], the same thing applies to organizations where employees must have creative thinking to enhance the overall performance and provide better products or services, i.e., the organizations have to transform their organizational culture so that it has a pro-innovative character. According to [2], few studies have focused on the impact of culture on innovation and most of them have concentrated on some cultural characteristics, not on archetypes of culture values.

This research reviews the literature on the organizational culture' dimensions which influence organizational innovation to provide an integrative understanding of the existing literature.

## **2. Creativity and innovation**

Definitions of innovation found in the literature vary according to the level of analysis which is used. Some definitions are general and comprehensive, while others concentrate on particular innovations same as the implementation of an idea for a new product or service.

Reference [3], define innovation as “the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society”. Moreover [4], describe innovation as “implementing new ideas that create value”.

Reference [5], pointed out that the general meaning of innovation was viewed not only as improving the existing technologies, accelerating and seeking a breakthrough in current process technologies, but also as enhancing corporate management practices. Especially when facing a turbulent market, shorter product cycles, and radical price wars. Whereas [6], explains innovation as an idea, practice or object that is recognized to be new by a person or another unit of adoption.

There are four dimensions of innovation that are developed by [7]: product innovation, process innovation, marketing innovation, organizational innovation.

Another study was conducted by [8], explained the differences between creativity and innovation as follows: “Creativity is closely related to the development of new useful ideas, while innovation is the successful development of new ideas. Therefore, creativity will be the beginning phase of an innovation”.

Reference [9], identifies five factors that drive the need for creativity and innovation in organizations today: (1) superior long-term financial performance is associated with innovation; (2) customers are demanding innovation; (3) competitors are getting better at copying past innovations; (4) new technologies enable innovation; and (5) what used to work doesn't anymore.

## **3. Organizational culture**

The concept of organizational culture has brought a significant amount of research since the 1980s. Before the concept appears in the literature, the concept of organizational climate was popular in the management and organizational literature in the 1960s, and 1970s. The terms culture and climate were used mutually until the theory of organizational culture established itself as a distinctive field of research [10]. Reference [11], defines organizational culture as: values, beliefs, assumptions, myths, norms, and goals that are widely accepted in organizations.

As stated by [12], organizational culture is defined as “a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to

be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems”.

According to [13], organizational culture is the complex set of ideologies, commitments, traditions, and values that are shared all over the organization and that influence how the organization manages its total performance becoming a potential source of advantage, advance, and innovation.

In the article entitled “A Strong Market Culture Drives Organizational Performance and Success” [14] declared that a company’s culture impacts everything such a company does. It is the essence of what the company is really like, how it works, what it concentrates on, and how it deals with customers, workers, and shareholders. They further explained that between 1990 and 2007, more than 60 research studies covering around 7,619 companies and small business units in 26 countries have determined that market culture and business performance are strongly related. This positive correlation is recognized by more than 35 performance measures, including return on investment, revenue growth, customer retention, market share, new product sales, and employee performance.

#### **4. Studies on the effect of organizational culture on creativity and innovation**

Organizational culture is considered in the literature as one of the factors that can most stimulate innovative behavior among members of the organization. Since it influences employee behavior, it may lead them to accept innovation as a fundamental value of the organization and to feel more involved in the business [15].

Most companies have automatically innovation cultures in which various norms, values, assumptions, and beliefs all compete for influence over employees’ actual behavior. The dominant ones that win out finally form the culture. Innovation culture can be determined as a multi-dimensional context which involves the intention to be innovative, the infrastructure to maintain innovation, operational level behaviors necessary to influence a market and value orientation, and the environment to implement innovation [16]. According to [17], a principal determinant of innovation is culture. The hold of positive cultural characteristics equips the organization with essential ingredients to innovate. Active organizations can absorb innovation into the organizational culture and management processes of the organization. Culture has various elements which can serve to enhance or inhibit the tendency to innovate.

Reference [18], states that culture affects innovation because it shapes the models dealing with novelty, individual initiatives, collective actions, understandings and behaviors regarding risks as well as opportunities. Another study was conducted by [19], determined what type of organizational culture would support creativity and innovation in an organization. A new model was produced and compared with the theoretical model. Differences, similarities, and new perspectives developed. The factors trust relationship, working environment, management support, and customer orientation on operational level showed changes in emphasis in the new paradigm. The trust relationship, in particular, showed that trust demonstrates in openness and sincerity. Trust

impacted both employee support for change and the probability of successful change, which affect the level to which creativity and innovation are stimulated and supported. Their model was based on the work of [20], [21], which describe the organizational culture and the importance of leadership in creating an ideal organizational culture that influences organizational behavior.

The model developed by [21], to explain organizational culture was based on the work of Edgar Schein and forms on open systems theory. The systems approach offers a holistic approach but also highlights the interdependence between the different sub-systems and components in an organization. The organizational systems model describes the interaction between organizational subsystems (goals, structure, management, technology, and psycho-sociological).

Reference [22], classified and synthesized dimensions of organizational culture, including strategy, purposefulness, trust relationship, behavior that encourages innovations, working environment, customer orientation, and management support that influence creativity and innovation.

Based on the dimensions that define organizational culture, Reference [23], stated that there are five determinants of organizational culture. Hence, one of the essential causes of the general popularity and concerns about the study of organizational culture because the argument or assumption that assures organizational cultures lead to superior organizational performance.

In order to build an innovative culture, specific requirements must be met. First of all the ability of managers to take opportunities and risks, encouraging creativity, participation of all workers in creating innovation-oriented culture, allowing employees to develop their interests and employ their unique talents, developing the company's mission, which the employees will identify with; providing employees with a sense that their work is meaningful and has a positive impact on the achievement of objectives [24].

The results of [25], show significant positive relationships between three types of organizational culture (which are: adhocracy, the market, and the clan) and organizational innovativeness. While the hierarchy culture manifests a non-significant correlation with organizational innovativeness, besides, the adhocracy culture contributed most to predicting organizational innovativeness.

Another study was conducted by [26], aims to identify the determinants of organizational culture that have an impact on creativity and innovation. The determinants of organizational culture are also strategy, structure, support mechanisms, behavior that supports innovation and open communication. The research identified that the most influenced determinant is communication. The other following ranking goes with behavior that encourages innovation, strategy, structure and support mechanisms.

Reference [27], has identified seven key dimensions of culture that distinguish highly innovative organizations. These dimensions form a framework which leaders can use to evaluate and strengthen the culture for innovation

within and across organizations. These dimensions are relationships, risk-taking, resources, knowledge, goals, rewards, and tools.

Whereas [28], states that senior managers play a critical role in building an effective and sustainable innovation culture. Particularly regarding developing new products, the role of senior managers involves four main areas: leadership, flexibility, responsibility, and employee empowerment. A well implemented and maintained innovation culture ought to enable senior managers to excel in the mentioned areas and allow the firm itself to compete effectively by blending the present consumer needs in the market with process innovations which provide firms the capability to meet those consumer needs.

Moreover, [29], Analysis results support the belief that the essential feature of organizational culture which supports for innovation is the role and attitude demonstrated by senior managers and their willingness to monitoring the firm's progress in innovation-led activities. A significant finding from this research shows that decision-makers do not need to be overly concerned with keeping a loose corporate structure. A significant degree of bureaucracy linked to a strict structure does not indeed inhibit innovation. Actually, for large multinational companies with subsidiaries, an innovation culture can be formed despite the prevalence of a particular level of rigidity, bureaucracy and hierarchical organizational structure.

According to [30], the way in which communication channels are nurtured or restrained in organizations can be a potential source of assistance or an obstacle to innovation and creativity. For example, an employee in one business unit of an organization is looking for expertise to develop his idea further, and that expertise doesn't exist in his business unit. An organization that has strong organizational support would have mechanisms for recognizing where else inside or outside the organization he might find expertise. If the expertise existed in another business unit within the organization, he could contact employees in another business unit and would be likely to find a willingness to help.

## **5. Conclusion**

Organizational culture is considered in the literature as one of the factors that can most stimulate innovative behavior among members of the organization, and organizational creativity and innovation play an integral role in all organizations. Organizations that need to be innovative have to transform their organizational culture so that it has pro-innovative character. And that can be found in the work of [25], the researchers state that creativity, innovation, and inventiveness are crucial for the survival and success of today's knowledge-based organization. Moreover, the research illustrates the five determinants of organizational culture that support innovation and creativity. These are strategy, structure, support mechanisms, behavior that encourage innovation and communication.

Nowadays boosting creative organizational can be gained by creating a creative environment that had some unique characteristics like thought-provoking decor and comfortable furniture. Moreover, successful leaders can drive innovation by inspiring and sustaining their employees in ways that promote innovation.

In summary besides the mentioned factors in the literature: goals, resources, and relationships are the main Dimensions of organizational culture that support creativity and innovation.

## References

- [1] M. Csikszentmihalyi: Creativity (Harper Collins, New York 1996).
- [2] J. C. Naranjo-Valencia, D. Jiménez-Jiménez, and R. Sanz-Valle: Innovation or imitation? The role of organizational culture. *Management Decision*. Vol. 49 No. 1(2011), p. 55-72
- [3] J. L. Farr, and M. A. West: Innovation and creativity at work: Psychological and organizational strategies (Ed. Wiley, 1990).
- [4] J. C. Linder, S. Jarvenpaa, and T. H. Davenport: Toward an innovation sourcing strategy. *MIT Sloan Management Review*. Vol. 44 No. 4(2003), pp. 43
- [5] J. A. Johannessen, B. Olsen, and G. T. Lumpkin: Innovation as newness: what is new, how new, and new to whom?. *European Journal of innovation management*. Vol. 4 No.1 (2001), p. 20-31
- [6] E. M. Rogers: Diffusion of Innovations (4th ed, ACM The Free Press, New York 1995), p. 15-23
- [7] G. Gunday, G. Ulusoy, K. Kilic, and L. Alpkhan: Effects of innovation types on firm performance. *International Journal of production economics*. Vol. 133 No. 2 (2011), p. 662-676
- [8] T. Ismail: Culture control, capability and performance: evidence from creative industries in Indonesia. *Asian Review of Accounting*. Vol. 24 No. 2(2016), p. 171-184
- [9] D. J. Pesut: Creativity and innovation: Thought and action. *Creative nursing*. Vol. 19 No. 3(2013), p. 113-121
- [10] G. Hofstede: Culture's consequences: Comparing values, behaviors, institutions and organizations across nations. (Sage publications 2001).
- [11] W. L. French: Human Resources Management (2nd ed. Houghtom Mifflin 1990).
- [12] E. H. Schein: Organizational culture and leadership (John Willey & Sons Inc, San Francisco 2004).
- [13] A. Poskien: Organizational culture and innovations. *Engineering economics*. Vol. 46 No 1(2006), p. 45-50
- [14] S. Gallagher, C. Brown, and L. Brown: A strong market culture drives organizational performance and success. *Employment Relations Today*. Vol. 35 No. 1(2008), p. 25-31

- [15] A. Hartmann: The role of organizational culture in motivating innovative behaviour in construction firms. *Construction innovation.* Vol. 6 No. 3(2006), p. 159-172
- [16] C. B. Dobni: Measuring innovation culture in organizations: The development of a generalized innovation culture construct using exploratory factor analysis. *European Journal of Innovation Management.* Vol. 11 No. 4 (2008), p. 539-559.
- [17] P. K. Ahmed: Culture and climate for innovation. *European journal of innovation management.* Vol. 1 No.1 (1998), p. 30-43
- [18] A. Kaasa, and M. Vadi: How does culture contribute to innovation? Evidence from European countries. *Economics of innovation and new technology.* Vol. 19 No. 7 (2010), p. 583-604
- [19] E. Martins, and N. Martins: An organisational culture model to promote creativity and innovation. *SA Journal of Industrial Psychology.* Vol. 28 No. 4 (2002), p. 58-65
- [20] N. Martins: Elandsrand Goldmine: organisational culture survey. (Johannesburg, report, unpublished 1997).
- [21] N. Martins: Organisasiekultuur in “n finansiële instelling.” (D. Philproefskrif), Pretoria: University of Pretoria.Unpublished, 1989.
- [22] E. C. Martins, and F. Terblance: The influence of organizational culture on creativity and innovation in a university library, (MLnf dissertation, University of South Africa, Pretoria 2000).
- [23] E. C. Martins, and F. Terblanche: Building organisational culture that stimulates creativity and innovation. *European journal of innovation management.* Vol. 6 No. 1 (2003), p. 64-74
- [24] E. Claver, , J. Llopis, , D. Garcia, and H. Molina: Organizational culture for innovation and new technological behavior. *The Journal of High Technology Management Research.* Vol. 9 No. 1 (1998), p. 55-68
- [25] G. Ashraf, S. A. Kadir, Z. A. L. Pihie, and A. M. Rashid: Relationship Between Organizational Culture and Organizational Innovativeness in Private Universities in Iran. *World Applied Sciences Journal.* Vol. 22 No. 6 (2013), p. 882-885
- [26] O. Aman, N. A. Binti Rahman, A. Feisal, and A. Ismail: The determinants of organisational culture that influence creativity and innovation. *2nd International Conference on Management Proceedings* (2012), pp. 11-12
- [27] L. MAHER: Building a culture for innovation: A leadership challenge. *HMA.* Vol. 50 (2014), p. 14

- [28] M. Zairi, and M. Al - Mashari: Developing a sustainable culture of innovation management: A prescriptive approach. *Knowledge and Process Management*. Vol. 12 No. 3 (2005), p. 190-202
- [29] I. S. I. D. R. E. March-Chorda, and J. E. F. F. Moser: How organisational culture affects innovation in large sized ict firms: a pilot study. *Recuperado el*, Vol 30 (2008)
- [30] L. D. McLean: Organizational culture's influence on creativity and innovation: A review of the literature and implications for human resource development. *Advances in developing human resources*. Vol. 7 No. 2 (2005), p. 226-246