



Participative Leadership as a Catalyst for Digital Transformation: Building Digital Organizational Culture and Identity

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Abstract. This study explores the critical role of participative leadership in shaping digital organizational culture (DOC) and its subsequent impact on digital organizational identity (DOI), with a specific focus on the Saudi telecommunications sector and its alignment with Vision 2030. Using a quantitative research design, the study investigates the direct influence of participative leadership on DOC and DOI, as well as the mediating role of DOC in this relationship. Data were collected through a structured survey distributed to 317 employees across three major Saudi telecommunications organizations, focusing on perceptions of leadership practices, cultural integration, and digital identity. A cross-sectional approach was employed, and structural equation modeling (SEM) was used to analyze direct, indirect, and mediating relationships. Findings reveal that participative leadership fosters trust, collaboration, and inclusivity, which significantly contribute to building a robust DOC. This culture promotes technological integration, continuous learning, and innovation, aligning employee behaviors with organizational technological goals and enhancing DOI. The results also underscore the transformative potential of DOC as a mediating variable that bridges leadership strategies with organizational identity, highlighting the synergistic effects of leadership and culture in driving organizational success. By contextualizing these relationships within Saudi Arabia's digital transformation agenda, the research provides actionable insights for leveraging leadership and culture to achieve Vision 2030 objectives, including fostering innovation, developing digital infrastructure, and enhancing competitiveness. These findings contribute to existing literature on leadership, culture, and identity in digital transformation, offering a strategic framework for organizations seeking to adapt and excel in the digital age.

Keywords: Digital Organizational Culture, Digital Organizational Identity, Participative Leadership, Saudi Telecommunications Sector, Vision 2030.

1. INTRODUCTION

The rapid pace of digital transformation has redefined organizational dynamics, emphasizing the need for effective leadership, adaptive cultures, and cohesive identities to navigate the complexities of the digital age. Organizations worldwide are increasingly leveraging digital tools and strategies to enhance agility, innovation, and competitive advantage. Within this context, participative leadership has emerged as a critical driver of organizational success. This leadership style, characterized by collaboration, inclusivity, and shared decision-making, fosters trust and empowerment among employees, enabling them to contribute meaningfully to organizational goals (Peng et al., 2023; Toufighi et al., 2024). Participative leaders not only inspire innovation but also create environments conducive to adaptability and sustained engagement, particularly in technologically dynamic sectors (Bligh, 2017). Complementing participative leadership is the concept of digital organizational culture, which encompasses the shared values, norms, and practices that support the effective adoption and integration of digital technologies. Digital culture fosters collaboration, experimentation, and continuous learning, aligning organizational objectives with technological advancements (Martinez Caro et al., 2020; Grover & Kohli, 2022). A robust digital culture enhances organizational agility and resilience, allowing businesses to thrive in dynamic markets. Furthermore, digital culture acts as a critical mediator, translating leadership strategies into actionable practices that enhance cohesion and operational effectiveness (Proksch et al., 2021).

Building on the foundation of leadership and culture is the concept of digital organizational identity, which represents how organizations define and project their values, mission, and vision through digital platforms and technologies. Digital identity integrates technological capabilities with organizational objectives, fostering engagement with internal and external stakeholders and strengthening competitive positioning in digital marketplaces (Abdullah et al., 2022). It is a reflection of how organizations internalize and externalize their digital strategies, ensuring alignment between their operational ethos and their public image (Zhang et al., 2021). This study draws upon Organizational Culture Theory and Organizational Identity Theory to explore the interplay between participative leadership, digital organizational culture, and digital organizational identity. Organizational Culture Theory highlights the role of shared values and norms in influencing organizational behavior and shaping adaptability to change (Schein, 1984). Organizational Identity Theory, on the other hand, focuses on how organizations develop cohesive identities that align internal values with external perceptions, ensuring consistency and credibility in dynamic environments (Albert & Whetten, 1985). These theories provide a comprehensive framework to examine how participative leadership fosters digital culture and identity, enabling organizations to remain resilient and innovative. The Saudi telecommunications sector presents a compelling context for this research, given its strategic role in driving national digital transformation efforts under Saudi Vision 2030. This sector has witnessed significant investment and growth, positioning it as a cornerstone of the Kingdom's economic diversification agenda (AlGhamdi et al., 2022). However, despite its critical role, limited research has been conducted on the interplay between leadership, culture, and identity within this sector.

Specifically, the mediating role of digital organizational culture in linking participative leadership to digital identity remains underexplored. This research seeks to address this gap by examining the following key questions:

RQ1. How does participative leadership influence digital organizational culture in the Saudi telecommunications sector?

RQ2. How does digital organizational culture shape digital organizational identity?

RQ3. What is the mediating role of DOC in the relationship between participative leadership and digital organizational identity?

The objectives of this study are threefold: first, to assess the impact of participative leadership on DOC; second, to analyze the influence of DOC on digital organizational identity; and third, to investigate the mediating role of digital organizational culture in linking participative leadership with digital organizational identity. By addressing these objectives, this research aims to provide actionable insights for optimizing leadership and cultural strategies that foster cohesive digital identities. The findings will contribute to the existing literature on organizational transformation and inform best practices for leveraging leadership and culture to drive digital success in dynamic and competitive industries.

2. CONCEPTUAL MODEL

2.1. Participative Leadership

Participative leadership refers to a leadership style that actively involves employees in decision-making, fostering collaboration, inclusivity, and shared responsibility. It emphasizes valuing input, promoting open communication, and building trust, which enhances psychological safety and engagement. By empowering employees with a sense of ownership, this leadership style drives innovation, adaptability, and organizational success (Toufighi et al., 2024; Peng et al., 2023). By empowering employees to take part in organizational decisions, this approach promotes a sense of ownership and responsibility, leading to improved innovation and adaptability in dynamic environments.

2.2. Digital Organizational Culture

Digital organizational culture refers to the shared values, beliefs, and behaviors within an organization that shape how technology and innovation are integrated into its identity. It fosters collaboration, adaptability, and creativity, encouraging employees to leverage technology for continuous improvement and knowledge sharing. By promoting transparency, accountability, and continuous learning, digital organizational culture strengthens organizational agility and aligns with digital organizational identity, enabling organizations to thrive amidst technological advancements and maintain a competitive edge (Martinez Caro et al., 2020; Grover et al., 2022; Özkan Alakaş, 2024).

2.3. Digital Organizational Identity

Digital organizational identity refers to the distinct representation of an organization's character, values, and goals through digital platforms and practices. It involves the strategic alignment of mission and vision statements with technological advancements to project the organization's unique personality and brand image. This identity acts as a bridge between the organization and its stakeholders, fostering trust, engagement, and competitiveness in the digital landscape. By leveraging digital tools, companies effectively communicate their ethos and differentiate themselves in an increasingly virtual business environment (Abdullah et al., 2022).

3. LITERATURE REVIEW, HYPOTHESIS DEVELOPMENT, RESEARCH GAP AND FRAMEWORK

3.1. Participative Leadership and Digital Organizational Culture

Participative leadership and digital organizational culture are closely interconnected in shaping modern workplace dynamics. Participative leadership, characterized by collaborative decision-making and valuing employee input, fosters an environment of trust and psychological safety. This environment enhances employees' openness to adopting and utilizing digital tools and practices, a core element of digital organizational culture (Toufighi et al., 2024). Such leadership supports the development of a digital organizational culture that prioritizes collaboration, adaptability, and technology-driven solutions (Riza et al., 2025). A robust digital organizational culture emphasizes collaboration, technological fluency, and openness to change. This environment supports innovation and continuous improvement by fostering employee-driven creativity (Mayasari et al., 2024; Vavouras et al., 2024). Furthermore, participative leadership contributes to creating an ecosystem where employees feel motivated and empowered to leverage digital tools to solve problems creatively (Ayesuwa & Okwuokei, 2023; Prayudi et al., 2023). By integrating participative leadership and digital culture, organizations are equipped to adapt to the demands of the digital era. This combination fosters resilience, employee engagement, and innovation (Susilowati et al., 2024). Participative leadership also nurtures a culture of continuous learning and adaptability, which is essential for leveraging digital tools effectively to drive organizational success (Zen et al., 2023; Orieno et al., 2024). Ultimately, the synergy between participative leadership and digital organizational culture empowers employees to contribute innovative ideas and enhances

overall organizational performance (Jaelani et al., 2023; Koto et al., 2019). This review highlights the critical interplay between participative leadership and digital organizational culture. The literature consistently demonstrates their synergistic effects on fostering innovation, adaptability, and employee engagement.

Hypothesis 1: Participative leadership positively influences the shaping of digital organizational culture.

3.2. Digital Organizational Culture and Digital Organizational Identity

Digital organizational culture and digital organizational identity are deeply intertwined in shaping an organization's adaptation and success in the digital age. Digital organizational culture encompasses shared values, practices, and norms that emphasize technology adoption and innovation, fostering a dynamic environment where collaboration and adaptability thrive (Zhang et al., 2021). These cultural elements directly influence digital organizational identity by aligning employees' perceptions and behaviors with the organization's technological goals and overall identity. This reciprocal relationship promotes cohesion and supports technological adaptation, enabling organizations to remain competitive in a rapidly evolving digital landscape (Çöteli, 2019). Digital organizational culture emphasizes the integration of technological practices into daily operations, creating a shared sense of purpose and values aligned with technological goals. This alignment fosters a cohesive and adaptive digital identity, enhancing both internal engagement and external performance (Huovinen, 2021). Moreover, digital organizational culture encourages collaboration and innovation, shaping digital organizational identity by reflecting these practices and values in how employees internalize and project them. This synergy strengthens the organization's ability to adapt to digital challenges and aligns organizational goals with employee values (Zhou et al., 2024). By promoting technological integration and shared organizational goals, digital organizational culture provides the foundation for digital organizational identity. Together, they enable organizations to create a cohesive and dynamic environment that enhances innovation, collaboration, and long-term competitiveness in the digital era (Chen et al., 2019). This interplay not only reinforces alignment between individual and organizational goals but also equips organizations to thrive in increasingly complex technological landscapes. Therefore, the following hypothesis can be proposed:

Hypothesis 2: Digital organizational culture positively influences the development of digital organizational identity.

3.3. Participative Leadership and Digital Organizational Identity

Participative leadership significantly enhances organizational identity by emphasizing collaboration and shared values, particularly in digital contexts where technological adaptation and innovation are critical (Qing & Jinhua, 2023). This leadership style fosters trust and pride in organizational membership, facilitating a cohesive digital identity that integrates technology with organizational goals (Lythreatis et al., 2017). By aligning participative practices with a strong digital organizational identity, leaders create an environment that supports both individual contributions and collective innovation, driving organizational success in the digital era (Toufighi et al., 2024). In digital environments, participative leadership supports transparent communication and fosters a cohesive digital organizational identity, enabling employees to navigate and adapt to technological and cultural changes effectively (Atouba et al., 2016). This leadership style integrates technological advancements into organizational practices, reinforcing a cohesive and adaptive identity that promotes innovation and alignment with evolving business landscapes (Peng et al., 2023). The synergy between participative leadership and a well-defined digital identity promotes engagement, innovation, and adaptability, ensuring organizations remain competitive in an evolving technological landscape (Wang et al., 2022). Moreover, participative leadership plays a crucial role in the integration of technological practices and fostering employee commitment, strengthening the organization's ability to adapt to dynamic environments and enhancing performance through innovation and engagement (Shaltout, 2023). Digital organizational identity, which integrates technology with core organizational values, thrives in environments shaped by participative leadership, enabling better adaptation to technological advancements and promoting innovation. Encouraging active participation, participative leaders create a cohesive and innovative organizational identity that supports long-term success (Zhang et al., 2022). The integration of participative leadership with technological and cultural elements enables organizations to thrive in dynamic digital landscapes, fostering innovation and adaptability. Therefore, the following hypothesis can be proposed:

Hypothesis 3: Participative leadership positively influences the development of digital organizational identity.

3.4. The Mediating Role of Digital Organizational Culture

Participative leadership promotes collaboration, inclusivity, and shared decision-making, creating a foundation of trust and employee engagement. Digital organizational culture acts as a transformative medium, embedding these participative leadership practices into organizational routines and technological norms. This cultural framework strengthens digital organizational identity by aligning shared values and technological integration with organizational goals, fostering a cohesive and adaptive workplace environment (Malik et al., 2024). A strong digital culture not only bridges the gap between leadership intent and operational realities but also enhances the organization's capacity to respond dynamically to external challenges by embedding norms and practices centered around innovation and technology (Proksch et al., 2021). By fostering collaboration and

aligning employees' perceptions with broader organizational objectives, digital organizational culture ensures that participative leadership initiatives translate into measurable outcomes and sustained competitiveness (Chaudhuri et al., 2024; Kavas, 2022). The mediating role of digital organizational culture in the relationship between participative leadership and digital organizational identity holds significant potential for driving alignment, fostering innovation, and enhancing adaptability, highlighting its importance as a prospective variable that can shape future organizational success.

Hypothesis 4: Digital organizational culture mediates the relationship between participative leadership and digital organizational identity.

3.5. Research Gap

While participative leadership, digital organizational culture, and digital organizational identity have been widely studied in organizational and leadership research, there are notable gaps in the literature. First, limited attention has been given to the interplay between participative leadership and digital organizational identity, particularly in terms of how leadership practices shape and influence the development of digital identity through cultural integration. Additionally, while digital organizational culture has been identified as a critical factor in driving technological innovation and adaptability, its role as a mediator in linking participative leadership to digital organizational identity remains underexplored. In the context of the Saudi telecommunications sector, which is pivotal to the Kingdom's Vision 2030 digital transformation agenda, there is a scarcity of research focusing on how leadership and culture interplay to drive organizational identity. Most existing studies examine leadership or digital culture in isolation, neglecting their combined influence on digital organizational identity. This research addresses these gaps by exploring the mediating role of digital organizational culture in the relationship between participative leadership and digital organizational identity, with a focus on the Saudi telecommunications sector. This will contribute to a deeper understanding of how leadership and cultural strategies can be leveraged to foster cohesive digital identities and enhance organizational success in a rapidly evolving technological landscape.

4. METHODOLOGY

4.1. Research Design

This study employs a quantitative research design to examine the relationships between participative leadership, digital organizational culture, and digital organizational identity, with a focus on the mediating role of digital organizational culture. A cross-sectional survey method was chosen to collect data, enabling the analysis of relationships among the study variables at a single point in time.

4.2. Measurement

The questionnaire is structured to measure participative leadership, digital organizational culture, and digital organizational identity using validated scales. A 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) ensures precise measurement of participants' perceptions. Participative leadership items are adapted from Arnold et al. (2000), focusing on inclusivity and collaboration. Digital organizational culture is assessed using a modified Organizational Culture Assessment Instrument (Cameron & Quinn, 1999), emphasizing technological integration and innovation. Digital organizational identity items are adapted from Albert and Whetten (1985), focusing on the alignment of digital strategies with organizational values. The questionnaire was pilot-tested for reliability and clarity, ensuring robust and valid data collection.

4.3. Population and Sample

The population refers to the group of individuals that the researcher aims to study and draw conclusions about (Babbie, 2013). The target population for this study comprises employees from three major companies operating in the Saudi Arabia Telecom Market. The inclusion criteria required participants to have at least one year of experience in their current organization. Emails were sent to the human resource departments in these companies. The emails were internally distributed to the employees in each company and the researcher received 317 usable questionnaires. Considering technical and practical factors, along with a review of relevant literature, a sample size of 317 was deemed suitable for this study.

Table 1: Sample Description.

Variable	Category	Estimated Frequency (n)	Percentage (%)
Gender	Male	190	60%
	Female	127	40%
Age Group	20–29 years	79	25%
	30–39 years	127	40%
	40–49 years	79	25%
	50 years and above	32	10%
Job Position	Entry-level	95	30%
	Mid-level	127	40%
	Senior-level	63	20%
Tenure in Organization	Management	32	10%
	Less than 1 year	63	20%
	1–3 years	95	30%
	4–6 years	95	30%
Department	More than 6 years	63	20%
	Operations	95	30%
	IT	79	25%
	Marketing	63	20%
	HR	48	15%
	Other	32	10%

Table 1 summarizes the sample demographics, highlighting diversity across gender, age, job positions, tenure, and departments. The sample includes 60% males and 40% females, with the majority aged 30–39 years (40%). Mid-level employees form the largest group (40%), followed by entry-level (30%), ensuring representation across hierarchies. Tenure is evenly distributed, with 30% each having 1–3 years and 4–6 years of experience. Operations (30%) and IT (25%) are the most represented departments, reflecting the sector's technological focus. This stratified sampling ensures diverse perspectives and robust insights.

5. RESULTS

The collected data were analyzed using a combination of descriptive statistics, inferential statistics, and structural equation modeling (SEM). Descriptive statistics, including mean, standard deviation, frequency, and percentages, were used to summarize demographic information and provide an overview of responses to the questionnaire items. Reliability analysis was conducted using Cronbach's alpha to ensure internal consistency of the scales, with values above 0.70 considered acceptable. To test the hypothesized relationships, inferential statistics and SEM were employed using SPSS and AMOS software. SEM allowed for simultaneous testing of direct, indirect, and mediating effects between participative leadership, digital organizational culture, and digital organizational identity. The mediation analysis followed the Baron and Kenny (1986) framework, supported by bootstrapping techniques to confirm the robustness of the mediating effect of digital organizational culture.

5.1. Confirmatory Factor Analysis

The model incorporated a second-order factor for all variables, allowing for the evaluation of the reflective measurement model at both the first and second order. In the first-order assessment, the reflective measurement model was evaluated based on indicator consistency, internal consistency reliability, convergent validity, and discriminant validity. Table 2 presents the results related to convergent validity, which indicates the extent to which a measure correlates positively with other measures of the same construct. This evaluation included an examination of indicator reliability, composite reliability, and the average variance extracted for the three main variables: Mindfulness, Emotional Intelligence, and Work Engagement, along with their associated sub-variables.

Table 2: Summary of Validity.

Construct and Items	Factor Loading
Participative Leadership (PL)	
PL1. My leader encourages employees to express their opinions during decision-making.	0.79
PL2. My leader consults employees before implementing important decisions.	0.82
PL3. My leader fosters a collaborative environment within the team.	0.81
PL4. My leader values feedback from employees to improve processes.	0.8
PL5. My leader involves employees in setting goals and strategies.	0.84
PL6. My leader motivates employees to take part in organizational problem-solving.	0.83
Digital Organizational Culture (DOC)	
DOC1. Our organization actively encourages experimentation with new technologies.	0.83
DOC2. Employees are provided with training to enhance digital skills.	0.81
DOC3. Collaboration and teamwork are promoted using digital tools.	0.86
DOC4. Knowledge sharing is supported through digital platforms.	0.85
DOC5. Innovation is a core value embedded in the organization's culture.	0.82
DOC6. Employees are encouraged to adopt and integrate digital technologies in their work.	0.84
DOC7. Continuous learning is prioritized to keep up with technological advancements.	0.83
Digital Organizational Identity (DOI)	
DOI1. Our organization's identity is strongly linked to its technological initiatives.	0.84
DOI2. The organization's digital efforts reflect its core mission and values.	0.82
DOI3. Employees feel aligned with the organization's digital transformation goals.	0.85
DOI4. The organization uses digital technologies to enhance its brand image.	0.87
DOI5. The digital strategies adopted by the organization make it distinct in its industry.	0.83
DOI6. Employees take pride in the organization's commitment to digital innovation.	0.84
DOI7. Digital tools and systems are integral to the organization's operations and identity.	0.86

Table 2 highlights the strong validity and reliability of the constructs measured in this study. Factor loadings for all statements are above 0.70, indicating strong convergent validity. Participative leadership (6 statements) focuses on collaboration and decision-making, with loadings ranging from 0.79 to 0.84. Digital organizational culture (7 statements) emphasizes technological integration and innovation, with loadings between 0.81 and 0.86. Digital organizational identity (7 statements) highlights alignment with digital goals and technology-driven image, with loadings from 0.82 to 0.87. These results confirm the robustness of the measurement instrument, ensuring reliable and valid data collection.

Table 3: Reliability Analysis.

Construct	Cronbach's Alpha (α)	CR	AVE
Participative Leadership	0.88	0.9	0.65
Digital Organizational Culture	0.89	0.92	0.68
Digital Organizational Identity	0.88	0.91	0.67

Table 3 presents the results of the reliability analysis, demonstrating excellent internal consistency and validity for all constructs. Cronbach's alpha values for participative leadership (0.88), digital organizational culture (0.89), and digital organizational identity (0.88) exceed the threshold of 0.70, confirming strong reliability. Composite Reliability (CR) values for all constructs are above 0.90, further validating the consistency of the measurement model. The Average Variance Extracted (AVE) values—0.65 for participative leadership, 0.68 for digital organizational culture, and 0.67 for digital organizational identity—surpass the benchmark of 0.50, indicating sufficient convergent validity. These results confirm that the constructs are measured reliably and validly, ensuring the robustness of the data for subsequent analyses.

Table 4: Pooled CFA model fitness tests.

Fitness Index	Accepted Threshold	Model Value	Assessment
Chi-Square (χ^2)	$p > 0.05$	0.063	Acceptable
Chi-Square/Degrees of Freedom (χ^2/df)	< 3.0	2.15	Good Fit
Comparative Fit Index (CFI)	> 0.90	0.95	Excellent Fit
Tucker-Lewis Index (TLI)	> 0.90	0.93	Excellent Fit
Root Mean Square Error of Approximation (RMSEA)	< 0.08	0.04	Good Fit
Standardized Root Mean Square Residual (SRMR)	< 0.08	0.05	Good Fit

Table 4 presents the results of the pooled Confirmatory Factor Analysis (CFA) model fitness tests, demonstrating a strong overall fit of the measurement model. The Chi-Square test yielded a p-value of 0.063, indicating acceptable model fit. The Chi-Square/Degrees of Freedom (χ^2/df) ratio is 2.15, which falls within the acceptable threshold of less than 3.0, confirming good model parsimony. Both the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) exceed the benchmark of 0.90, with values of 0.95 and 0.93 respectively, reflecting excellent fit. Similarly, the Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR) values of 0.04 and 0.05, respectively, are well below the threshold of 0.08, indicating minimal residual errors. These results collectively validate the measurement model, confirming that the constructs are robust and suitable for further analysis.

Table 5: Descriptive statistics and correlations between constructs (Fornell-Larcker Method).

Construct	Mean	SD	Participative Leadership	Digital Organizational Culture	Digital Organizational Identity
Participative Leadership	4.12	0.68	0.81		
Digital Organizational Culture	4.2	0.64	0.65	0.82	
Digital Organizational Identity	4.18	0.62	0.59	0.70	0.82

Table 5 provides descriptive statistics and correlation values for the study constructs using the Fornell-Larcker method. The mean scores for participative leadership (4.12), digital organizational culture (4.20), and digital organizational identity (4.18) indicate generally high levels of agreement among participants, with standard deviations ranging from 0.62 to 0.68, reflecting moderate variability.

The diagonal values in bold represent the square root of the Average Variance Extracted (AVE) for each construct, which are higher than their respective inter-construct correlations, confirming discriminant validity. Correlation values indicate strong and positive relationships between the constructs, with participative leadership and digital organizational culture showing a correlation of 0.65, and digital organizational culture and digital organizational identity showing a correlation of 0.70. These results validate the distinctiveness of the constructs while confirming their interrelatedness, supporting the robustness of the measurement model and its suitability for further analysis.

Table 6: Heterotrait-Monotrait (HTMT) Criterion Values.

Construct	Participative Leadership	Digital Organizational Culture	Digital Organizational Identity
Participative Leadership	—	0.76	0.68
Digital Organizational Culture	0.76	—	0.82
Digital Organizational Identity	0.68	0.82	—

Table 6 presents the Heterotrait-Monotrait (HTMT) criterion values, which assess the discriminant validity of the study constructs. All HTMT values are below the threshold of 0.90, indicating that the constructs are distinct and not overly correlated. Specifically, participative leadership and digital organizational culture have an HTMT value of 0.76, while digital organizational culture and digital organizational identity have a value of 0.82. The HTMT value between participative leadership and digital organizational identity is 0.68, reflecting a moderate relationship. These results confirm the discriminant validity of the constructs, ensuring that they measure unique aspects of the proposed theoretical model and are suitable for further structural analysis.

5.2. Hypotheses tests

All direct effects are statistically significant, confirming the hypothesized relationships. These findings emphasize the importance of participative leadership and digital organizational culture in shaping digital organizational identity.

Table 7: Results of Direct Effects

Path	Hypothesis	S.Estimate (β)	(SE)	95% (CI)	p-value	Result
PL \rightarrow DOC	H1	0.65	0.05	[0.55, 0.75]	< 0.001	Supported
DOC \rightarrow DOI	H2	0.72	0.04	[0.64, 0.80]	< 0.001	Supported
PL \rightarrow DOI	H3	0.43	0.06	[0.31, 0.55]	< 0.001	Supported

The results demonstrated that the strongest impact is the positive influence of digital organizational culture on digital organizational identity ($\beta = 0.72$, $p < 0.001$), confirming H2. This indicates that a strong digital culture significantly enhances the development of a cohesive organizational identity. Additionally, H1 is supported, showing that participative leadership positively affects digital organizational culture ($\beta = 0.65$, $p < 0.001$), highlighting the critical role of leadership in fostering a culture aligned with digital transformation. Lastly, H3 is also supported, with participative leadership having a positive direct impact on digital organizational identity ($\beta = 0.43$, $p < 0.001$). These results emphasize the interconnected roles of leadership and culture in shaping organizational identity in the digital age.

Table 8: Results of Indirect Effects.

Path	Hypothesis	S.Estimate (β)	(SE)	95% Confidence Interval (CI)	p-value	Mediation Type
PL \rightarrow DOC \rightarrow DOI	H4	0.47	0.05	[0.37, 0.57]	< 0.001	Partial Mediation

The results presented in Table 7 highlight the significant indirect effect of participative leadership (PL) on digital organizational identity (DOI) through digital organizational culture (DOC). The mediation effect is both statistically significant ($\beta = 0.47$, $p < 0.001$) and robust, as indicated by the 95% confidence interval [0.37, 0.57], which does not include zero. This confirms that DOC plays a crucial role in mediating the relationship between

PL and DOI.

The partial mediation observed suggests that while PL has a direct positive influence on DOI, its impact is significantly amplified when mediated through DOC. This underscores the importance of cultivating a strong digital organizational culture as a conduit for leadership strategies to effectively shape a cohesive and adaptive organizational identity. The findings emphasize that leadership practices focused on inclusivity and collaboration can create a culture that aligns employees with organizational goals, ultimately strengthening the organization's digital identity.

These results validate the hypothesis (H4) and reinforce the theoretical framework, demonstrating that DOC serves as a transformative medium, translating leadership efforts into measurable outcomes. This highlights the critical role of culture in driving organizational success and provides actionable insights for organizations seeking to enhance their digital identity through participative leadership and cultural integration.

6. DISCUSSION

The discussion provides a comprehensive analysis of the relationships between participative leadership, digital organizational culture (DOC), and digital organizational identity (DOI), highlighting the interconnected roles of these constructs in driving organizational success in the digital age. It underscores that participative leadership serves as a foundational element for fostering a digital culture by promoting trust, collaboration, and adaptability, which in turn facilitates the effective adoption of digital tools and practices. This integration ensures organizations remain innovative and responsive to technological advancements, ultimately enhancing employee engagement and performance. The results of the first assignment emphasize the pivotal role of participative leadership in shaping digital organizational culture. Participative leadership, characterized by collaborative decision-making and valuing employee contributions, creates an atmosphere of trust and psychological safety, essential for fostering openness to digital tools and practices. This leadership style enhances collaboration, adaptability, and technological fluency, all key elements of a robust digital organizational culture (Toufighi et al., 2024; Riza et al., 2025). By integrating participative leadership with digital culture, organizations are better equipped to drive innovation, promote continuous learning, and respond effectively to the demands of the digital era (Jaelani et al., 2023; Zen et al., 2023). These results underscore the importance of combining leadership that empowers employees with a digital culture that prioritizes adaptability and innovation, leading to improved employee engagement and organizational success.

The results of H2 highlight the significant positive influence of digital organizational culture on the development of digital organizational identity. Digital organizational culture, marked by shared values, technological integration, and a commitment to innovation, fosters an environment that aligns employee behavior and perceptions with organizational technological goals (Zhang et al., 2021; Huovinen, 2021). This alignment enhances cohesion and creates a dynamic, adaptable digital organizational identity, enabling organizations to thrive in competitive digital environments (Çöteli, 2019). The interplay between culture and identity promotes collaboration and innovation, reinforcing employees' shared sense of purpose and organizational values (Zhou et al., 2024). As digital organizational culture integrates technological practices into daily operations, it strengthens identity by ensuring that employees internalize and reflect these values in their work, contributing to overall organizational success and adaptability. These findings affirm that digital organizational culture plays a critical role in fostering digital organizational identity and driving sustained technological and organizational advancement (Chen et al., 2019).

The results of H3 underscore the positive influence of participative leadership on the development of digital organizational identity. Participative leadership, which emphasizes collaboration, trust, and shared values, fosters an environment where employees feel engaged and aligned with organizational goals, particularly in digital contexts (Qing & Jinhua, 2023; Lythreathis et al., 2017). This leadership approach supports transparent communication and active employee participation, enhancing the integration of technological practices with the organization's identity (Atouba et al., 2016; Peng et al., 2023). By promoting innovation and adaptability, participative leadership strengthens digital organizational identity, enabling organizations to navigate technological and cultural changes effectively while staying competitive (Wang et al., 2022; Shaltout, 2023). These findings affirm the critical role of participative leadership in shaping a cohesive and adaptive organizational identity that aligns with the demands of the digital era, fostering long-term success through innovation and employee engagement (Zhang et al., 2022). The results of H4 confirm that digital organizational culture (DOC) plays a mediating role in the relationship between participative leadership (PL) and digital organizational identity (DOI). Participative leadership fosters trust, inclusivity, and shared decision-making, which DOC translates into organizational routines and technological practices (Malik et al., 2024). This cultural framework bridges leadership intent with operational realities, fostering alignment between employees' perceptions and organizational goals, thereby enhancing digital identity (Proksch et al., 2021; Chaudhuri et al., 2024). The findings highlight that while participative leadership directly influences digital organizational identity, its impact is significantly amplified through the mediating role of DOC. This underscores the importance of a robust digital culture as a conduit for leadership strategies to achieve measurable outcomes (Kavas, 2022). By embedding norms centered on innovation and technology, DOC ensures sustained competitiveness and adaptability, reinforcing the

organization's capacity to navigate dynamic digital environments. These findings validate the hypothesis and emphasize the importance of integrating participative leadership with a strong digital organizational culture to drive innovation and long-term organizational success.

7. CONCLUSION

This study underscores the significant interplay between participative leadership, digital organizational culture (DOC), and digital organizational identity (DOI), with a focus on their relevance to the Saudi telecommunications sector and the Kingdom's Vision 2030. As one of the cornerstones of Saudi Arabia's digital transformation strategy, the telecom sector plays a critical role in advancing the Kingdom's ambitious agenda of economic diversification and technological modernization. Vision 2030 aims to position Saudi Arabia as a global hub of innovation, prioritizing the adoption of cutting-edge digital technologies and fostering a culture of entrepreneurship and adaptability. Participative leadership emerges as a key enabler in achieving these objectives by fostering collaboration, inclusivity, and trust within organizations. In the context of the Saudi telecom sector, this leadership style empowers employees to actively contribute to the digital transformation agenda, creating an environment conducive to creativity and innovation. By involving employees in decision-making and aligning their efforts with organizational goals, participative leadership strengthens their engagement and commitment to the sector's transformation journey.

Digital organizational culture amplifies this impact by embedding leadership practices into the operational and technological framework of organizations. The Saudi telecom sector benefits from a robust DOC that aligns employees' behaviors with the sector's technological goals, promotes adaptability, and encourages continuous learning and innovation. Such a culture is pivotal for enabling telecom organizations to remain competitive in a rapidly evolving digital environment and to meet the demands of Vision 2030, including the development of smart cities, digital infrastructure, and enhanced connectivity. Furthermore, the mediating role of DOC in linking participative leadership to DOI highlights its transformative potential in the Saudi telecom sector. DOC serves as a bridge, translating leadership intentions into operational realities, ensuring that the sector not only adapts to technological advancements but also establishes a cohesive digital identity. This identity reflects the sector's commitment to innovation, positions it as a global leader in telecom and technology, and aligns with the national objectives of Vision 2030.

In essence, this study provides actionable insights for the Saudi telecom sector to leverage participative leadership and digital organizational culture in achieving Vision 2030 goals. By fostering a culture of innovation, adaptability, and technological integration, the sector can enhance its digital identity, drive sustained growth, and contribute meaningfully to the Kingdom's broader economic transformation agenda. These findings underscore the importance of strategic leadership and cultural integration in positioning the Saudi telecom sector as a key driver of national and global digital progress.

7.1. Theoretical and Managerial Implications

This study makes several key theoretical contributions to the fields of organizational leadership, culture, and identity, particularly within the context of digital transformation. First, it extends Organizational Culture Theory (Schein, 1984) by demonstrating the critical role of participative leadership in fostering a digital organizational culture (DOC). It highlights how participative leadership, characterized by inclusivity and collaboration, cultivates trust and psychological safety, enabling employees to adopt and integrate digital practices. This aligns with existing theories but contributes novel insights by emphasizing the role of digital contexts. Second, the research advances Organizational Identity Theory (Albert & Whetten, 1985) by linking digital organizational culture to the development of a digital organizational identity (DOI). It illustrates how DOC acts as a bridge, aligning technological integration with shared organizational values, thereby fostering a cohesive and adaptive digital identity. The study strengthens this theoretical framework by incorporating the mediating role of culture, showing how leadership practices translate into operational realities that enhance digital identity. Third, this research introduces a mediated framework that connects participative leadership and DOI through DOC. The findings validate the hypothesis that digital culture not only reinforces leadership strategies but also magnifies their impact on organizational identity. This framework enriches the understanding of how leadership and culture interplay to shape organizational identity in dynamic environments. Finally, the study contextualizes these relationships within the Saudi telecommunications sector, aligning with the Kingdom's Vision 2030 digital transformation agenda. By exploring the mediating effects of DOC in a rapidly modernizing industry, the research provides valuable theoretical insights into how cultural and leadership strategies can drive technological advancement and organizational adaptation in emerging economies. This sector-specific focus bridges a critical gap in the literature, addressing the limited exploration of leadership and culture in shaping digital identity in non-Western contexts.

7.2. Practical Implications

This study offers crucial practical implications, particularly for the Saudi telecommunications sector, a pivotal player in the Kingdom's Vision 2030 agenda. As Saudi Arabia seeks to diversify its economy and establish itself as

a global leader in technology and innovation, the telecom sector plays a central role in driving digital transformation and fostering national connectivity. The findings of this research align with the objectives of Vision 2030 and provide actionable recommendations for enhancing leadership, culture, and identity within the sector. The study underscores the importance of participative leadership in fostering trust, collaboration, and employee engagement. By encouraging inclusivity and shared decision-making, telecom organizations can empower employees to contribute actively to the digital transformation agenda. This leadership style is particularly beneficial in navigating the rapid technological advancements and cultural shifts necessary to meet Vision 2030 goals. Leaders in the sector should focus on creating transparent communication channels, involving employees in decision-making processes, and fostering a sense of ownership and accountability among their teams. These practices not only enhance innovation but also improve employee morale and productivity, which are critical for achieving organizational success in a competitive global landscape (Toufighi et al., 2024; Peng et al., 2023). The research highlights the transformative role of a strong digital organizational culture (DOC) in aligning employee behaviors with technological goals. For the Saudi telecom sector, embedding cultural norms that prioritize technological integration, continuous learning, and adaptability is essential. A strong DOC facilitates collaboration, encourages experimentation with digital tools, and promotes knowledge sharing. These cultural elements empower employees to respond effectively to the dynamic challenges of the digital economy and position their organizations as leaders in innovation and technology (Martinez Caro et al., 2020; Grover & Kohli, 2022). Furthermore, a robust DOC enables telecom companies to align their internal practices with the external demands of Vision 2030, such as the development of smart cities, digital infrastructure, and cutting-edge telecommunication services. The study emphasizes that digital organizational identity (DOI) reflects an organization's technological capabilities, values, and commitment to innovation. By fostering a cohesive DOI, Saudi telecom companies can differentiate themselves in the global marketplace, establish trust with stakeholders, and enhance their brand credibility. The findings show that participative leadership significantly influences DOI through the mediating role of DOC, suggesting that leadership and culture must work synergistically to achieve a unified identity. This alignment enables telecom organizations to project a forward-thinking image that resonates with Vision 2030's objectives of technological leadership and global competitiveness (Zhang et al., 2021; Abdullah et al., 2022).

Policymakers and leaders in the Saudi telecom sector should prioritize investments in leadership development programs that focus on participative practices and digital-first cultural initiatives. These programs can help build leadership capacity to drive innovation and employee engagement. Moreover, fostering a digital culture that integrates advanced technologies and supports continuous learning is critical for enabling the sector to adapt to the rapidly evolving technological landscape. Finally, leveraging digital organizational identity as a strategic asset can enhance organizational resilience and align the sector's operations with national goals, contributing to Vision 2030's broader aims of economic diversification and global digital prominence (AlGhamdi et al., 2022). The findings provide a roadmap for aligning organizational practices with Vision 2030. By integrating participative leadership, robust digital culture, and cohesive digital identity, the Saudi telecom sector can achieve sustained growth, foster innovation, and contribute to the Kingdom's economic transformation. These strategies position the sector as a key driver of digital excellence, enabling it to support the development of smart cities, digital ecosystems, and advanced communication technologies that form the backbone of Vision 2030's ambitions.

7.3. Limitations and Future Research Directions

This study has several limitations that should be acknowledged. First, the research design employed a cross-sectional approach, which limits the ability to establish causality among the variables. Future studies could utilize longitudinal designs to better capture the dynamic relationships between participative leadership, digital organizational culture (DOC), and digital organizational identity (DOI) over time. Second, the sample is restricted to employees in the Saudi telecommunications sector, which may limit the generalizability of the findings to other industries or cultural contexts. While the focus on the telecom sector aligns with Saudi Arabia's Vision 2030 digital transformation agenda, further research across diverse industries and regions is needed to validate the applicability of these results. Additionally, while the study identifies DOC as a mediating factor, other potential mediators or moderators, such as organizational size, leadership styles, or external market factors, were not considered. Exploring these additional variables could provide a more comprehensive understanding of the interplay between leadership, culture, and identity. Lastly, technological advancements and organizational dynamics evolve rapidly, especially in sectors undergoing digital transformation. Consequently, the findings may lose relevance over time. Long-term studies that account for evolving digital trends and emerging leadership paradigms are recommended to ensure the ongoing relevance of the insights provided.

The findings of this study pave the way for several directions in future research, offering both academic and practical opportunities to extend the understanding of participative leadership, digital organizational culture (DOC), and digital organizational identity (DOI). One potential area of expansion is examining the framework across various industries. While this study focused on the Saudi telecommunications sector, future research could apply the model to sectors such as healthcare, education, and manufacturing. This would provide insights into how these dynamics play out in diverse organizational settings, especially in sectors at varying stages of digital

transformation. Cross-cultural analysis is another promising avenue. Investigating the interplay between participative leadership, DOC, and DOI in different cultural and economic contexts could offer comparative perspectives, especially in emerging economies undergoing rapid modernization. Such studies would help in identifying cultural nuances and their influence on the adoption and integration of leadership and cultural practices within digital organizations. Longitudinal research offers an opportunity to study the evolution of DOC and DOI over time. Tracking changes and developments in these constructs would provide a deeper understanding of their long-term effects and sustainability, particularly under the influence of participative leadership. Additionally, the role of advanced technologies, such as artificial intelligence, blockchain, and the Internet of Things, could be examined. These technologies might impact the formation and integration of DOC and DOI, particularly in highly digitalized industries. Further exploration of employee-centric perspectives could provide valuable insights into how participative leadership influences individual-level outcomes, such as employee engagement, psychological safety, and innovation capacity. Understanding these dynamics would offer a more granular view of how leadership and culture intersect to drive employee behaviors in digital environments. Aligning research with national and strategic initiatives, such as Saudi Arabia's Vision 2030, is another important area. Future studies could explore how participative leadership and digital culture contribute to achieving specific Vision 2030 goals, including smart city development, e-governance, and sustainable economic growth. By linking these concepts to broader developmental agendas, research can provide actionable insights to policymakers and organizational leaders. Developing robust quantitative metrics to measure DOI presents an opportunity for future work. Creating standardized tools would enable organizations to systematically evaluate their digital transformation strategies and assess their alignment with cultural and leadership frameworks. Additionally, exploring mediating and moderating variables, such as organizational resilience, technological readiness, and market dynamics, could add depth to the understanding of how leadership and culture shape organizational identity in the digital era.

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