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Research in Progress Paper

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Abstract

We are currently dealing with the challenges of a digital economy as well as a digital transformation. Furthermore, digital technologies are reshaping traditional business strategy and also transforming the structure of social relationships for both the consumer and the enterprise. However, we still do not have an in-depth discussion on what skills and abilities are required for leading the digital transformation process can help organizations to cope with these new challenges. So, the objective of the research in progress is to show how we are developing a study to answer the research question "what the skills are required of digital leaders to improve business performance in a digital transformation process. Our research is expected to make several contributions, bringing some initial results from the qualitative part of the study and presenting the next steps which will be empirically tested soon. The practical value of this research rests on demonstrating the impact of digital leadership on business performance, considering the context of digital transformation in Brazilian Enterprises.

Keywords

Digital Transformation, Digital Leadership, Leadership Skills, Business Performance

Introduction

We are currently dealing with the challenges of a digital economy as well as a digital transformation. These challenges were announced at the beginning of this century by Zimmermann (2000), who defined a digital economy to be an economy based on the digitization of information and its respective information and communication infrastructure. According to the author, this new type of economy implies challenges and opportunities, thus making it necessary for organizations to overcome the barriers imposed by the digital transformation and to take the opportunities that come with it. To cope with this new context, it is required that leaders develop new skills to contribute to business success.

Furthermore, digital technologies are reshaping traditional business strategy as modular, distributed, cross-functional, and global business processes that enable work to be carried out across boundaries of time, distance, and function. These technologies are also transforming the structure of social relationships for both the consumer and the enterprise with social media and social networking (Bharadwaj, El Sawy, Pavlou, and Venkatraman 2013).

However, while waves of technology — automation, additive manufacturing, AI — are washing over the corporate world, redefining the nature of work and productivity, there are no playbooks and few best practices for manufacturers' digital transformation (Moldoveanu & Narayandas, 2019).

The U.S. military coined the acronym VUCA (volatility, uncertainty, complexity, and ambiguity) in the late 1990s, and it has become general shorthand for conditions leaders may encounter especially in digital transformation context and leaders need to be prepared for many types of turbulence or upheaval (Schoemaker, Heaton, & Teece, 2018).

Considering the dynamics of the VUCA world, the identification of competencies for digital leadership is opportune. Temelkova (2018) points out that investigating and synthesizing key competencies for digital leadership contribute to business organizations achieving optimal management and optimal team collaboration, which in turn are crucial to the development of the global high-tech economy.

Bennis (2013) highlights that to face the digital revolution, it is necessary to lead with the capacity to understand the use of digital opportunities, tools, and instruments from this era. Kane (2019) adds that the most successful digital transformations begin with a change in the mentality of leaders, who need to develop for this challenge.

In this vein, this paper presents the main ideas of work in progress and discusses the relationship between digital transformation and the development of leadership skills. The research has been developed in Brazilian organizations that are in the process of digital transformation. Initially, exploratory field research is being developed to understand the phenomenon and after a quantitative study will proceed to reach a larger audience to respond to the research question: "what the skills are required of digital leaders to improve business performance in a digital transformation process?"

To fill this void, our research is expected to make several contributions. First, we conceptualize digital leadership. Second, our study advances in identifying the key digital leadership skills required for a business in a digital transformation process. Third, we intend to contribute to the literature by bringing some initial results from the qualitative part of the study and presenting the next steps of the main research. In the end, the practical value of this research rests on demonstrating the impact of digital leadership on digital business performance and discuss the best practices adopted by leaders, among other findings.

Literature review

From Digital Transformation to Digital Business Model

The digital era has brought many changes to society in general. Digitization refers to the encoding of analog information into digital format. We notice that all forms of content, such as books, music, photos, maps, etc., are now available in digital format. As a result, the level of digitization in our everyday socio-economic system is increasing and involves representing, processing, storing, and communicating the widest possible range of matter, energy, and information (Lyytinen, Yoo, and Boland Jr. 2016).

According to Aaker (2015), most firms are struggling to get digital rights, and they recognize that digital is a powerful device for building brands and strengthening relationships because it has a unique capability to engage people and communities. Consumers are demanding more powerful, faster devices to communicate messages, while businesses are seeking cutting-edge, cost-effective tools to cope with complex challenges (Chekwa and Daniel, 2014). Thus, firms must be prepared, and it is why we want to show how capabilities will help firms to cope with all these challenges of the digital economy.

The digital business model arose from advertising campaigns promoted by some companies that began using e-business in the late 1990s. The "Digital Business" seems to become popular in the decade of 2000 when consumers witnessed the growing trend of e-business and e-commerce. Many people wonder if it is just the addition of the letter "e", but that is not all. Although one could think that this transformation in business models through digitization was more a fashion than a fact, currently there are enough economic evidence that digitization is a trend that causes deeper implications than just the introduction of a new distribution channel as the development of e-commerce did (Bharadwaj et al, 2013);

So that traditional businesses begin to operate in the digital world, the firms must review their logic of organization and the use of IT infrastructures, which require new capabilities (Yoo, Boland & Lyytinen, 2012).

Leadership

Leaders play a critical role in group life by holding a disproportionate responsibility in both setting goals and inspiring collective action to attain those goals (Hoyt & Price, 2015). In the context of digital transformation Strategic leadership can help change the mind-sets of operationally oriented managers away from trying to be overly precise (and often wrong) and toward trying to be roughly right. Both product and process innovation matter here, depending on the organizational level considered as well as the nature of the strategy (such as differentiation vs. cost advantages) (Schoemaker, Heaton, & Teece, 2018).

In this scenario, a new term emerges, called Digital leadership that can be defined as "... the accomplishment of a goal that relies on ICT through the direction of human assistants and uses of ICT" (Hüsing et al, 2013). As mentioned before, Bennis (2013) highlights that to face the digital revolution, it is necessary to lead with the capacity to understand the use of digital opportunities, tools, and instruments from this era. Kane (2019) adds that the most successful digital transformations begin with a change in the mentality of leaders, who need to develop for this challenge. According to Klein (2020), digital leaders have to lead the DT so they could bring the organization through Industry 4.0 by managing the disruptive changes by motivating the employees.

In order to handle the digital revolution, there must be a kind of leadership that understands how to use the digital opportunities and its accompanying instrumentation (Bennis, 2013). Leadership needs to be aligned with digitalization through the action of employee empowerment and a shift in culture (Ancarani & Di Mauro, 2018). The authors supported that new business environments require a new leadership paradigm that moves from egocentric towards altrocentric leadership, solving the challenges of collaboration and teamwork to create and enable high-performance teams. In this context, leaders' challenges are associated with a lack of vision or an incremental vision concerning DT, furthermore, visions from top management need to be radical and transformative (Fitzgerald et al., 2013).

Leadership and Business Performance

Leadership and organizational performance Cursory reading of the leadership literature reveals that leaders are responsible for creating a vision of where the organization is going and implementing initiatives to achieve the vision. They generate enthusiasm for goal achievement and communicate employees' roles in contributing to the organization's strategy, and these leaders must manage interdisciplinary and increasingly international teams. Furthermore, effective leaders engage with the external environment, building collaborative relationships within the wider community, to promote the necessary change orientation (Yukl,2002; Temelkova, 2018).

McGrath and MacMillan (2000) reinforce that there is a significant relationship between leadership styles and organizational performance. Effective leadership style is seen as a potent source of management development and sustained competitive advantage, leadership style helps an organization to achieve their objectives more efficiently by linking job performance to valued rewards and by ensuring that employees have the resources needed to get the job done.

Broadly speaking, leadership performance is identical to organizational performance. Business management attributes their successes to leadership efficiency, that is, the leadership style of administrative supervisors has a considerable effect on organizational performance (Yukl,2002).

The need for leaders to be prepared to operate in a digital environment is evident. According to Temelkova (2018), this need results from factors such as the speed of innovations related to robotic and sensory technologies, and the competitive and unpredictable environment, especially in the IT sector. In this context, digital leadership is a systemic process and requires the interdependence of three functional areas: strategic leadership, commercial entrepreneurship, and digital technology.

The relationship between these three spheres must manifest an interdependent unity, and lead to the synergistic behavior of the leader who operates in a digital environment. "At the same time, each of the three functional areas is filled with certain basic knowledge and skills that determine the scale and capacity of digital leadership" (Temelkova, 2018, p. 68).

Methods

The research method employed a multiple-case study of five retail companies within the context of Digital Business Strategy. The protocol for the multiple-case study was validated by three specialists that made contributions to improve it (protocol is available upon request). The sample will be intentionally collected

on organizations of different sizes and in different stages of their digital transformation to improve the generalization of the study (Benbasat et al. 1987).

The respondents are C-level executives and Managers who lead a team at the strategy level. The interviews will be transcribed and analyzed by utilizing the content analysis technique (Bardin 1977). The analysis is in progress, with the use of the qualitative analysis software N'VIVO®. As a final step in the qualitative phase, the triangulation of data will be performed using content from the interviews, documents, and observations. Now we have just finished the pilot study that brought some insights to improve the final instruments.

After we conclude the qualitative phase, the hypotheses will be tested using a quantitative approach with partial least squared based structural equation modeling (PLS-SEM) (Hair, Ringle, and Sarstedt 2011). The collection will be carried out in organizations that are within the same digital context, in addition to the companies in the case studies. The respondents will once again be executives of the aforementioned areas. The survey will be elaborated based on the results of the qualitative phase in progress and literature review.

Conclusion

The first results have confirmed the role of the leader in the digital transformation process. Some skills needed by the leader have emerged from the research, such as resilience, organization, ability to communicate using different means of communication, ability to perform multiple tasks, strategic leadership thinking, entrepreneurship, and digital technology skills.

The first interviews of the case studies reveal a consistent relationship between leadership skills and business performance. The Head of Commercial of one of the biggest Brazilian retail company pointed out:

"The company and its strategy can be compared to an iceberg. The top part, what appears to the clients, is the result of the bottom part since the majority of them are intangible so we need a team focused and motivated" He highlights that performance is linked to the client's experience through digital media, such as online shopping websites, applications, among others what is related to leadership orientation.

The first results show the importance of being a sense maker and a challenge-driven leader. The rapidly changing environment, sensemaking is more important than ever and a challenge-driven leader can inspire organizations to take on climate change. These results match Ancona(2019) findings. In sum, the next steps of the research will be fundamental for the development of the quantitative collection instrument.

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