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Impact of Digitalization on Authentic Leadership; A Qualitative Study on Information Technology and Software Industry of Pakistan

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ABSTRACT

This research is aimed to explore the authenticity of authentic leadership in the digital era in IT and Software Industry. Through qualitative data the study explores the challenges faced by leadership while showcasing their authenticity in online or remote dealings. Through purposive sampling technique, interviews were conducted with 20 experts which were analyzed through thematic analysis. The study identifies key themes that were highlighting the importance of transparency, emotional intelligence and adaptability in leadership. Furthermore, key challenges were identified as misinterpretation, empathetic behavior, trust and security in virtual work environment. This study would have some positive repercussions for leaders and organizations who are doing business in virtual work setting.



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Introduction

In the present era, characterized by advanced technology, the concept of digital transformation is widely discussed and highly relevant in determining the strategic priorities of enterprises globally. According to Bounfour, the advancement of technology, such as the introduction of the first digital computer by Stibitz and the launch of the World Wide Web by Tim Berners-Lee in 1990, has sparked a renewed discussion about the impact of digitalization and digital transformation. This debate is now prevalent in general business reviews and among contemporary business scholars. In 2010, Vogelsang characterized digitization as a prolonged economic wave, also known as the 5th Kondratiev wave, which will not only alter our way of existence, but also revolutionize manufacturing methods and opportunities. When discussing the Kondratiev waves he concluded that "after the steam, steel, electricity, and petrochemical revolutions, network-based digitalization is the driving force today on the stage of business and private life". Chew correctly asserts that the

phrases digital transformation or digitalization are generally interpreted as societal changes resulting from technical advancements. Furthermore, Swedish Commission expressed digitalization as “digitalization means that digital communication and interaction between people, organizations and things becomes an obvious occurrence. The possibilities to collect, interpret, apply and develop larger quantities of data digitally, allows for developmental possibilities in almost every sector”.

Digitalization is widely recognized as a crucial element of the 4th industrial revolution (World Economic Forum 2016b) and, as such, it has significant effects on both current and future leadership practices. The work environment is being transformed by the digital revolution, since it has facilitated the abundance, accessibility, and reduced cost of information. On one side, digitalization has transformed the organizations by increases the efficiency, provide flexibility, and adaptability. On the other side, it has created several challenges to the leaders in effectively managing its team while doing the in virtual setting. Digitalization has provided the opportunity for the organization to work remotely, however, this opportunity has brought challenges for leadership to manage, influence and motivate team in virtual setting. In other words, the convergence of technology and the widespread use of online communication platforms has fundamentally transformed the conventional models of leadership, hence demanding a thorough investigation into the influence of digital presence on the efficacy of leadership.

The notion of authentic leadership, which is defined by traits such as openness, self-consciousness, and a sincere rapport with subordinates, has become increasingly recognized as a framework that cultivates trust and achievement inside an organization (Ashraf et al., 2022; Javed & Afridi, 2022; Shah et al., 2020). Leaders with such attributes set high standards of integrity, take responsibility and value principles. They use their inner compasses to guide their daily actions, which enables them to earn the trust of their employees, peers, and shareholders, creating approachable work environments and boosting team performance. Previous literature strongly link authentic leadership with team performance. For instance, Iszatt-White and Kempster (2019) verified the positive impact of authentic leadership in reducing emotional exhaustion. Furthermore, Novitasari et al. (2020) underscored the constructive role of Authentic leadership in fostering employees innovative behavior through psychological capital. While these studies were performed in traditional organizational setup, where leaders were observing and managing teams face-to-face. We believe, it will be interesting to know who authentic leadership maintain its authenticity, team perception and trust in virtual work environment. Leaders face difficulties in preserving their authenticity in a digital environment when people's impressions can be influenced by well crafted online identities. Although the digital age provides leaders with chances to engage with a wider range of people, it also poses difficulties in maintaining genuine leadership expression. Thus, it is still not clear that; what strategies do leaders employ to build and sustain authenticity in their online persona?, what are the challenges leaders face in showcasing their authenticity in their online work environment? And how the digitalization effect the trust and perception of the followers regarding their leaders? Thus, this study aimed to explore the answers of the aforementioned questions through interviews from the experts of IT and Software Industry who are working and managing teams remotely.

The Information Technology (IT) and Software Development Industry, which is the main focus of this research, provides an excellent framework for investigation. Within an industry marked by virtual teamwork, distant collaboration, and a dependence on digital communication channels, leaders navigate a distinct landscape where the conventional aspects of genuine leadership cross with the requirements of the online world.

Problem Statement

In the rapidly evolving landscape of the Information Technology (IT) and Software Development Industry in Pakistan, leaders are confronted with the challenges of balancing authentic leadership practices with the demands of the digital age (Ashraf et al., 2022; Corbett & Spinello, 2020). As the industry increasingly relies on virtual collaboration, online communication platforms, and rapid

technological advancements (Afridi et al., 2020; Neubauer et al., 2017), understanding the intricate interplay between authentic leadership and online presence is imperative. The problem at hand lies in the scarcity of comprehensive research that explores how leaders in the Pakistani IT and Software industry navigate the complexities of the digital realm to maintain authenticity and leadership effectiveness. Despite the acknowledged importance of authentic leadership, there is a gap in knowledge regarding the specific strategies employed, challenges faced, and the impact of online presence on leadership perceptions within this unique industry context.

The absence of a nuanced understanding of authentic leadership in the Pakistani IT sector hinders the development of tailored leadership approaches that can effectively address the industry's distinctive challenges. Key questions persist regarding the authenticity of leaders' online personas, the trust-building mechanisms utilized in virtual teams, and the overall effectiveness of authentic leadership practices in a technology-driven and culturally diverse environment. Therefore, there is a pressing need for a qualitative investigation to uncover the complexities of authentic leadership in the digital age within the specific context of the IT and Software Development Industry in Pakistan. This research aims to fill the existing gap in knowledge and contribute valuable insights that can inform leadership practices, organizational strategies, and future research endeavors within this vital sector.

Research Questions

1. What strategies do leaders employ to build and sustain authenticity in their online persona?
2. What difficulties do leaders encounter when trying to demonstrate authentic leadership in the digital domain?
3. What is the impact of digitizing leadership on trust and how followers perceive it?

Research Objectives

The research objectives are to comprehensively explore and understand the dynamics of authentic leadership in the digital age within the Information Technology (IT) and Software Development Industry in Pakistan. Firstly, the study aims to investigate the strategies employed by leaders to establish and sustain authenticity in their online presence. Secondly, it seeks to identify and understand the challenges leaders encounter in portraying authentic leadership within the digital realm. The study also endeavors to examine the influence of the digitalization of leadership on trust-building processes and follower perceptions. Furthermore, it aims to discern potential differences in the perception of authentic leadership between traditional and virtual work environments within the specified industry context. Lastly, the research endeavors to uncover how leaders effectively navigate the delicate balance between transparency and privacy in the online space. Through addressing these objectives, the study seeks to provide valuable insights for both practitioners and academic discourse, contributing to a nuanced understanding of authentic leadership in the context of the IT industry's digital landscape in Pakistan.

Significance of the Study

This qualitative research study investigates the dynamic landscape of authentic leadership within the context of the Information Technology and Software Development Industry in Pakistan, specifically exploring its evolution in the digital age. Employing purposive sampling, leaders from diverse roles were selected to delve into the influence of online presence on leadership effectiveness. The study unveils key themes, underscoring the significance of transparency, emotional intelligence, and adaptability in the realm of digital leadership. Notably, it highlights challenges such as misinterpretation and proposes strategies aimed at fostering authenticity, building trust, and addressing perceptual gaps prevalent in virtual work environments. The findings of this research offer nuanced insights that prove valuable for both practitioners and scholars grappling with the intricate dynamics of authentic leadership in the contemporary professional landscape. Overall, the study contributes to a deeper understanding of the subject, providing

practical implications for real-world leadership scenarios in the Information Technology and Software Development sector in Pakistan.

Scope of the Study

The scope of this study extends beyond its immediate focus on the Information Technology and Software Development Industry in Pakistan to resonate with broader implications for leadership in the digital age. By examining the interplay of authentic leadership within this specific industry, the research offers insights that can be extrapolated to various professional contexts navigating the challenges and opportunities presented by digitalization. The identified themes of transparency, emotional intelligence, and adaptability serve as universal pillars for effective leadership in the contemporary digital landscape. Moreover, the proposed strategies to mitigate challenges and enhance authenticity have the potential to inform leadership practices across diverse industries and geographies, contributing to a more comprehensive understanding of how leaders can thrive in virtual work environments. The study's scope thus transcends its immediate geographical and sectoral boundaries, offering valuable guidance for practitioners and scholars grappling with the complexities of authentic leadership in the broader context of the digital era.

Literature Review

Digitalization

The discourse surrounding the ramifications of digitalization and digital transformation has consistently resurfaced in corporate assessments and is also prevalent among modern business academics. Both circumstances are commonly regarded as a comprehensive summary of the bigger technically driven changes that occur in the social structure. This phrase is also commonly confused with other terms such as mechanization (Batiz-Lazo & Boyns, 2004), industrialization (Murphy et al, 1988), and robotization (Afsar et al., 2019; Ali Ahmad et al., 2023; Meluso et al., 2020; Zhang et al., 2022). However, for brevity, the process of enhancing information from its physical form to a digital form is commonly referred to as digitalization. Various terminologies are employed to elucidate the notion of digitalization in a multifaceted manner, including “Mobile Apps, Big Data, Internet of things, and many more” (Collin et al., 2015 p.29). Gartner identifies "Digitalization" as a distinct approach for corporate IT, specifically for business transformation. Similarly, Fitzgerald et al. (2013), stated that “no organization will be able to protect itself from digital technologies and must occupy such changes to get effective business modes”. Thus, digitalization is a complex concept and phenomenon that is difficult to define due to its multicultural, interdisciplinary, transnational, geographical, and virtual attributes.

Leadership in Digital era

Digital transformation focuses on reorganizing the structure of an organization in response to digital changes. The advent of digital transformation significantly influences leadership practice and theory, particularly in terms of the leader's competencies and capabilities, as well as their approach to managing this transition in a balanced manner. Breuer & Szillat, (2019) comprehend leadership as “Leadership is the fine art of receiving someone else to do something you wish is finished because he needs to do it”. Leadership has previously been endorsed for followers’ motivation, enhanced performance, more satisfaction, positive psychological climate, in building trust and relationships. However, attributing leadership for these outcomes in digital environment where leaders are not available to their team face-to-face may put a question mark on leaders’ ability to express it effectiveness in virtual environment (Castellano et al., 2021). Thus, how leadership maintains its credibility to lead in complex environments such as virtual business environment needs further exploration. This study therefore is an attempt to explore the impact of digitalization on authentic leadership in virtual settings.

Authentic Leadership

Authentic leadership is a significant and powerful leadership approach that emphasizes the value of leaders being real, self-aware, transparent, and ethical in their behavior (Afridi & Haider, 2018;

Avolio & Gardner, 2005; Srivastava & Dhar, 2019). The value of authentic leadership has gained significant attention in the field of leadership, with a rising number of scholars emphasizing its significance (Afridi et al., 2019; Daraba et al., 2021; Elrehail, 2018; Kampa et al., 2017). It should be noted that there is a lack of consensus on the exact definition of the concept in different research investigations. The authentic leadership method suggests that leaders who exhibit these attributes can have a good impact on organizational results, establish trust among their followers, and cultivate a favorable work environment (Afridi et al., 2010; Anugerah et al., 2019; Avolio & Gardner, 2005; Loyless, 2023; Srivastava & Dhar, 2019).

The emergence of the digital era has fundamentally transformed the leadership landscape with the introduction of novel communication technology and platforms (Afridi et al., 2018; Eryeşil, 2021; Vătămănescu et al., 2022). As truly said by (Purwanto et al., 2021) “As we consider leading in the age of AI, machine learning, and an increasingly connected world, it seems even more important that we embrace the idea of being an authentic leader”. The leader defines what an organization views as excellent and develops an appropriate environment in which the culture of the workforce is reconciled with the needs of the organization. Demonstrating consistency in leader behaviours, actions, and decisions can be a challenge given the complexity of situations and varying context of business around the world.

In contemporary business environments, where leaders' online presence is become a critical factor of their recognition. Online presence involves a variety of behaviors, such as actively participating in social media, attending virtual meetings, and engaging in digital communication. Though maintaining and showcasing their genuiness online may be a critical challenge for leaders, but those who effectively manage their presence in virtual environment may likely enhance their credibility, visibility and relationship building capabilities. However, challenges arise as leaders strive to maintain authenticity in a digital landscape where perceptions can be shaped by carefully curated online personas. While the digital age offers opportunities for leaders to connect with a broader audience, it also presents challenges to the authentic expression of leadership (Corbett & Spinello, 2020; Eryeşil, 2021; Sainger, 2018).

The selective curation of social media content and the possibility of misinterpreting digital communication necessitate a careful equilibrium between projecting an authentic identity and controlling one's online persona. Leaders may struggle with the difficulty of preserving authentic ties in a digital environment that frequently prioritizes shallow interaction. Therefore, for this purpose, IT and Software Industry is selected to know who leaders in such industry manage it virtual team, in this digital era. IT and Software Industry is selected, because, this industry is portrayed as virtual teams, remote alliance and they depend heavily on digital communication tools.

Stakeholder Mapping

The present study is aimed to explore the impact of digitalization on the authenticity of the authentic leader in IT and Software Industry. Therefore, this study implications would be significant to various stakeholders. For instance, this study would be useful to the leaders in IT and Software industry as they are directly working in the industry where online presence is crucial. Thus maintaining and showcasing leadership authenticity is very imperative for such leaders. The findings will suggests leadership in such industry how to make their presence more effective in such challenging environment. It will further provide suggestions in maintaining the positive perception and building trust in their follower while managing them virtually.

IT and Software companies are also the stakeholders for this study. The findings of this study would also provide valuable repercussions on how to develop leadership strategies for virtual business environments. Findings would lead organizational approaches to leadership training, communication strategies and organizational working environment. Similarly, the Human Resource professional in IT and Software Industry could get benefits from the findings of this study by

guiding HR professionals in designing leadership development programs and policies. Furthermore, the academic community and researchers may be interested in the findings of this study for scholarly literature, shape future research agendas, and influence academic curricula related to leadership studies.

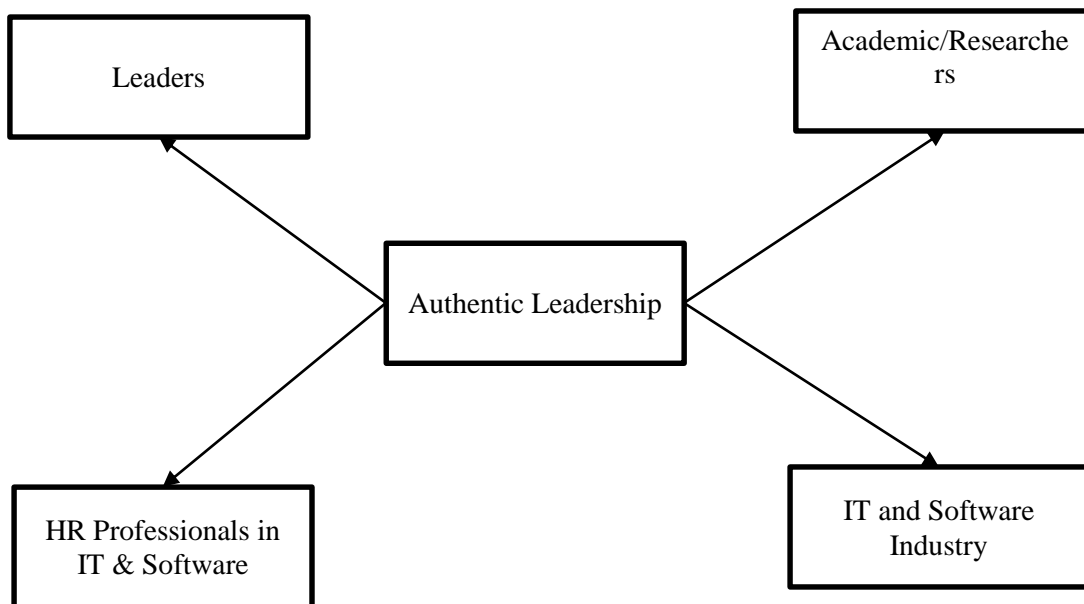


Figure no. 1: Stakeholder Mapping

Research Methodology

Research Approach

Our research study employed a phenomenological approach, which aims to comprehend human experience by directly exploring the personality of individuals through techniques such as interviews. We utilized the qualitative research method, specifically employing the interview technique, to examine the effects of digital age. The research study employed a qualitative strategy instead of a quantitative one to address the inquiry. Because Bryman, (2001) stated that “A research tool that involves the understanding of the social world via an inquiry of the interpretation of that world by its participants (P. 264). The present study is an effort to answer the questions of *What strategies do leaders employ to build and sustain authenticity in their online persona? What difficulties do leaders encounter when trying to demonstrate authentic leadership in the digital domain? What is the impact of digitizing leadership on trust and how followers perceive it?* An in-depth interviews from the leaders of IT and Software Industry was more suitable for such purpose, because it allows for “greater investigation” and “deeper perception” (Bell et al., 2022).

Data Collection Tools

The primary data collection method involves in-depth interviews with leaders from the IT industry in Pakistan. This aligns with the phenomenological approach, where the focus is on gathering rich, qualitative data directly from participants. Open-ended interviews will allow participants to express their experiences, perceptions, and insights freely, contributing to a comprehensive understanding of the phenomena under investigation (Erro-Garcés & Alfaro-Tanco, 2020). In addition to that, the choice of phenomenology supports the exploration of the contextual factors that shape authentic leadership practices in the digital age (Stahl & King, 2020). This is crucial for understanding how cultural, organizational, and technological factors influence leaders' experiences and behaviors within the specific context of the IT industry in Pakistan.

Consequently, The experts in IT and Software industry who are working remotely and leading teams in some capacity were contacted through purposive sampling. Purposive sampling technique

is best suited for qualitative research as it enables intentional selection of participants aligned with the study's specific goals, maximizing diversity, expertise, and information richness (Erro-Garcés & Alfaro-Tanco, 2020; Taherdoost, 2016). This method empowers researchers to strategically target individuals who can provide in-depth insights, enhancing the depth and relevance of qualitative data. Thus, a total of 25 leaders in IT and software industry were contacted, however only 10 provided their consent for participation in this study. Due to their remote location, the researcher conducted interviews through Zoom meeting.

Interview Process

The experts in IT and Software industry who are working remotely and leading teams in some capacity were contacted through purposive sampling. Purposive sampling technique is best suited for qualitative research as it enables intentional selection of participants aligned with the study's specific goals, maximizing diversity, expertise, and information richness (Erro-Garcés & Alfaro-Tanco, 2020; Taherdoost, 2016). This method empowers researchers to strategically target individuals who can provide in-depth insights, enhancing the depth and relevance of qualitative data. Thus, a total of 25 leaders in IT and software industry were contacted, however only 05 provided their consent for participation in this study. Due to their remote location, the researcher conducted interviews through Zoom meeting.

Interview Details

The information regarding the respondents, their position, date of interview and the total duration of interview is provided in Table no. 1. Due to the research objectives, for interviews we only selected those leaders who were managing teams virtually. All the interviewees emphasized that digitalization is essential for enhancing their overall efficiency and effectiveness.

Table No. 1
Participants Information

Sr. No.	Participant Name	Designation	Organization	Duration of Interview	Method
1	Alouddin Qureshi	Senior Software Engineer	Amnexus Digi	11 minutes	Zoom
2	Aqil Khan	Oracle DBA Consultant	BUPA Group, UK and KSA	13 minutes	Zoom
3	Sheheryar Afzal	Program Manager	DPL Innovation as a service	6 minutes	WhatsApp Call
4	Erqem Habib Hussaini	Product management Consultant	Centangle Interactive	07 Minutes	WhatsApp Call
5	Mushahid Hussain	Chief Sales Manager	Centangle Interactive	08 Minutes	WhatsApp Call

Findings and Analysis

Outcome of the Interviews

Based on the research questions, the participants were asked in interviews regarding the strategies they employ to build and sustain authenticity in their online persona. In response to this question, participant no. 1 stated that he emphasizes open communication, transparency and honesty. For the same question participant no. 2 replied that he focuses on genuine connections with followers. He further stated that he values individual perspectives and believes in open communication. Respondent no. 3&4 emphasizes individual values and ethical standards. Respondents no 5, honesty and fostering genuine connections are the elements of for maintaining authenticity in virtual business environments.

The second question regarding the difficulties they encounter when trying to demonstrate authentic leadership in the digital domain. Participant no. 1, 2, & 3 highlighted that misinterpretation,

emotional connection and facial expression are the main challenges that they face in managing virtual teams. Participant no 4 states that building trust takes time, and it is difficult in virtual environment to get it instantly. He further added that virtual environment provides limited context for connecting with followers. Participant no. 5 highlights handling complexity and maintaining consistencies are the major challenges in virtual business environments.

Consequently, the participants were asked regarding the impact of digitizing leadership on trust and how followers perceive it. Participants no. 1&2 highlighted transparent communication and consistency and engaging team members can enhance trust and perception of leader in virtual settings. Participant no 3 highlighted the importance of empathetic concern towards and consistent virtual presence as important attributes in enhancing trust and perception of team members in an online business environment. Participant no. 4&5 emphasizes technical competence, accountability and responsibility, the main elements of enhancing trust and perception.

The answers of the participants were analyzed against each research question. Then we assigned codes based on the answers provided by the interviewees. After the codes, the themes were identified with the help of previous literature. The complete analysis, coding and themes details are provided in table no. 2.

Table No. 2
Thematic Analysis

Research Questions	Coding	Themes
How do leaders establish and maintain authenticity in their online presence?	Transparency, honesty, fostering genuine connection, open communication, value individual perspectives, ethical standard, open discussion,	Transparency, Openness and empathy
What challenges do leaders face in portraying authentic leadership in the digital realm?	Misinterpretation, Emotional connection, facial expression, limited context, time constraints, maintaining consistency, Building trust, handling complexity	Communication challenges Complexity Emotional intelligence
How does the digitalization of leadership influence trust and follower perception?	transparency, consistency, reliability, personalization and engagement, adaptability and flexibility, technological competence, Accountability and responsiveness	Enhanced digital leadership, Agility

Discussion

The research was aimed to explore the impact of digitalization on authentic leadership. Three research questions were designed, and data was collected through interviews with leaders in various IT and Software companies. Based on the responses of all the leaders, being transparent with the team members during online business environment is crucial for authentic leaders. Furthermore, authentic leaders also encourage honesty and open communication, where authentic connections are fostered, and individual perspectives are valued. Furthermore, implanting empathetic behavior in online setting emerges as a vital strategy for ensuring authenticity in online setting. Moreover, to address the challenges associated with leading virtual teams, authentic leaders navigate the issues related to misinterpretations, and limited context. In addition, strategies for strengthening emotional intelligence is become a vital element for authentic leadership in virtual business environment to help in addressing the issues of facial expression and emotional connections. By giving importance to enhanced accessibility, transparency, consistency, reliability, personalization, engagement, adaptability, and flexibility, leaders may effectively impact trust and affect the way followers see them in the ever-changing digital environment.

Recommendations

In fostering authentic leadership within the digital landscape, leaders are encouraged to prioritize transparency and openness. This entails cultivating an environment of honest and open

communication, where genuine connections are fostered, and individual perspectives are valued. Embedding empathy into digital interactions emerges as a pivotal strategy, enhancing the authenticity of leadership expressions. Furthermore, to effectively navigate the challenges inherent in digital communication, leaders must proactively address issues such as misinterpretation and limited context. Strategies to enhance emotional intelligence become paramount, aiding leaders in navigating challenges related to emotional connection and facial expressions. Moreover, managing time constraints and maintaining consistency are identified as critical components for the success of digital leadership initiatives.

In addition, while acknowledging the inherent complexity of digital leadership, leaders are advised to delve into the intricacies of online interactions. This includes understanding the nuanced dynamics at play, skillfully handling complex situations, and adapting leadership styles to align with the demands of the digital environment. Likewise, leveraging the positive aspects of digitalization is crucial for leaders aiming to enhance their effectiveness. Prioritizing increased accessibility, transparency, consistency, reliability, personalization, engagement, adaptability, and flexibility enables leaders to positively influence trust and shape follower perceptions within the dynamic digital landscape. Besides that, recognizing the challenges posed by misinterpretation in virtual environments, leaders are urged to champion emotional intelligence. Proactive measures to address potential misunderstandings of digital cues and fostering empathy emerge as pivotal strategies to bridge the perceptual gap between traditional and virtual work settings. Finally, to strike the delicate balance between transparency and privacy, leaders are advised to actively establish clear communication boundaries. This involves engaging in open communication within well-defined limits, acknowledging inherent limitations, and building trust through a careful equilibrium of sharing information while respecting individual privacy.

Conclusion

This qualitative study delved into the multifaceted realm of authentic leadership in the digital age, specifically focusing on the impact of online presence on leadership effectiveness. Through a thorough exploration of leadership experiences within the Information Technology and Software Development Industry in Pakistan, several key themes emerged. The study underscored the pivotal role of transparency and openness in establishing and maintaining authenticity in online presence. Leaders who prioritized honest and open communication, valued individual perspectives, and incorporated empathy were better positioned to foster genuine connections with their teams. The challenges associated with digital communication, including misinterpretation, limited context, and time constraints, were acknowledged, emphasizing the need for leaders to navigate these complexities with emotional intelligence and adaptability. Digitalization emerged as a transformative force that, when harnessed effectively, enhanced leadership (Afridi, Khan, et al., 2021; Afridi, Shahjehan, et al., 2021). Leaders who embraced increased accessibility, transparency, consistency, and adaptability were seen to positively influence trust and reshape follower perceptions (Afridi et al., 2023). Importantly, the study highlighted the nuanced differences in the perception of authentic leadership between traditional and virtual work environments, emphasizing the role of emotional intelligence in bridging this perceptual gap. In navigating the delicate balance between transparency and privacy, the study recommended the establishment of clear communication boundaries. Leaders were advised to communicate openly within defined limits, acknowledging both the advantages and challenges posed by the online space. Overall, this study provides valuable insights for both practitioners and academics, shedding light on the intricacies of authentic leadership in the digital age. As the workplace continues to evolve, understanding and adapting to the dynamics of online leadership becomes imperative. The recommendations derived from this study offer actionable strategies for leaders to navigate the digital landscape effectively, fostering authentic and impactful leadership in the contemporary professional environment.

Contribution

This study makes a significant contribution to the understanding of authentic leadership in the digital age, particularly within the Information Technology and Software Development Industry in Pakistan. By exploring the intricacies of online presence and its impact on leadership effectiveness, the study offers nuanced insights that contribute to both academic discourse and practical leadership applications. The identified themes and recommendations provide a comprehensive guide for leaders navigating the complexities of digital leadership, addressing communication challenges, fostering enhanced leadership strategies, and promoting emotional intelligence. Moreover, the study sheds light on the perceptual differences between traditional and virtual work environments, offering valuable considerations for leaders seeking to bridge this gap. In essence, the study contributes a rich understanding of how leaders can authentically navigate the digital landscape, fostering trust, transparency, and effective communication in the evolving professional context.

Limitation and Future Research Recommendations

While this study provides valuable insights into authentic leadership within the Information Technology and Software Development Industry in Pakistan, certain limitations should be acknowledged. The context-specific nature of the findings limits their generalizability to other industries or regions. Additionally, the focus on leaders' perspectives neglects the follower's viewpoint, and there's a need for caution in interpreting the findings. Future studies are recommended to adopt a longitudinal approach to explore the evolution of leadership behaviors over time. Comparative research across diverse industries and regions would enhance the generalizability of findings, while a mixed-methods approach could provide a more comprehensive understanding.

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