Organizational culture oriented for innovation: Influencing variables

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Abstract: In order to lead employees to collectively innovate and thereby achieve business entrepreneurship, managers should project cultural values and implement them through appropriate human resource practices that affect the psychological cognition of employees. If they do it, the perceived organizational support of employees in relation to organizational behaviour-oriented innovation will increase. Human resource practices to support a culture of creativity and innovation of employees are essential for the company to achieve success and develop a sustainable competitive advantage. The aim of this paper is to identify the variables inherent in organizational culture capable of enhancing an organizational culture of innovation. It is believed that the ability of innovation can be learned and trained in the organization while diffusing cultural values, based on human resources management practices, capable of supporting an organizational behaviour by employees, oriented to innovation. The methods used in this article are analysis and synthesis, and methods of induction and deduction.

Key words: organizational culture, innovation, human resources management practices, success and competitive advantage

1. Introduction

It is recognized that competitive advantage can be achieved through a workforce of high quality that enables organizations to compete on quality and innovation. 'Innovation is the basis of all competitive advantage: the means by which organizations anticipate and fill customer needs, the method by which organizations utilize technology' (Schumann et al., 1994, quoted by Gudmundson et al., 2003, p. 1). Innovation has played and continues to play an increasingly crucial role in determining organizational success as a guiding performance and competitive advantage (Leskovar-Spacapan and Bastic, 2007). The Schumpeterian view of innovation focuses on how a company manages its resources over time and develops skills that influence their innovation performance. And innovation has been considered vital for all companies to grow and survive (Craig and Moores, 2006). Innovation is

Correspondence to: Elsa Barbosa Polytechnic Institute of Beja School of Technology and Management Rua Pedro Soares s/n Beja 7800-295, Portugal Tel.: +351 284 31 15 40 E-mail: elsa.barbosa@ipbeja.pt a key means by which an organization can achieve sustainable growth. The importance of innovation for competitiveness, productivity and profit factor is well documented in literature (Leskovar-Spacapan and Bastic, 2007).

It is an essential issue for many theorists and managers: if a company needs to develop its organizational culture and distinctive capabilities to be beneficial for its long-term development, what kind of organizational culture and distinctive capabilities can affect performance and competitive advantage of a company?

The aim of this paper is to identify the variables that contribute to the formulation of an organizational culture of innovation, namely which cultural values may be implicit in the practices of human resource management, able to lead the company employees to perceive that their organization adopts behaviours more stimulant for the development of innovation in the company.

We will carry on an analysis of literature that allows us to identify work done about which variables of organizational culture can influence the adoption of behaviours inducing innovation practices in companies, in particular, which cultural values underlie human resources management practices that contribute to the development of innovative behaviours.

2. Conceptualization of innovation

An increasing number of professionals and researchers define innovation as any idea, practice, or object that the individual or organization adopt and regard as new (Damanpour, 1991). Innovation has further been defined as 'the willingness to place strong emphasis on research and development, new products, new services, improved product lines, and general technological improvement in the industry' (Slevin and Covin, 1990, p. 43). Following the example of the Oslo Manual, innovation is defined as 'implemented technologically new products and processes and significant technological improvements in products and processes' (OECD, 1997, p. 31). Innovation is 'a process that begins with a new idea and concludes with market introduction' (Freeman and Engel, 2007, p. 94). Innovation is defined as 'implementing new ideas that create value'. This general description refers to various types of innovation, such as product development, implementing new process technologies and management practices.

Models that explain the process of innovation

Several innovation models attempt to explain the innovation process. The interactionist model of organizational creativity (developed by Woodman, Sawyer and Griffin), included various individual, group and organizational characteristics and portrayed their theoretical relationship to creativity. The model of individual innovation at work (developed by West and Farr) included characteristics that were intrinsic to the job, group factors, relationships at work, and organizational factors. The relationship between these variables and innovation was moderated by individual characteristics. The conceptual model of the innovation process (developed by Hauser) suggested that organizational culture plays a key role in the innovation process. All these models included variables that represent various dimensions of organizational culture (Gudmundson et al., 2003).

4. Conceptualization of organizational culture

Organizational culture has generated significant interest since 1980 (Deal and Kennedy, 1982). It is commonly defined as a set of values, norms and beliefs within a company. Hofstede (1991, p. 262) defines organizational culture as 'the collective programming of the mind which distinguishes the members of one organization from another.' Hence, the differences in culture between organizations are largely a function of practices of human resource management and how they are perceived by organization members.

At both personal and organizational level, we believe that organizational culture provides a competitive advantage and has a considerable effect on the development of the relationship between employee and manager (Çakar and Erturk, 2010).

It is suggested that organizational culture provides a basis for the system of management of the organization that is, management behaviour reinforces the principles of culture. Thus, managerial strategies and processes are derived from the organizational culture.

5. Organizational culture and innovation

The culture has a profound impact on the innovation of a company or an organization. Possession of positive cultural characteristics provides the organization with the necessary ingredients to innovate (Ahmed, 1998). Culture has several elements that may serve to enhance or inhibit the tendency to innovate.

Also, according to another recent research, there exists a strong positive relationship between participative management practices and innovative culture in small companies (Gudmundson et al., 2003). Wang, Guidice, Tansky and Wang (2010) also emphasize the critical role that a culture of innovation can play in improving the ability of a firm to innovate.

In a study that asked 800 executives in 20 countries what they believed to be the most significant barriers to innovation (IBM Global Business Services, 2006) a culture of not support was mentioned as one of the main barriers.

Studies of the relationship between organizational culture and innovation have typically focused on a culture of innovation, finding a direct and positive relationship with innovation. Few have investigated more specific dimensions of organizational culture in relation to organizational innovation. Researchers also argue that organizational culture does not produce innovation per se (Covin and Slevin, 1991). Resources, both financial and human, are needed to make it happen. These investments in resources that help foster innovation and lead to a better long-term performance are also scarce.

Organizational culture can encourage (or discourage) a variety of behaviours and decisions, including those related to innovation. As Kanter (2000) suggested, it is important that executives learn to use the culture of their organization to mobilize and motivate members to be creative and innovative when the objective is to create new products, concepts and services.

Successful innovation depends on cultural adaptation. Thus, companies that consider innovation a strategic priority should cultivate and nurture a culture of innovation inducing a priority because the lack of alignment reduces the probability of success.

6. Characteristics of organizational culture oriented for innovation

As Barney (1986) notes, it is difficult to change the culture unless that culture becomes a source of sustained competitive advantage. Thus, companies engage in developing economically valuable characteristics in their cultures, such as innovation or other important organizational objectives. Human resource practices related to employee training, team-based production systems, incentive-based rewards systems and autonomy of an employee are believed to be particularly effective in improving company's performance (Chandler et al., 2000). Also, if the organization's culture is consistent with the external environment—conditions of rapid environmental change—the performance of organization will be enhanced. According to Leskovar-Spacapan and Bastic (2007), open organizational cultures (competitive and entrepreneurial), strongly oriented to the market and innovativeness, have a positive effect on performance.

In addition, companies that usually have scarce resources, relatively immobile and not easily copied by competitors, strive to achieve superior profitability and sustain competitive advantage over a long period of time (Day, 1994). Dynamic environments lead to an adaptation facilitated by a less formal control, increasing decentralized decision-making (Gonzalez-Padron et al., 2008).

Culture reputed to be innovation-oriented is the one that values and promotes behaviours such as risk taking, change, experimentation, innovation, tolerance of uncertainty, and exploitation of opportunity (O'Reilly et al., 1991). Others also characterized an innovation-oriented culture as one in which a consistent, coherent and comprehensive presence of values and norms promotes the 'fresh' thinking and fast execution, which is reinforced by incentives, socialization, role modelling and local for sharing information (Wang et al., 2010).

Concepts related to organizational change, growth and innovation are common in almost all cultural backgrounds. Innovation is at the centre stage when the organization promotes risk-taking and an attitude for continuous improvement exists in these innovative organizations.

Culture of innovation is a major determinant of an innovative company. Hauser suggested that culture can be divided into three dimensions: content, structural aspects and their strength. 'These three dimensions and their interactions define the final function of the specific culture within an innovation process' (1998, p. 3).

Conceptually, companies with cultures of innovation and entrepreneurship are those who properly use the rewards and tolerate failure, and in which members share values such as openness to new ideas, creativity, change, continuous learning, autonomy, collaboration, flexibility and informal communication (Amabile, 1988; Covin and Slevin, 1991; Hurley and Hult, 1998). A study by Chandler et al. (2000) revealed that an innovation culture is the one where employees perceive that workloads are not excessive and that the support of management and reward systems of the organization are consistent with a commitment to innovation. And excessive work pressure inhibits creativity.

Employees without the time or resources to complete assigned tasks are less likely to exhibit innovative behaviour.

Likewise, Gudmundson et al. (2003) showed that innovation is positively affected by the level of organizational support and the degree of autonomy of workers. In terms of benefits, it was found that companies with high levels of innovation culture and management commitment have greater success in developing new products than those with low ratings. A culture

of innovation helps to overcome the challenging and tenuous requirements for both control and flexibility. In short, a culture rich in innovation is an important, if not essential, ingredient in the production of innovation.

Given the importance of organizational culture for innovation, management practices and human resources practices associated with a 'culture of innovation support' become a subject of research interest (Chandler et al., 2000).

The results of the study by Wang et al. (2010) indicate that firms with high orientation for the team were able to make better use of financial investments and human capital to produce innovations than firms with low orientation for the team. The impact of education on innovation is higher with low stability and high teamwork and innovation orientation. The culture emphasizing outcomes and stability leads to lower levels of innovation, regardless of financial and human resources invested. A culture that has a lot of orientation for the outcome may result in a limited number of innovations. By rewarding innovative ideas and behaviours, companies can also reduce the likelihood of their culture being perceived as highly outcome oriented.

Ogbonna and Harris (2000) examined the relationship between leadership style, organizational culture and performance and found a positive relationship between participative leadership and innovation culture and a negative relationship between bureaucratic culture and innovative culture. Also Claver, Llopis, Garcia and Molina (1998) supported the positive relationship between worker autonomy and innovation.

Neely et al. (2001, quoted by Leskovar-Spacapan and Bastic, 2007) found in their study that innovative firms had a strong culture, a clear sense of mission and purpose, a well thought out strategy and business philosophy of continuous improvement, driven by total customer satisfaction and total quality management. The characteristics of the best practices of innovation are: visionary leadership; enthusiastic champions of change; knowing customers; constantly introducing new and differentiated products and services; providing products and services that exceed customer expectations; unlocking the potential of people through good communication, teamwork and training; promoting organizational pyramid and creating a customer-focused culture. Creativity/ innovation is truly enhanced when the entire organization supports it. Structures in creative companies tend to be flexible, with few rules and regulations, slight job descriptions and high autonomy. Companies should adopt flat structures as these allow important decisions to be made at all levels. Leadership style also influences innovation (Amabile, 1998). There is a consensus that a democratic, participative leadership style is supportive to creativity, whereas autocratic styles tend to decrease it.

As Snell (1992) showed through several examples from the perspective of organizational culture, if employees perceive that they are working in a shared and mutually communicative environment, they feel positive support of the organization. This will lead them to improve their performance and to be proactive and innovate on their own initiative. Gerhart (2009) noted that management practices and organizational culture are the mirror of the national culture. Employees in an environment with human resource practices will perceive strong feelings of support from the organization to which they belong, which will motivate them to make more contributions on behalf of that organization.

When a company's culture emphasizes teamwork, financial investment in R&D (research and development) is more likely to be used effectively (and perhaps more efficiently), be-

cause the personnel involved in the innovation process is likely to enhance interpersonal communication and cooperation and as a result, provide a better innovation. Therefore, it is expected that team orientation will strengthen the relationship between spending on R&D and innovation (Wang et al., 2010).

In Table 1 we can see a synthesis of the different cultural values underlying human resources management practices, that could contribute to the development of innovative orientation behaviour by employees in companies and improving the companies performance, achieving success, and develop a sustainable competitive advantage.

Cultural values	Authors
Participative management practices Organizational support Autonomy of workers Management commitment	Gudmundson, Tower and Hartman (2003)
Cultural adaptation	Kanter (2000)
Employee training Team-based production systems Incentive-based rewards systems Autonomy of employee Rapid environmental change Workloads not excessive Support of management Reward systems Work pressure not excessive	Chandler, Keller and Lyon (2000)
Open organizational cultures Competitive and entrepreneurial Strongly oriented to the market and innovativeness	Leskovar-Spacapan and Bastic (2007)
Dynamic environments Less formal control Decentralized decision-making	Gonzalez-Padron, Hult and Calantone (2008)
Risk taking Change Experimentation Tolerance of uncertainty Exploitation of opportunity	O'Reilly, Chatman and Caldwell (1991)
'Fresh' thinking Fast execution Risk-taking Continuous improvement Education on innovation Low stability High teamwork Teamwork Financial investment in R&D (research and devel- opment) Interpersonal communication and cooperation Team orientation	Wang, Guidice, Tansky and Wang (2010)

Table 1. Organizational culture variables influencing innovation orientation

Cultural values	Authors
Resources, financial and human Rewards Tolerate failure Openness to new ideas Creativity Change Continuous learning Autonomy Collaboration Flexibility Informal communication	Covin and Slevin (1991); Hurley and Hult (1998)
Participative leadership	Ogbonna and Harris (2000)
Worker autonomy	Claver, Llopis, Garcia and Molina (1998)
Strong culture Clear sense of mission and purpose Well thought out strategy Business philosophy of continuous improvement Total customer satisfaction Total quality management Visionary leadership Enthusiastic champions of change Know customers Constantly introduce new and differentiated prod- ucts and services Providing products and services that exceed cus- tomer expectations Unlock the potential of people through good com- munication Teamwork Training Democratic, participative leadership style	Neely et al. (2001)
Flexible structures Few rules and regulations Slight job descriptions High autonomy Flat structures	Amabile (1998)
Shared and mutually communicative environment	Snell (1992)

Source: Author's own elaboration.

7. Conclusions

Determinants related to innovation and competitive long-term success are oriented culture for innovation, entrepreneurship and market orientation.

The antecedents of innovation include an orientation to learning, teamwork and decentralization or autonomy in decision-making. Styles of partnership management: participative, vision definition, democratic and collaborative, are effective in stimulating innovation. Attributes of autonomy, such as open communication, sharing of information, participation in decision-making, shared vision and common direction, are also key elements in promoting innovation. It is necessary that companies provide an environment that facilitates collaboration among employees and the generation of new ideas. Success in innovation typically requires strong management support and commitment of resources. Mutual trust and greater collaboration are also important factors for innovation in companies.

Leaders of innovative organizations tend to have a clear picture of the outcome they want to achieve and clearly articulate this vision, so that the members share the vision and are motivated to do more than just 'survive'. An organization oriented for the innovation encourages the introduction of new ideas and processes.

Thus, the innovation capacity of the company is its ability to mobilize the knowledge possessed by its employees and combine them to create new knowledge, resulting in product and/ or process innovation.

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Kultura organizacyjna zorientowana na innowacje. Determinanty

Abstrakt: Chcąc zachęcić pracowników do wspólnego wprowadzania innowacji, a tym samym osiągania określonego poziomu przedsiębiorczości na szczeblu całej firmy, menedżerowie powinni wdrażać wartości kulturowe i realizować je poprzez zastosowanie odpowiednich praktyk z zakresu zarządzania zasobami ludzkimi, które wpłyną na psychologiczne podejście do pracowników. W takiej sytuacji wzrośnie wsparcie dla pracowników ze strony przedsiębiorstwa, a to przełoży się na ich zachowania zorientowane na innowacyjność organizacji. Praktyki w dziedzinie zasobów ludzkich mające na celu wspieranie kreatywności i innowacyjności pracowników są dla firmy kluczowe, jeśli chce ona osiągnąć sukces i utrzymywać przewagę konkurencyjną. Celem niniejszej pracy jest określenie zmiennych związanych z kulturą organizacyjną zdolnych do wzmacniania kultury innowacji w przedsiębiorstwie. Uważa się, że umiejętności wprowadzania innowacji można się nauczyć, a sztukę tę doskonalić w procesie rozprzestrzeniania wartości kulturalnych. Ma temu służyć doświadczenie menedżerów w zakresie zarządzania zasobami ludzkimi, pozwalające na osiągnięcie innowacyjnych zachowań wśród pracowników, którzy będą zaangażowani w działania firmy. Zastosowane w niniejszym badaniu metody to analiza i synteza, a także indukcja i dedukcja.

Słowa kluczowe: kultura organizacyjna, innowacje, praktyki zarządzania zasobami ludzkimi, sukces i przewaga konkurencyjna