

“Innovation and Leadership Styles: a case study of Portuguese SMEs”

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Abstract: In a globalized world, organizations and individuals face an increased number of daily challenges. It surfaces the ability to be effective, efficient and capable to optimize processes, as well as being different and having the ability of bringing novelty into the market. This apparent paradox dramatically changed the reality of firms, both internally and in the external operational context. The Integration of functions and blurred job descriptions requires new knowledge and a new ways of understanding knowledge and communication, and demands new skills and new behaviour patterns, from both the employee and firms', that better respond to an ever-changing environment, customer demands, rapid technical changes and uncertainty.

Keywords: innovation, leadership styles, human resource management.

1 Introduction

1.1 Firm's Attitude towards Innovation Activity

Human resources are considered as a source of possible barriers to innovation. Barriers can come both from all of the participant in the firm's activities, fragile management commitment to the innovation process, can translate into the organizational culture that does not support innovation strongly, and might lead to the questioning of innovation strategy. Employee resistance, at all levels of the organization, along with poor communication, and inconsistent human resource practices and policies contribute to the failure of the firm to embrace innovation (Acemoglu & Pischke, 1998). The quality of management and employees and its ability to think creatively and implement innovation is crucial. Management has to be able to lead and drive ideas throughout the members of the firm, search for talents and use it wisely, and in this manner be distinguished by its human resources (Lekášová, Gundová, Král, & Ondrusová, 2017).

Firm's external environment, like market opportunities, changes in technology, government policies and a more turbulent or quiet environment impact the levels of innovation of a firms and its perception of barriers (Madrid-Guijarro, Antonia; Garcia, Domingo; Van Auken, 2009; Souitaris, 2001). According to Hueske and Gunther (2015) suppliers, customers and complimentary innovators, like competitors, should be considered as part of the firm's external environment, as well as potential employees and investors. The state has a dual role as an external factor: it may restrict innovation throughout is regulatory framework or may enhance it with regulation schemes when it upgrades certain standards (Hueske & Guenther, 2015). Systematic institutional support for SMEs, government is seen as required to enhance innovation activities of firms (Lekášová et al., 2017).

As the external environment changes, so do organizations (Barreto, 2010). Organizational structure, strategy, size, resources and organizational culture and its ability to learn influence innovation, and these are indicators of how firms adapt to change (Anderson, Dreu, Carsten, & Nijstad, 2004). Organizational structure shapes and is shaped by the organizational strategy, and reflects a number of practices and ways of doing, that could act as innovation barriers, like the pattern of relationships between departments can hinder communication and coordination, as well as the allocation of resources (Hueske & Guenther, 2015). As the lack of resources hinders innovation, so does the organization ability to

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learn, namely through the lack of training and scarce development of its members. All the above is part of the organizational culture, that can also act as an innovation barrier, as well as rules, processes, bureaucracy and performance measure systems (Fard, Moshabbaki, Abbasi, & Hassanpoor, 2011).

Firms as any organization, functions around individuals that are in its basic form organized in groups. Groups have their own structure, work processes, climate, characteristics and sets of rules and behaviours and leadership styles, which determines the potential of innovation that it has (Anderson et al., 2004). Group processes include team building strategies, the characteristics of the members that compose the group (skills, ages, background, experience, knowledge) and the perception and the sharing of goals by the group members, that can create innovation barriers (Hueske & Guenther, 2015).

Managerial support in constructing firm's innovation environment is crucial to decrease barriers is linked to human resources. Loyalty and effort is requested for employees, once the innovation activity is seldom disruptive and disturbs standards procedures and processes (Acemoglu, D. & Pischke, 1998; Baldwin & Lin, 2002; Tabas, Beranová, & Vavřina, 2011). The lack of a qualified labor force, which may include managers, or the ability to maintain or hire it (D'Este, Rentocchini, & Vega-Jurado, 2014; Tabas et al., 2011). The inability to hire new employees is in itself an innovation barrier. Newly hired employees are often the ones that lead firms into innovation (Rumelt, 1950; Tabas et al., 2011).

Another barrier linked to labor force is related to time management, especially in SMEs. Innovation activities are often time-consuming that deviate employees from daily tasks that are part of crucial firms' function activities. Time occupied in learning activities and training, personal development, or networking crucial to innovation, is often scarce if not inexistent, which impairs know-how and the ability to establish bridges with other stakeholders. Nevertheless, building up a sustainable set of innovation competences is mandatory (Tabas et al., 2011). To be part of a wider knowledge network is important for the firm's capacity to create novelty and innovate. Technology parks or clusters represent an important business asset, regarding competitiveness and innovation processes (Porter, 1998).

According to project management literature, for innovation to occur it requires a creative environment with specific features (Aubry, Hobbs, & Thuillier, 2007). Organisational innovations are produced by the interactions among the actors in firms structures and in the organization as a whole (Dietrich, 2018). Organizational changes are commonly linked to the growth of firm competitiveness, since it requires changes in strategy, technology, working systems and management styles (Martins & Martins, 2012).

Transformations in the organization seldom require reflection about values, beliefs and behaviour patterns that guide the daily organizations' processes. Organizational culture is often seen as a central part of the change process, and the bond that maintains the organization together (Martins & Martins, 2012). Culture can encourage innovative behaviour among the members of an organization since it may conduct them to embrace innovation as a basic value to the organization and nurture commitment to it (Naranjo-Valencia, Jiménez-Jiménez, & Sanz-Valle, 2016).

2 Methodologies

The main goal was to enable interviewees to express their opinion regarding the different topics raised by the questions, but also to discuss other issues that he/she may considered relevant for the study. All the interviews were recorded and later transcribed (*verbatim* transcription). For the interpretation of data, transcripts all of the interviews were used, but also the information exchanged before and after recording. All these data enabled a greater understanding of key issues. Using the method of Miles, Huberman, and Saldaña (2014), we reduce draw data in structured and quantifiable data. The treatment of data by the cataloguing of the answers, identification of units of thought and frequency of response was used by authors as Noblet, Simon, and Parent (2011), and Valkokari, Paasi, and Rantala (2012) and Hermans and Castiaux (2017).

In this case, we started by identifying key words in the answers collected which enabled the assessment of frequency of citation, keyword and related words. Thus, it was possible to present and analyse the data quantitatively. Throughout this account, we have selected some phrases that were relevant due to objectivity of content and because they evidence a personal or common point of view with other entrepreneurs. So, we also present qualitative data for a better understanding of the issue.

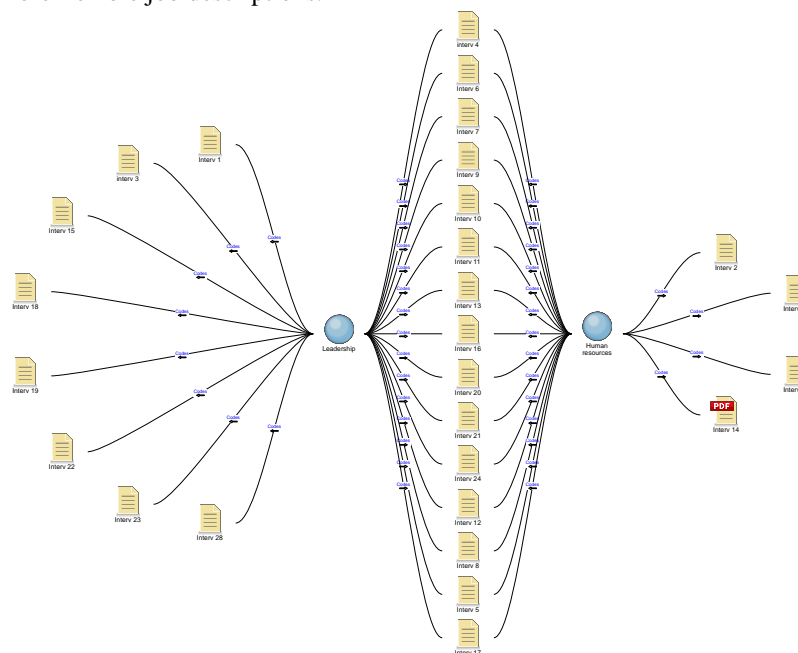
Our population of research was a group of 68 companies unevenly distributed throughout the Portuguese territory. A non-disclosure agreement was signed with all respondents to insure the confidentiality of the information provided.

We adopted some measures to ensure validity. Issues of external validity were partially addressed by closely following the Grounded Theory approach, and by concentrating in the problem of internal validity and reliability and by cross-referencing the qualitative data with other sources, like NITEC final reports, results of the European Innovation Scoreboard, and other studies about the outputs of public funding on firms' innovation systems. This triangulation approach increased confidence that the qualitative data were accurate and that our interpretation was true to the intentions of the interviewees. According to Guest (2006) in depth interviews are extremely useful to access information about social processes and related problems that are hardly untapped by more structured research. We conducted 28 interviews in person from January till July 2017. The interviews took almost over an hour on average; they were all recorded and *verbatim* Tran scripted.

Firms from the Porto, Aveiro and Viseu region that were granted funding by the NITEC program were considered to be part of our sample. These locations were selected not only because of its strong entrepreneurial activity, but also due to the close functional and administrative relationships, and convenience for data collection.

3 Results

Human resource management practices are related to the surging of ideas and the creation of spaces for discussion within the firm, and it seem to be linked to the open innovation practices. Regardless, our respondents' statements point to the awareness of individuals' engagement with the firm, its processes and innovation system, that are translated into more flexible work environments, less formal, more focused on interdepartmental work, inter areas and cross tasks. As firm 13 posits "(an environment favourable to innovation has to be a relaxed environment, but with a minimum of formalism, that is, for things not to fall apart. Also, there has to be a workflow to guide the work so that we do not lose focus, but it has to be relaxed, and there has to be empathy among people) there has to be a mind-opening: that is, "people do not have to be afraid to speak what they think or even if it is the greatest barbarity in the world, and whoever is listening do not consider this to be an outrage and may even consider it as an opportunity to innovate". Also, the development an environment where employees feel safe to express their ideas and proposals was also mentioned to be relevant. For instance, firm 8 promotes innovation through allowing their employees to have free time during working week to devote to their own innovation projects, regardless of their area or function in the firm. Martins and Terblanche (2003) suggest that an organizational culture and structure that supports creativity and innovation, values flexibility, freedom and cooperative teamwork, and that more hierarchical structure, rigid and stable might hinder innovation. Flexibility in organizations tends to make use of job rotations programs and more flexible job descriptions.



Firms' leadership was also mentioned by interviewees as crucial for innovation. From the information gathered from the interviewees' responses we were able to create five different categories regarding the role of the leader in the promotion of internal innovation processes: **sponsor**; **coordinator**; **role model**; **source of stability** and **leadership and people's management**.

Leadership is a social process that occurs in groups, in which the leader influences others' behaviors so that organizational goals are met. The role of a leader as an influencer may vary from "being inspirational, motivational and visionary to a role that involves the design of an appropriate organizational context" (Oke, Munshi, & Wlumbwa, 2009). At this point, we do not aim to focus on leadership theories, but rather on how the leader is perceived and its role on the innovation processes. Like Jong and Hartog, (2007), we perceive leadership as a process of influencing other towards achieving some kind of desired results.

The leader is seen as the sponsor of the innovation process within the firm. He/she is seen as the initiator and the engine of change and novelty, and he/she is the one that determines the direction, promotes culture, values and create the adequate environment to innovate (Jong & Hartog, 2007). As posited by firm 2: "the role of the leader is fundamental; without it nothing is done. These people are the ones who create the environment and the culture for an innovative company" (Table 41). It is a perception close to the inspirational motivation. Inspirational motivation refers to the leader's ability to motivate and inspire its group members by detecting new opportunities, providing meaning by drawing the strategical vision of the future (Oke et al., 2009). Leaders involvement is seen as decisive in the success of any firm's initiative.

Interviewees also referred to **coordination** as one of roles of the leader. Coordinating people, projects and departments, in the persecution of expected results. The leader should be able to bind employees to a common purpose, reinforcing the group gains that come from achieving a task or a result. The leader is seen as the facilitator, the person to that helps sorting problems or overcome difficulties. For instance, firm 17 argues that "(...) the leader is the one who defines and structure the project, and it does not necessarily is the one that had the idea. He/she has to be able to evaluate if the idea is viable, feasible, and whether it is relevant to the company. The leader has to be able to encourage teams to have ideas and to

The leader's reputation among his employees is seen as an important feature of the leader's role in innovation processes. As mentioned by Oke et al., the "(idealized influence involves the extent to which a leader's followers hold the leader in high regard and seek to identify with him or her. Leaders demonstrating idealized influence act as role models, are admired, respected and trusted" (Oke et al., 2009, p. 65). In the same path, Jong and Hartog (2007) note that when the leader acts as a model for creativity it rises the chance that employees would follow the practice of idea generation themselves. Leaders should be able to lead by example and be a **role model**, to enlighten employees to embrace novelty, and, by doing so, promote change and a common believe in the organization, that ultimately will be translated into the organizational culture. As mentioned by firm 6: "[leaders] have to set the example. Because if the leader or the leaders do not believe in the idea, there is no worth starting"

Being able to listen and to perceive people's fears and needs, share goals and the risk of the innovation process, and to conduct themselves ethically are also leader's characteristics, that were also referred by our respondents. Even though difficult times, the leader must act like a beacon of **stability and steadiness**, that shows perseverance and stamina to pursue the firm's objectives. For instance, firm 8 argues that "(leadership must promote tranquillity within work context so that in the medium-term employees do not have doubts where the company wants to go" (Table 44). Experiencing support is believed to be helpful in creating and generating ideas (Jong & Hartog, 2007).

Leadership has to have the **ability to manage people** and to promote their personal development, as well as to be able to recognize people's competencies and capabilities as underlined by our respondents. The individualized type of transformational leadership "focuses on followers' individual needs for achievement, development, growth and support. Such leaders also engage in coaching and mentoring, create new learning opportunities and value diversity in their followers" (Oke et al., 2009, p.65). Transformational leaders stimulate employees to look at problems in new ways and help them develop to their full potential (Jong & Hartog, 2007). In this line, firm 18 mentioned that "(leadership has to know how to empower people and to bring about what they have of positive and can add value".

There is no doubt that leadership has a vital role in nurturing innovation systems and processes in organizations. It is important that employees share the firms and leader's vision and mission as a strategy to support creativity and innovation. A firm's culture that values a flexible work environment, freedom and cooperative teamwork will promote innovation (Martins & Terblanche, 2003). The degree of freedom each employee has and authority to participate in the decision making process determines the level of empowerment and it is positively related to an innovative organization (Martins & Martins, 2012). In the same line, Jong and Hartog (2007) suggest that there is a positive relationship between innovativeness and a 'shared leadership' style. This type of style enhances people's involvement and motivation to generate ideas and to successfully implement internal innovation management systems.

4 Conclusions

Since the firm's environment, both internal and external, are contingency factors it was assessed what type of environment is favourable to foster innovation. In this case, Size, technical-system, environment, values produced brought by the members of an organization and presence or absence of institutional facilities (private or public) that promote or facilitate policy implementation in the organizations, are important factors in contingency theory (Moreno-Luzón & Peris, 1998). From our data some factors were identified. At the internal level, organizational culture is seen as crucial for fostering innovation, and it encompasses the pattern of behaviours that enhances the predisposition to think outside the box, change procedures, and promote a creative mind-set. This pattern of behaviours may be constructed through human resource practices that brings out the knowledge and know-how that is embodied in individuals within firms. Human resource management practices were another element identified as a potential booster of innovation. Alongside, leadership and the leader's behaviour are seeming crucial for the development of a pro-active and creative climate among firms' employees. Leadership is a social process of influence other's behaviours so that organizational goals are met (Oke et al., 2009). The data gather enabled us to identify five type of roles the leader plays for fostering innovation: sponsor; coordinator; role model; source of stability and people's manager. The leader is seen as the initiator and the engine of change and novelty which is the base for successfully develop firm's innovation process. This view is close to the inspirational motivator suggested by Oke et al. (2009), due to leader's ability to inspire firm's members. Coordinating people, projects and departments was also a role identified by our respondents. The leader's ability to act as a role model is relevant for building reputation among its followers. Idealized influence involves the extent to which a leader's followers hold the leader in high regard and seek to identify with him or her. "Leaders demonstrating idealized influence act as role models, are admired, respected and trusted" (OKE et al., 2009, p. 65). Being able to maintain steadiness and strength during turbulent times is one of the roles identified. Being able to listen and to perceive people's fears and needs, share goals and risks involved during innovative process, and conduct themselves ethically is one of the tasks of the leader as a source of stability. The Individualized consideration type of transformational leadership "focuses on followers' individual needs for achievement, development, growth and support. Such leaders also engage in coaching and mentoring, create new learning opportunities and value diversity in their followers" (OKE et al., 2009, p.65), which translates into the last type of role identified – leader as people's manager. All interviewees shared the opinion that internal factors were as a pre-condition for the development of innovations within the firm. This results are in line with Sternberg & Ardnt, (2001) which argue that firm-specific determinants of innovation are more important than either region-specific or external factors.

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