

Electronic Leadership a Multifunctional Perspective: A Proposal Based on the Theory of the Structure of Initiation and Consideration of the Leadership and Adaptive Structures



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Abstract The objective of this article is to describe and elaborate a contextualization of how nowadays electronic leadership must become a strategic tool for organizations and since the beginning of the twenty-first century has evolved in a process of social influence mediated by Information and Communication Technologies, of such that it has come to produce changes in attitudes, feelings behaviors even in the performance of individuals within organizations. Modern leadership has had to adapt and learn to communicate with your work teams no longer traditionally face to face but through a communication mediated by different electronic elements from laptops, cell phones, tablets, and other items from anywhere in the world. The documentary methodology allowed us through the consultation of multiple documents and a broad contrast of the information to make a proposal that structures the leadership electronically and fundamentally the actions of leaders in virtualized environments such as those of today .

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Resumen El objetivo del presente artículo es describir y elaborar una contextualización de como hoy en día el liderazgo electrónico se debe convertir en una herramienta estratégica para las organizaciones y como desde inicios del siglo XXI ha evolucionado en un proceso de influencia social mediado por las Tecnologías de la Información y la Comunicación, de tal manera que ha llegado a producir cambios en las actitudes, sentimientos comportamientos incluso en el desempeño de los individuos al interior de las organizaciones. El liderazgo moderno ha tenido que adaptarse e ir aprendiendo a comunicarse con sus equipos de trabajo ya no de forma tradicional cara a cara sino a través de una comunicación mediada por diferentes elementos electrónicos, desde laptops, celulares, tabletas, y otros elementos desde cualquier lugar del mundo. La metodología documental nos permitió a través de la consulta de múltiples documentos y un amplio contraste de la información hacer una propuesta que estructure del liderazgo electrónico y fundamente el accionar de los líderes en ambientes tan virtualizados como los de hoy en día.

Keywords Electronic leadership · Tics · Virtual teams

Palabras clave Liderazgo electrónico · Tics · Equipos Virtuales

1 Introduction

The administration has now moved in environments marked by classical theories. This can be evidenced in the use of transactional leadership models. Nowadays in a globalized world and in constant connection, changes are being generated in the organizational structures, allowing new ways of working where its members interact through technological resources, but in different parts of the world, giving way to virtualization of the work teams and with it a substantial change in leadership, where new responsibilities must be assumed and new processes structured in virtual environments.

For Gonzalez and Sotelo (2016), new paradigms have motivated a review of the role of the traditional leader, the world economy is experiencing an important transition that is based on how organizations build new markets through the tics, allowing new ways of working and creating value both physically and in the virtual world. Avolio et al. (2001) have been stating that these new transformations have generated a new style of electronic leadership, which must be trained to meet the challenges of modern globalization.

Today's organizations depend heavily on multiple forms of digital communication, many of the processes that were previously done in person have been developed digitally, with the advantages offered by new technologies in order to achieve strategic objectives. If modern organizations do not enter into this dynamic of virtualization of many of their processes and the correct use of these technologies, they could be left behind losing great business opportunities.

Recent developments in the field of leadership have stimulated the need for them to reach these new business opportunities or strengthen a position within some area. It is very important to have a leadership capable of managing these advantages that modern technologies produce and that this in turn is ideal in guiding the teams in the scope of the strategic objectives of the organization in the middle of the virtualization of the processes. Starting from this base, today a new concept of e-leader or e-leadership is created with the aim of developing leadership proposals that are increasingly relevant to the modern environments of organizations.

For the development of this analysis, we will initially present a contextualization of electronic leadership and the main theories that we have used for the analysis.

1. Contextualization of leadership and Information and Communication Technologies

Until the end of the twentieth century, we continued talking about leadership in its traditional field, but they were Avolio et al. (2001) and a team of the first that began using the term electronic leadership at the end of the last century, beginning of the twenty-first century. They argued that technology has an effect on organizations according to their context and how users of these technologies adapt, resist, or reject technology based on structures that organizations create. The theory of adaptive structuring as indicated by Orlikowski (1992) highlights that human action is guided by structures, which define rules and resources that serve as the basis for planning and fulfilling tasks and structures that also arise when a group of work acts on these and produces new information that serves for interaction.

Avolio et al. (2000) define electronic leadership as “the process of social influence mediated by advanced information technologies to produce changes in attitudes, feelings, thoughts, behaviors, and performance among individuals, groups, and organizations”. Lee (2009) defines it as an exercise outside the traditional environment highly mediated by technology, and it is the leadership exercised in the virtual context of business environments.

Modern leadership must coexist with current information technologies as these are fundamental parts of change and organizational transformation processes. Esguerra and Contreras (2016) point out that within these processes of organizational transformation, we must take into account that these they become very influential elements in the organization and that affect all levels of it, both individual, group, and organizational, modifying the internal dynamics of the processes and in equal measure the exercise of leadership that results from the interactions with these technologies.

Some of the first to define the structure of information and communication technologies were DeSanctis and Poole (1994), which differentiated two important characteristics; structural characteristics, which refer to the real characteristics of how the information is collected and managed by the users and spirit characteristics that are the structural characteristics but in reference to the underlying intention or purpose with which these technological structures are used. Regarding these spiritual characteristics, Avolio et al. (2001) point out that the repeated appropriation of technologies generates or transforms social structures, and over time, they are institutionalized.

In this sense, electronic leadership is based on the extent to which social structures accept, adapt, or reject these technologies.

The structural and spiritual characteristics have changed over time, but the objectives of leadership remain the same, creating vision, giving direction, motivating, inspiring and building trust, however, electronic leadership needs to implement these technology-mediated objectives (Avolio et al. 2001; Gonzalez and Sotelo 2016). However, these rapid changes affect leadership and individuals, for the amount of effort in order to adopt these new technologies. For Van Wart et al. (2017), most individuals tend to be reluctant to these changes requiring greater leadership effort. Given this, it is very important that the leadership is willing to understand that, although most of the effort is short-term in the implementation, the benefits of these new adaptations are long-term in reducing time, costs and an increase in the productivity of human capital.

Modern leadership must adapt to being mediated by technology, and therefore, it must learn to develop increasingly effective communication strategies and better structure its influence processes, whether by procedures, setting standards, or policies, generating a positive perception, where the organization is going, without losing motivation and increasingly adapting to the use of tics. In the same way, it is essential not to forget that leadership is influence and that influence must be materialized in the achievement of the objectives. It is of no use to have the best technology if the strategic objectives of the organization are not achieved; this process is analogous to as if it is done virtually or physically in the organization, the electronic leadership that can occur at all hierarchical levels of the organization, you must be able to motivate in such a way that in all areas the greatest number of objectives is achieved.

2 Virtual Team Communication

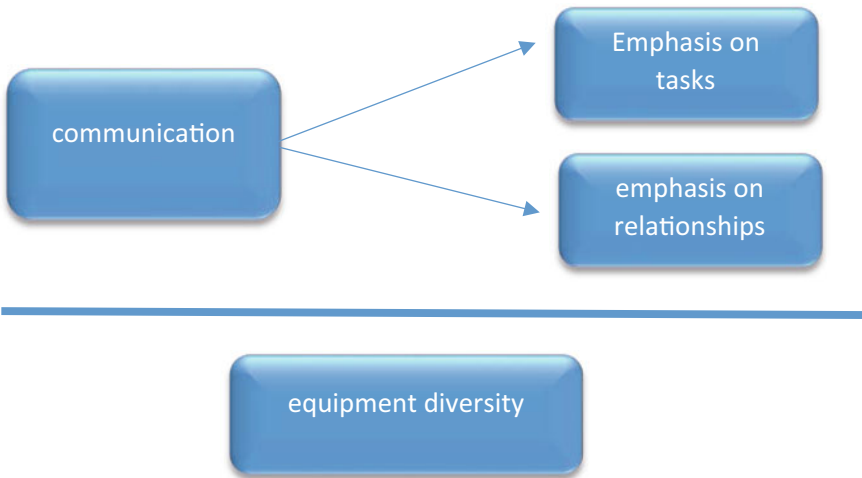
One of the characteristics of virtual teams is given in their communication, which occurs mainly through virtual tools affecting the behavior of the team. The investigations of Marlow et al. (2017) in their findings suggest that virtual teams take longer to complete tasks due to a variety of problems such as the lack of adaptation to the tics and the little synchrony between communication and virtual tools; similarly Hiltz et al. (1986) in the early beginnings of studies in highly virtualized teams found that they had a more focused orientation to tasks and communication than traditional teams.

It is clear that communication plays a fundamental role in electronic leadership. Marlow et al. (2017) argues that when communication is carried only through electronic means, it is more frequent and is greater in relation to face-to-face equipment, but there is a phenomenon of a decrease in its efficiency; this is because virtual teams must spend more time trying to filter out that communication that is irrelevant. For Chandler and Sweller (1991), the overabundance of unnecessary shared information can result in cognitive overload, which decreases performance, that is, once

an individual’s cognitive load reaches a certain threshold, learning and information processing seem affected.

The communication has two emphasis: the first in relation to its content, a communication with high emphasis on the delegation of tasks, that is, one that focuses on how to assign and carry out the tasks, and another with relational emphasis where it can generate cohesion, trust in teams and that they are able to share relational information through virtual tools (Çekmecelioğlu and Özbağ 2016). Of the same, we cannot leave behind the diversity of the teams; diversity can promote high levels of performance if high quality communication occurs. Integration and understanding of the unique perspectives of team members can provide valuable information to achieve higher levels of performance. However, if the quality of communication is low, people may have difficulty coordinating their work with team members, due to a lack of understanding, especially related to different aspects of the task (Horwitz and Horwitz 2007; Marlow et al. 2017).

The communication in the virtual teams must contain these two emphasis mentioned above, but these must be supported on the basis of the diversity of the teams in all aspects (cultural, nationality, religious, among others). These aspects feed the communication and provide multiple points of view that allows to create alternative solutions to the problems; in the same way, it should also be taken into account that the misunderstandings in virtual teams are much more difficult to handle than in face-to-face teams. In this way, the leader must be clear about all these aspects so that his communication is more effective and timely.



Source self-made

Based on Horwitz and Horwitz (2007), Marlow et al. (2017)

On the other hand, leaders can influence the appropriation of technology, using legitimate models such as the formalization of processes, the establishment of norms and non-legitimate policies or procedures such as the manipulation of organizational

structures (Esguerra and Contreras 2016) of this. For a better adoption of technological changes, leadership must develop analytical skills, flexibility, create a need for achievement, motivate continuous learning, analyze, and support technical skills (Van Wart et al. 2017).

Avolio et al. (2001) argue that the nature of traditional leadership (face-to-face) and that of virtual leadership is essentially the same and that the greatest challenge that this leadership entails in itself is learning to manage the temporal, physical, and cultural dispersions that they exist today in modern work equipment. One of the challenges that this type of leadership must assume according to Avolio et al. (2014) is to learn to communicate with their work teams no longer in a traditional face-to-face way but through communication mediated by some type of computer system, which includes digital media, video conferencing environment, email, chat software, among others. The effectiveness of these media will depend on the way in which the leader manages them and makes the most of virtual environments. This point becomes a challenge, leading in virtual environments which is not easy, since you have to be updated, but about a high capacity to adapt to environments that change so rapidly today.

A survey conducted by the Society for Human Resource Management (SHRM) indicated that 46% of multinational organizations use virtual teams, (Minton-Eversole 2012). Globalization has greatly influenced the increase of these percentages and the development of new work teams. Traditional teams have the advantage of real-time personal communication and share physical space in many cases, which becomes a more effective process, while in virtual environments their collaborators must communicate and work asynchronously through technology; these mean that leadership must achieve synchrony in its work activities (Avolio et al. 2014; Kahai et al. 2003).

3 Characteristics of Electronic Leadership

The study of virtual leadership has focused on two areas: leadership behavior and leadership traits (Gilson et al. 2015; Liao 2017), returning to a behavioral approach (Blake and Mouton 1964; Bowers and Seashore 1966; Judge and Robbins 2013; Katz et al. 1950; Likert 1961) one could study virtual leadership by focusing the behaviors of leaders who are task oriented, that is, they create an initiation structure or those oriented to relationships, which contain a high degree of consideration. For electronic leadership, it is very important that leaders possess these two characteristics are task oriented, structuring and specifying roles and responsibilities; but without leaving aside the leadership also oriented toward relationships, emphasizing the well-being of the group, these two approaches were analyzed in behavioral theories and could characterize the way in which electronic leadership should behave.

3.1 Task-Oriented Leadership

The use of virtual teams has grown as organizations widely adopt team structures to carry out their work which are constantly integrated by different backgrounds and cultures, leading to understand that leadership and information technologies are evolving naturally, which will have cultural and even anthropological implications (Avolio et al. 2014).

The Ohio state studies conducted in 1950 within the framework of behavioral theories of leadership could contribute a little in how electronic leadership should behave, and these studies focused on trying to identify the different behaviors developed by leaders, from the observation of real situations. In the first of the two studies that were conducted at this University, under the direction of Hemphill (1956) and Fleishman (1951), it was tried to identify the different behaviors carried out by the leaders. For this, questionnaires were developed. These different behaviors were grouped into two dimensions or two types of behaviors, which were named as initiation of structure and consideration (López Martínez 2013; Shartle 1979; Vázquez 2010).

The Ohio state agency identified two types of behaviors that described the leader, the behavior of initiation of the structure and the behavior of consideration that describe the behavior of leadership within these theories. An important point also to take into account in virtual teams is the condition of having a vertical leader due to multiple geographical locations, this has allowed the emergence of natural leaders, that is, members willing to assume leadership roles, informal leaders within the team which facilitate the operation of the equipment allowing greater cohesion and stability.

For Robbins (2004) and Shartle (1979), taking up the studies of the Ohio state company, he considers that the initiation of the structure refers to the degree to which the leader defines and structures his role and those of his subordinates in order to achieve the goals. A leader who has a high qualification in the category of initiation of the structure is the one who assigns specific tasks to the members of his team and expects the members of his team to have a defined performance and insists that the deadlines be met.

In virtual teams, the establishment of objectives and a structure is probably one of the most important points of electronic leadership, clear rules, and practices that must be established since due to the little face-to-face interaction, or the multiple cultural differences, as schedules, among others, can hinder the scope of the objectives.

3.2 Relationship Oriented Leadership

Another characteristic that electronic leadership must possess is an orientation to relationships without leaving as explained above, the orientation to the structure. This orientation covers part of the personality of the leader; Hoch and Dulebohn

(2017) identified five important features that virtual leadership must have, the five central dimensions are extroversion, kindness, awareness, openness to experiences, and emotional stability. In addition to these five fundamental characteristics, agility and trust have also been shown to have a highly positive impact.

Participatory and consultative electronic leadership has demonstrated efficiency, rather than a managerial or authoritative style, has demonstrated high levels of efficiency when clear objectives are established, and there is transparency in decision making; when the leader provides virtual feedback generating trust, it promotes self-management of team. In terms of continuing to contribute to the construction of a more accurate definition of electronic leadership, the models of transformational leadership applied to virtual teams by their characteristics can favor the construction of trust and the development of individual creativity that contributes to the cohesion of groups (Esguerra and Contreras 2016).

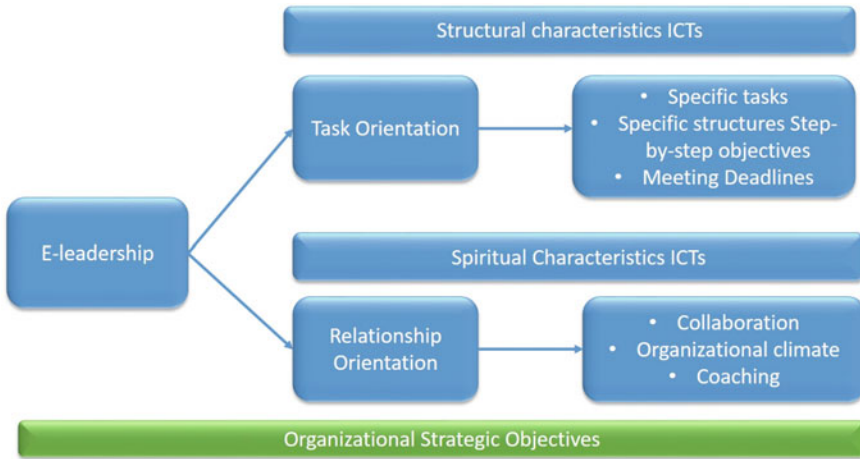
Returning to the studies of the state-owned Ohio, Robbins (2004) describes that the second style of leadership “consideration” which is the second orientation in behavioral theories is described as the degree to which the leader is likely to have working relationships characterized by mutual trust, respect for the ideas of subordinates, and their feelings. A very considerate leader is the one who helps his work team even with his personal problems, is friendly, and accessible; leaders with a high qualification in structure and consideration initiation tend to get their employees to achieve greater performance and satisfaction.

Now, similar to leadership in face-to-face contexts, electronic leadership can transmit through traits (who is one), behaviors (what one does), cognitive (what one thinks), and affective (what one feels), these mechanisms provide unique forms of leadership influence and are well received by collaborators (Hernandez et al. 2011).

Behavioral theories that initially tried to guide the way in which transactional leadership was exercised can be retaken and applied today to electronic leadership. A more promising approach would be to create an amalgam between behavioral models and modern approaches such as transformational leadership that perfect and give a more modern vision of what electronic leadership could be. More specifically take elements of behavioral models and transformational elements that give presence to the role of the leader, even if physically not found and everything is mediated by virtual communication.

On the basis of all of the above, Hambley et al. (2007) confirm what has been set out, where the establishment of transactional goals bony a high orientation to the tasks, and also the use of the facets of transformational leadership positively encourage group creativity and their efficiency.

In the following graph, we propose how the structure of electronic leadership could be, you can see the orientations that electronic leadership should have, and how these are complemented by the structure of the tics and their spirit approach according to the theory of structures placing as a basis the organizational objectives.



Based on Avolio et al. (2001), DeSanctis and Poole (1994), Gonzalez and Sotelo (2016), Robbins (2004)

4 Methodology

This study aimed to determine that when developing a theoretical, critical, and documentary review in which it has been possible to develop an analysis in view of the proposed theories of electronic leadership and its impact on work teams that are largely mediated by the technologies of the information and the communication.

5 Conclusions and Discussions

Leadership has evolved, but it has not lost its essence, in this research a proposal was drawn up of what could be the approaches and characteristics that electronic leadership should focus on and that can be adapted to the reality of organizations capacity. To disseminate and share information through technology, organizations have begun to redefine by allowing teams to separate in time and space, and elements such as culture, schedules, and other aspects affect to a certain extent the functioning of the teams and the leadership (Ziek and Smulowitz 2014).

Kahai et al. (2003) examine transformational versus transactional leadership in virtual team environments, finding that groups that work with a transactional leader had higher levels of group effectiveness and task satisfaction (task orientation), but also the effects of transformational leadership (consideration) were considered necessary; for Kirkman et al. (2002), the transformational/transactional leadership styles predict team processes and results, but none of these styles outperforms the other. This

strengthens the argument that we have been working on that the best way to strengthen electronic leadership is by giving behavioral tools, but also transformational ones.

The time and space variables are increasingly shorter, there are new relationships in the work teams, the same relationships of organizations with others make them increasingly complex, and in this way the traditional leadership only focuses on face-to-face teams. It is insufficient for the modern demands of organizations. Although a wide variety of definitions for electronic leadership have been suggested, we consider that the most important is to structure the way in which leaders must react to the changing ways of working, and the best way is an amalgam between transactional leadership styles and transformational, based on the theory of adaptive structuring. Traditional paradigms and models alone do not meet the operational needs of organizations, but a good interrelationship of these paradigms coupled with new models of exercising leadership can contribute to organizations reaching a greater degree of efficiency.

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