



Digital Transformation and Organizational Culture Change in the Post-pandemic Era: A Structural Equation Modelling Approach in a Diverse Regional Context

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ABSTRACT

The acceleration of digital transformation spurred by the COVID-19 pandemic has reshaped organizational culture. In this context, knowledge acquisition became vital for adapting to new technologies and work models. This study examines digital transformation's impact on organizational culture, with a focus on analysing knowledge acquisition as a mediator both during and after the pandemic. Adopting a descriptive-analytical approach, data were gathered from 373 organizations across five continents and various industries. The study captures a broad spectrum of cross-regional and -sectoral adaptation practices by targeting professionals with direct experience in digital transformation initiatives during and post-COVID-19. The results show that digital transformation significantly influences organizational culture transformation through its effect on knowledge acquisition. Moreover, quantitative evidence indicates that the transformation of IT capabilities directly and positively affects both knowledge acquisition and organizational culture transformation. However, IT resources alone do not directly impact this transformation. Additionally, knowledge acquisition significantly mediates the relationship between IT resources transformation, IT capabilities, and organizational culture transformation. The findings underscore the importance of strategically integrating knowledge acquisition processes with digital transformation initiatives to effectively adapt organizational cultures to emerging digital contexts. Organizations aiming for sustained competitive advantage should prioritize enhancing IT capabilities and systematically acquiring and managing knowledge to drive cultural adaptability and resilience.

Keywords: Digital Transformation, Organizational Culture, Knowledge Acquisition, IT Resources, IT Capabilities

JEL Classifications: O33, M15, D83, M14, L86, C38

1. INTRODUCTION

In today's fast-paced and competitive global landscape, digital transformation has become a crucial concern for organizations seeking to enhance their resilience and sustainability, particularly in the wake of the significant disruptions generated by the COVID-19 pandemic. With the swift incorporation of cutting-edge digital technologies into operational processes, notable transformations have been seen in both technological capabilities and organizational culture in general (Fischer et al., 2023). At the heart of this transformation

lie two essential IT elements: Resources and capabilities. The foundational technological assets that support digital initiatives include infrastructure, networks, investments, and talent pools, all of which are essential IT resources. The organizational ability to effectively deploy these resources encompasses both internal competencies and external technical expertise. A third essential factor, knowledge acquisition, embodies the organized approach to collecting, managing, and using new information sourced from digital environments, and is vital to shaping an organization's adaptability and capacity for innovation (Chavarnakul et al., 2025).

During the pandemic, most organizations used technological resources as a preventive tool, which further contributed to the rapid digitalization of work, as well as to an acceleration in the expansion of virtual teams. Additionally, research indicates the absence of traditional physical cues of dominance and status in virtual settings, which can foster more participatory relationships (De Lucas Ancillo et al., 2023). All of this has led to a transformation in organizational culture; wherein digital transformation has been identified as a key success factor for the sustainability of organizations during the pandemic. Other success factors include organizational culture, network structure, supply chain reliance, financial planning, and distribution leadership (Obrenovic et al., 2020).

In the midst of the crisis, firms faced an urgent need to acquire new knowledge to solve emergent and extant problems. If the organization's culture supported this process and the necessary tools were available (e.g., IT), such knowledge could be successfully acquired (Abdalla et al., 2022). Organizations that heavily rely on digital tools for their operations are increasingly acquiring knowledge. Knowledge acquisition, a dimension of knowledge management, involves the process of learning and problem-solving, which can generate innovative values and enhance an organization's competitive edge. Accordingly, knowledge acquisition can impact the status of learning cultures. The COVID pandemic accelerated the learning culture of organizations through digital transformations, thereby enhancing their value (Nwankpa et al., 2021). Scholars have indicated that knowledge acquisition can directly impact organizational culture (Ismael and Sağsan, 2021).

The end of the pandemic did not see a uniform return to pre-COVID practices and processes. Globally, surviving organizations began rapidly digitizing and transforming their business and knowledge management processes, and establishing new work standards that led to transformations in organizational culture, which, naturally, vary by country (Reisberger et al., 2024). However, the mechanisms through which digitalization transforms organizational culture, as well as whether this transformation is effective, have been given insufficient scholarly attention, both before and after the pandemic (Mikušová et al., 2023; Reisberger et al., 2024). Hence, the following questions remain underexplored: Does digital transformation lead to shifts in organizational culture? What role does knowledge acquisition play in this transformation? Managers must focus on the underlying factors and mechanisms that drive an organizational culture to evolve into one centred on knowledge innovation. Creating an adaptive and innovative culture can enhance the organization and give it a competitive edge in the digital space (Reisberger et al., 2024).

The impact of such global crises as COVID-19 on organizational culture has yet to be clarified. Understanding this can help firms – and particularly human resources departments – improve their employee assessment procedures, implement change-adaptation training, and select employees who will align with these changes (Kniffin et al., 2021). Understanding the mechanisms of cultural transformation throughout the pandemic-to-post-pandemic transition via a multi-regional lens enables diverse organizations

to mitigate crisis impacts and formulate strategies for sustaining business processes (Diab, 2022). Using a multi-regional survey, this study evaluates how organizations leverage digital capabilities as strategic resources. Moreover, it provides a robust theoretical framework from which to explore the complex interplay between technology, culture, and diverse contextual factors (Asif et al., 2024) by examining the impact of digital transformation on culture across the pandemic-to-post-pandemic transition. The resource-based view (RBV) can elucidate and help to align the interrelationships between organizational resources and capabilities to address crises effectively (Leidner et al., 2009). Analysing resource and capability evolution throughout the pandemic-to-post-pandemic transition highlights the strategic importance of digital transformation. This provides a comprehensive understanding of digital dynamics and their implications for diverse global organizations (Helfat et al., 2023), as well as a clearer picture of digital transforming throughout the shift to the post-pandemic era and its subsequent effects on diverse workplace culture.

Thus, this study focuses on examining the mediating role of knowledge acquisition in the relationships between digital transformation and organizational culture that support achieving sustainability and competitive advantage. This topic has rarely been examined from the perspective of the RBV. Accordingly, its application for examining digital transformation's impact on culture and knowledge acquisition across the pandemic-to-post-pandemic transition offers a novel perspective on diverse, interconnected global environments (Dhrubo et al., 2024), particularly in atypical settings (Mahssouni et al., 2023).

2. LITERATURE REVIEW

2.1. Digital Transformation and RBV and Organizational Culture

Technology permeates every facet of our digital existence (Ashwini et al., 2026). Various industries use digital technologies and ICTs to produce, process, transmit, and analyse data (Matthews et al., 2020). The impact of digitalization on the dynamics of structural change is multifaceted. Indeed, it enhances automation in production processes and improves efficiency, leading to significant structural transformations, and gives organizations the opportunity to reduce expenses and transform industries. The advent of digitalisation has given rise to innovative business models, such as the sharing economy and e-commerce, with the potential to reconfigure the economic landscape (Matthess et al., 2020). IT employs a variety of strategies to address crises. For instance, the integration of remote work, cybersecurity, and data analytics facilitates immediate oversight and informed choices during crisis management. Through permeating an organization's various dimensions, digitalization can enhance overall performance (Setyawan et al., 2025), help resource organization during times of crisis (Guo et al., 2020), and allow companies to navigate challenges and flourish amidst unpredictability. The impact of digitalization extends to personal relationships, IT, internal and external processes, products and services, strategic approaches and business frameworks, as well as organizational culture. According to Inmor et al. (2026) digitalization bolsters organizations' adaptation abilities and strengthens their resilience.

Scholars across various disciplines have examined the impact of digitization on enterprises. The RBV perspective emphasizes the importance of a company's resources and competencies, particularly those related to IT, in maintaining a competitive edge (Abbasi Kamardi et al., 2025). The RBV offers insights into the impact of digital transformations on crisis response by analysing the digital tools employed, their interconnections with the resources of other organizations, and their effectiveness in providing assistance (Leidner et al., 2009). In a novel approach, Helfat et al. (2023) propose incorporating the RBV into routine sitting practices, thus highlighting how innovation yields new capabilities and resources with which to adapt to market shifts and consumer demands, as well as the creation of unique, difficult-to-duplicate products (Helfat et al., 2023). The text explores the themes of digital transformation, organizational culture, and the transition of digital resources and skills essential for sustaining a competitive advantage (Dhrubo et al., 2024). Balcı (2021) employs the RBV to examine the dynamics of digitalization and the essential resources required for service transformation to maintain competitiveness amid the COVID-19 pandemic. The findings indicated that the significance of organizational and collaborative resources is paramount. Mahssouni et al. (2023) analyse panel data from Europe to investigate the impacts of COVID-19 and digitalization on firm performance through the lens of RBV, with their results revealing the latter's impact on the financial sector.

Leidner et al. (2009) explore the role of IT in crisis response through the lens of the RBV. Their IT resources encompassed collaborative networks, infrastructure, leadership, and skilled personnel in such areas as IT design and use, signal identification, and a comprehensive vision. The authors noted the vital roles played by both technology and personnel in crisis response, thus highlighting the connections between technological competencies, leadership qualities, and networking abilities. Consequently, the significance of non-IT assets in relation to IT resources and capabilities can be inferred. The study emphasized the significance of collaboration and collective effort in the field of IT during the crisis. Siregar et al. (2026) explore the impact of digitalization on competitive advantage from an RBV perspective and found that organizational readiness and entrepreneurial competence enhance digitalization in femaleled small and medium-sized enterprises (SMEs), which, in turn, improves performance. Importantly, digitalization indirectly strengthens the effect of competitive advantage on SME performance, acting as a mediating factor.

Priyono et al. (2020) note how the pandemic has influenced digitalization through its impact on business models, specifically in relation to the adoption of technology, the use of digital tools, knowledge enhancement during transitions, modifications in sales strategies, and resource management. Modifying IT functions is essential for enhancing operational efficiency. In order to navigate the challenges posed by COVID-19, organizations must adapt their IT resources and expertise accordingly. Guo et al. (2020) employ a dynamic capacity framework to examine the digital transformation of firms through seven IT resources that expanded during the pandemic: Social, mobile, big data, cloud computing, IT, platform development, and social technology. Their investigation revealed that the integration of digital technology and innovative business

models in SMEs enhances their capacity to address public crises and boosts performance via effective crisis response strategies.

The digital transformations brought about by COVID-19 can be attributed to alterations in IT resources and capabilities. The RBV expounds upon these resources and capabilities in the context of digital transitions to include IT skills and competencies, competitive positioning, and enduring cultural transformations. This study offers a new perspective on the resources mobilized during digital transitions across diverse organizational and regional contexts during crises. Indeed, it explores the effects of such transitions through the lens of boundary definitions. The evolution of organizational culture mirrors personally held ideals (Saksono et al., 2025), and its impact is significant to performance, strategy, and operations (Pradana et al., 2022). Given the intricacy of its associated ideas and technical language, a unified definition of organizational culture is difficult to advance. The culture within an organization encompasses the collective norms, values, procedures, fundamental assumptions, and beliefs that tackle challenges related to adaptation and integration, ultimately influencing employee behaviour. Organisational structure is profoundly influenced by culture, which holds significant value for individuals (Bagga et al., 2023). Denison et al. (2012) characterize organizational culture as the fundamental values, practices, beliefs, and assumptions held by its members that underpin the organization's principles. According to Denison and Mishra (1995), corporate culture encompasses such aspects as involvement, consistency, adaptability, and mission. These dimensions illustrate various strategies for achieving organizational success. The effectiveness of an organization, particularly during crises (e.g., the pandemic), is influenced by a variety of factors, and evaluations of which focus on organizational culture's impact on operational efficiency and contextual suitability (Bogale and Debela, 2024).

Organizations that prioritized flexibility, responsiveness, and strength throughout the COVID-19 pandemic were able to maintain their operations. Indeed, during the pandemic, successful organizations emphasized the importance of diversity, coherence, and agility while proactively addressing potential risks. Individuals adapted to the economic and environmental impacts of COVID-19, restructured their priorities, and embraced new responsibilities (Obrenovic et al., 2020). Given the critical role of employee involvement, an effective digital transformation must engage all individuals within the organization. The influence of organizational culture on digital transformation is significant. According to Ismail et al. (2025), organizational culture and digital transformation have a significant bi-directional relationship, which speaks to the importance of one integrating and adopting the other. According to Bagga et al. (2023), the shift towards digital frameworks enables organizations to prioritize digital initiatives, cultivating an environment where employees can deliver outcomes efficiently. This transformation also aids companies in attracting and retaining skilled talent by impacting various structural change factors. Dhrubo et al. (2024) illustrate that the RBV processual setting represents a fluid environment of resources and skills that adapt over time to secure a technological competitive advantage. Confronting emerging opportunities and threats requires the evolution of workforce management and the development of

organizational culture. Grover et al. (2022) demonstrate the impact of digitalization on workflows, organizational structures, and relationships. The various resources and skills within IT can engage with each other and their environments, highlighting their crucial role in the process of digital transformation. Altering the organizational culture will yield varied outcomes. The influence of IT resources and competencies on organizational culture warrants exploration (Erdurmazlı, 2021). The research demonstrated the impact of resource and capacity transformation on corporate culture through a processual lens. Yunita et al. (2023) explore the role of organizational culture in mediating the relationship between technical competence and organizational ambidexterity within the context of Indonesian banking. The authors' findings suggest that an organization's culture connects technical skills to both adaptability and innovation, with technology serving to enhance this relationship. Technology facilitates a harmonious interplay between exploration and utilization within the business culture. Staying within the context of Indonesia, Iqbal et al. (2020) explore the influence of university organizational culture on IT resources and knowledge management through the RBV. The results indicate that IT infrastructure and personnel significantly influence organizational culture, particularly regarding knowledge management practices.

A multifaceted transformation of a corporate culture also requires the alteration of business operations – a requirement which can be attributed to a variety of factors. For instance, the sluggish nature of corporate culture complicates the analysis of both the direct and indirect impacts of IT transformation. Moreover, alterations to an organization's information systems often lead to a shift in its cultural dynamics. Therefore, comprehending the direct and indirect impacts of IT on organizational cultures is essential. The process of acquiring knowledge influences interpersonal connections. As organizations require personnel equipped with the ability to gather information in order to generate value (Erdurmazlı, 2021), a deeper understanding of IT's value to an organization is required.

2.2. Digital Transformation, Knowledge Acquisition, and Organizational Culture Transformation

The process through which knowledge is acquired is crucial to how it is managed (Sahibzada et al., 2020). By engaging with both external and internal stakeholders, as well as using available resources and technology, employees leverage their expertise to generate fresh insights (Djangone et al., 2021). The RBV describes the acquisition of knowledge as the gathering of assets that are centred around knowledge (Kero and Bogale, 2023), divided into two categories: Explicit and implicit. Employees acquire practical insights through implicit understanding, while explicit knowledge offers guidance for learning. The process of acquiring knowledge has the potential to enhance innovation and foster cultural transformation, thereby contributing to an organization's success (Fu et al., 2024). Organizations that demonstrate adaptability are better positioned to endure the challenges posed by the pandemic. Organizations that demonstrate resilience enhance the flow and management of knowledge. Effective enterprises have leveraged online platforms and communication strategies. According to Obrenovic et al. (2020), technology has been pivotal in fostering

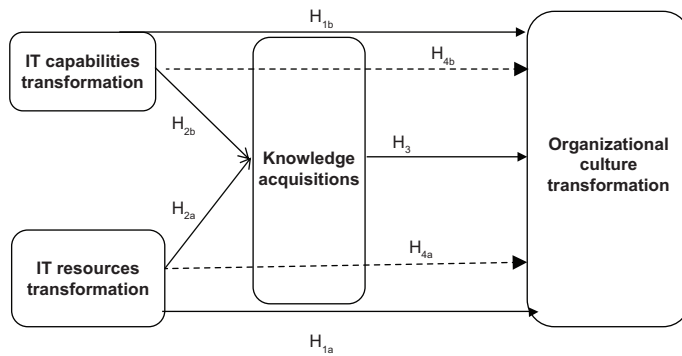
trust and connectivity among stakeholders, consumers, and workers throughout the pandemic, thereby heightening the organization's emergency response capabilities. Throughout the outbreak, specialists observed that alterations in IT use influenced the processes of knowledge acquisition and dissemination. For instance, Xie et al. (2020) explore how Chinese university students acquired practical knowledge through gathering pandemic-related information from social media and the internet. The use of digital resources and capabilities enhances decision-making and streamlines organizational processes. Van de Wetering and Versendaal (2021) explore the ways in which IT resources and capabilities enhance knowledge within Dutch hospitals. The researchers connected IT ambidexterity to the adaptation of business frameworks regarding IT resources, focusing on the management of patient knowledge operations within hospitals, and found that the transformation of company culture was significantly influenced by the process of acquiring knowledge. Rehman et al. (2023) analyse SMEs to explore the role of an environmentally conscious organizational culture in fostering green innovation via internal organizational knowledge. Their findings indicate that the process of acquiring knowledge has an impact on the development of a green corporate culture. Ismael and Sağsan (2021) explore the influence of organizational culture on knowledge processes and creative thinking within Iraqi health institutions during the pandemic, and identified a significant connection between organizational culture and knowledge management.

Contemporary enterprises and their operations are required to adjust to the evolving ICT landscape. The adoption of new technologies is intricately linked to advancements in knowledge management and the cultivation of learning-focused organizational cultures. According to Berce et al. (2008), the influence of ICT extends to organizational culture and knowledge management. However, this influence has rarely been explored. Hanelt et al. (2020) explore the impact of digital transformation on organizational change, proposing that the implementation of digital innovations could enhance the development of new IT skills and foster improved human interactions. Data-driven processes amalgamate and harmonize both new and existing knowledge across organizations, forging a cohesive digital strategy that aligns seamlessly with the company's overarching plan and a culture that evolves to align with the new environment. Ryan et al. (2011) investigate the role of Facebook in assisting first-semester doctorate students in their adaptation to Dutch culture. Following the conclusion of the first semester, they engaged in open coding of personal narratives. It was discovered that students rely on social media to gain insights into the organization, methods, and schedule of a new culture. Adaptive cultures enable organizations to endure during pandemics. According to Obrenovic et al. (2020), successful organizations leverage intranet, social media, and online communication tools to foster trust and cultivate relationships with employees, stakeholders, and customers both prior to and following a crisis. As such, technology better equips organizations to respond to crises.

Figure 1 illustrates this study's conceptual model.

In light of the above discussions, the following hypotheses are proposed:

Figure 1: Research model



- H_1 : Digital transformation throughout the pandemic-to-post-pandemic transition significantly impacts organizational culture.
 - H_{1a} : IT resource transformation throughout the pandemic-to-post-pandemic transition impacts organizational culture.
 - H_{1b} : IT capabilities transformation throughout the pandemic-to-post-pandemic transition impacts organizational culture.
- H_2 : Digital transformation throughout the pandemic-to-post-pandemic transition positively relates to knowledge acquisition.
 - H_{2a} : IT resource transformation throughout the pandemic-to-post-pandemic transition positively relates to knowledge acquisition.
 - H_{2b} : IT capabilities throughout the pandemic-to-post-pandemic transition positively relate to knowledge acquisition.
- H_3 : Knowledge acquisition throughout the pandemic-to-post-pandemic transition positively relates to organizational culture.
- H_4 : Knowledge acquisition mediates the relationship between digital transformation and organizational culture throughout the pandemic-to-post-pandemic transition.
 - H_{4a} : Knowledge acquisition mediates the relationship between IT resources and organizational culture throughout the pandemic-to-post-pandemic transition.
 - H_{4b} : Knowledge acquisition mediates the relationship between IT capabilities and organizational culture throughout the pandemic-to-post-pandemic transition.

3. METHODOLOGY

This study employed a descriptive-analytical approach, using a questionnaire to examine how knowledge acquisition mediates the impact of digital transformation on organizational culture throughout the pandemic-to-post-pandemic transition. A purposive and convenience sampling approach was adopted, wherein the authors' professional networks and social media accounts were leveraged to reach a broad spectrum of participants across sectors such as technology, healthcare, and manufacturing. This multi-channel dissemination in Arabic and English aimed to maximize sample diversity across diverse global regions. While this method was chosen due to logistical challenges and restricted physical

access to organizations, it ensured a rich dataset from culturally diverse and educated cohorts. Additionally, demographic data, including age, were collected to explore generational differences in perceptions of digital transformation and organizational culture, thereby enhancing the study's explanatory power despite inherent limitations in generalizability (Memon et al., 2025).

The survey process followed a structured timeline to ensure data integrity. The questionnaire was finalized in August 2023, and pilot testing was conducted in early September 2023 to verify clarity and reliability. Data were collected between September 15 and December 15, 2023, yielding 373 valid responses. The authors used a purposive and convenience sampling approach, disseminating the survey in Arabic and English through the researchers' professional networks, acquaintances, and various social media platforms. This enabled a broad outreach across diverse industries and regions during the pandemic-to-post-pandemic transition.

This sample size aligned with established studies in the field, such as Zhao and Aumeboonsuke (2024), which indicate that samples between 200 and 400 are appropriate for capturing cross-industry insights. Furthermore, the 373 responses exceed the threshold required for robust Structural Equation Modelling (SEM), as recommended by Hair et al. (2019). While the authors recognize that this sampling method, necessitated by logistical constraints, may limit broader generalizability, it provides significant exploratory insights into the evolution of organizational culture and digital transformation.

The characteristics of the sample are outlined in Table 1.

The survey was structured using a 5-point Likert scale. The initial segment focused on the respondent's overall profile, followed by a segment on digital transformation. The process of digital transformation was articulated through the lens of IT resources and capabilities, as influenced by the RBV. This study followed the digital classification of IT resources and capabilities proposed by Liang and You (2009), which categorizes IT resources into four distinct groups: Infrastructures, networks, investment, and employee talents. The IT capabilities include both internal resources and external expertise, with the questionnaire items being modified from the works of Chu et al. (2019), Nwankpa and Roumani (2016), and Priyono et al. (2020). The third section focused on the knowledge acquisition process, with insights derived from Klein and Todesco (2021), Abbas and Kumari (2021), and Hock-Doepgen et al. (2021), illustrating the pandemic's impact on this process. To assess cultural shifts, the survey was grounded in Denison et al.'s (2012) framework, wherein organizational culture is defined by embedded values, beliefs, and procedures. Building on Denison and Mishra's (1995) four-trait model – as adapted by Bagga et al. (2023) – the questionnaire captures employee perceptions of cultural evolution during the pandemic-to-post-pandemic transition. These dimensions are particularly relevant in crisis contexts, highlighting the alignment between internal culture and the evolving environment (Bogale and Debela, 2024). Ultimately, this framework illustrates how fundamental traits influenced organizational resilience and success throughout this digital shift.

Table 1: Sample characteristics

Respondent profile	Percentage
Sex	
Male	46.4
Female	53.6
Age	
18-30	33.8
31-40	22.3
41-50	10.5
51 and above	33.5
Place of residence	
Africa	37
Asia and Australia	27
Europe	23
The Americas	13
Industry	
Food and beverages	10.4
Durables, consumer	3.4
Electronics, and machinery	
Chemicals, pharmaceutical, and plastics	1.4
Textile, leather, and clothing	3.1
Other manufacturing	2.2
Investment, banking, and finance	5.1
Transportation	2.9
Telecommunication and media	7.7
Information systems and technology services	9.7
Construction and real estate	6.3
Health and social services	5.6
Wholesale and retail	7.2
Education	22.2
Other services	9.4

Beyond descriptive data, the survey explored causal pathways between digital transformation, knowledge acquisition, and cultural evolution. Its value lies in providing empirical evidence on how organizations manage change throughout the pandemic-to-post-pandemic transition. By capturing geographic and industry diversity, the study offers grounded strategies for knowledge-driven cultural adaptation, supporting managerial decision-making in post-crisis contexts and bridging the gap between theory and practice.

4. RESULTS

The hypotheses were tested using Partial Least Squares Structural Equation Modelling (PLS-SEM), chosen for its effectiveness in managing complex models without requiring a normal distribution (Hair et al., 2021). Following Hair et al.'s (2021) two-step approach, the study first evaluated the measurement model to ensure theoretical validity and reliability, followed by using the structural model to assess the hypothesized relationships. This method is particularly suited to this study's exploratory nature across diverse global contexts.

When assessing the measurement model, validity and reliability must be evaluated. The assessment was conducted by determining the average variance extracted (AVE), along with convergent and discriminant validity through the use of Cronbach's alpha and composite reliability (CR), respectively.

As per Hair et al. (2021; 2018), VIF factors are used to check for the absence of multicollinearity. Accordingly, the authors removed

any VIF value exceeding 0.5. Table 2 indicates the absence of multicollinearity and shows that the Cronbach alpha value and CR fell above 0.7 and below 0.95, aligning with the preferred range suggested by Hair et al. (2018). As such, the reliability requirements were met.

The AVE value in Table 2 spans from 0.69 to 0.896, aligning with the preferred range suggested by Hair et al. (2021). Discriminant validity was assessed with the heterotrait–monotrait ratio (HTMT), where the values exceeded 0.7 and fell below 0.85, in line with Hair et al. (2021). Therefore, the findings in Table 3 fall within the acceptable threshold levels, thus fulfilling the condition of validity.

In line with Hair et al.'s (2021) recommendations for examining hypotheses through structural models, bootstrap techniques were used to determine the significance of the path coefficient, relying on a P-value threshold of <0.05. The direct relationships among the variables are presented in Figure 1, while Table 4 illustrates the direct effect between the variables.

Table 4 illustrates a favourable connection between the transformation of IT capabilities and both knowledge acquisition ($\beta = 0.481$, $P < 0.00$) and organizational culture ($\beta = 0.308$, $P < 0.00$), as well as between IT resources and knowledge acquisition ($\beta = 0.326$, $P < 0.00$). Additionally, the acquisition of knowledge significantly influences organizational culture ($\beta = 0.607$, $P < 0.00$). However, the transformation of IT resources was not found to affect organizational culture ($\beta = 0.007$, $P < 0.903$). The influence of IT capabilities on knowledge acquisition surpasses that of IT resources, as evidenced by the β (0.481) coefficient for the relationship between IT capability transformation and knowledge acquisition, which is higher than the β (0.326) coefficient for the relationship between IT resource transformation and knowledge acquisition.

We adhered to Hair et al.'s (2021) methodology to assess the significance of the indirect effects, as illustrated in Table 5.

The results in Table 5 reveal the mediation effect of knowledge acquisition on the relationships between both IT resources ($\beta = 0.198$, $P < 0.00$) and IT capabilities on organizational culture ($\beta = 0.292$, $P < 0.00$).

5. DISCUSSION

The findings reveal that IT organizational resources have no direct impact on organizational culture, a result that challenges traditional views, such as those by Benitez-Amado et al. (2010). More recent evidence from Vaska et al. (2021) suggests that, in post-crisis environments, digital assets alone are insufficient catalysts for cultural change. Instead, cultural transformation requires mediating elements – specifically IT capabilities and knowledge acquisition – to bridge the gap between technical infrastructure and organizational adaptation. This underscores that, while hardware and software are essential “enablers”, they must be activated by human-centric capabilities to drive meaningful cultural shifts.

Table 2: The assessments of validity and reliability

Construct	Loading	VIF	Cronbach's alpha	Composite reliability	Average variance extracted
IT Resources Transformation (ITRES)			0.938	0.939	0.754
ITRES1	0.833	2.630			
ITRES2	0.872	3.040			
ITRES3	0.905	3.452			
ITRES4	0.875	2.861			
ITRES5	0.856	2.627			
IT Capabilities Transformation (ITXTCAP)				0.949	0.728
ITXTCAP1	0.834	2.494			
ITXTCAP2	0.825	2.626			
ITXTCAP3	0.835	3.439			
ITXTCAP4	0.876	3.054			
ITXTCAP5	0.862	3.636			
ITXTCAP6	0.890	2.711			
ITXTCAP7	0.849	2.481			
Knowledge Acquisition (KNOWAC)			0.901	0.939	0.836
KNOWAC4	0.894	3.016			
KNOWAC5	0.931	2.811			
KNOWAC7	0.917	3.140			
Organizational Cultural Transformation (ORGC)			0.951	0.953	0.691
ORGC1	0.804	3.162			
ORGC2	0.832	3.401			
ORGC3	0.810	2.433			
ORGC4	0.845	3.569			
ORGC5	0.848	3.038			
ORGC6	0.799	4.123			
ORGC7	0.847	2.630			
ORGC8	0.800	3.040			
ORGC9	0.891	3.452			

Table 3: HTMT ratio

The relationships between construct	HTMT
ITRES<->ITXTCAP	0.835
KNOWAC<->ITXTCAP	0.797
KNOWAC<->IT RESOURCES	0.767
ORGC<->ITXTCAP	0.801
ORGC<->ITRES	0.715
ORGC<->KNOWAC	0.896

Table 4: The direct effect between the variables

Hypotheses	β	P-values	Decision
ITXTCAP->NOWAC	0.481	0.00	Supported
ITXTCAP->ORGC	0.308	0.00	Supported
ITRES->KNOWAC	0.326	0.00	Supported
ITRES->ORGC	0.007	0.90	Rejected
KNOWAC->ORGC	0.607	0.00	Supported

Table 5: The results of indirect effects between the variables

Hypotheses	β	P-values	Decision
ITRES->KNOWAC->ORGC	0.198	0.000	Supported
ITXTCAP->KNOWAC->ORGC	0.292	0.000	Supported

This study aligns with the emerging post-pandemic discourse, notably Cyfert et al. (2025), which posits that it is the evolution of “soft” factors, rather than technology alone, that forms the crux of digital transformation. The findings emphasize that transforming IT capabilities significantly reshapes organizational culture, suggesting that prioritizing digital competencies and tools enables firms to institutionalize cultural change more effectively. This is consistent with Yunita et al. (2023) and Pfaff et al. (2023), who

argue that digital maturity fosters an adaptive, technology-centric workplace. While IT resources provide the structural base, this study’s evidence (gathered from diverse sectors and regions) demonstrates that the strategic competence to use these resources is what facilitates meaningful cultural evolution.

Furthermore, knowledge acquisition was identified as a vital catalyst for this transformation. Resonating with Rehman et al. (2023), this study finds that the systematic process of gaining and applying knowledge directly impacts corporate culture, especially in innovation-driven environments. Accordingly, for organizations to navigate the swift pace of technological advancement, they must couple the mere adoption of technology with the effective management and internalization of new knowledge to drive deep-seated cultural adaptation in a global context.

This study highlights the role of knowledge acquisition in bridging IT resource transformation and changes in organizational culture. Although IT resources may not instigate cultural changes in and of themselves, their influences become all the more notable when organizations successfully leverage these resources to gather and use knowledge. This aligns with Cyfert et al.’s (2025) emphasis on such soft factors as competencies. This is also consistent with Obrenovic et al. (2020) and Hanelt et al. (2020), who suggest that combining IT with knowledge management practices facilitates cultural transformations that are in harmony with digital business models.

The findings suggest that the transformation of IT resources is pivotal to the acquisition of knowledge. This aligns with Wang

et al.'s (2020) emphasis on the significant role of innovative information systems in facilitating knowledge processes, especially in the context of such health crises as the COVID-19 pandemic. Their study emphasized that companies that allocated resources towards IT to enhance knowledge-sharing platforms, remote work solutions, and data-driven decision-making were more effectively equipped to respond to disruptions. This foregrounds the notion that, although IT resources may not directly alter organizational culture, they facilitate knowledge acquisition, which subsequently impacts cultural transformation.

Furthermore, IT capabilities are salient to knowledge acquisition. This aligns with Sayibu et al. (2022), who demonstrate how digital skills facilitate knowledge dissemination, particularly in crisis contexts. However, the findings extend this by showing that advanced IT capabilities, such as data analytics and digital platforms, have become permanent structural requirements, further reinforcing Cyfert et al.'s (2025) description of these capabilities as essential for internalizing knowledge and adapting to rapidly evolving environments.

This study's findings extend the literature by clarifying how digital transformation impacts organizational culture. Specifically, this research offers empirical evidence from cross-sectoral environments on the crucial role of IT capabilities and knowledge acquisition as mediators of cultural change. This highlights that, while infrastructure is necessary, organizations must prioritize developing digital competencies and knowledge management strategies to foster lasting cultural transformation.

The strategic value of this study lies in its timing and cross-sectoral reach, capturing the transitional dynamics of organizations moving from crisis response to long-term adaptation. These findings fill a literature gap by elucidating how knowledge acquisition operates as a transformation mechanism within the RBV framework. This resonates with prior research (e.g., Cyfert et al., 2025) highlighting that, in post-pandemic environments, integrating IT capabilities and knowledge processes is essential for institutionalizing a sustainable digital culture.

6. CONCLUSION

This study contributes to the burgeoning literature on digital transformation by providing further details on its nuanced impact on organizational culture. Moreover, its scientific significance lies in demonstrating that IT resources alone are insufficient; rather, it is the synergy between IT capabilities and knowledge acquisition that serves as the critical mechanism for cultural change. By extending the RBV into the post-pandemic digital era, this study offers a fresh theoretical perspective on how crises catalyse the evolution of internal capabilities into strategic assets.

Practically, these findings provide a roadmap with which authorities and leaders can prioritize knowledge management as a prerequisite for digital integration. Despite its cross-sectoral insights, the study's limitations – notably the varied regional distribution reflecting diverse digital maturity – should be acknowledged. Consequently, future research is encouraged

to adopt longitudinal frameworks to investigate the long-term sustainability of these transformations, particularly the emerging role of artificial intelligence in redefining organizational resilience.

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