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Emerging Role of E-leadership on Innovation

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Abstract

The world is evolving due to new-age technology and innovation, leading to a change in the business environment. Organizations need to strengthen their leadership teams with innovative and creative professionals to adapt to dynamic changes.

Leadership plays a pivotal role in the productivity and profitability of organizations. New-age leaders are evolving to be E-Leaders in order to successfully bring growth to their organizations and inculcate innovation.

This paper aims to present the importance of E-Leadership in the context of promoting innovation. It is a literature review of independent factors influencing E-Leadership with gaps identified for future research. Organizations should study and consider these factors for their transition process towards E-Leadership.

Keywords: E-Leadership, Digitalization, Organization Culture, Organizational Mechanisms and Processes, Communication and Collaboration, Leadership Styles and Skills, Innovation

1. Introduction

The concept of 'leadership' is evolving and has varied definitions. A leader effectively influences employees to attain a common goal (Sivathanu et al., 2018). The intervention of new age technologies and mechanisms (Cortellaza et al., 2019) has imparted changes in the functionality of organizations. Thus, the importance of E-Leadership is becoming crucial whereby leaders use electronic as well as traditional means of communication.

E-Leaders play a pivotal role in developing well defined capabilities within the organization which encourages operating in both remote and virtual environments (Van Wart, et al., 2019). It is a multidimensional concept with a need to be examined from different aspects. Thus, E-Leadership is an important phenomenon promoting rapid growth in organizations. However, it also brings with it numerous challenges to organizations i.e. adopting appropriate technologies for paving their way forward in future.

This paper is a study of structured literature review on the emerging role of E-Leadership in addressing the research problems derived from research gaps towards fostering innovation within organizations.

2. Research Problems and Questions

The research aims to seek answers to the following research questions:

- How does digitalization influence leadership within organizations?
- Is organization culture important in encouraging E-Leadership?



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- How do mechanisms and processes within organizations impact the role of E-Leaders?
- How do new ways of communication and collaboration influence E-Leaders?
- Is the evolution of leadership styles and skills leading to E-Leadership?

3. Research Objectives

To seek answers to the research questions, the objectives of the study are outlined below:

- To study qualitative information for understanding the relationship between digitalization and leadership.
- To evaluate the culture of organizations for bringing in E-Leadership.
- To assess the various organizational mechanisms and processes that promotes E-Leadership.
- To identify new ways of communication and collaboration within organizations that encourages E-Leadership.
- To evaluate the relevance and suitability of leadership styles and skills that foster E-Leadership.

4. Scope of the Study

The scope of the study encompasses various studies on the concept of E-Leadership that have evolved over the years. E-Leadership refers to the process of influencing organizations to achieve their objectives for promoting innovation. Organizations can encourage growth as well as bring in a new pattern of work environment by implementing E-Leadership.

In the study, several factors that lead to the emerging role of E-Leadership within organizations were taken into consideration.

The objective of the study is to review important areas that influence leadership and to identify research gaps in order to prepare organizations for implementing E-Leadership.

5. Literature Review

E-Leadership refers to the concept of following a collaborative approach with a strong focus on innovation. Studies confirm the implementation of E-Leadership requires organizations to be open to an innovation fostering environment with focus on out-of-box thinking (Sivathanu, 2018).

The study is classified into various independent factors influencing E-Leadership, wherein the independent variables are:

- Digitalization
- Organization Culture
- · Organizational Mechanisms and Processes
- New Ways of Communication and Collaboration
- Evolution of Leadership

Digitalization

Digitalization has transformed the functionality of organizations thereby encouraging a smart working environment (Cascio et al., 2016). The usage of technology (Haddud et al., 2018) is leading to the



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necessity of relevant skills required to exploit them. Thus, the role of leadership is becoming crucial for adopting the appropriate technology for digitalization.

Studies on leadership have been trying to analyse the transformation initiated by digitalization. Some researchers have focused on the ability of the role of leaders to bring in digital transformation within their organizations and also encourage employees to adopt to change (Gardner, 2010). To further elaborate on this topic, the role of E-Leader has been conceptualized, whereby these leaders persistently use technology to communicate (Avolio, 2014).

The interest in exploring the association between digitalization and leadership is gaining momentum; however, these studies have been fragmented across varied aspects. This fragmentation is challenging for scholars to analyse the changes caused by digital transformation (Schwarzmüller et. al., 2018). Organizations are evolving due to technological enhancements, but how these evolutions are taking place is still a topic for debate. Moreover, due to the implementation of digital technology, it is essential to always take into consideration the latest research undertaken within this field.

Organization Culture

The culture of an organization is inclusive and broad in scope. Organizations should be open to a culture-promoting innovation for attaining a competitive advantage. Creativity of employees is strongly influenced by organizational innovation, which is driven by effective leaders (Ivcevic et. al., 2020). To encourage employees to innovate, leaders themselves need to be open to inculcate change.

Studies (Larjovuori et. al., 2018) on leadership conclude that while developing skillsets for new-age leaders, it is crucial to examine the holistic view of the organization. Organization culture constitutes a dynamic system for achieving organizational goals. To address this theoretical gap, E-Leaders should focus on integrating organization culture with organizational commitment in order to successfully implement initiatives for organizational change.

Organizational Mechanisms and Processes

Technology can improve organizational mechanisms and processes, leading to an increase in automation. This results in E-Leaders focusing on combining current employee requirements with appropriate digital skills. Also, new recruits in the organization need to be hired based on these digital competencies.

By integrating technology as well as management skills, E-Leaders of small and medium-sized enterprises (in a study conducted in Johannesburg, South Africa) were able to function efficiently in terms of maintaining their relationship with customers and suppliers, with better employee management and effective exchange of information.

An E-Leader is a visionary and has a clear role of combining skills that are both traditional and innovative in nature (Torre & Sarti, 2020). Both of these skills encourage team development by following a balanced approach.



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New Ways of Communication and Collaboration

New forms of communicating through technologies, have inculcated the need for guiding people through digital channels (Darics, 2020). To meet these growth-induced changes, organizations are in the process of implementing 'E-Leadership' where leaders operate primarily through digital medium (Zaccaro & Bader, 2003).

With emerging new-age technology, it has been observed that organizations are getting reshaped to various meaningful work patterns (Susskind & Susskind., 2015). Information can be stored and processed systematically (Hilbert & López, 2011). Leaders can communicate efficiently with speed and across various media platforms (Webster, 2014). As envisioned, along with being up-to-date with technology (Torre & Sarti, 2020) organizations need to focus on technology-related skills as one of the core capabilities required for leaders.

A leader in a technology-dominated setting must communicate effectively as part of a team, and fully understand the tools for supporting decision optimization. This requires not only cutting-edge Information & Communication Technology (ICT) skills but also a combination of mature business skills as well as communication skills. ICT-mediated environments are impacting the way leadership is looked upon; hence the term 'E-Leadership' is emerging.

Studies indicate in future, leadership will need to be well-connected and collaborative to tackle challenges caused by external factors (Kelly et al., 2018). Also, leaders will need to create an environment conducive to experimentation and at the same time empower employees to collaborate freely and think innovatively (Jakubik & Berazhny, 2017). Thus, it is essential for leaders to encourage an organization that promotes an environment for innovation (Shamim et al., 2016).

Evolution of Leadership

Leadership is evolving to be connected as well as collaborative. It is transforming into E-Leadership whereby leaders should aim to build their organization on three pillars:

- Ensure a working environment that is connected across all levels and units within the organisation
- Establish rapport with customers
- Initiate integrated relationships with partners as well as competitors (Berman & Korsten, 2014).

Studies indicate that leadership styles, skills and practises are evolving and new-age leaders are emerging. Scholars agree to organizational structures becoming flatter and more decentralized (Horner-Long & Schoenberg, 2002) due to faster and easier accessibility to information. Therefore, leaders need to adopt an inclusive style of leadership (Schwarzmüller et al., 2018) whereby the ideas of followers are considered in everyday decision-making. Also, employees need to be inspired and motivated throughout their involvement and active participation, which are among the key skills of leaders (Horner-Long & Schoenberg, 2002).



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It has become vital for leaders to build an organizational environment that promotes unity and collaboration among employees. Thus, E-Leaders should blend social skills with effective methods of communication (Liu et al., 2018).

Scholars agree that speed has changed organizational life due to the introduction of technology, thus forcing E- business leaders to make rapid decisions (Horner-Long & Schoenberg, 2002). This suggests that in the future, E-Leaders will need to follow a decisive approach and adapt to problem-solving capabilities (Horner-Long & Schoenberg, 2002).

6. Proposed Methodology

The study uses qualitative research based on articles with a focus on emerging role of leadership as indicated in Figure 1. These were reviewed through keyword searches of 'ProQuest', 'EBSCO' and 'DOAJ' databases and limiting to the time frame of 2017-2023.

Identified relevant articles: 100

Elimination on title and abstract

Articles retrieved for detail evaluation: 85

Do not meet the inclusion criteria

Articles included in review: 50

Figure 1: Flow diagram of Literature Review

Major findings, objectives, key result areas and conclusions suggested by the studies were identified. Also, the gaps and areas for potential future research were examined.

The systematic analysis of the literature review involved analysing articles in terms of their relevance, chalking out the important aspects and working out the frequency of the occurrence of the gap variables. This helped to identify the key independent variables.

7. Discussion, Analysis & Outcome

The discussion, analysis and outcome from the various independent variables playing a significant role in encouraging E-Leadership are outlined below:

Digitalization

Digitalization refers to adopting and implementing technologies (Hendrik, 2017) for organizational growth. However, the use of technologies brings about change in the functionality of organizations (Gruia et al., 2020).



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Leaders will need to invest in up-grading the skills of employees (Cortellaza et al., 2019) with new age technology tools in order to be future ready. Also, talent will need to be effectively led and managed through effective communication (Hendrik, 2017).

Studies indicate the traditional way of leading will need to be replaced by collaborative learning and communicating via digital medium. Digitalization will imply automation of managerial practices (Jakubik & Berazhny, 2017) in organizations. The outcome from the studies reviewed on digitalization proposed leaders in future to focus on four aspects for transitioning to a digital environment:

- Combine employee skills and technologies to cope with digital age.
- Ensure a connected environment that encourages seamless working across all levels within the organization.
- Follow communication that is mediated in nature.
- Initiate integrated relationships (Berman & Korsten, 2014).

Thus, organizations at the internal and external level are becoming boundary less. Their structure is undergoing an on-going change process (Van Outvorst et al., 2017).

Proposition 1: The advent of digitalization in organizations positively influences the role of leadership, transforming into E-Leader through adoption of digital tools and encouraging a digitalized environment.

Organization Culture

The culture of organizations plays a pivotal role in determining the environment of the organization. It provides a guideline for employees to integrate themselves within the organization (Gruia et al., 2020). Organizations need to build an effective culture resilient to changes caused by new-age technology.

Organization culture is influenced by leadership styles and operating structures, which an organization may choose to adopt (Northouse, 2016). The process of setting up a transformative culture will require dedicated efforts from the leadership team. Thus, leaders will need to focus on flexibility and encourage a learning and innovative environment within organizations.

The outcome from various studies indicates leadership to be both people-oriented and technical-minded to foster an innovative organization culture. Leaders should be knowledgeable, upgrade their skills and gain understanding about competencies required to operate in a new-age and competitive environment. Leaders should also act as network facilitators and thereby promote organizational growth.

Proposition 2: Organization culture has a significant relationship with the emerging role of E-Leaders who promote an innovative environment through employee opinions and encouraging out-of-box thinking.

Organizational Mechanisms and Processes

The shift from an industrial era to new-age technology environment has encouraged change in organizational mechanisms and processes, whereby organizations are embracing automated and flexible work mechanisms (Pulley & Sessa, 2001). Work environment is seen to be mediated by latest



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technologies, which is making leaders change their practices for sustaining long-term organizational growth. Within organizations, there has been an increase in communication through virtual platforms (Nydegger & Nydegger, 2010).

The outcome from various studies reviewed suggests organizations to have a new mindset, as well as method, for encouraging improved work performance. This will lead to overall satisfaction of employees, customers and organizational needs.

Proposition 3: Organizational mechanisms and processes are evolving due to new-age technology, which positively influences E-Leadership through organizational innovativeness.

New Ways of Communication and Collaboration

The use of latest technologies encourages new ways of communication and promotes collaboration within organizations (Bednar & Welch, 2017). It leads to flatter organizational structures where employees can freely communicate and collaborate without geographical boundaries. Thus, leaders will need to act as network facilitators to foster innovation in organizations (Iannotta et al., 2020).

Leaders require various leadership and management traits to guide people through digital platforms (Darics, 2020). Thus, leaders using new-age technologies should (a) identify effective management processes and (b) lead people by promoting the mission and vision of the organization.

The outcome from studies reviewed suggests leaders to develop capabilities that are digital as well as human in order to communicate and collaborate effectively. This will lead to an efficient and flexible working environment, giving employees a sense of purpose in the organization and thereby improve productivity.

Proposition 4: New ways of communication and collaboration has a significant influence on the role of E-Leaders through communication tools and collaborative technologies leading to seamless working among employees.

Evolution of Leadership

The role of leaders is evolving with a change in their behaviour and a mix of physical and technology-mediated interactions (Bednar & Welch, 2017). The new way of practicing leadership involves use of technologies for maintaining relationships within teams.

New age leaders should be visionaries who work towards promoting team development in a balanced way through traditional as well as innovative technologies.

Studies suggest future leaders to ensure a working environment that is well connected across all hierarchical levels in the organization, thereby leading to the emerging role of E-Leadership.

The outcome from studies reviewed on evolution of leadership indicate leadership practices emerging to be more collaborative, following the approach of better connectivity and being network oriented. In



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future, leaders will have different perspectives i.e. be innovative, flexible and follow the attitude of learn and unlearn. Leaders will need to be knowledgeable and well prepared, develop an understanding of required competencies to effectively function in a fast-paced environment.

Proposition 5: The evolution of leadership due to new age technology has a significant relationship with new-age leaders, through change in leadership skills and practices.

8. Research Implications

The research implications of the study bring about the significance of the changing role of leaders, who constantly interact with new age technology. Thus, there is a need to follow mediated communication to foster innovation within organizations. New age leaders should focus on upgrading their skills and the competencies of their employees in order to operate in a fast-paced, dynamic and rapidly changing environment.

9. Contribution to Practice

The findings from the study can be implemented by organizations to transition towards E-Leadership and be ready for the future. It will help senior management of organizations to prepare themselves while planning their hiring as well as training and development needs. It will also provide a guideline for strategizing the growth plans of the organizations towards innovation.

10. Limitations & Scope for Future Research

The limitations of the study pertain to the fact that it is based on secondary information and is confined to the review of select few articles. Thus, there is a further scope to research and explore on the topic. The study is also restrained to the drawbacks as well as limitations of research methodologies that were considered in the original research. The study is restricted to five independent variables; thus, further studies can be undertaken to identify new variables and expand the research to quantitative analysis.

Future research can aim to focus on the following:

- Design different communication tools that leaders can utilize to measure employee motivation and satisfaction.
- Use of social media in influencing the role of E-Leaders.
- Leadership influenced by gender in a digital environment.
- Primary research to gain valuable insights of digital transformations within organizations.
- An extensive review of external factors and strategic effects to gain an understanding of how E-Leadership is adopted across varied organizations.

11. Conclusion

The study concludes by bringing about the emerging role of leaders due to new-age technologies, which lead to change and influence the work environment. Consequently, leadership practices are becoming network-oriented, connected and collaborative.



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In future, leaders will need to possess and develop skills that are human as well as digital in nature. Leaders will be required to effectively communicate in a digitalized environment for bringing about innovation within their organization.

The study demonstrates that understanding digitalization, organization culture, organizational mechanisms and systems, new methods of communication & collaboration and the evolution of leadership styles and practices will prepare leaders to be ready for new-age technology, thereby fostering innovation. This will also prepare organizations for paving their way towards E-Leadership and for business sustainability.

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