The Role of Leadership in Managing Organisational Culture Change in the Context of Information Technology Implementation

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ABSTRACT

The rapid development of information technology has affected many organisations in various sectors. The implementation of information technology often involves changes in work processes, organisational structure and overall organisational culture. The background of this study aims to investigate the role of leadership in managing organisational culture change in the context of information technology implementation. The current research type is qualitative. Data collection techniques include listening and recording important information to conduct data analysis through data reduction, data display, and conclusion drawing. The study arrived at a statement that in the context of information technology implementation in organisations, organisational culture change becomes a critical factor affecting the success and sustainability of the use of such technology. Leadership plays an important role in managing such organisational culture change. Through effective communication, appropriate education and training, active participation and involvement of organisational members, strong team building, recognition and rewards, gradual change management, and continuous evaluation and adjustment, leadership can create an enabling environment for the adaptation and utilisation of information technology.

Keyword: Leadership, Organisational Culture, Information Technology

INTRODUCTION

The objective of this study is to examine the impact of leadership on the management of organizational culture change during the implementation of information technology. The swift advancement of information technology has had a profound impact on numerous organizations across diverse sectors (Wahyoeid et al., 2023). The integration of information technology frequently necessitates modifications in work procedures, organisational framework, and the overarching organizational culture (Harper & Utley, 2015) and (Prastyaningtyas et al., 2023).

In order to effectively adapt and utilize information technology, it is imperative for organizations to undergo changes in their organizational culture. Nevertheless, the process of implementing a change in organizational culture is frequently challenging and intricate (Kaur Bagga et al., 2023). The effective execution of information technology frequently relies on the leader's capacity to oversee the transformation of organizational culture (Leso et al., 2023).
Leadership plays a crucial and influential role in the formation and guidance of organizational culture (Xenikou, 2022). Organizational members must possess the capacity to inspire, influence, and motivate their peers in order to facilitate the adoption of requisite cultural transformations. In addition to their leadership abilities, it is imperative for leaders to establish a conducive work environment that fosters change and enables a seamless adaptation process to information technology.

Previous research has established a correlation between leadership and the process of initiating and implementing organizational culture change. These studies emphasize the significant role that leaders play in instigating and molding the desired cultural transformation within an organization. One of the pertinent investigations is the scholarly inquiry undertaken by (Schein, 2004). Schein's research has identified three distinct leadership mechanisms that exert influence on the process of organizational culture change. These mechanisms include: a) the role of leader models, b) socialisation and teaching by leaders, and c) leader behaviour in responding to the behaviour of organisational members. Furthermore, an additional pertinent study can be found in the research conducted by (Kotter & Heskett, 1992). The findings of this study indicate that the implementation of a robust and intentional leadership approach can effectively facilitate the establishment of a favorable cultural transformation within the organization. It has been discovered that leaders who demonstrate commitment to transforming the organizational culture through the establishment of explicit values, effective communication of a compelling vision, and consistent implementation of actions have the ability to effect substantial cultural change. The aforementioned studies provide evidence that leadership plays a pivotal role in effecting changes within an organizational culture. Leaders have the ability to shape the desired organizational culture through various methods such as leader modeling, socialization, teaching, and responding to members’ behavior. Both studies contribute to a deeper comprehension of the correlation between leadership and the process of transforming organizational culture. Additionally, they offer valuable insights and recommendations for leaders to effectively navigate the challenges associated with implementing cultural change within organizations.

In addition, it has been observed that the application of transformational leadership, characterized by the presence of a well-defined vision, proficient communication, and robust motivation, has been linked to favorable cultural shifts during the implementation of information technology (Ausat et al., 2022). Leaders who possess the ability to effectively express a vision for transformation, effectively convey the advantages and objectives of implementing information technology, and offer suitable assistance to members of the organization, have the capacity to exert influence over the necessary cultural shift (Cortellazzo et al., 2019).

Nevertheless, the management of organizational culture change in relation to the implementation of information technology still presents numerous challenges. Several factors have been identified as potential influences on the success of organizational culture change. These factors encompass resistance to change, ineffective communication, and a misalignment between the prevailing organizational values and the values necessary in the realm of information technology.

This literature review aims to enhance comprehension regarding the role of leadership in effectively managing organizational culture change within the specific context of information technology implementation. The findings of this study have the potential to offer valuable insights and recommendations for leaders and managers in effectively addressing the complexities associated with managing organizational culture transformation in the context of information technology implementation.

LITERATURE REVIEW

Leadership

Leadership encompasses the capacity of an individual to exert influence, provide guidance, and inspire individuals or collectives towards the attainment of predetermined objectives (Khan et al., 2020). Leadership encompasses the utilization of aptitudes and methodologies to effectively manage and direct individuals within a team or organization, with the ultimate objective of achieving a predetermined vision (Zen et al., 2023). Leadership encompasses a broader scope
beyond mere occupation or designation. Leadership can manifest in both formal and informal capacities. Formal leadership positions include managerial roles, directorial positions, and chief executive officer positions (Hiller & Beauchesne, 2013). On the other hand, informal leadership can be observed in individuals who assume the roles of group leaders, mentors, or inspirational figures. Leadership encompasses more than mere authority or power; instead, it pertains to the capacity to exert positive and efficient influence over others (Lawson & Fleshman, 2020). There are various leadership approaches or styles utilised by individuals. Some common leadership styles include:

1. Transformational leadership: This style of leadership involves the leader having a clear vision, being able to motivate and inspire team members, and drive positive change in the organisation.
2. Transactional leadership: This leadership style involves an exchange between the leader and team members. The leader rewards or punishes based on achieving set targets or performance.
3. Democratic leadership: This leadership style involves active participation of team members in decision-making. The leader seeks input and opinions from team members before making decisions.
4. Authoritarian leadership: This leadership style involves the leader having full control and giving direct instructions to team members.
5. Laissez-faire leadership: This leadership style involves the leader giving full freedom to team members in making decisions and managing their work.

Effective leaders possess a range of essential qualities, including proficient communication abilities, adeptness in cultivating robust interpersonal connections, adeptness in conflict management, establishment of high levels of trust, and adaptability in response to environmental fluctuations. In addition, they possess the capacity to discern and harness the unique capabilities of individuals, inspire and incentivize members of a team, and establish an environment conducive to productivity and cooperation.

Organisational Culture

Organisational culture encompasses a range of elements, including values, norms, beliefs, traditions, attitudes, and behaviours, which are collectively embraced and enacted by individuals within an organisation (Bamidele, 2022). The aforementioned statement pertains to the manifestation of cognitive processes, interpersonal dynamics, and functional procedures within a specific organizational framework (Bagozzi & Lee, 2019). The organizational culture plays a pivotal role in shaping the distinct identity of an organization and exerting influence over the behaviors, communication patterns, and collaborative efforts of its members (Tran, 2017). Organisational culture can include various elements, including:

1. Values and beliefs: Organisational values reflect the principles and beliefs that members of the organisation consider important. These underlie the decisions and actions taken by individuals within the organisation.
2. Norms and behaviours: Organisational norms refer to the rules, expectations and standards of behaviour accepted within the organisational environment. These norms may relate to communication, co-operation, work ethics, or quality of work.
3. Traditions and rituals: Organisational traditions include activities or celebrations that are repeated regularly and represent the history and culture of the organisation. These rituals could be regular meetings, annual events, or other specialised practices.
4. Leadership style: Organisational culture is also reflected in the leadership style practiced in the organisation. A strong and assertive leadership style may reflect a more authoritarian culture, while an inclusive and participative leadership style may reflect a more democratic culture.
5. Communication: Organisational culture can influence communication patterns among members of the organisation. Some organisations may have an open and communicative culture, while others may have a more formal or hierarchical culture in terms of communication.

Organisational culture can influence the performance and success of the organisation as a whole. A strong and positive culture can create a co-operative, innovative and productive work environment. On the other hand, a culture that is not in line with the organisation’s goals or desired
values can hinder the adaptation, initiative and performance of organisational members. Leaders and managers have an important role in shaping and strengthening organisational culture. They should set a good example, communicate organisational values, and create policies and practices that are consistent with the desired culture.

**Information Technology**

The term "Information Technology" (IT) encompasses the utilization of computers, hardware components, software applications, communication networks, and information systems for the purpose of acquiring, storing, manipulating, transmitting, and overseeing data (Harahap, Kraugusteeliana, et al., 2023). The process entails the utilization of technological tools to gather, organize, and disseminate data and information in diverse formats, including textual content, visual imagery, auditory elements, and audiovisual media (Sutrisno et al., 2023). Information technology covers various aspects, including:

1. **Hardware:** This includes computers, servers, network devices, storage devices, mobile devices, and other hardware used to process and store information.
2. **Software:** This includes the applications and operating systems used to manage and process data. Software includes programmes used to process information, such as word processing, spreadsheets, databases, content management systems, and other specialised programmes.
3. **Communication network:** Communication networks connect information devices and systems so that data and information can be transmitted and accessed efficiently. This includes wired networks, wireless networks, communications infrastructure such as routers and switches, and communications protocols such as TCP/IP.
4. **Information system:** An information system is an organised structure of hardware, software, data, procedures, and personnel used to collect, manage, process, and deliver relevant and useful information in the context of an organisation or business.

The integration of information technology has a substantial impact on enhancing efficiency, productivity, and communication capabilities across various domains such as business, education, healthcare, entertainment, and public administration (Harahap, Ausat, et al., 2023). Information technology (IT) is employed within organizational settings to mechanize business procedures, enhance the efficiency of data storage and retrieval, facilitate improved collaboration and communication among team members, and bolster decision-making processes (Kamar et al., 2022). The utilization of information technology within organizations frequently entails the deployment of information systems, encompassing database management systems, supply chain management systems, sales management systems, human resource management systems, and other related systems (Ausat, 2023). The utilization of information technology within organizations serves the objective of enhancing efficiency, elevating service quality, optimizing operational processes, and generating a competitive edge by effectively harnessing information resources. Nonetheless, the incorporation of information technology may present certain difficulties, including but not limited to cultural transformation, training requirements, safeguarding information, and intricate system integration. Hence, the proficient administration of information technology implementation and utilization within an organizational framework necessitates the presence of effective management.

**RESEARCH METHOD**

This research aims to analyse the role of leadership in managing organisational culture change in the context of information technology implementation. In this study, researchers conducted library research so that there was no need to go directly to the field during the data collection process, but rather examine various reference sources that support this research. The literature was obtained from online media and databases from journal portals that are in accordance with the keywords related to this discussion, namely the role of leadership in managing organisational cultural change in the context of information technology implementation. The author does not focus on specific journal portals or online media in determining relevant reference sources such as referring to the Emerald Insight, ResearchGate, and Elsevier journal portals, but is more flexible. In this article, with a focus on public sector development strategies as a driver of economic...
growth, the author made these keywords the focus of the search so as not to widen the main discussion. The search for journals, articles and publications was mostly in the range of articles published between 2010 and 2023. Not all articles, journals and publications that appear in the search results will be used, but only those related to the role of leadership in managing organisational culture change in the context of information technology implementation.

This research is a type of qualitative research. Data collection techniques include listening and recording important information to conduct data analysis through data reduction, data display, and conclusion drawing to obtain a picture of the conclusions regarding the literature study that will be developed in this study. Data validation uses triangulation of data sources.

RESULTS AND DISCUSSION

The significance of leadership in the management of organizational culture change within the framework of information technology implementation is a crucial factor in attaining effective and enduring utilization of information technology within an organization. Organisational culture change pertains to the process of modifying the underlying principles, customary practices, attitudes, and conduct within an organization (Gabriel, 2015). On the other hand, information technology implementation encompasses the utilization and integration of information technology within the operational framework of an organization.

The significance of organizational culture change in the implementation of information technology is a topic of considerable importance. Information technology encompasses not only technical components, but also the crucial element of human interaction with the technology (Harahap, Sutrisno, et al., 2023). Hence, it is imperative to establish an organizational culture that fosters the acceptance of change and the ability to adapt to advancements in information technology. The successful adoption and effective utilization of information technology may encounter challenges and hindrances in the absence of a suitable cultural transformation (Touriano et al., 2023).

Within this particular context, the function of leadership encompasses various significant roles. Initially, it is imperative for leadership to effectively communicate the necessity of implementing information technology and fostering organizational change. Effective leadership necessitates the ability to effectively articulate a well-defined vision and elucidate the advantages associated with the cultural transformations demanded by advancements in information technology (Khoshhal & Guraya, 2016). This intervention is expected to mitigate resistance and alleviate anxiety that may be experienced by individuals within the organization. Additionally, it is imperative for leadership to exemplify and exhibit personal dedication towards effecting a transformation in the organizational culture. Effective and persuasive leadership plays a crucial role in transforming the attitudes and behaviors of individuals within an organization, while also highlighting the significance of embracing and adapting to advancements in information technology (Jaroliya & Gyanchandani, 2022). In this particular scenario, it is imperative for leadership to establish a precedent and embody the qualities of a role model in the effective utilization of information technology, thereby directly showcasing its advantages.

Thirdly, it is imperative for leadership to establish an environment that fosters the transformation of organizational culture. The implementation of information technology can be facilitated by the formulation of policies, establishment of procedures, and development of organisational structures that align with the intended goals (Verhoef et al., 2021). It is imperative for leadership to ensure the availability of necessary resources for facilitating cultural change, including but not limited to sufficient training, technical support, and accessibility to information technology. Additionally, it is imperative for leadership to establish a robust and proficient team in order to effectively oversee the process of organizational culture transformation. The composition of this team may comprise individuals who possess both technical expertise and a comprehensive comprehension of the organizational culture. Effective leadership is essential in facilitating the successful implementation of cultural change within an organization (Sonmez Cakir & Adiguzel, 2020). It is imperative for leaders to offer guidance and assistance to their teams, while also actively addressing any barriers or challenges that may impede progress in this transformative process.
Furthermore, it is imperative for leadership to engage in the measurement and evaluation of the advancements made in the process of organizational culture transformation. Continuous evaluation is essential for monitoring both the achievements and obstacles that may arise during the process of managing cultural change. Through the acquisition of consistent feedback, leadership can effectively make the requisite modifications to guarantee a prosperous implementation of information technology.

When it comes to the management of organizational culture change, leadership must also give due consideration to a number of significant factors. Initially, it is imperative for leadership to possess a comprehensive understanding of the organizational context and the individual attributes of its members. Each organization possesses a unique culture, and a comprehensive comprehension of this culture will assist leaders in formulating a suitable strategy for implementing change. Additionally, effective and transparent communication is a crucial attribute that leaders must possess. Effective communication plays a pivotal role in mitigating apprehensions and anxieties that may emerge within the members of an organization (Hashemi et al., 2020). Furthermore, it is imperative for leadership to ensure the appropriate and timely dissemination of information regarding cultural change and the implementation of information technology to all pertinent stakeholders.

Furthermore, it is imperative for leadership to possess the qualities of flexibility and adaptability. The adoption and integration of information technology frequently entail swift and fluid transformations, necessitating leadership that is adaptable and responsive to such changes (Hund et al., 2021). The importance of flexibility should also be evident in the decision-making process concerning modifications to the organizational culture. Ultimately, leadership necessitates the possession of both patience and perseverance. The process of changing organisational culture is not immediate, but rather requires a sustained and diligent commitment over a period of time. The ability to persist in the face of obstacles and challenges is a crucial attribute for effective leadership during the process of organizational culture change.

The criticality of leadership in managing organizational culture change within the context of information technology implementation cannot be overstated. The implementation of effective leadership is crucial in establishing a conducive environment for the assimilation of information technology, fostering a shift in the attitudes and behaviors of individuals within the organization, and ultimately guaranteeing the sustained prosperity of information technology utilization within the organizational context.

When overseeing the transformation of organizational culture during the implementation of information technology, leadership must also take into account various effective strategies and approaches. Several approaches can be employed in order to address the issue at hand:

1. Effective communication: It is imperative for leadership to ensure effective and transparent communication regarding the process of cultural transformation and the implementation of information technology. This necessitates elucidating the rationale behind the modification, its advantages, and the corresponding ramifications and anticipations. Effective communication plays a pivotal role in mitigating resistance and fostering enhanced comprehension among individuals within an organization.

2. Education and training: In order to effectively equip organizational members with the necessary skills to adopt and utilize information technology, it is imperative for leadership to identify and address education and training needs. This encompasses targeted technical instruction as well as training focused on fostering cultural transformation, encompassing shifts in mindset, conduct, and collaborative dynamics. The acquisition of knowledge and skills through education and training plays a crucial role in developing the necessary competencies for the successful implementation of information technology.

3. Participation and involvement: Leadership ought to foster and promote the active engagement and inclusion of members within an organization in order to facilitate cultural transformation. This can be achieved by involving them in the various stages of planning, decision-making, and implementation. By engaging the members of the organization, a sense of ownership and commitment towards the cultural transformation will be fostered.

4. Formation of a strong team: Effective leadership is essential for assembling a team that
possesses the requisite expertise and knowledge to effectively navigate the complexities of managing organizational culture change. The team should possess the capacity to formulate change strategies, discern potential obstacles, and devise efficacious tactics. Leadership plays a crucial role in offering guidance and assistance to the team, as well as fostering efficient collaboration among its members.

5. Recognition and reward: It is imperative for leadership to acknowledge and incentivize individuals or teams who demonstrate success in embracing cultural transformation and effectively leveraging information technology. The provision of positive incentives to organizational members can effectively encourage their adaptation to change and active participation in the successful implementation of information technology.

6. Gradual management of change: It is imperative for leadership to comprehend that the process of organizational culture transformation is a time-consuming endeavor that necessitates careful management in sequential phases. The achievement of successful information technology implementation necessitates a gradual and deliberate transformation of the organizational culture, rather than an immediate and abrupt change. Hence, it is imperative for leadership to develop a comprehensive change plan, effectively prioritize the essential actions, and adeptly oversee the process of change.

7. Evaluation and adjustment: It is imperative for the leadership to engage in ongoing assessment of both the organizational culture transformation and the implementation of information technology. This entails the ongoing observation of progress, the identification of emerging obstacles, and the implementation of necessary adjustments. Continuous evaluation will aid leaders in maximizing the effectiveness of the culture change process and effectively addressing any potential issues that may arise.

The crucial aspect to emphasize is that the success of organizational culture change in the context of implementing information technology is heavily reliant on effective leadership. Leadership plays a crucial role in facilitating the adaptation and utilization of information technology within an organization, thereby enhancing overall organizational performance and competitiveness. This can be achieved through a comprehensive understanding of the significance of cultural change, the implementation of suitable strategies, and the active involvement of organizational members.

CONCLUSION

In the realm of information technology implementation within organizations, the alteration of organizational culture emerges as a pivotal element that exerts influence on the achievement and durability of technological utilization. The role of leadership is crucial in effectively managing organizational culture change. Leadership has the ability to establish a conducive environment for the adoption and utilization of information technology by employing various strategies. These strategies include proficient communication, suitable education and training, active engagement and participation of organizational members, robust team building, acknowledgment and incentives, gradual change management, and ongoing evaluation and adjustment. There are several suggestions that can be given from the review of the above explanation, among others:

a) Leadership must have a deep understanding of organisational culture change and the importance of adaptation to information technology. This understanding can be obtained through continuous training and learning.

b) Leadership needs to build effective communication with organisational members, explaining the vision of cultural change and the benefits of implementing information technology clearly and openly.

c) A participatory approach and active involvement of organisational members in culture change will help create a sense of ownership and commitment to the change. Leadership should facilitate participation and listen to input from organisational members.

d) The formation of a strong and competent team to manage culture change is essential. Leadership must identify individuals with relevant expertise and knowledge, and provide support and direction to the team.
e) Recognition and reward of individuals or teams that are successful in adopting cultural change and leveraging information technology will provide positive incentives for organisational members to adapt.

f) The culture change process should be managed in stages, with detailed plans and thoughtful management. Leadership must understand that culture change takes time and patience.

g) Continuous evaluation and adjustment will assist leadership in monitoring progress, identifying obstacles, and making necessary improvements in organisational culture change and information technology implementation.

By incorporating these recommendations, leaders can enhance their effectiveness in overseeing the transformation of organizational culture and facilitating the seamless integration of information technology within the organization. This will assist organizations in addressing the dynamic challenges posed by information technology and attaining enhanced advantages through its utilization.

REFERENCES


