

Research Paper

The Catalyst of Progress: Leadership, Culture, and Innovation

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ABSTRACT

Purpose: This study investigates the relationship between leadership and innovation culture and identifies the essential components needed to develop a potential innovation culture management tool.

Methodology: A quantitative exploratory and descriptive research was conducted from March to April 2021 during the Covid-19 pandemic.

Results: The results emphasize the significance of developing an entrepreneurial attitude, nurturing creativity, engaging in ongoing education, communicating effectively, working collaboratively, prioritizing security, and attaining company success. Leadership is crucial in molding and impacting an organisation's culture, strategy, and behavior.

Research limitations: This study has certain limitations, particularly concerning the sample size and the convenience factor. Additional research is essential to confirm the validity of the suggested framework within an actual organizational setting. Moreover, there is a need to develop a tool for evaluating and tracking an innovative culture. It is important to acknowledge that this process is intricate, time-consuming, and may face considerable opposition without producing immediate, noticeable outcomes.

Practical implications: Broadening the focus of this study can provide businesses with important insights into the main factors that encourage a culture of innovation. By applying strong leadership methods, companies can foster an atmosphere that supports innovative thinking. Furthermore, implementing a tool to assess the innovation culture can reveal areas that need enhancement and allow for ongoing monitoring of advancements.

Originality: This model seeks to demonstrate that strong leadership not only motivates and involves people but also acts as a driving force for creativity and innovation.

Keywords: *Innovation; Leadership; Culture; Strategy; Behaviour; Entrepreneurship.*

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1. Introduction

Innovation presents a multifaceted challenge, influenced by various interrelated factors (Belso-Martínez et al., 2017). Schumpeter first introduced this concept in 1911, portraying it as a crucial driver of creativity within capitalism (Schumpeter, 1982). Since then, the understanding of innovation has evolved, with contemporary transformations rooted in knowledge and entrepreneurial ability (Pimentel et al., 2020), encompassing both process and outcome dimensions (Schuijff & Dijkstra, 2020). Several factors are vital to the innovation process, including leadership (Barham et al., 2020), internal innovation capacity (García-Granero et al., 2015), strategy (Rezaei & Ortt, 2018), networks and relationships (Rezaei & Ortt, 2018), technology management (Christensen, 2005), and culture (Wang, 2020). The focus here is on the relationship between a company's culture and the ever-evolving landscape of innovation-driven transformation. Effective leadership encompasses the attributes and techniques needed to foster innovation, whereas strategy pertains to the development and implementation of an organization's strategic plans (Santos et al., 2021). Understanding that individuals and organizations both propel and gain from innovation highlights the critical role of social connections, as economic interactions are shaped by preceding social engagements (Abbasiharofteh & Maghssudipour, 2024; Kaplan & Vakili, 2015).

Innovation is recognized globally as a key driver of economic expansion, fostering the creation of new sectors and offering answers to societal issues (Sivam et al., 2019). For progressive change, both social and economic innovations must take the forefront. Our conventional growth strategies have become outdated, and we lack adequate systems to tackle the urgent threats our world faces (Moore, 2015). Importantly, innovation plays a crucial role in sustainable development and achieving the future of our envisioned future (Baldassarre et al., 2024; Solmecke, 2016). Various management tools for innovation, such as those from the European Innovation Management Academy, COTEC's Innovation Scoring, PwC's Strategy&, and SPRING Singapore, are now available for implementation (European Commission, 2016). Yet, assessing innovation remains difficult because existing evaluation methods often conflate results with process indicators. Moreover, there is frequently an insufficient focus on the culture of innovation, which hinders a complete understanding of the innovation environment (Davies &

Buisine, 2018). Most current studies primarily use a quantitative lens, indicating the need for a more in-depth exploration of this phenomenon (Feng et al., 2022).

The primary objective of this study is to explore the relationship between leadership and an innovation culture, aiming to identify critical components for developing a management tool. Secondary objectives include analyzing leadership's influence on organizational behavior, strategies to foster innovative environments, and the role of cultural alignment in achieving sustainable innovation. It expands on the article titled "The Leadership Role in Promoting an Innovation Culture," which was presented at the Flexible Automation and Intelligent Manufacturing International Conference (FAIM 2023) in Porto, Portugal, from June 18 to 22, 2023. Assessing innovation remains a difficult endeavor because existing evaluation tools often mix outcome and process indicators, as noted by the European Commission in 2016.

This article is structured as follows: the introduction outlines the study's scope, objectives, and background. The literature review examines prior research on innovation, leadership, and culture. The methodology details the quantitative approach used for data collection and analysis. The results section presents the findings and discussions, while the conclusion summarizes key insights, identifies limitations, and proposes directions for future research.

2. Literature Review

2.1. Innovation and Innovation Strategy

Innovation involves developing new or significantly enhanced products (goods or services), processes, marketing strategies, or organizational techniques within business functions, workplace environments, and external interactions (Manual, 2005). It is a pervasive force within both society and the economy, engaging a wide range of participants in a dynamic interplay (Caraça et al., 2009). Traditionally, innovation is divided into four main categories: product/service, process, marketing, and organizational/business models (Mahmoud-Jouini et al., 2019). However, it remains a challenging pursuit for many companies (Mahmoud-Jouini et al., 2019). To effectively manage innovation, a framework must consider the methods used and the intended results, as its impact on performance is substantial (Damanpour, 2018). Differentiation can be a successful strategy for businesses aiming to achieve competitive advantages

(Kapoor & Teece, 2021). While change may not always be immediately visible or measurable, it should pave the way for new solutions and added value. Innovation, in any form, represents a venture into the unknown (Manso, 2017). This intangible quality highlights the necessity for tools that enable managers to track the returns on their investments. A clear innovation strategy helps reduce uncertainty and risk (Taherdoost, 2024; Teece et al., 2016).

Organizations often decide to create new products or technologies to quickly adapt to changing markets and seize emerging opportunities, while also utilizing their current strengths (Acharya & Xu, 2017; Rousseau et al., 2016). They need to employ a range of strategies to take advantage of new prospects and make the most of their existing abilities, aiming to strike a balance between exploring new innovations and refining existing ones for the best results (Al-Husban & Yawson, 2024; Molina-Castillo et al., 2011). To gain a competitive edge, companies set clear innovation goals, though they frequently find that putting these strategies into action is more difficult than planning them (Morales-de la Peña et al., 2021; Un & Rodríguez, 2018). Research indicates that merging established practices and common values with strategic requirements can help overcome these challenges. The effective execution of an innovation strategy largely hinges on how well it aligns with the organization's current culture. (Page et al., 2023). However, many organizations struggle to manage their culture in a way that supports the effective execution of their innovation strategies (Ahmad et al., 2018). To this end, it is crucial to coordinate the management of organizational culture to facilitate the successful implementation of these strategies. Furthermore, examining the relationship between different types of investments and Corporate Social Responsibility initiatives can enhance their collective impact on investment outcomes (Wu et al., 2019).

2.2. Innovation Strategy and Strategic Leaders

In an academic setting, leaders with strategic roles greatly impact the innovation processes in organizations. Their interactions with organizational members critically influence the possibilities and constraints surrounding innovation. For example, leaders who are seen as appreciating individual efforts and efficiency usually enhance team coordination, resulting in more effective innovation (Chen et al., 2006; Costa et al., 2023). Such leaders encourage innovation by maintaining a balance between stability and control, and by embracing enthusiasm, boldness, and inventiveness (Cortes & Herrmann,

2021). They use strong communication skills to inspire commitment, provide ideological rationales that align team members with the organization's goals, boost internal motivation, and encourage creative thinking, while also acting as role models (Ou et al., 2018). The decisions and actions of these strategic leaders become even more crucial during times of environmental uncertainty, when there are opportunities for growth, increased market competition, or when the feasibility of new technologies is unclear (Lorenzo et al., 2018).

The literature recognizes that a combination of organizational conditions, industry features, and national traits collectively influence the way strategic leaders affect innovation. Yet, it is crucial to understand that these influences are not always straightforward. Depending on the methods of influence and the particular stage of innovation, strategic leaders might have contradictory impacts. For example, some leadership qualities could foster idea generation while simultaneously obstructing the effective implementation of those ideas. Consider narcissistic leaders; they can serve as dynamic catalysts for change but may also be less open to feedback from their team members (Campbell et al., 2005). Their propensity for taking risks and dedicating resources towards change contrasts with their tendencies toward arrogance and a lack of empathy. This dual nature can affect their support for generating and developing ideas within the organization.

In this context, the better approach seems to emphasize leading with the motive of meeting the needs of others. Various leadership styles, including charismatic and transformational, aim to inspire and engage followers to achieve common goals (Walumbwa et al., 2010). However, servant leadership stands out by prioritising follower development and fostering positive organisational behaviour (Barbuto Jr (Jay) & Gottfredson, 2016). Studies show that servant leaders enhance followers' emotional well-being by prioritising their concerns, even above organisational interests (Mustamil & Najam, 2020). Supervisor traits like empathy, humility, and a supportive attitude are positively associated with the development of psychological capital in their followers (Najam & Mustamil, 2020; Vveinhardt & Andriukaitiene, 2017).

2.3. Innovation Culture

In a corporate setting, culture refers to the accepted norms, principles, and values that influence individuals' perceptions and guide their decisions and actions (Campbell et al., 2005). It relates to the acknowledged standards within a company's work environment, which instruct members on how to behave to achieve the company's goals (Krajcsák, 2018). Organisational culture defines how members work together both internally and with outside parties. It distinguishes different organisations and plays a vital role in corporate governance and management. The origins of organisational culture can come from various sources, such as the beliefs and assumptions of the founders and the experiences learned by the members of the organisation (Al Halbusi et al., 2021).. Founders have a significant impact on setting the strategic path in the early stages of an organisation's development, and the business strategy often aligns with their operational expectations (Mohapatra & Mishra, 2018; Tallman & Cuervo-Cazurra, 2021). They may also impart their personal experiences and cultural preferences to their employees and associates (Krajcsák, 2018). Furthermore, the experiences learned by organisational members help shape the organisational culture, influenced by social trends and the business environment's dynamics (Graham et al., 2021).

The concept of an innovation culture pertains to the shared beliefs, assumptions, and values within an organization that promote the innovation of products (Alam et al., 2022). This culture is strongly tied to an organizational atmosphere that fosters employees' innovative capabilities, welcomes risk-taking, and supports their personal growth and advancement (Khaola & Coldwell, 2019). It is characterized by unique traits from five perspectives: leadership and management, team dynamics, individual contributions, the surrounding environment, and the organization as a whole (Davies & Buisine, 2018). Successful innovative organizations are built on individuals who are confident in their ability to drive positive change, encourage creativity, and work well in team settings (Volery & Tarabashkina, 2021). These teams are proficient in producing and spreading new ideas, relying on trust, mutual support, and clear communication (Aldahdouh et al., 2019). Personal innovation involves actions related to the innovation process and is largely a personal decision shaped by individual preferences and goals (Amabile et al., 2001). Skilled innovative leaders can recognize and cultivate creative talents within their groups (Christensen et al., 2018; Yun et al., 2020). On an external level, innovative partnerships are characterized by numerous points of contact, a proactive approach to the

external environment, and a high level of adaptability and flexibility in establishing collaborations, along with a rapid and effective collaboration process (Davies & Buisine, 2018).

In this study, two distinct frameworks were utilized: first, the ETOILe model, which stands for External links, Team, Organizations, Individuals, and Leaders (Davies & Buisine, 2018), and second, the six Building Blocks of Innovation, which include Values, Behaviours, Climate, Resources, Processes, and Success (Infurna et al., 2020). Figure 1 showcases various elements and influences that can either promote or hinder an innovative culture, with Leadership playing a crucial and central part (Tvedt et al., 2023).

Figure 1 - Building Blocks of innovation culture (own elaboration)



Source: own elaboration

3. Methodology

The objective of this study is to implement a comprehensive strategy to investigate key factors influencing the culture of innovation. This encompasses analyzing personal values and behaviors, assessing the organization's perspective on resources and strategic communication, and thoroughly evaluating both internal and external viewpoints regarding the organizational environment and success metrics. To accomplish these objectives, a quantitative study was conducted in Northern Portugal during March and April 2021, in the context of the COVID-19 pandemic. Data was collected via an online survey administered by students from IPCA enrolled in the master's program in Integrated Systems of Management. The survey was developed following an extensive review of relevant literature and was further refined through the researcher's professional

expertise. Before distribution, the survey underwent evaluation by two academic experts and three industry professionals.

The research employed two separate models: the ETOILe model (which focuses on External links, Team, Organization, Individuals, and Leaders) and the Six Building Blocks of Innovation framework (which includes Values, Behaviors, Climate, Resources, Processes, and Success). These models were previously compiled and illustrated in Figure 1. The survey was divided into different categories, each containing specific elements, and within these categories, participants responded to various statements. Participants indicated their level of agreement on a Likert Scale ranging from 1 to 5, where 1 meant "completely disagree" and 5 meant "completely agree." The statements were crafted to evaluate how employees viewed certain factors within the following categories: i) Values (with 13 statements); ii) Behaviors (with 13 statements); iii) Strategy (with 7 statements); iv) Resources (with 3 statements); v) Climate (with 12 statements); and vi) Success (with 7 statements). These surveys were distributed to the companies where the students were working, with each student gathering feedback from 5 respondents, totaling 95 responses overall. Most students were from the Quality and Safety Department, and they intentionally sought feedback from highly skilled individuals across different departments. This strategy was chosen because every employee has the potential to offer value to the organization in the medium and long term.

4. Results and Discussion

The questionnaire was distributed to a group of 95 staff members across 19 different private companies, and we successfully obtained a complete response rate of 100%.

4.1 Socio-demographic

Respondents were mainly female (76.8%), as can be seen in Figure 2

Figure 2 – Gender of the respondents



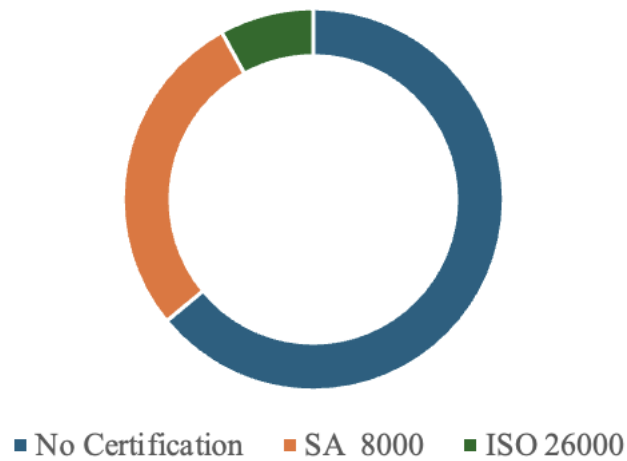
Source: own elaboration

Regarding age demographics, individuals aged between 28 and 37 years old make up 28.6% of the respondents, while those aged between 23 and 27 years old constitute 14.7%. The respondents hold positions as engineers and directors within the Department of Quality and Safety in their respective companies. They are all highly skilled and are currently pursuing master's degrees in fields that emphasize the study of these themes.

4.2 Company profile

All the companies included in the study are based in Northern Portugal. Most of them are classified as Small and Medium Enterprises (SMEs), comprising 83% of the sample. Among these, 50% operate within the manufacturing industry, 43% are engaged in extractive industries, and the remaining respondents are from sectors such as agriculture, hunting, and fishing, accounting for 7% of the total. Regarding social responsibility certification, a significant portion of the companies (64%) lack any certification in this area. Among those that do have certifications, 28% hold the SA 8000 international certification, while 7% possess the ISO 26000 certification (see Figure 3).

Figure 3 – Certifications obtained in Social Responsibility



Source: own elaboration

4.3 Perceptions about leadership relevance

Following an in-depth statistical examination of the collected responses, a series of 36 questions emerged, reflecting a notable consensus among the participants. This finding was reached by applying a particular standard, which deemed an average score exceeding 3.75 on a Likert scale of 1 to 5 as significant. Concerning leadership's role, it is deduced that the primary elements affecting a company's innovation culture are detailed in Table I.

Table I. Full set of components proposed for evaluating innovation culture.

Building Blocks	Factors	Survey Questions	Average
Values	Entrepreneurial	We want to explore opportunities and create solutions	4,5
		We desire and tolerate ambiguity when seeking new opportunities	4,1
		When we identify new opportunities we quickly try to put them into practice	4,1
	Creativity	We stimulate new ways of thinking and solutions from distinct angle	4,3
		Our workplace offers us the freedom to pursue new opportunities	4,7
		We want to be spontaneous and not anxious to joke at ourselves	4,6
Learning	We are good at asking questions in the pursuit of the unknown	4,4	
	We are constantly experimenting with our innovation efforts	4,1	
	We are not afraid to fail, and we treat failure as a learning opportunity	4,2	
Behaviours	Energize	Our leaders inspire us with a vision for the future and communication of opportunities for the organization	4,7
		Our leaders often challenge us to think and act entrepreneurially	4,6
		Our leaders model the right innovation behaviours for others to follow	4,6
	Engage	Our leaders dedicate time to coach and deliver feedback on our innovation efforts	4,0
		In our organization, people at all levels proactively take initiative to innovate	3,8
		Our leaders provide support to project team members during both successes and failures	4,0
Enable	Our leaders use suitable influence strategies to help us pilot around organizational blockages	4,2	
	Our leaders can modify and change the course of action when needed	4,5	
	Our leaders persist in following opportunities even in adversity	3,8	
Strategy	Communication	The organisation has a clear and shared innovation strategy, involving employees in its definition	3,9
		The innovation strategy translates into an action plan with quantitative objectives and targets	3,9
		The organization has a marketing strategy that supports and values innovation activity	3,8
		The organization monitors the external environment, which it uses to define and implement its strategy	4,0
Resources	People	We have committed leaders who are willing to be champions of innovation	4,3
		We have access to innovation experts who can support our projects	4,4
		We have the internal talent to succeed in our innovation projects	4,5
Climate	Collaboration	We have a community that tells a common language about innovation	3,8
		We appreciate, respect, and leverage the differences that exist within our community	3,8
		We work well together in teams to capture opportunities	4,2
	Safety	We are coherent in actually doing the things that we say we value	4,6
We question decisions and actions that are inconsistent with our values		3,8	
We can freely voice our opinions, even about unconventional or controversial ideas		3,8	
Success	External	Our customers think of us as an innovative organization	3,9
		Our innovation efforts have led us to better financial performance than others in our industry	3,8
		Our customers think of us as an innovative organization	4,1
	Entreprise	I am satisfied with my level of participation in our innovation initiatives	4,0
We reward people for joining in potentially risky opportunities, nevertheless of the outcome		4,6	

Source: own elaboration

The core values of an organization are essential in assessing business innovation and are often compared to the organization's "DNA." These values are integral to boosting a company's long-term success and act as guiding principles that direct the company's path and assist in decision-making, especially concerning sustainability efforts. Recognizing their importance in shaping an organization's identity, they are typically highlighted in corporate communications and on websites. These values lay the groundwork for cultural competencies, helping the organization stand out and posing a challenge for others to replicate. This intangible element is evident in traits like a spirit of entrepreneurship, teamwork, attentiveness to diverse stakeholders (including employees, customers, partners, or rivals), adaptability, and a commitment to excellence. When these organizational values support leaders in fostering a learning environment, they offer a stable foundation for leaders to enhance resilience (Amabile et al., 2001).

Organisational values play a vital role in evaluating business innovation and are often likened to the "DNA" of the organisation. Organisational values are crucial for enhancing

the long-term performance of companies and serve as guiding principles that steer the direction of the company and facilitate decision-making, particularly in the context of sustainability initiatives [56]. Recognising their significance in defining an organisation's identity, they are commonly showcased in corporate materials and websites. These values form the foundation of cultural competencies, enabling the organisation to set itself apart and creating a challenge for imitation. This intangible aspect is reflected in qualities like entrepreneurial spirit, collaborative teamwork, attentiveness to various stakeholders (be they employees, clients, partners, or competitors), responsiveness, and dedicated pursuit of excellence. When organisational values support leaders in cultivating a learning environment, these values provide stability for leaders to promote resilience (Christensen et al., 2018).

Values dictate the priorities and decision-making processes within a company, influencing resource allocation and expenditure. Truly innovative organizations allocate ample resources towards fostering entrepreneurship, fostering creativity, and promoting ongoing learning initiatives. The values of a company are not merely articulated by its leaders or documented in annual reports; rather, they are demonstrated through actions and investment choices. These values are evident in the behaviors and expenditures of individuals within the organization, speaking louder than mere rhetoric.

Strategies related to Human Capital that focus on innovation are designed to build a workforce that not only has technical expertise but also demonstrates initiative, a willingness to experiment, and the ability to work collaboratively. These strategies are intended to promote both individual and group behavior that is open to change. This involves a balanced approach that includes: (1) attracting, selecting, and hiring the right talent; (2) promoting employee involvement in innovative activities; (3) offering educational and training opportunities; (4) assessing performance; and (5) retaining employees who excel in innovation.

The company can encourage its staff to connect with external networks and improve their skills in recognizing and adjusting to shifts in the external environment. Additionally, it can support the cultivation of attitudes and behaviors that emphasize teamwork, boost emotional intelligence, instill a unified perspective of the organization's operations, and foster an atmosphere of mutual trust and respect. Behaviors reflect the actions individuals take in pursuit of innovation. For leaders, these actions encompass a readiness to discontinue existing products in favor of newer, superior alternatives, to inspire

employees with a compelling vision of the future, and to streamline bureaucratic processes. Employees demonstrate support for innovation through persistent efforts to overcome technical obstacles, resourcefulness in acquiring necessary resources during budget constraints, and attentiveness to customer feedback.

Studies suggest that Innovation Culture (IC) positively impacts how individuals utilize knowledge in their daily activities (Yun et al., 2021). This integration of knowledge relies on the support of the firm's Absorptive Capacity (AC), facilitating the acquisition and development of new skills crucial for fostering innovation. Firms lacking ambition to broaden their knowledge base risk diminishing their AC, thus reducing their attractiveness for new opportunities (Infurna et al., 2020). To counteract this, it is suggested to reinforce a culture of innovation within firms, which in turn enhances AC and fosters knowledge acquisition and integration. Firms with strong acquisition and assimilation capabilities excel in continually renewing their knowledge by adapting to external trends [59]. This AC, defined as the firm's capacity to identify, assimilate, and exploit external knowledge, is vital in governing the relationship between IC and Open Innovation (OI). Hence, IC directly influences OI, with AC moderating this relationship.

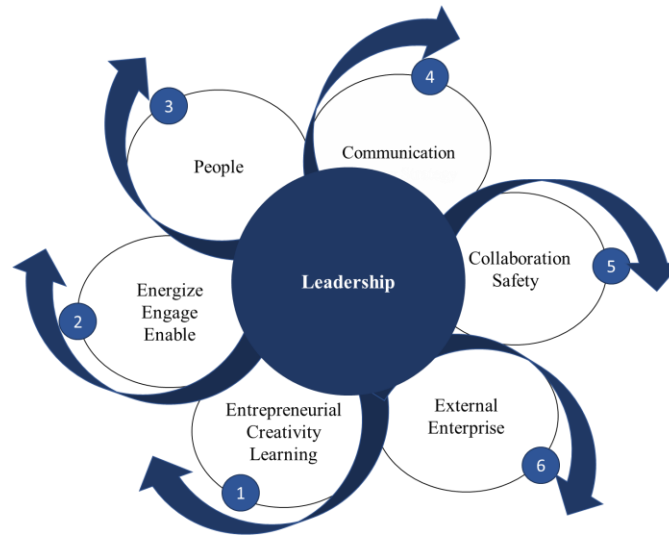
Organizations face significant future challenges when they establish strategic goals. Due to the fast-paced changes occurring in the current business climate, innovation becomes a key component of their strategies. Therefore, it is essential to clearly outline strategic guidelines for the organization's innovative efforts. These guidelines become more coherent and motivating when employees participate in jointly analyzing internal strengths and the competitive environment, as well as in setting strategic goals.

Resources can be categorized into three primary components: personnel, systems, and projects. Among these, individuals, particularly those recognized as "innovation champions," hold the utmost importance. They significantly influence the organization's values and overall climate (Tvedt et al., 2023; Naqshbandi & Tabche, 2018). Human resources are currently seen as companies' greatest assets and are valued as driving intelligent and creative elements (Sivam et al., 2019; Cohen & Levinthal, 1990; Shea, 2021; Markham & Griffin, 1998). The ability of organizations to innovate is largely influenced by the proficiency of their workforce. Employees' expertise, capabilities, and mindset are viewed as significant factors that enhance innovative efforts. This enables them not only to fulfill their responsibilities but also to generate new ideas.

Workplace climate refers to the overall atmosphere or environment within an organization. An innovative climate encourages active engagement and enthusiasm among employees, motivates individuals to take risks in a safe environment, promotes continuous learning, and stimulates independent thinking (Dieguez et al., 2021). Organizational climate refers to the lasting impression that employees have about their workplace environment and culture ((Edmondson, 2018; Schneider et al., 2013). Like how each person has a unique personality, every organization has its own distinct climate, defined by characteristics perceived by those who work there. These elements influence how employees behave in terms of relationships, independence, and the structure of the organization. A positive organizational climate enhances the level of commitment that employees have towards the organization, thereby reinforcing their bond with it (Dieguez et al., 2021; Edmondson, 2018). Feeling pride in one's workplace is crucial for employee engagement and often goes unnoticed. This pride motivates both individuals and teams to accomplish more, improve communication, and leverage each other's strengths effectively (Schneider et al. 2013; Fu & Deshpande, 2014).

Concerning success, the effectiveness of an innovation can be evaluated across three dimensions, namely external, organizational, and individual. External recognition measures how favourably a company is perceived for its innovative efforts by customers and competitors, as well as the financial returns generated by the innovation. On a broader scale, success strengthens the organization's values, behaviors, and operational procedures, influencing subsequent actions and decisions, such as reward allocation, recruitment strategies, and project prioritization (Dieguez et al., 2022). In summary, the study identifies the key factors needed to create a culture that values innovation within a company. These factors are illustrated in Figure 4. The present findings support the research proposed by Dieguez (2023) and Lima et al. (2022).

Figure 4. Full set of components proposed for evaluating innovation culture



Source: own elaboration

5. Conclusions

This study primarily aimed to deepen our understanding of the key factors that influence the culture of innovation, focusing particularly on how leadership is essential in nurturing it. Creating an environment that supports innovation is crucial for its ongoing growth and achievement. Additionally, this research aimed to identify the main elements necessary for creating a tool to manage an innovation culture. The results highlight the importance of developing an entrepreneurial spirit, enhancing creativity, encouraging ongoing learning, enabling effective communication, promoting teamwork, ensuring a sense of safety, and attaining success both within the organization and beyond.

This study emphasizes the crucial role that individuals play in bringing about significant and positive changes. Leadership is identified as a critical factor that can influence an organization's culture, strategy, and behaviour. Effective leadership, particularly the servant leadership style, not only inspires and motivates individuals but also promotes innovation and cultivates psychological capital among followers. Furthermore, from a transformative perspective, this study underscores the pivotal role of individuals in driving organizational innovation. Leadership plays a crucial role in shaping the culture, strategy, and behavior within an organization. Strong leadership inspires and engages team members, while also driving innovation. As businesses adapt to the ever-changing

modern environment, fostering an innovative culture through capable leadership is essential for ensuring long-term growth and maintaining a competitive edge.

Acknowledging the limitations inherent in this study, particularly concerning the sample size and convenience is vital. Further research is recommended to validate the proposed framework within an actual organizational environment and to design a tool for assessing and tracking innovation culture, even if it is not an easy process and it will be a very lengthy process, which will face a lot of resistance and will not bring immediate visible results.

By broadening the focus of this study, companies can acquire an essential understanding of the main factors driving an innovative culture. Utilizing strong leadership strategies can help establish a setting that supports creativity. Furthermore, possessing a mechanism to assess and oversee the culture of innovation can help pinpoint areas that need improvement and allow for ongoing monitoring of progress. To further advance this research, future studies could focus on developing and validating an innovation culture assessment tool. Longitudinal studies across diverse industries could provide deeper insights into the interplay between leadership styles and innovation outcomes. Additionally, exploring digital tools and AI applications for tracking cultural transformation could offer actionable frameworks for practitioners.

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