



RESEARCH

Organisational Culture and Knowledge Management Systems Adoption: Examining Employee Usage in Multinational Corporations

Mahmoud Abdelrahman^{1,2} · K. Nadia Papamichail³ · Ramy Hammady^{4,5} · Yusuf Kurt³ · Wael Abdallah⁶ · Leo Shixiong Liu¹ · Sebastian Kapser⁷

Received: 8 March 2025 / Accepted: 25 May 2025 / Published online: 24 June 2025
© The Author(s) 2025

Abstract In an era marked by digital transformation and organisational complexity, multinational corporations (MNCs) strive to build flexible systems that can harness and share knowledge effectively across diverse cultural and geographic contexts. This study investigates the strategic role of organisational culture in enabling the adoption and utilisation of knowledge management systems (KMSs) and how this relationship influences knowledge sharing and organisational effectiveness. Drawing upon the Technology Acceptance and Denison's cultural framework, this research positions organisational culture as a key driver of system flexibility, enhancing user perceptions of usefulness and ease of use, and thereby fostering greater engagement with KMSs. Survey data from 221 respondents across Europe and the Middle East were analysed using Partial Least Squares Structural

Equation Modelling (PLS-SEM). The findings reveal that cultural adaptability, involvement, and mission significantly impact KMSs usage and knowledge sharing, which are critical for organisational agility and sustained performance. This study contributes to the literature on flexible systems management by demonstrating how culturally embedded knowledge practices enhance technological adoption and strategic responsiveness. It offers practical insights for global firms seeking to develop adaptive knowledge infrastructures that support innovation, collaboration, and resilience in dynamic international environments.

Keywords Knowledge management systems · Knowledge sharing · Organisational culture · Organisational effectiveness · Technology flexibility

✉ Mahmoud Abdelrahman
M.Abdelrahman@mmu.ac.uk

K. Nadia Papamichail
n.papamichail@manchester.ac.uk

Ramy Hammady
R.Hammady@soton.ac.uk

Yusuf Kurt
Yusuf.Kurt@manchester.ac.uk

Wael Abdallah
wael.mostafa@aucegypt.edu

Leo Shixiong Liu
Leo.Liu@mmu.ac.uk

Sebastian Kapser
sebastian.kapser@hs-heilbronn.de

² Zagazig University, Business Administration Department, Zagazig University, Zagazig, Egypt

³ Alliance Manchester Business School, University of Manchester, Manchester, United Kingdom

⁴ University of Southampton, Southampton, United Kingdom

⁵ Helwan University, Faculty of Applied Arts, Helwan University, Cairo, Egypt

⁶ Onsi Sawiris School of Business, Heikal Department of Management, American University in Cairo, Cairo, Egypt

⁷ Heilbronn University Graduate School, Faculty of Economics, Heilbronn University, Heilbronn, Germany

¹ Manchester Metropolitan University, Business School, Manchester Metropolitan University, Manchester, United Kingdom



Introduction

Multinational corporations (MNCs) operate in complex and rapidly changing global environments, requiring adaptive strategies to maintain competitive advantage and growth. The globalisation of markets, fueled by technological advancements and shifting socio-economic trends, intensifies competition, compelling MNCs to innovate and navigate diverse regulatory, cultural, and operational challenges. Recent studies affirm that innovation is dynamic, and the turbulent business climate further increases uncertainty and change for MNCs. To enhance innovation performance, MNCs must effectively manage these uncertainties by adopting robust knowledge management (KM) processes and fostering a supportive organisational culture (OC). Despite the recognised importance of these factors, there is little empirical study on how KM processes and organisational culture have a synergistic impact on organisational effectiveness in uncertain and changing environments (Trivedi & Srivastava, 2024, 2025).

Success depends on balancing global scale with local responsiveness, fostering innovation, and aligning with evolving stakeholder expectations. By developing resilient strategies and networks, MNCs can effectively manage risks and seize emerging opportunities to drive sustainable growth and differentiation. To facilitate knowledge sharing (KS) and teamwork among employees, these corporations are progressively adopting KMSs (Kim et al., 2021). However, the success of deploying and utilising KMSs is contingent on multiple elements, such as organisational culture (OC), which shapes employees' perceptions and actions regarding the sharing of knowledge and engagement with KMSs (Grover et al., 2022; Heath et al., 2022).

In today's international marketplace, knowledge is a key driver of competitive superiority and has emerged as a vital component for MNCs. The facilitation of efficient KS across diverse international divisions presents a significant hurdle for MNCs, which were confronted with numerous unforeseen challenges by management outside their firms (Sonmez Cakir et al., 2024). These challenges are compounded by environmental "forces for change," including globalisation, the advent of new technologies, the adoption of best business practices, governmental policies, political dynamics, the competitive nature of global financial markets, the scarcity of skilled knowledge workers, the capacity for learning, the rapidity with which knowledge can be forgotten, and elevated rates of employee turnover. Moreover, MNCs are in pursuit of suitable methods to handle and leverage their knowledge in a manner that is both effective and efficient. Within this intensely competitive international context, MNCs have come to

acknowledge the critical imperative to formalise KS processes to maximise the benefits derived from their entire spectrum of knowledge assets (Afshar Jalili & Salempour, 2020; Ganguly et al., 2019; Hassandoust et al., 2022).

Recent research on organisational flexibility highlights that knowledge management processes (KMPs) supported by information technology significantly enhance the ability to adapt to changing markets. Organisational flexibility entails the capacity to modify structures and strategies in response to market fluctuations, thereby allowing firms to utilise strategic planning capabilities to reallocate resources effectively and improve overall performance (Yoshikuni et al., 2023). Their empirical studies demonstrate that knowledge management processes, including creation, storage, application, and sharing, which directly impact operational processes and increase organisational ambidexterity in dynamic environments. This aligns with MNCs' need to implement flexible KMSs to tackle global challenges. Innovation and flexibility are increasingly recognised as interconnected prerequisites for organisational success, with adaptable organisations demonstrating greater responsiveness through the efficient utilisation of knowledge (Haleem et al., 2018). They found that organisational culture fosters innovation management and provides the flexibility to react to competitive pressures. This reinforces the understanding that MNCs need adaptive KMSs that cater to diverse cultural contexts while maintaining strategic coherence, allowing for swift reconfiguration of knowledge resources in response to evolving market conditions.

MNCs have complex internal dynamics, characterised by geographical, cultural, and structural separations, linguistic obstacles, power conflicts between units, and potential misalignments and disputes regarding the interests, norms, procedures, and habitual operations within different segments of the organisation (Kostova et al., 2008). Therefore, to enable effective knowledge exchange within the intricate structures of multinational corporation, it is essential to implement specific coordination mechanisms and technological instruments (Gupta & Govindarajan, 1991; Nielsen & Michailova, 2007; Persaud, 2005). Consequently, effective MNCs excel at organising their knowledge resources, which are often scattered across diverse geographical regions. The ability to dynamically reconfigure knowledge resources in response to environmental changes is critical to organisational flexibility. Flexible management has become essential in digitally transformed environments, enabling organisations to adapt their operational, strategic, and measurement practices in real time to foster a culture of continuous improvement (Cosa & Torelli, 2024). This flexibility is increasingly important for MNCs operating across diverse cultural and geographical contexts, enabling them to respond to market

changes and leverage their global knowledge assets more effectively. Therefore, KMSs should be designed to enhance flexible capabilities, enabling MNCs to identify, assess, and adapt their knowledge assets in response to shifting competitive landscapes. A primary cause of KMSs falling short within organisations is the oversight of the impact that organisational and interpersonal environments have on KS (Jiang & Xu, 2020; Wang & Noe, 2010).

In a similar context, the significance of OC and its influence on knowledge sharing (KS) and organisational performance has been highlighted (Dudézert et al., 2021; Forte et al., 2016; Pool et al., 2014). They point out that OC, along with its characteristics (involvement, consistency, adaptability, and mission), plays a crucial role in shaping employees' perspectives and inclinations towards KS. Salehzadeh et al. (2017) also addressed the need for efficient OC and how it may help businesses carry out KS, which can improve organisational performance.

The primary area of investigation for this research is MNCs functioning within the European and Middle Eastern regions. Two critical considerations underpin this regional focus. Much of the scholarly discourse concerning the Middle East tends to emphasise issues of instability and regional challenges, leading to the perception that the area presents operational difficulties for MNCs (Mellahi et al., 2011). Despite challenges, the Middle East remains a crucial market for many top MNCs. These companies continue to generate significant profits from their operations within the region (Kavoossi, 2000). Hence, the necessity for further research on knowledge networks in the Middle East has been emphasised (Abdelrahman & Papamichail, 2016; Wang & Noe, 2010). Additionally, Europe is selected due to its position as a hub for numerous leading companies, offering a meaningful contrast to the Middle East (Abdelrahman & Papamichail, 2016; Wang & Noe, 2010).

This study investigates how organisational culture impacts sharing knowledge practices facilitated by KMSs. The goal is to understand how these factors contribute to improved Organisational Effectiveness (OE) within MNCs. The research adapted and combined the Technology Acceptance and Denison Organisational Culture Models together as a theoretical lens to examine these relationships. The paper begins by exploring how internal organisational values and norms shape the utilisation of enterprise knowledge platforms and the practices of exchanging expertise within multinational firms. Subsequently, the research methodology and data-gathering processes are delineated, leading to the presentation of the analysis. The concluding portions of the paper encompass a discussion and the derived conclusions.

Literature Review

Research Background

In the present economic landscape, characterised by “the only constant is change,” knowledge stands as the singular reliable foundation for sustained competitive superiority (Nonaka, 2009). Building on the importance of knowledge, there is a critical role for organisations to generate and leverage knowledge to achieve a sustainable competitive edge (Grant, 1996; Kogut & Zander, 1992; Nonaka, 2009; Pereira & Bamel, 2021; Prahalad & Hamel, 2009). Knowledge as a value emphasises the criticality of grasping organisational mechanisms for leveraging knowledge held by its workforce (Grant, 1996). This perspective has evolved the conceptualisation of a firm as a collection of resources, pinpointing knowledge as the most strategic asset and, potentially, the sole basis for competitive differentiation (Fernandes et al., 2022; Gupta et al., 2021). It is deeply embedded throughout the organisation's values, governance frameworks, operational protocols, technological infrastructure, and human capital (Kraus et al., 2022; Michailova & Minbaeva, 2012).

In this context, it is important to clarify that organisational values, collaborative practices, and internal governance mechanisms collectively reflect the broader construct of ‘*Organisational Culture*.’ Explicitly acknowledging this connection helps unify terminology and underscores how shared assumptions and behavioural norms shape knowledge creation and sharing.

The role of KS is underscored by focusing on an organisation's ability to integrate knowledge within its existing frameworks and to enable the exchange of this embedded knowledge among individuals, while also acknowledging the distinct attributes of knowledge (Michailova & Minbaeva, 2012). Furthermore, KS is not considered an inherent process and may require substantial organisational efforts to cultivate strong connections among members (Mahajan et al., 2024). A robust framework for supply chain flexibility is pivotal in enhancing overall organisational performance (Varma et al., 2024). Consequently, organisations ought to invest in mechanisms characterised by ongoing social interactions, the exchange of ideas, knowledge dissemination, and other activities related to the social nature of learning (Mondal & Chakrabarti 2024; Minbaeva et al. 2003). Accordingly, organisations serve as key environments for generating and shaping knowledge resources, where their responsibility involves organising, structuring, and distributing these resources to maximise their utility (Grant, 1996; Mahdi et al., 2019). Furthermore, leveraging Information Technology (IT) is essential for the effective application of such



resources (Cuthbertson & Furseth, 2022). In this regard, internal organisational values and digital knowledge platforms together provide a foundational framework for guiding the management and dissemination of knowledge across the enterprise. This research seeks to extend the use of knowledge platforms in the context of information exchange by incorporating the technology acceptance perspective alongside organisational values, collaborative practices, digital knowledge infrastructures, and institutional performance. These aspects are explored in detail in the following sections.

Technology Acceptance

With the advancement of Information Systems (IS), scholarly interest has steadily grown around the elements that shape user engagement and adoption of digital platforms (Mishra et al., 2023). This focus is especially significant for multinational enterprises, which face the challenge of embedding knowledge platforms across geographically dispersed teams. Understanding how such elements influence user attitudes allows organisational leaders, technical architects, and IT specialists to better assess how individuals perceive and interact with specific technological tools (Alhaimer, 2024).

Recent studies have also demonstrated that emerging technologies can foster strategic flexibility in decision-making (Yoshikuni et al., 2023). Numerous Information Systems (IS) researchers have endeavoured to develop models that elucidate the significance of user technology acceptance within organisations. The increasing integration of generative artificial intelligence in industrial applications further underscores the evolving nature of user interactions with KMSs (Kar et al., 2023). The most prominent of these models is the Technology Acceptance Model (TAM), conceptualised by Davis (1989). TAM interprets individuals' behaviour through two key constructs: the perceived ease of use (PEU) and the perceived usefulness (PU) in relation to a specific technological system. These constructs are believed to directly influence actual system usage. According to TAM, both PEU and PU significantly correlate with a user's intention to use and their actual interaction with the system (Davis, 1985, 1989).

Building on the work of Fred D. Davis, the TAM defines PEU as the user's belief in a system's effortlessness and PU as the belief in the system's ability to enhance job performance (Davis, 1989). This concept emphasises how users' perceptions regarding a technology's ease of use directly impact their willingness to adopt and utilise it.

System flexibility significantly influences technology adoption in multinational contexts, extending beyond individual perceptions. Integrating organisational

components across stakeholders and aligning information technology with business processes is essential for achieving organisational flexibility (Samiei & Habibi, 2020). This perspective is further supported by evidence that knowledge-intensive processes require flexible management approaches to respond effectively to evolving business environments (Gromoff et al., 2017).

Their research indicates that organisations need systems capable of adjusting to environmental changes by dynamically reconfiguring their knowledge resources. In order to sustain their market leadership amid intense competition, organisations must consistently evolve alongside technological advancements by designing solutions that utilise modern infrastructure and system frameworks, while ensuring effective oversight of their implementation (Xhafa et al., 2017). This flexibility enhances organisational adaptability at the system, structure, and strategy levels.

Flexible systems management is described as an inherently iterative process that balances learning with optimisation paradigms (Sushil, 2017). The TAM, comprised of PU and PEU as key drivers of adoption, is directly influenced by systems that offer greater adaptability, which are often seen as more accessible and beneficial by MNCs operating across diverse regions.

Organisational Culture

Organisational Culture has emerged as a prominent business concept since the 1980s (Denison, 1990; Naveed et al., 2022; Pedraza-Rodríguez et al., 2023). It is recognised as a key factor in an organisation's ability to adapt to external environments and foster Organisational Effectiveness. Organisational culture is described as a collection of shared core assumptions, norms, and values that permeate an organisation (Schein, 2012). These elements essentially create a framework for organisational activities (Zheng et al., 2010). Furthermore, CEO transformational leadership and supply chain agility are critical drivers of firm performance and can positively influence the adoption of KMSs (Prabhu & Srivastava, 2023).

These assumptions, having demonstrated their effectiveness over time, become embedded within the organisation and are passed on to new members as the "correct" way to address challenges and operate within the organisational context. Post-pandemic adaptation of IT systems, therefore, necessitates a nuanced understanding of consumer behaviour, which has a direct influence on organisational effectiveness (Yin et al., 2023). A supportive and agile organisational culture has been shown to enhance innovation performance by moderating the effects of management support (De la Gala-Velásquez et al., 2023).

The relationship between organisational culture and flexibility is especially critical in digitally transformed environments. Organisational cultures that emphasise adaptability, resilience, and agility have been shown to significantly enhance an organisation's capacity to leverage digital technologies for improved performance (Cosa & Torelli, 2024). Their systematic review of 47 studies highlighted that flexible management practices, supported by suitable cultural values, enable organisations to adapt their operational and strategic practices in real time, fostering ongoing improvement and responsiveness to changing conditions. In the context of MNCs, cultural dimensions that encourage flexibility are even more critical as these organisations must navigate multiple national contexts while maintaining coherent knowledge management practices.

A growing body of research suggests a positive correlation between a well-defined OC and an organisation's ability to achieve a competitive advantage and enhance its overall effectiveness. This relationship has been demonstrated in several recent studies (Barney, 1991; Gordon & DiTomaso, 1992; Naveed et al., 2022; Pedraza-Rodríguez et al., 2023). Specifically, scholars have identified and validated four key dimensions of OC that contribute significantly to organisational effectiveness: adaptability, consistency, involvement, and mission. These dimensions form the foundation of the Denison Model, which measures each through three sub-indices (Denison & Mishra, 1995; Fey & Denison, 2003). Since its development, the Denison Model has been widely applied and extensively validated in empirical research, reinforcing its status as a leading framework in the study of OC. More recent studies have expanded the understanding of OC by incorporating elements of organisational spirituality, which have been shown to significantly influence knowledge sharing and adaptability. Cultures that emphasise higher-order values such as trust and psychological well-being have been found to shape more positive attitudes towards knowledge sharing (Khari & Sinha, 2018). Their findings indicate that collective knowledge; viewed as a dynamic capability, enhances an organisation's ability to compete strategically in global markets. This insight is particularly relevant for multinational corporations, as it suggests that cultures fostering trust and employee well-being create more open environments for information exchange, thereby improving organisational flexibility to changing conditions.

The four dimensions of the Denison Model are defined as follows. *Flexibility* captures an organisation's capacity to adapt its structures, processes, and practices to remain responsive to external changes. This dimension is assessed through the organisation's ability to drive transformation, maintain customer focus, and support continuous learning. *Cohesion* refers to the alignment of organisational

members around shared principles, values, and goals, and is evaluated through indicators such as collaboration, mutual agreement, and commitment to core values. *Engagement* reflects the degree to which employees are actively involved in decision-making and organisational processes, measured through teamwork, delegation, and opportunities for skill development. *Purpose* is associated with a shared understanding of the organisation's mission, evaluated by the clarity of strategic goals, the establishment of measurable targets, and the articulation of a long-term vision (Fey & Denison, 2003).

While the Denison Model has established itself as a prominent framework in OC research, an increasing number of scholars are calling for a deeper exploration of its nuanced role within knowledge management (KM) studies. These scholars acknowledge the well-established influence of OC on KM success but point to a research gap concerning the specific mechanisms through which this influence is exerted (Curado et al., 2023; Yu et al., 2023). Further emphasising this gap, research has highlighted the importance of understanding how KS can be effectively nurtured within organisations. This includes the call for more focused inquiry into the conditions and practices that enable KS (Othman & ElKady, 2023). In addition, particular attention has been drawn to the dynamics of OC within employee and team interactions and their influence on knowledge-sharing behaviours (Hijazi, 2023). Moreover, the integration of artificial intelligence (AI) into the workplace, examined through the lens of socio-technical systems theory, underscores the complex interplay between technological adoption and organisational culture. This perspective highlights how culture shapes, and is shaped by, the implementation and use of emerging technologies (Yu et al., 2023). This study aims to contribute to this underexplored domain by advancing understanding of the interconnections between OC, KM, and emerging technologies in organisational settings.

Knowledge Sharing

KS is an essential element for any organisation. KM initiatives cannot be truly effective unless knowledge is actively shared within the organisation (Hassandoust et al., 2022). While numerous tools are available to facilitate KS, their successful implementation often necessitates a shift in organisational culture, which some employees may be reluctant to embrace. Effective use of knowledge within Information Systems departments significantly influences overall organisational performance, as highlighted by Lin et al. (2023). The enablers and constraints of information sharing on enterprise social media are critical for fostering a collaborative knowledge-sharing environment (Laitinen & Sivunen, 2021).



Knowledge sharing involves the transfer of knowledge across various levels of an organisation, including individual-to-individual exchanges, group-level dissemination, and inter-team collaboration (Davenport & Prusak, 2000). However, fostering a culture that supports KS necessitates a thoughtful and sensitive approach. KM within organisations serves a critical function in fostering communication and knowledge sharing among members. This collaborative exchange enriches interpretation and facilitates coordinated action (Courtney, 2001). Consequently, fostering a cooperative OC becomes essential to enable seamless knowledge dissemination and employee communication. In contrast, cultivating teamwork fosters mutual reliance, a foundational element for successful KS (Radaelli et al., 2024; Saeed et al., 2023).

A strong OC can not only facilitate knowledge sharing but can also be reinforced by it (Curado et al., 2023). It is important to distinguish that effective knowledge sharing goes beyond the mere transmission of information; it involves the exchange of valuable knowledge that directly and indirectly supports collaborative problem-solving. This process is often enabled by social networks and technological tools (Al-Kurdi et al., 2020; Wang & Noe, 2010).

Knowledge Management Systems

Technology is crucial in the business sector, enabling employees to access necessary knowledge promptly and equipping decision-makers with the means to apply this knowledge within their work environments (Bals et al., 2007; Chong & Chong, 2009; Kucharska & Erickson, 2023). The role of IT culture and personal innovativeness significantly contributes to the success of digital entrepreneurship, underscoring the importance of these factors in leveraging KMSs within organisations (Abubakre et al., 2022). Recent empirical evidence demonstrates that organisational culture, structure, and leadership significantly mediate digital transformation processes and, in turn, enhance knowledge sharing and overall performance in SMEs (Leso et al., 2023). The interplay between technological proficiency and adaptive capacity, especially in fostering collaborative learning, is vital for advancing operational success (Mao et al., 2021). Business innovations are similarly associated with enhanced system harmonisation and creative advancements, promoting sustainable resource strategies (Le et al., 2023). Acknowledging this significance, numerous enterprises have, over the past thirty years, implemented customised IT-driven frameworks termed KMSs (Nielsen & Michailova, 2007). Knowledge management systems (KMSs) are defined as IT-based systems designed to support organisational processes related to the creation, storage and retrieval, dissemination, and application of knowledge

(Alavi & Leidner, 2001). These systems have become a strategic component within a multitude of today's foremost MNCs (Abdelrahman & Papamichail, 2016; Nielsen & Michailova, 2007).

Organisations from various sectors acknowledge the importance of efficient KMSs for their prospective achievements (Shin, 2004; Yang & Yang, 2023). MNCs consistently depend on their IT departments to effectively and efficiently manage and leverage their accumulated knowledge (Bacon et al., 2019; Montazemi et al., 2012a, 2012b). The internal environments of multinational corporations are characterised by complexity, including geographical, cultural, and organisational distances, language barriers, power dynamics between units, and potential conflicts or discrepancies in interests, values, practices, and procedures across different parts of the organisation (Kostova et al., 2008). As such, KS within the multifaceted setting of MNC elements necessitates specific coordination methods and instruments to smooth the knowledge sharing process by using KMSs by ensuring the transmission of knowledge from those who possess it to those in need across the organisation (Ghoshal & Bartlett, 1995; Sia et al., 2010).

The flexibility of KMSs is essential for multinational organisations with teams dispersed across geographically diverse regions. Companies operating in globally distributed environments encounter challenges that necessitate a flexible management approach, which blends traditional organisational structures with agile methodologies to create distinctive advantages in knowledge-intensive settings (Yadav, 2016). This approach enhances an organisation's capacity to adapt to evolving needs in multicultural and geographically dispersed contexts while maintaining necessary coordination and control mechanisms. In MNCs, such flexibility supports increased knowledge sharing across organisational boundaries, greater responsiveness to local market demands, and more effective utilisation of global expertise.

The methodology associated with flexible management promotes minimal documentation, the appointment of dedicated site coordinators to facilitate inter-location interaction, and the development of both formal and informal communication channels; all contributing to more agile and adaptive knowledge management systems. To this end, agile KMSs are seen as crucial for corporations operating in geographically distributed settings, enabling them to meet diverse regional requirements without compromising strategic alignment and allowing for the swift reconfiguration of knowledge resources in response to shifting market conditions (Yadav, 2014).

Organisational Effectiveness

The KS throughout an organisation's divisions is crucial for enhancing firm performance, particularly within MNCs (Deng et al., 2023; Jiang & Xu, 2020; López-Sáez et al., 2021). The concept of OE pertains to the extent to which an organisation fulfils its objectives, with the primary ambition being the attainment of a superior level of OE (Daft, 2015; Dhoopar et al., 2023). An organisation's performance is shaped by the knowledge it acquires and utilises (Wu & Chen, 2014). The effective management of this knowledge plays a crucial role in enhancing organisational effectiveness, as emphasised by (Ho, 2008). Organisational agility, coupled with transformational leadership, has been found to bridge high-performance work systems and overall organisational performance (Dimple & Tripathi, 2024). Furthermore, empirical evidence suggests a positive association between the implementation of KM strategies and enhanced organisational performance (Gu et al., 2019). MNCs derive significant benefits from employing individuals with diverse cultural and professional backgrounds, as such diversity enhances organisational efficiency by contributing a broad range of expertise and competencies. The long-term survival of MNCs is closely tied to their capacity to leverage unique global expertise by accessing existing knowledge bases and integrating them to create innovative solutions (Mäkelä et al., 2012). Additionally, effective information exchange within MNCs plays a vital role, with institutional knowledge identified as a key factor in sustaining competitiveness in international markets (Montazemi et al., 2012a, 2012b). Modelling organisational resilience has been shown to be instrumental in achieving enhanced performance outcomes (Sánchez-García et al., 2023). Consequently, to succeed in the globalized digital economy, MNCs are required to identify, evaluate, create, enhance, and expand their intellectual assets, recognizing that knowledge stands as a vital economic resource (López-Sáez et al., 2021; Metaxiotis et al., 2003).

There is substantial evidence from the literature that organisational culture and leadership style have critical parts to play in the shaping of the adoption of information technology (IT) and KMSs and in influencing knowledge-sharing intentions and organisational effectiveness. Tseng (2017) found that OC and leadership style both have significant moderating effects on the relationship between IT adoption and employees' willingness to share knowledge, which underscores the need for positive cultural and managerial environments to achieve the maximum impact of IT on knowledge behaviours. Ciganke et al. (2008) provided empirical evidence that cultures of open communication and process orientation significantly affect determinants of KMSs acceptance, namely perceived usefulness, ease of use, and subjective norms, thus confirming

the importance of a fit culture in the successful implementation of KMSs. AlShamsi and Ajmal (2018) listed trust, cooperation, and management support as essential cultural elements that foster knowledge sharing within technology-based firms, while Hung et al. (2011) emphasised the organisational context and leadership as determinants of intrinsic and extrinsic motivation for knowledge sharing among R&D personnel. Despite these advances, most earlier research has examined these variables in univariate or linear frameworks; few have attempted to account for their synergistic effect on organisational performance or explored how the interaction between OC, leadership, and IT/KMSs implementation can provide multiplicative benefits to multinational corporations. This research fulfils this shortfall by empirically analysing how employees' combined effects of OC and KMSs usage influence organisational performance, presenting an integrated and dynamic picture compared to previous works.

Research Gap and Contribution

A substantial body of research has examined the role of OC in shaping KMSs adoption and KS. The foundational study by De Long and Fahey revealed that the benefits of technological infrastructure are often constrained when existing organisational norms do not promote KS across divisions, highlighting that cultural context is critical for effective system use (De Long & Fahey, 2000). Subsequent research confirmed that OC significantly affects both individual KS behaviours and an organisation's capacity to manage and synthesise knowledge. Trust, collaboration, and shared values have been consistently recognised as cultural factors essential to the successful implementation and use of KMSs (Collins & Smith, 2006; Wang & Noe, 2010; Willem & Scarbrough, 2006).

Despite these contributions, key limitations persist. Many prior studies rely on single-country data or cross-sectional designs, limiting their applicability to complex, multicultural settings. This gap is particularly relevant to multinational corporations, where diverse cultural values and geographically dispersed teams complicate KMSs adoption. Moreover, little research has integrated OC into established technology adoption frameworks such as the TAM, especially in relation to how OC dimensions influence PU and PEU.

Recent studies offer further insight into these dynamics. Research shows that IT-supported KM processes enhance flexibility and ambidexterity, allowing organisations to adapt quickly to changing environments—critical for MNCs operating globally (Yoshikuni et al., 2023). Organisational inertia negatively affects firm performance in emerging-market SMEs, whereas flexible, innovation-



driven cultures positively contribute to strategic outcomes (Le & Mohiuddin, 2024). In the context of digital transformation, OC—along with leadership and structure—was found to significantly influence adoption success (Leso et al., 2023).

Several studies have directly explored OC's influence on innovation, digital capability, and sustainability. Cultural practices, more than managerial skills, were found to shape innovation across remote teams (Pedraza-Rodríguez et al., 2023). Similarly, organisational green culture strengthens the connection between green KM and green innovation, advancing sustainable development goals (Wang et al., 2022).

A number of investigations have focused on how OC facilitates KS and its outcomes. KS has been identified as a mediator between OC and performance, with attributes such as trust and collaboration strongly influencing outcomes (Chang et al., 2017; Moon & Lee, 2014; Shao et al., 2015). Zheng et al. confirmed that OC dimensions—adaptability, mission, consistency, and involvement—are positively associated with organisational effectiveness (Zheng et al., 2010). Their findings also identified KS as a full mediator in the OC-performance relationship.

Research has also acknowledged that KS is not an automatic process, but one requiring significant organisational support, structures, and social bonds (Michailova & Minbaeva, 2012). Perceptions of PU and PEU, core to TAM, have been shown to influence KMSs usage more than general organisational support, underscoring the importance of user experience in adoption processes (King & Marks Jr, 2008).

Fewer studies have examined these dynamics in the MNC context. Those that have, such as Riege, Nielsen and Michailova, and Kulkarni et al., identified that factors such as incentives, training, staffing adequacy, and system design must be adapted to support KS in globally distributed teams (Uday R. Kulkarni et al., 2006a, 2006b; Nielsen & Michailova, 2007; Riege, 2007). These findings suggest that effective implementation of KMSs in MNCs must consider both technical and cultural variables.

The limitations of a purely technological focus are further highlighted in recent work on AI integration, where success depends on aligning emerging tools with cultural and collaborative KS practices (Olan et al., 2022). Likewise, Yadav advocated for flexible management systems blending agile and traditional models to improve responsiveness in multinational, multicultural settings (Yadav, 2014, 2016). Despite growing interest in OC-KMSs relationships, few studies have investigated how cultural variables interact with TAM constructs in global organisations. Most TAM-based studies overlook the effect of cultural heterogeneity on PU and PEU, particularly in

MNCs where communication styles, decision-making norms, and knowledge behaviours differ across regions.

This study seeks to address these gaps by integrating the Denison model of OC with the TAM framework and applying it in the context of MNCs operating across Europe and the Middle East. By doing so, it contributes both theoretically and practically to understanding how cultural dimensions shape technology acceptance, KS, and performance. This integrated approach offers a more nuanced framework for designing KMSs strategies that align with diverse organisational contexts in a globalised business environment.

Conceptual Model and Hypotheses Development

Organisational culture plays a pivotal role in knowledge management, yet its specific impact on the adoption and usage of KMSs in MNCs remains insufficiently understood. While extensive research has explored how culture facilitates or hinders knowledge-sharing practices, the mechanisms by which specific cultural dimensions influence the acceptance and usage of KMSs, particularly within the culturally diverse and operationally complex environments of MNCs, are still underexplored. This research builds upon an extensive review of existing literature to propose a conceptual model that examines the interconnectedness of six critical factors influencing the adoption and effectiveness of KMSs (see Fig. 1). These factors include organisational culture, employees' perceived ease of using the KMSs, the perceived value or usefulness of the system, the extent of KMSs usage across the organisation, employees' willingness to share knowledge through the system, and the overall organisational effectiveness achieved as a result.

The study integrates Denison's cultural dimensions (adaptability, consistency, involvement, and mission) within the TAM framework, highlighting how cultural alignment influences key perceptions of technology such as ease of use and usefulness. By addressing these interrelated factors, this research offers a comprehensive model that not only extends the theoretical scope of TAM but also provides actionable insights for MNCs to optimise KMSs implementation and link it with organisational effectiveness.

Drawing upon the existing body of scholarly work, seven hypotheses were formulated to align with the proposed research model, which will undergo empirical testing and subsequent analysis.

Our research investigates how an organisation's culture influences employees' use of KMSs. Studies suggest a strong connection between the two. For instance, Huber (2001) points out that culture shapes how knowledge workers develop and follow KS practices and how they

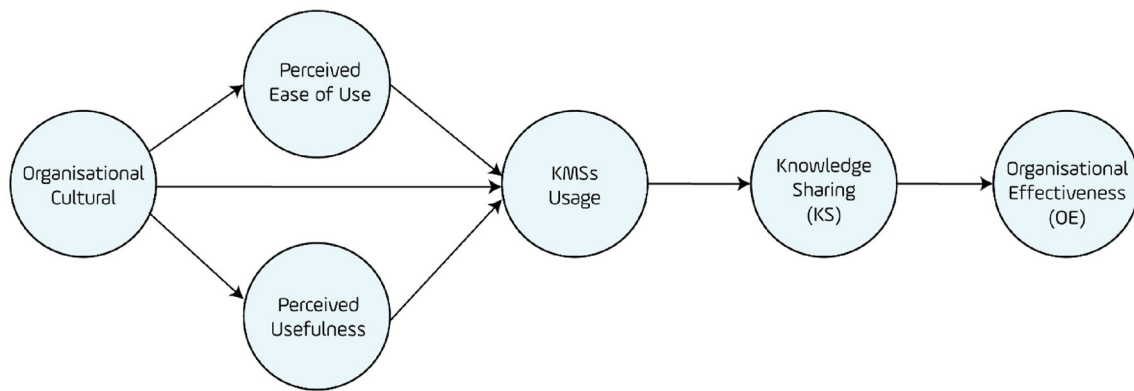


Fig. 1 Research model and hypotheses proposed

apply knowledge using KMSs. Similarly, Alavi et al. (2005) highlight that cultural values within a company can significantly impact both KMSs use and their effectiveness. They argue that cultural differences can lead to varying outcomes for both the organisation and individual employees when it comes to KMSs.

Continuing this line of thought, Kankanhalli et al. (2005) propose that OC can promote KS by encouraging the use of KMSs through reward systems and incentives. Additionally, several studies suggested that cultures that emphasise innovation are more likely to embrace KMSs and facilitate knowledge sharing through norms that encourage employees to contribute (Aman & Yusof, 2023; Bock et al., 2005; Ruppel & Harrington, 2001). Abdelrahman and Papamichail (2016) and Putra and Wijayanto (2021) further emphasise the significant role organisational culture plays in influencing PEU, PU, and, ultimately, KMSs usage within MNCs. They advocate for fostering a positive organisational culture that empowers employees at all levels and locations to utilise their knowledge resources through KMSs.

Organisational culture significantly drives the adoption and effectiveness of KMSs in MNCs by shaping perceptions of usefulness, ease of use, and actual system usage. Cultures emphasising collaboration and innovation enhance perceived usefulness by aligning KMS functionalities with employees' needs for cross-border knowledge sharing and problem-solving, as seen in environments where digital strategy and skills are prioritized to support product innovation (G. Cao et al., 2025a, 2025b). For perceived ease of use, process-oriented cultures reduce complexity through standardised workflows, while open communication norms foster peer support, enabling intuitive navigation of KMS interfaces; a dynamic reinforced by cultures that prioritise digital skill development and adaptability (Cao et al., 2025a, 2025b; Tehrani et al., 2024). Finally, KMS usage is directly amplified in cultures that decentralise decision-making and promote digital

transformation as a strategic asset, as evidenced by subsidiaries in MNCs leveraging cohesive strategies to align KMS with localised operational needs and global collaboration (G. Cao et al., 2025a, 2025b; Raman et al., 2024). Together, these cultural dimensions, like: collaboration, adaptability, and strategic digital alignment; systematically enhance both the practical value and user experience of KMSs, driving sustained adoption and innovation in MNCs. Consequently, the following hypotheses are proposed:

H1 Organisational Culture positively influences the perceived usefulness of Knowledge Management Systems in Multinational Corporations.

H2 Organisational Culture positively influences the perceived ease of use of Knowledge Management Systems in Multinational Corporations.

H3 Organisational Culture positively influences the usage of Knowledge Management Systems in Multinational Corporations.

This research investigates the link between how easy and useful employees find a KMS and their overall use of the system. Building on the TAM by Davis (1989) and Venkatesh et al. (2003), the study proposes that users' perceptions of a system's ease of use and usefulness directly impact their actual usage. TAM suggests strong correlations between perceived ease of use and both intended and actual system use (Eze et al., 2021; Lewis & Sauro, 2023). Similarly, TAM highlights a connection between perceived usefulness and both intended and actual use (Al-Sharafi et al., 2023; Bansah & Darko Agyei, 2022). Therefore, the following hypotheses are proposed:

H4 Perceived Usefulness positively influences Knowledge Management Systems usage in Multinational Corporations.

H5 Perceived Ease of Use positively influences Knowledge Management Systems usage in Multinational Corporations.

KMSs can improve the overall effectiveness of knowledge management by providing tools that facilitate the storage, retrieval, and sharing of knowledge assets (Shin, 2004). Furthermore, research suggests that KMSs play a crucial role in not only creating new knowledge but also in gathering, organising, and disseminating existing knowledge within an organisation (Bolloju et al., 2002). This is particularly relevant for MNCs, where knowledge can be generated and reside in various departments and locations (Holm et al., 2001). KMSs can bridge these geographical and departmental divides by enabling employees to locate expertise within the organisation and fostering interactions that promote knowledge sharing (Dennis & Vessey, 2005). Implementing tasks by using KMSs in MNC enhances knowledge sharing by improving information transparency, traceability, and trust among participants. These systems enable better access to reliable information, reduce sub-standard product risks, and foster collaboration between manufacturers and retailers. Cost-sharing mechanisms further incentivise active participation and boost overall profitability. The results support the hypothesis that KMSs usage positively influences KS in MNCs (Cao et al., 2025a, 2025b). Based on this reasoning, we propose the following hypothesis:

H6 Knowledge Management Systems usage positively influences Knowledge Sharing in Multinational Corporations.

The final hypothesis (H7) examines the relationship between KS and the operational success of MNCs. When knowledge flows freely across departments and among employees, it creates significant learning opportunities. This, in turn, acts as a powerful engine for propelling organisational productivity and ensuring long-term viability (Riege, 2007). Furthermore, KS empowers employees to actively contribute and share valuable insights, ultimately enriching the organisation's knowledge base and strengthening its competitive edge (Jackson et al., 2006). Research suggests that KS can contribute to several benefits, including reduced production costs, the development of groundbreaking products and projects, improved team dynamics, and enhanced organisational innovation capabilities. These factors ultimately contribute to increased sales and revenue (Collins & Smith, 2006; Cummings, 2004; Mesmer-Magnus & DeChurch, 2009). Montazemi et al., (2012a, 2012b) highlight the particular significance of effective knowledge sharing within MNCs. Since knowledge serves as a crucial wellspring of competitive

advantage in their global strategies, promoting open communication and collaboration becomes even more critical.

H7 Knowledge Management Systems usage positively influences Organisational Effectiveness in Multinational Corporations.

Methodology

Data Collection and Sampling

This study employed an online questionnaire to collect data from KMSs users working in multinational corporations (MNCs) across Europe and the Middle East (EME). Participants were selected using a non-probability sampling approach, specifically combining self-selection and snowball sampling. The initial pool included employees from S&P 500 companies identified via the ORBIS database and professional networks. A total of 631 surveys were distributed. An online survey, hosted on Qualtrics, was distributed to these individuals. To ensure sample relevance, two screening questions were included to confirm that respondents (a) were employed in MNCs and (b) actively used KMSs. Only participants answering “Yes” to both were permitted to complete the full survey. Qualtrics’ built-in validation features minimised missing data by requiring responses to all key items. Anonymity, clear instructions, and confidentiality assurances reduced self-report and social desirability biases.

To ensure sample relevance, respondents were required to confirm employment in an MNC and active use of a KMSs before proceeding with the full survey. Of the 241 responses received, 20 were excluded for ineligibility or response-pattern anomalies, resulting in 221 valid responses (35% usable response rate). Approximately 55% of valid responses came from direct invitations and 45% through referrals. The mixed sampling strategy was adopted to ensure access to KMSs users in a hard-to-reach population. Qualtrics features minimised missing data, and anonymity protocols helped reduce response bias. This purposive approach was suitable for targeting specialised professionals with practical KMSs experience and aligns with established practices in management and information systems research.

An analysis of the participants’ profiles was conducted to get insights into their demographic characteristics and the nature of the organisations they represent. Table 1 provides a further breakdown of the participating countries within the EME region. Moreover, Table 2 presents a breakdown of the survey participants’ demographics and profiles.

Measures

The questionnaire was constructed based on an extensive review of the relevant literature, with survey items adapted from validated instruments employed in previous research. All items in Appendix “1” were measured using a 7-point Likert scale. Organisational culture was examined through items adapted from Denison (1990), Denison and Mishra (1995) and Fey and Denison (2003); capturing four core dimensions: adaptability, consistency, involvement, and mission. Constructs related to perceived ease of use and perceived usefulness were derived from Adams et al. (1992) and Davis (1989). Items assessing the use of knowledge management systems were adapted (Fred D. Davis, 1993a, 1993b; He et al., 2009; Leidner & Elam, 1993). Knowledge sharing was measured following the framework outlined by Michailova and Minbaeva (2012). Organisational effectiveness was assessed through perceived measures adapted from Denison (1990), Denison and Mishra (1995), Fey and Denison (2003). Firm size was included as a control variable and was operationalised by the total number of full-time employees within each MNCs. The questionnaire was pilot-tested with 35 professionals to ensure validity and clarity.

To assess the suitability of the data for factor analysis, the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett’s Test of Sphericity were conducted. The KMO value was 0.920, which exceeds the recommended threshold of 0.80, indicating excellent sampling adequacy (Kaiser, 1974). Bartlett’s Test of Sphericity was statistically significant, $\chi^2(741) = 6906.53$, $p < 0.001$, confirming that the correlations between items were

sufficiently large for factor analysis (Bartlett, 1950; Hair Jr et al., 1995). These results support the factorability of the correlation matrix.

Analysis and Findings

We employed Partial Least Squares Structural Equation Modelling (PLS-SEM) to analyse our data, using SmartPLS 4 software (Ringle et al., 2015)(Ringle et al., 2015)(Ringle et al., 2015). Several factors highlight the appropriateness of PLS-SEM for this research. First, it is widely acknowledged as a suitable method for exploratory models focused on explaining (Fornell & Bookstein, 1982; Hair, 2015; Henseler et al., 2009, 2015; Richter et al., 2016). To the best of our knowledge, this is the first study to investigate the interrelationships among organisational culture, perceived usefulness, perceived ease of use, knowledge management systems, and organisational effectiveness. Given the novel nature of these relationships, a ‘soft-modelling’ approach (Wold, 1980) is considered appropriate. Therefore, the exploratory and theory-building nature of the study aligns well with the strengths of PLS-SEM. Additionally, the complexity of the proposed model—comprising multiple interconnected constructs—further supports the use of PLS-SEM, as it is well-equipped to handle such intricate models (Sarstedt et al., 2021).

Common Method Bias

Since the data were collected through self-reported measures, there was a potential for common method bias. To mitigate this, we applied both procedural and statistical

Table 1 Countries of response

Countries of response					
Middle-East			Europe		
Country	N	%	Country	n	%
Bahrain	5	2.3	Austria	5	2.3
Egypt	34	15.4	France	12	5.4
Iraq	7	3.2	Germany	15	6.8
Jordan	5	2.3	Greece	11	4.9
Kuwait	6	2.7	Italy	7	3.2
Lebanon	5	2.3	Netherlands	8	3.6
Libya	7	3.2	Spain	4	1.8
Qatar	10	4.5	Switzerland	5	2.3
Saudi Arabia	18	8.1	United Kingdom	37	16.7
Syria	3	1.4			
United Arab Emirates	17	7.7			
Total	117	53%	Total	104	47%



Table 2 Profiles and demographic data of survey participants ($n = 221$)

Variable	Category	Frequency	%
Gender	Male	171	77
	Female	50	23
Age	< 25 years	13	6
	25–35 years	147	67
	36–45 years	36	16
	46–55 years	14	6
	> 55 years	11	5
Business activities	Manufacturing	23	11
	Services	162	73
	Both	36	16
# of Employees at company location	< 50	33	15
	50–99	21	9
	100–499	63	28
	500–999	37	17
	1000–4999	41	19
	5000 or more	26	12
# of Employees worldwide	< 50	24	11
	50–99	11	5
	100–499	12	5
	500–999	13	6
	1000–4999	30	14
	5000 or more	131	59
Country of Work	Europe: 9 Countries	104	47
	Middle-East: 11 Countries	117	53
Managerial Levels	Top level Mgt	30	14
	Mid-level Mgt	68	31
	First level Mgt	45	20
	Supervisory Level	31	14
	Non managerial Level	47	21
Work Experience	< 1 year	24	11
	1–3 Years	82	37
	4–6 years	66	30
	7–9 years	16	7
	10 years or more	33	15
KMSs Experience	< 1 Year	39	18
	1–2 Years	38	17
	3–5 Years	49	22
	> 5 years	95	43

approaches. We collaborated with practitioners and academics to refine item wording, improving face validity and minimising ambiguity (Chang et al., 2020). We also used statistical techniques, including Harman's one-factor test, to assess common method variance (CMV) following Chang et al. (2020) and Podsakoff et al. (2003). The unrotated principal component analysis showed that the first factor explained 40.13% of the total variance, well

below the 50% threshold, suggesting CMV is not a major concern.

Assessment of the Measurement Model

We assessed the quality of our measurement model, based on reflective indicators, by evaluating its reliability and validity. Internal consistency was measured using

Cronbach's alpha and Composite Reliability (CR) (Nunnally, 1978; Werts et al., 1974). All alpha values exceeded the recommended threshold of 0.70, ranging from 0.836 to 0.941, indicating strong internal consistency (Nunnally, 1978). Similarly, CR values ranged from 0.892 to 0.955, surpassing the 0.80 benchmark and confirming the reliability of the composite constructs' scales (Hair et al., 2017; Nunnally & Bernstein, 1994). Indicator reliability was also evaluated, with all standardized factor loadings exceeding the minimum acceptable threshold of 0.50 (Anderson & Gerbing, 1988; Hair et al., 2011) ranging from 0.690 to 0.950, and the majority above 0.70.

To test construct validity, we examined both convergent and discriminant validity. Convergent validity was confirmed by Average Variance Extracted (AVE) scores above 0.50, as suggested by Fornell and Larcker (1981), with values ranging from 0.596 to 0.873; indicating that the constructs capture the intended underlying concepts. Discriminant validity was evaluated using the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio. In line with the Fornell-Larcker approach, each construct's AVE exceeded its squared correlations with other constructs (see Table 3), supporting construct distinctiveness. Furthermore, all HTMT values were below the 0.90 cut-off recommended by Henseler et al. (2015), as shown in Table 4, indicating acceptable discriminant validity (Hair et al., 2017).

Results

After confirming the reliability and validity of the measurement model, we proceeded to evaluate the structural model. A key element in evaluating the model's predictive capability is the coefficient of determination (R^2) for the endogenous latent variables. In this study, the R^2 value for organisational effectiveness is 0.186, which exceeds the threshold for adequate predictive power (Chin, 1998; Cohen, 1988; Ringle et al., 2012). To further examine the influence of independent variables on dependent variables,

we calculated the effect size (f^2), which reflects the change in R^2 . According to Cohen (1988), effect sizes of 0.02, 0.15, and 0.35 correspond to small, medium, and large effects, respectively. In our model, the effect size of knowledge sharing on organisational effectiveness is 0.180, indicating a medium-sized effect.

To test the significance of the relationships proposed in our hypotheses (H1-H7) and assess their validity, we applied a bootstrapping method with 5000 resamples of our 221 observations (Hair et al., 2017; Henseler et al., 2009). The detailed results, presented in Table 5 and Fig. 2, provide strong support for all our hypotheses. Organisational culture positively impacts employee perceptions of usefulness (0.253, $t = 3.158$, $p < 0.01$), ease of use (0.168, $t = 1.897$, $p < 0.1$), and, also, their use of knowledge management systems (KMS) (0.212, $t = 2.774$, $p < 0.01$), supporting hypotheses H1, H2, and H3. Notably, both perceived usefulness (0.201, $t = 2.516$, $p < 0.05$) and perceived ease of use (0.184, $t = 2.115$, $p < 0.05$) have a positive effect on employee KMS usage, supporting hypotheses H4 and H5. Furthermore, KMS usage positively influences knowledge sharing within the organisation (0.328, $t = 5.314$, $p < 0.01$), supporting hypothesis H6. Lastly, the hypothesis (H7) is confirmed, as knowledge sharing positively affects organisational effectiveness (0.323, $t = 4.824$, $p < 0.01$). It is also noteworthy that firm size, included as a control variable, positively influences organisational effectiveness (0.272, $t = 4.801$, $p < 0.01$).

Consequently, the study provides robust empirical support for the hypothesised relationships between organisational culture, perceived usefulness, perceived ease of use, KMSs usage, knowledge sharing, and organisational effectiveness in MNCs. Organisational culture significantly impacts PU and PEU, highlighting how a supportive cultural environment fosters employees' perceptions of KMSs as valuable and easy to use. Furthermore, organisational culture directly influences KMSs usage, underscoring its critical role in encouraging system engagement beyond individual-level perceptions.

Table 3 Validity and Reliability measures and Fornell-Larcker

	CA	CR	AVE	1	2	3	4	5	6
1. Knowledge Sharing	0.869	0.911	0.721	0.849					
2. KMSs Usage	0.856	0.932	0.873	0.328	0.934				
3. Organisational Effectiveness	0.859	0.897	0.596	0.335	0.341	0.772			
4. Organisational Culture	0.836	0.892	0.675	0.481	0.293	0.475	0.822		
5. Perceived Ease of Use	0.941	0.955	0.809	0.143	0.322	0.332	0.168	0.900	
6. Perceived Usefulness	0.931	0.948	0.785	0.280	0.348	0.349	0.253	0.512	0.886

Bold diagonal figures are the square roots of AVE, CA, Cronbach's alpha; CR, Composite reliability; AVE, Average variance extracted



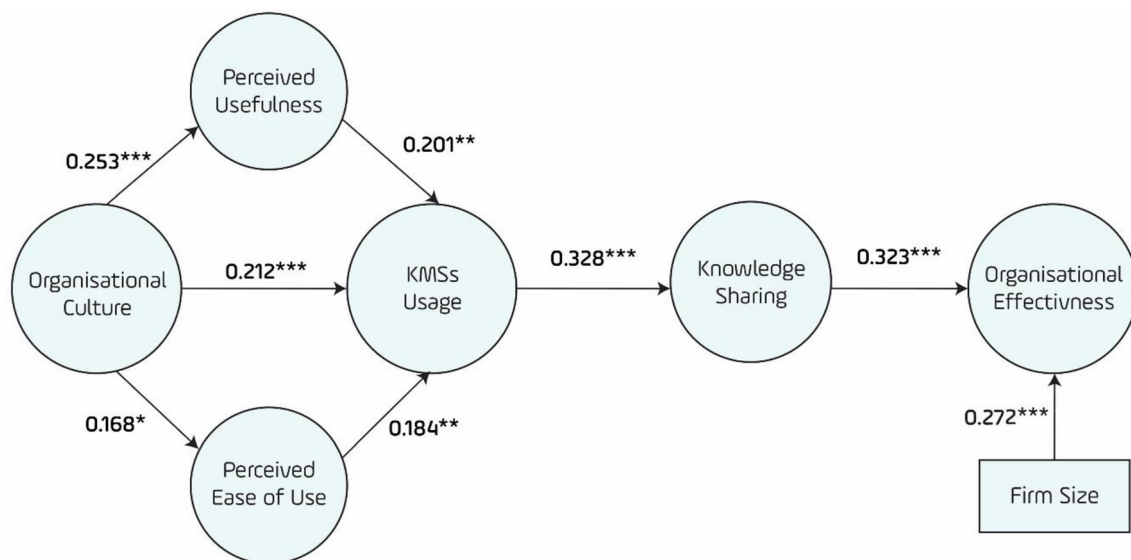
Table 4 Discriminant Validity- Heterotrait-Monotrait (HTMT)

	1	2	3	4	5	6
1. KMSs Usage						
2. Knowledge Sharing	0.379					
3. Organisational Effectiveness	0.393	0.391				
4. Organisational Culture	0.564	0.345	0.578			
5. Perceived Ease of Use	0.164	0.353	0.351	0.189		
6. Perceived Usefulness	0.319	0.378	0.379	0.284	0.547	

Table 5 Assessment of the structural model

Hypothesised relationships	Standardised coefficient	<i>t</i> -statistic	<i>p</i> -value	Statistically significant?
H1: Organisational culture → Perceived usefulness	0.253***	3.158	0.002	Yes
H2: Organisational culture → Perceived ease of use	0.168*	1.897	0.069	Yes
H3: Organisational culture → KMSs Usage	0.212***	2.774	0.006	Yes
H4: Perceived usefulness → KMSs Usage	0.201**	2.516	0.012	Yes
H5: Perceived ease of use → KMSs Usage	0.184**	2.115	0.034	Yes
H6: KMSs Usage → Knowledge Sharing	0.328***	5.314	0.000	Yes
H7: Knowledge Sharing → Organisational effectiveness	0.323***	4.824	0.000	Yes
Firm size	0.272***	4.801	0.000	Yes

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$



Note: ***, $p < 0.01$; **, $p < 0.05$; *, $p < 0.1$

Fig. 2 Assessment of the structural model

Consistent with TAM, PU and PEU positively affect KMSs usage, affirming the established relationship between user perceptions and technology adoption.

Additionally, KMSs usage enhances knowledge sharing, a crucial finding for geographically dispersed MNCs, as KMSs facilitate effective KS despite cultural and

geographical barriers. Finally, knowledge sharing positively impacts organisational effectiveness, demonstrating its importance in driving innovation, decision-making, and performance in MNCs.

Integration of Mediating Mechanisms within the Structural Model

To further validate the robustness of our conceptual framework; which integrates the Technology Acceptance Model with Denison's cultural dimensions, we extended our analysis to explore the underlying mediating mechanisms that connect organisational culture, KMSs usage, knowledge sharing, and organisational effectiveness. This approach aligns with the theoretical logic underpinning our proposed model, wherein user perceptions (i.e., perceived ease of use and perceived usefulness) and knowledge-related behaviours (i.e., system usage and sharing) are theorised as key conduits through which organisational culture influences performance outcomes.

Accordingly, and following methodological guidance from (Chang et al., 2020; Ghazali et al., 2019; Podsakoff et al., 2003), we conducted a bootstrapped mediation analysis with 5000 resamples using SmartPLS As shown in the table 6. The results confirm two significant indirect effects: (1) KMSs usage mediates the relationship between organisational culture and knowledge sharing ($\beta = 0.071$, $p = 0.026$), and (2) knowledge sharing mediates the effect of KMSs usage on organisational effectiveness ($\beta = 0.111$, $p = 0.002$). These findings are complemented by the continued significance of the corresponding direct effects, indicating partial mediation and supporting the hypothesised sequential flow from cultural values to organisational outcomes via technology engagement.

Although the indirect paths from organisational culture through perceived usefulness ($\beta = 0.055$, $p = 0.088$) and perceived ease of use ($\beta = 0.031$, $p = 0.195$) to KMSs usage were not statistically significant at the 0.05 level, their inclusion remains theoretically meaningful within the

TAM framework. Collectively, these results reinforce the multidimensional validity of the proposed model, highlighting how cultural, perceptual, behavioural, and performance constructs interact within a unified explanatory system.

This study contributes novel insights by extending TAM to the global context, showing how cultural dimensions uniquely influence technology adoption in MNCs. It highlights the critical role of supportive organisational cultures in shaping perceptions of KMSs value and usability, fostering knowledge sharing, and improving organisational effectiveness. These findings enhance the theoretical understanding of technology acceptance and knowledge management within culturally diverse global enterprises (Table 6).

Discussion

The influence of organisational culture on the adoption and utilisation of technologies, such as KMSs, has become a focal point in contemporary research, especially within MNCs. While established models like the TAM have effectively explained technology adoption through individual-level constructs such as PU and PEU, they have largely overlooked the broader cultural and organisational contexts that shape these perceptions. This study addresses this gap by integrating cultural dimensions into TAM, providing a richer and more context-sensitive framework for understanding KMSs adoption in MNCs.

Organisational culture, characterised by shared values, beliefs, and norms, plays a pivotal role in shaping employee attitudes towards new technologies. The Denison Model of organisational culture, which categorises culture into dimensions such as adaptability, involvement, consistency, and mission, serves as a valuable lens for examining these dynamics. For instance, adaptability fosters innovation and reduces resistance to change, creating an environment where employees perceive KMSs as easier to

Table 6 Results of mediation analysis

Indirect effects	Sample mean (M)	Std. Dev	t-value	P-value
Organisational culture—> Perceived ease of use—> KMS Usage	0.031	0.024	1.296	0.195
Organisational culture—> Perceived usefulness—> KMS Usage	0.055	0.03	1.709	0.088
Organisational culture—> KMS Usage- > Knowledge Sharing	0.071	0.031	2.22	0.026
KMS Usage—> Knowledge Sharing—> Organisational effectiveness	0.111	0.035	3.046	0.002
<i>Direct Effects</i>				
Organisational culture- > Knowledge Sharing	0.430	0.060	7.171	0.000
KMS Usage—> Organisational effectiveness	0.222	0.073	3.036	0.002



use. Similarly, involvement, which reflects participatory decision-making, enhances employees' sense of ownership, positively influencing both PU and PEU. Developing strategic talent management practices and agile management ecosystems further reinforces competitive advantage (Rožman et al., 2023). These findings are particularly relevant in MNCs, where decentralised structures and cultural diversity necessitate higher employee engagement to ensure successful system adoption.

Beyond technology acceptance, OC significantly impacts KS behaviours within KMSs. Cultures that prioritise collaboration, trust, and collective responsibility tend to facilitate effective knowledge sharing, particularly in MNCs, where cultural differences can otherwise hinder open communication. For instance, collectivist cultures may view KS as a means of strengthening organisational ties, while individualistic cultures might perceive it as a competitive risk. Enhancing supply chain resilience through flexible management systems is critical for sustaining knowledge sharing in volatile environments (Chowdhury et al., 2024). This study highlights that cultural dimensions, such as trust and collaboration, can mitigate reluctance to share knowledge in geographically dispersed teams, further enhancing KMSs effectiveness. The results also align with the Dynamic Capabilities Theory, underscoring the role of OC as a dynamic capability that enables the adoption and utilisation of KMSs in response to changing environmental conditions. By embedding adaptability and involvement into the KMSs framework, this study demonstrates that OC is not merely a backdrop to technological change but a fundamental enabler of it. The findings contribute to a more comprehensive understanding of how cultural alignment enhances the adoption, utilisation, and success of KMSs, particularly in the complex and culturally diverse contexts of MNCs. Although the model supports the hypothesised relationships, future research could further explore moderating factors that might influence these associations.

To further validate the robustness of the proposed model, a mediation analysis was conducted to test the significance of key indirect effects within the structural pathways. Using a bootstrapping method with 5000 resamples, we examined whether KMSs usage and knowledge sharing acted as behavioural conduits through which organisational culture influences performance. The results confirmed that KMSs usage significantly mediates the relationship between OC and KS, while knowledge sharing mediates the link between KMSs usage and OE. These mediating pathways, supported by both significant indirect and direct effects, indicate partial mediation and reinforce the structural integrity of the model. Although the indirect paths through perceived usefulness and perceived ease of use were not statistically significant, their inclusion

remains theoretically grounded within the TAM framework. Together, these findings support a multidimensional explanation of how culture-driven perceptions and behaviours contribute to organisational outcomes.

The statistical analysis of the main model provided strong support for all the proposed hypotheses. The results indicated that OC has a significant positive influence on PU, PEU and ultimately KMSs usage within MNCs. This finding aligns with previous research (Kankanhalli et al., 2005; Leidner & Elam, 1995; Nielsen & Michailova, 2007). Hybrid strategies in competitive sectors are often hindered by unique barriers that must be overcome to achieve strategic priorities (Alnoor et al., 2023). Huber (2001) and Putra and Wijayanto (2021) suggest that OC shapes the behaviour of knowledge workers, influencing their participation in KS and the utilisation of KMS. Alavi et al. (2005) emphasise the critical role of OC in driving KMSs usage and its outcomes, highlighting that cultural variations within organisations can lead to differing results from KMSs implementation. Abdelrahman and Papamichail (2016) posit that a strong organisational culture fostering concern for employees and a trusting environment is most conducive to the early adoption of KMSs. Kankanhalli et al. (2005) argue that OC supports KS through KMSs by leveraging reward and incentive structures. De Long and Fahey (2000) add that the benefits of new technologies like KMSs are limited when OC values and practices do not actively promote knowledge sharing and system utilisation across different units. Furthermore, research suggests that cultures emphasising innovation are more likely to embrace KMSs and facilitate KS through established norms that encourage knowledge exchange (Bock et al., 2005; Ruppel & Harrington, 2001; Wang & Noe, 2010). In the context of MNCs, Nielsen and Michailova (2007) highlight the extended use of standardised KMSs in many corporations. They further emphasise that OC and other relevant organisational factors play a crucial role in influencing KMSs usage, design, and implementation.

Our findings further reveal that both perceived usefulness and perceived ease of use have a positive and significant influence on KMSs utilisation within MNCs. This aligns with previous studies (Cabrera & Cabrera, 2005; King & Marks Jr, 2008; Kulkarni et al., 2006a, 2006b). The TAM by Davis (1989) and Venkatesh et al. (2003) explains how an individual's perceptions regarding a technology's usefulness and ease of use ultimately determine their actual use of that technology. Their research suggests that PEU is significantly correlated with intended use and actual system usage. Furthermore, PU is also found to be influential, potentially even more so than PEU, in driving actual system usage (Davis, 1989; Fred D Davis, 1993a, 1993b; Venkatesh et al., 2003). The study also demonstrates a

strong and significant positive relationship between KMSs usage and KS. This finding aligns with existing research that has provided evidence of KMSs facilitating KS (e.g., Zamir and Kim (2022); Tucker and Kotnour (2021); Wu et al. (2023). Uday R Kulkarni et al., (2006a, 2006b) emphasise that KMSs are ineffective without user adoption. Similarly, Shin (2004) highlights the value of KMSs in enhancing KM by providing tools for effective storage, sharing, and creation of knowledge.

Building on existing research, our findings highlight the crucial role of KMSs in not only creating new knowledge but also effectively gathering, organising, and sharing existing knowledge within MNCs (Bolloju et al., 2002). Leveraging advanced manufacturing techniques can also bolster supply chain resilience, thereby supporting knowledge management initiatives (Singh et al., 2024). By facilitating knowledge sharing, KMSs foster a sense of community and ensure valuable ideas, experiences, and best practices are accessible to all employees (Cabrera & Cabrera, 2005; Wang & Noe, 2010). Recent developments in flexible manufacturing underscore the increasing digitalisation that drives both technology acceptance and effective knowledge management (Srivastava & Bag, 2023). KS is particularly critical in MNCs, where geographically dispersed knowledge needs to be readily available for effective utilization. Holm et al. (2001) emphasise the importance of knowledge generation and sharing across interconnected organisational units within MNCs. Complex MNCs environments necessitate specific coordination mechanisms and tools, such as KMSs, to facilitate KS.; which is supported by Montazemi et al., (2012a, 2012b), who highlight the reliance of MNCs on IT departments to leverage existing knowledge effectively.

The evolution of KMSs in digitally transformed environments has considerably enhanced organisational agility. Cosa and Torelli (2024) highlight that emerging digital technologies, such as artificial intelligence, big data analytics, and cloud computing, have disrupted KMSs, from passive repositories to active systems that facilitate real-time knowledge sharing and informed decision-making. Their research illustrates that computer-supported KMSs offer three dimensions of flexibility: adaptability (ability to quickly absorb new information and alter outputs), agility (ability for speedy reaction to altered circumstances), and resilience (ability to sustain operations in spite of disruptions). The above dimensions of flexibility are particularly important for MNCs as they allow for the integration of knowledge across geographical and cultural boundaries and, thus, more adaptive and innovative organisational practices.

Dennis and Vessey (2005) point to the success of KMSs in enabling MNCs employees to locate internal expertise and foster interactions that support knowledge sharing.

However, Wang and Noe (2010) caution that a one-size-fits-all approach for facilitating KS in MNCs does not exist. They emphasise the need to consider cultural nuances when developing organisational practices and global knowledge sharing systems. Our research model hypothesized a positive and significant effect of KS on OE in MNCs. This aligns with Lesser and Storck (2001); and Meher et al. (2022), who identify the value of knowledge sharing and communities of practice in MNCs through improved problem-solving, employee learning, and goal implementation. Additionally, Wei Zheng et al., (2010) highlight organisational culture as a key asset linked to OE.

While the present study emphasises the cultural and technological enablers of adaptability within multinational corporations, it is essential to highlight the implications of these findings for the development of flexible policy frameworks that support long-term sustainability. In contemporary global business environments, sustainability is no longer confined to environmental concerns but encompasses a broader spectrum, including economic resilience, social inclusion, and ethical governance (D'Adamo et al., 2024; Lozano, 2015). Organisational cultures that promote adaptability, learning, and decentralised decision-making, as identified in this study through Denison's framework are uniquely positioned to facilitate internal policy mechanisms that respond dynamically to shifting regulatory, environmental, and societal demands (Gaziulusoy & Ryan, 2017). Flexible policies, enabled by knowledge-sharing infrastructures like KMSs, allow MNCs to proactively align with sustainability goals such as the UN Sustainable Development Goals (SDGs) and circular economy models by embedding reflexive governance and iterative feedback mechanisms into corporate routines (Bocken et al., 2014; Loorbach et al., 2008). Moreover, as climate and geopolitical uncertainties intensify, there is growing recognition that organisational sustainability depends on policy agility; particularly the ability to adapt compliance protocols, resource strategies, and stakeholder engagement practices in real time (Sullivan-Taylor & Branicki, 2011). When KMSs embedded within a culture of shared purpose and responsiveness, they serve as critical infrastructures that support this policy flexibility by enabling rapid dissemination of contextual intelligence, best practices, and risk-mitigating knowledge (Du Plessis, 2007). Therefore, the cultural and technological mechanisms explored in this study are not only integral to KMSs effectiveness but also pivotal in fostering sustainable organisational policies that are responsive, resilient, and forward-looking.

Building on these foundations, this study contributes to the discourse on flexible policy approaches for sustainability by demonstrating how culturally grounded knowledge practices can act as dynamic inputs for adaptive policy design in multinational contexts. Rather than



treating policy as a top-down instrument, our findings highlight how the decentralised knowledge flows facilitated by KMSs; when embedded in cultures of involvement and adaptability, which enable iterative sensemaking across organisational levels. This creates a feedback-rich environment in which sustainability policies are not only better informed by operational realities but also more responsive to evolving external pressures such as regulatory shifts, stakeholder demands, and ecological risks. The study shows that when employees perceive KMSs as useful and easy to use within culturally supportive environments, they are more likely to contribute to knowledge ecosystems that underpin the co-creation and continuous refinement of sustainability-related protocols. In doing so, this research offers an integrated view in which organisational culture and digital knowledge infrastructures jointly support the emergence of policy systems that are flexible by design characterised by responsiveness, inclusivity, and contextual sensitivity.

An essential yet underexplored dimension of the findings relates to the broader role of digitalisation as a catalyst for organisational flexibility and knowledge integration. While this study focuses on the adoption of KMSs, these systems are inherently embedded within the broader framework of digital transformation, which encompasses the application of digital technologies to enable fundamental changes in organisational processes, capabilities, and value creation models (Vial, 2021). Digitalisation extends the utility of KMSs by allowing organisations to move beyond static knowledge repositories towards dynamic, data-driven ecosystems that facilitate real-time collaboration, predictive analytics, and agile decision-making (Bharadwaj et al., 2013). In this regard, the integration of organisational culture with digital infrastructure, as illustrated in this study, reflects a critical synergy whereby cultural adaptability and involvement foster digital readiness and resilience (Kane et al., 2015). Moreover, in the context of MNCs, digitalisation enhances the scalability and customisability of KMSs, allowing for the decentralised yet coherent management of knowledge across geographically dispersed units (Pandey et al., 2025). This digital enablement also supports the emergence of “digital ambidexterity”; the simultaneous pursuit of exploration and exploitation, crucial for sustaining innovation under volatile conditions (Yoshikuni et al., 2023). Therefore, the findings of this study may be interpreted not only as evidence of the influence of organisational culture on KMSs adoption, but also as part of a broader digitalisation process through which firms develop the dynamic capabilities necessary to compete in rapidly evolving global markets. Acknowledging this connection deepens the theoretical contribution by positioning KMSs as both products and enablers of digital transformation,

fundamentally aligned with the goals of flexible systems management.

Extending this perspective, the study also reveals that digitalisation acts as a structural enabler of organisational reflexivity; the capacity to detect, interpret, and respond to change through iterative knowledge loops. By showing how culturally supportive environments enhance user engagement with KMSs, our findings imply that digital systems are not merely technical artefacts, but interactive platforms that mediate collective learning and adaptive behaviour (Sassanelli & Terzi, 2022). This suggests a shift from static digital implementation towards the cultivation of digital sensemaking environments, in which technologies support not just efficiency, but organisational awareness and agility. Importantly, this form of digitally mediated reflexivity allows MNCs to synchronise global and local operations by embedding feedback mechanisms into knowledge practices; thereby supporting the reconfiguration of structures, processes, and strategies in response to emerging conditions (Srivastava et al., 2025). In this way, the study contributes to the understanding of digitalisation not only as a technological transition, but as an ongoing socio-technical evolution that underpins the kind of continuous, decentralised flexibility demanded by contemporary global management.

This study makes a significant contribution to the theory and practice of flexible systems management by empirically validating the role of organisational culture as a foundational enabler of adaptive knowledge infrastructures in multinational corporations. By integrating Denison’s cultural framework with the TAM, the study demonstrates how cultural dimensions such as adaptability, involvement, and mission enhance employees’ perceptions of PU and PEU, thereby facilitating the adoption and effective utilisation of KMSs. This relationship is critical for enabling dynamic reconfiguration of knowledge assets; a central tenet of flexible systems management (Cosa & Torelli, 2024; Sushil, 2017). The findings empirically substantiate the notion that flexibility in organisational systems is not solely a function of technological capability but is deeply embedded in culturally informed human practices that govern how systems are perceived, engaged with, and used to navigate change (Pavlou & El Sawy, 2011; Teece, 2007). Moreover, the research advances the discourse by situating KMSs as not merely technological artefacts, but as strategic tools that facilitate agility, ambidexterity, and organisational resilience in culturally complex, geographically dispersed contexts (Yoshikuni et al., 2023). The integration of organisational culture into the dynamic capabilities perspective expands the theoretical boundaries of flexible systems management, highlighting that responsiveness and adaptability in global enterprises are contingent upon the socio-technical congruence of knowledge

systems, cultural configurations, and user perceptions (Sambamurthy et al., 2003; Zahra et al., 2006).

Conclusion

This study examined the role of organisational culture in shaping employee perceptions and usage of KMSs within multinational corporations, positioning these systems as enablers of flexible systems management. Through the integration of the Denison Organisational Culture Model and the TAM, this research provides empirical evidence that specific cultural dimensions, namely (adaptability, involvement, consistency, and mission) are significant predictors of employees' perceived usefulness and perceived ease of use of KMSs. These perceptions, in turn, are strongly associated with system usage, facilitating knowledge sharing across dispersed teams and enhancing overall organisational effectiveness.

To further reinforce the theoretical soundness of the model, we incorporated a mediation analysis that confirmed significant indirect effects. Specifically, KMSs usage mediated the relationship between organisational culture and knowledge sharing, while knowledge sharing mediated the link between KMSs usage and organisational effectiveness. These findings not only strengthen the explanatory power of the proposed framework but also affirm that culture-driven perceptions and behaviours function as key pathways to enhanced organisational outcomes.

The findings emphasise that the value of KMSs extends beyond their technical functionalities. Instead, their flexibility and effectiveness depend largely on the cultural conditions within which they are implemented. MNCs operate in complex environments characterised by geographic dispersion and cultural diversity. Under such conditions, adaptability and flexibility are essential not only in technical design but also in organisational practices and behaviours. A culturally aligned and user-sensitive knowledge system empowers employees to engage more meaningfully with digital tools, thereby enhancing the organisation's agility and resilience. Furthermore, the study affirms that knowledge sharing, enabled by well-utilised KMSs, is a key mechanism through which organisations enhance strategic responsiveness, innovation, and operational efficiency. By situating the analysis within the context of MNCs, the study provides a nuanced understanding of how culturally rooted perceptions and behaviours influence the adoption and strategic value of KMSs. Ultimately, this research underscores the need to embed both technological and cultural flexibility within systems management strategies to support organisational success in a dynamic global landscape.

Theoretical Contribution

This study makes an important theoretical contribution by integrating organisational culture into the TAM, thereby extending the model's applicability to the context of flexible systems management in MNCs. While TAM has long been a foundational framework for understanding technology adoption, its traditional formulation overlooks the socio-cultural variables that significantly influence user perceptions and behaviours in diverse organisational contexts. By embedding Denison's dimensions of culture (adaptability, involvement, consistency, and mission) into the TAM structure, this research highlights the critical role of cultural alignment in shaping PU and PEU of KMSs.

In reframing KMSs as flexible systems rather than static repositories, the study underscores the importance of socio-technical integration. Organisational culture functions as a dynamic enabler of system engagement, supporting the real-time adaptation and reconfiguration of knowledge assets. This aligns with contemporary perspectives on dynamic capabilities, where organisational success is understood to stem from the capacity to sense, respond, and transform in the face of environmental change. Moreover, the findings position KMSs as infrastructural components of flexible systems management that not only facilitate knowledge dissemination but also underpin strategic agility and organisational learning. The interaction between culture and technology is shown to be pivotal: it is not the system alone, but how it is culturally received and operationalised, that determines its success. This contribution advances theoretical discourse by bridging TAM with organisational and knowledge-based theories, offering a more holistic framework for understanding the factors that influence KMS adoption and impact in global enterprises. By providing empirical validation of this integrated framework, the study offers new avenues for future research on the interplay between cultural systems and technological infrastructures in fostering organisational adaptability and resilience.

Managerial Contribution

This study offers several practical insights for managers seeking to enhance the flexibility, effectiveness, and strategic value of KMSs in MNCs. The results clearly demonstrate that supportive organisational cultures; characterised by (adaptability, involvement, consistency, and mission) positively influence employee perceptions of KMSs and drive their usage. In the context of global operations, this highlights the importance of embedding cultural awareness into system design, deployment, and governance. To translate these findings into action, organisations must first conduct regular assessments of



both corporate and subsidiary-level cultures. Such audits can reveal cultural attributes that either support or hinder knowledge sharing and system engagement. Based on these insights, KMSs should be developed with modular and customisable features that can accommodate local cultural norms while maintaining alignment with the organisation's strategic goals. This design flexibility is essential for ensuring user engagement across culturally diverse teams.

Leadership plays a pivotal role in shaping the environment within which KMSs function; managers should actively foster cultures of trust, collaboration, and continuous learning through clear communication, transparent leadership, and incentive structures that reward knowledge sharing. Investing in culturally sensitive training and onboarding programs can further enhance technology acceptance and usage, especially in regions where digital adoption may vary.

By adopting these measures, MNCs can transform KMSs into agile platforms that facilitate cross-boundary knowledge flows, improve responsiveness to local market needs, and enhance innovation across business units. Ultimately, aligning technological investments with cultural dynamics not only improves system performance but also reinforces the organisation's capacity to compete in rapidly evolving global markets. This reinforces the strategic role of KMSs as flexible systems integral to sustaining knowledge-driven competitiveness in MNCs.

Limitations & Future Research

The present study provides valuable insights into how organisational culture influences the adoption and utilisation of Knowledge Management Systems in multinational corporations, with a specific focus on perceived usefulness, ease of use, knowledge sharing, and organisational effectiveness. While the findings offer important implications for theory and practice, several directions for future research are worth considering. First, the current research focused on employee perceptions within MNCs in Europe and the Middle East. These regions were selected to reflect contrasting cultural and economic environments; however, future research could benefit from extending this investigation to other geographic contexts. Comparative studies across Asia, North America, or Latin America may provide deeper insight into how national culture, digital maturity, and organisational norms influence KMSs adoption and knowledge sharing practices. It would also be valuable to conduct country-specific case studies and further mediating analysis to explore and explain how contextual nuances within a single cultural or regulatory setting affect system implementation and user engagement. Second, while this study emphasised internal organisational dimensions such as adaptability, involvement, and mission, future research can explore the interplay between internal

and external factors. Variables such as industry competitiveness, digital infrastructure, regulatory environments, flexibility of KMSs and economic volatility could offer a broader contextual understanding of KMSs integration and strategic outcomes. Cross-disciplinary perspectives integrating strategic management, information systems, and institutional theory could offer new insights into this complex interplay. Third, this study concentrated on cultural dimensions and user perceptions. Future scholars could examine the impact of leadership styles, organisational routines, or HR practices that support flexible systems management, innovation and collaboration on KMSs flexibility and success. Additionally, investigating how learning culture, reward systems, or digital readiness and flexibility programmes facilitate knowledge-sharing behaviour would offer practical value for decision-makers. Longitudinal studies could also reveal how such organisational practices evolve and impact KMSs usage over time. Fourth, although the conceptual model confirmed the influence of organisational culture on user engagement with KMSs, further investigation of potential moderating and mediating variables could significantly enrich theoretical development. A mediation analysis was conducted, and key findings were integrated within the structural model; however, a full mediation framework was beyond the scope of this study. Future research is encouraged to develop and test a more comprehensive mediation model, incorporating additional hypotheses and theoretical pathways to deepen understanding of the mechanisms at play. For instance, exploring the roles of organisational learning capability, interdepartmental coordination, or employee readiness to adopt new technologies may provide deeper insights into the complex interplay between culture, technology, and performance. Such efforts could enhance the explanatory power of current models and contribute to the development of more holistic frameworks in the field of flexible systems management. Finally, although the focus was on MNCs, future studies might explore similar relationships in public sector organisations, NGOs, or small-to-medium enterprises, where resource constraints and cultural dynamics may lead to different outcomes. Including voices from under-researched sectors would not only broaden empirical generalisability but also inform inclusive strategies for global digital transformation. Expanding research in this direction could enhance the practical relevance and cross-sector applicability of global flexible knowledge management systems and strategies. Therefore, future research can deepen understanding of how flexible systems, enabled by both technological and cultural factors, support knowledge creation, organisational learning, and sustainable performance in an increasingly dynamic global environment.

Appendix

Constructs	Items
Knowledge Management Systems usage (KMS)	•With what frequency do you personally use Knowledge Management Systems (KMSs) in your organisation? •With what frequency do you personally use Knowledge Management Systems (KMSs) for knowledge sharing in your organisation?
Perceived Ease of Use (PRE)	•Learning to operate KMS is easy for me •I find it easy to get KMS to do what I want it to do •My interaction with KMS is clear and understandable •I find KMSs are flexible to interact with •It is easy for me to become skilful at using KMS
Perceived Usefulness (PRU)	•Using KMS in my job enables me to accomplish tasks more quickly •Using KMS improves my job performance •Using KMS in my job increases my productivity •Using KMS enhances my effectiveness in my job •Using KMS makes it easier to do my job
Knowledge Sharing (KS)	•Gain knowledge from colleagues in your own department •Use knowledge from colleagues in your own department •Gain knowledge from colleagues in other departments •Use knowledge from colleagues in other departments
Organisational Culture (OC)	Involvement (INV): •Knowledge is widely shared so that everyone can get the knowledge he or she needs when it's needed •Everyone believes that he or she can have a positive impact •Working in this organisation is like being part of a team Consistency (CON): •The leaders and managers follow the guidelines that they set for the rest of the organisation •There is a clear and consistent set of values in this organisation that governs the way we do business •When disagreements occur, we work hard to achieve solutions that benefit both parties in the disagreement •It is easy to reach consensus, even on difficult issues •We often have trouble reaching agreement on key issues •People from different organisational units still share a common perspective •It is easy to coordinate projects across functional units in this organisation Adaptability (ADP): •This organisation is very responsive and changes easily •This organisation responds well to competitors and other changes in the business environment •This organisation continually adopts new and improved ways to do work •Customer comments and recommendations often lead to changes in this organisation •Customer input directly influences our decisions •The interests of the final customer often get ignored in our decisions •We view failure as an opportunity for learning and improvement •This organisation encourages and rewards those who take risk Mission (MIS): •This organisation has long-term purpose and direction •This organisation has a clear mission that gives meaning and direction to our work •This organisation has a clear strategy for the future •There is widespread agreement about the goals of this organisation •Leaders of this organisation set goals that are ambitious, but realistic •The leadership has clearly stated the objectives we are trying to meet •We have a shared vision of what this organisation will be like in the future •Leaders of this organisation have a long-term orientation •Our vision creates excitement and motivation for our employees



continued

Constructs	Items
Organisational Effectiveness (OE)	•OE1: Market share •OE2: Sales growth •OE3: Profitability •OE4: Employee satisfaction •OE5: Quality of products and/or services •OE6: New product development

Acknowledgements The authors would like to extend their sincere gratitude to the Editor-in-Chief, Associate Editor, and two anonymous reviewers for offering their insightful comments and ideas to strengthen the quality and content of this article.

Author’s Contribution Author Contributions Statement M.A. (Dr. Mahmoud Abdelrahman) conceptualized the study, formulated the research objectives and research questions, designed the research methodology, led the data collection process, and contributed to data analysis and interpretation. He also provided critical insights into the study’s overall structure and ensured methodological rigor. N.P. (Prof. Nadia Papamichail) conceptualized the study, developed the research objectives and questions, and reviewed the overall research methodology. She played a key role in the revision of the findings. Additionally, she provided critical input on the study’s structure and ensured methodological rigor throughout the research process. R.H. (Dr. Ramy Hammady) was responsible for synthesizing the literature, and critically reviewing existing research to establish the study’s context. He also contributed to structuring the discussion and aligning the findings with the broader academic discourse. Y.K. (Dr. Yusuf Kurt) conducted in-depth data analysis, applied statistical methods, and interpreted the results. He played a key role in ensuring the accuracy and robustness of the analytical processes and contributed to refining the methodological framework. W.A. (Dr. Wael Abdallah) conducted a thorough literature review, identified key theoretical and empirical studies relevant to the research, and contributed to the refinement of the manuscript by integrating relevant academic sources. L.S.L. (Dr. Leo Shixiong Liu) provided theoretical insights, assisted in developing the conceptual framework, and contributed to refining the literature review. He also helped in aligning the theoretical contributions with the study’s findings and implications. S.K. (Prof. Sebastian Kapser) contributed to the theoretical foundation of the study, assisted in framing the conceptual model, and provided significant input in structuring the literature review. He also contributed to reviewing and revising the manuscript. All authors contributed to reviewing and editing the manuscript, provided intellectual input, and approved the final version for submission.

Funding The authors did not receive any funding/financial support for this article’s research, authorship, and publication.

Data Availability The study was approved by the research ethics committee at the University of Manchester. Informed consent was received from all participants. Consent for publication has also been received from all relevant parties. Supporting data and materials are available upon request. The data that support the findings of this study are available, but restrictions apply to the availability of these data, which were used under licence for the current study and so are not publicly available. The data are, however, available from the authors upon reasonable request.

Declarations

Conflict of interest The authors declare that there is no conflict of interest regarding the publication of this manuscript.

Ethical Approval This study was conducted in accordance with ethical research standards. Ethical approval was obtained from the Research Ethics Committee at The University of Manchester prior to data collection. All questionnaire responses were collected anonymously, and no personally identifiable information was recorded at any stage of the research. Participation in the study was entirely voluntary, and all participants were provided with a clear explanation of the research objectives, their rights, and the confidentiality of their responses.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article’s Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article’s Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

Abdelrahman, M., & Papamichail, K. N. (2016). The Role of Organisational Culture on Knowledge Sharing by Using Knowledge Management Systems in MNCs. In *22nd Americas Conference on Information Systems (AMCIS)*.

Abubakre, M., Zhou, Y., & Zhou, Z. (2022). The impact of information technology culture and personal innovativeness in information technology on digital entrepreneurship success. *Information Technology & People*, 35(1), 204–231.

Adams, D. A., Nelson, R. R., & Todd, P. A. (1992). Perceived usefulness, ease of use, and usage of information technology: A replication. *MIS Quarterly*, 16, 227–247.

Afshar Jalili, Y., & Salempour, F. (2020). Group organizational citizenship behavior and knowledge sharing: The moderating role of workgroup emotional climate. *VINE Journal of Information and Knowledge Management Systems*, 50(1), 117–135.

Alavi, M., Kayworth, T. R., & Leidner, D. E. (2005). An empirical examination of the influence of organizational culture on knowledge management practices. *Journal of Management Information Systems*, 22(3), 191–224.

- Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25, 107–136.
- Alhaimer, R. (2024). Exploring the attitudes of Kuwait's residents toward the role of corruption and anti-corruption entities (Nazaha) in Kuwait. *Public Integrity*, 26(3), 305–321.
- Al-Kurdi, O. F., El-Haddadeh, R., & Eldabi, T. (2020). The role of organisational climate in managing knowledge sharing among academics in higher education. *International Journal of Information Management*, 50, 217–227. <https://doi.org/10.1016/j.ijinfomgt.2019.05.018>
- Alnoor, A., Khaw, K. W., Chew, X., Abbas, S., & Khattak, Z. Z. (2023). The influence of the barriers of hybrid strategy on strategic competitive priorities: Evidence from oil companies. *Global Journal of Flexible Systems Management*, 24(2), 179–198.
- AlShamsi, O., & Ajmal, M. (2018). Critical factors for knowledge sharing in technology-intensive organizations: Evidence from UAE service sector. *Journal of Knowledge Management*, 22(2), 384–412.
- Al-Sharafi, M. A., Al-Emran, M., Iranmanesh, M., Al-Qaysi, N., Iahad, N. A., & Arpaci, I. (2023). Understanding the impact of knowledge management factors on the sustainable use of AI-based chatbots for educational purposes using a hybrid SEM-ANN approach. *Interactive Learning Environments*, 31(10), 7491–7510.
- Aman, F., & Yusof, K. H. (2023). Determinants of KMS adoption in Malaysian organizations: Evidence across various industries. *Kybernetes*, 52(11), 5186–5210.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423.
- Bacon, E., Williams, M. D., & Davies, G. H. (2019). Recipes for success: Conditions for knowledge transfer across open innovation ecosystems. *International Journal of Information Management*, 49, 377–387.
- Bals, C., Smolnik, S., & Riempp, G. (2007). Assessing user acceptance of a knowledge management system in a global bank: Process analysis and concept development. 2007 40th Annual Hawaii International Conference on System Sciences (HICSS'07).
- Bansah, A. K., & Darko Agyei, D. (2022). Perceived convenience, usefulness, effectiveness and user acceptance of information technology: Evaluating students' experiences of a Learning Management System. *Technology, Pedagogy and Education*, 31(4), 431–449.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Bartlett, M. S. (1950). Tests of significance in factor analysis. *British Journal of Psychology*, 3, 77–85.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. V. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 37, 471–482.
- Bock, G.-W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29, 87–111.
- Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.
- Bolloju, N., Khalifa, M., & Turban, E. (2002). Integrating knowledge management into enterprise environments for the next generation decision support. *Decision Support Systems*, 33(2), 163–176. [https://doi.org/10.1016/S0167-9236\(01\)00142-7](https://doi.org/10.1016/S0167-9236(01)00142-7)
- Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The International Journal of Human Resource Management*, 16(5), 720–735. <https://doi.org/10.1080/09585190500083020>
- Cao, C., He, Y., Liu, Y., Huang, H., & Zhang, F. (2025a). Blockchain technology adoption mechanism for semiconductor chip supply chains considering information disclosure under cost-sharing contract. *International Journal of Production Economics*, 282, Article 109496.
- Cao, G., Duan, Y., & Edwards, J. S. (2025b). Organizational culture, digital transformation, and product innovation. *Information & Management*, 62(4), Article 104135.
- Chang, S.-J., Van Witteloostuijn, A., & Sampsams Edén, L. (2020). Common method variance in international business research. *Research methods in international business*, 385–398.
- Chang, W.-J., Liao, S.-H., & Wu, T.-T. (2017). Relationships among organizational culture, knowledge sharing, and innovation capability: A case of the automobile industry in Taiwan. *Knowledge Management Research & Practice*, 15(3), 471–490. <https://doi.org/10.1057/s41275-016-0042-6>
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295–336.
- Chong, C. W., & Chong, S. C. (2009). Knowledge management process effectiveness: Measurement of preliminary knowledge management implementation. *Knowledge Management Research & Practice*, 7(2), 142–151.
- Chowdhury, M. M. H., Chowdhury, P., Quaddus, M., Rahman, K. W., & Shahriar, S. (2024). Flexibility in enhancing supply chain resilience: Developing a resilience capability portfolio in the event of severe disruption. *Global Journal of Flexible Systems Management*, 25(2), 395–417.
- Ciganke, A. P., Mao, E., & Srite, M. (2008). Organizational culture for knowledge management systems: A study of corporate users. *International Journal of Knowledge Management (IJKM)*, 4(1), 1–16.
- Cohen, J. (1988). Set correlation and contingency tables. *Applied Psychological Measurement*, 12(4), 425–434.
- Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of Management Journal*, 49(3), 544–560.
- Cosa, M., & Torelli, R. (2024). Digital transformation and flexible performance management: A systematic literature review of the evolution of performance measurement systems. *Global Journal of Flexible Systems Management*, 25(3), 445–466.
- Courtney, J. F. (2001). Decision making and knowledge management in inquiring organizations: Toward a new decision-making paradigm for DSS. *Decision Support Systems*, 31(1), 17–38.
- Cummings, J. N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. *Management Science*, 50(3), 352–364.
- Curado, C., Henriques, P., Oliveira, M., & Martins, R. (2023). Organisational culture as an antecedent of knowledge sharing in NGOs. *Knowledge Management Research & Practice*, 21(3), 449–461.
- Cuthbertson, R. W., & Furseth, P. I. (2022). Digital services and competitive advantage: Strengthening the links between RBV, KBV, and innovation. *Journal of Business Research*, 152, 168–176.
- D'Adamo, I., Daraio, C., Di Leo, S., & Simar, L. (2024). A flexible and sustainable analysis of waste efficiency at the European level. *Global Journal of Flexible Systems Management*, 25(4), 881–894.
- Daft, R. L. (2015). *Organization theory and design*. Cengage Learning Canada Inc.

- Davenport, T. H., & Prusak, L. (2000). *Working knowledge: How organizations manage what they know*. Harvard Business Review Press.
- Davis, F. D. (1985). A technology acceptance model for empirically testing new end-user information systems: Theory and results. Massachusetts Institute of Technology.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 319–340.
- Davis, F. D. (1993a). User acceptance of information technology: System characteristics, user perceptions and behavioral impacts. *International Journal of Man-Machine Studies*, 38(3), 475–487.
- Davis, F. D. (1993b). User acceptance of information technology: System characteristics, user perceptions and behavioral impacts. *International Journal of Man-Machine Studies*, 38, 475–487.
- De la Gala-Velásquez, B., Hurtado-Palomino, A., & Arredondo-Salas, A. Y. (2023). Organisational flexibility and innovation performance: The moderating role of management support. *Global Journal of Flexible Systems Management*, 24(2), 219–234.
- De Long, D. W., & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. *Academy of Management Perspectives*, 14(4), 113–127.
- Deng, H., Duan, S. X., & Wibowo, S. (2023). Digital technology driven knowledge sharing for job performance. *Journal of Knowledge Management*, 27(2), 404–425.
- Denison, D. (1990). *Corporate culture and organizational*. Wiley.
- Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, 6(2), 204–223.
- Dennis, A. R., & Vessey, I. (2005). Three knowledge management strategies: Knowledge hierarchies, knowledge markets, and knowledge communities. *MIS Quarterly Executive*, 4(4), 399–412.
- Dhoopar, A., Sihag, P., & Gupta, B. (2023). Antecedents and measures of organizational effectiveness: A systematic review of literature. *Human Resource Management Review*, 33(1), Article 100915.
- Dimple, & Tripathi, M. (2024). Bridging the gap between high-performance work system and organizational performance: Role of organizational agility, transformational leadership, and human resource flexibility. *Global Journal of Flexible Systems Management*, 25(2), 369–393.
- Du Plessis, M. (2007). The role of knowledge management in innovation. *Journal of Knowledge Management*, 11(4), 20–29.
- Dudézert, A., Mitev, N., & Oiry, E. (2021). Cultural metaphors and KMS appropriation: Drawing on Astérix to understand non-use in a large French company. *Information and Organization*, 31(2), Article 100352.
- Eze, N. U., Obichukwu, P. U., & Kesharwani, S. (2021). Perceived usefulness, perceived ease of use in ICT support and use for teachers. *IETE Journal of Education*, 62(1), 12–20.
- Fernandes, K. J., Milewski, S., Chaudhuri, A., & Xiong, Y. (2022). Contextualising the role of external partnerships to innovate the core and enabling processes of an organisation: A resource and knowledge-based view. *Journal of Business Research*, 144, 146–162.
- Fey, C. F., & Denison, D. R. (2003). Organizational culture and effectiveness: Can American theory be applied in Russia? *Organization Science*, 14(6), 686–706.
- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 19(4), 440. <https://doi.org/10.2307/3151718>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382–388.
- Forte, P., Hoojaghan, F. A., & Pool, J. K. (2016). Investigating the effect of organisational culture on knowledge management and performance: An empirical study in knowledge-based companies using the balanced scorecard. *International Journal of Management and Decision Making*, 15(2), 167–183.
- Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. *Journal of Knowledge Management*, 23(6), 1105–1135.
- Gaziulusoy, A. İ., & Ryan, C. (2017). Roles of design in sustainability transitions projects: A case study of Visions and Pathways 2040 project from Australia. *Journal of Cleaner Production*, 162, 1297–1307.
- Ghazali, E. M., Mutum, D. S., & Woon, M. Y. (2019). Multiple sequential mediation in an extended uses and gratifications model of augmented reality game Pokémon Go. *Internet Research*, 29(3), 504–528.
- Ghoshal, S., & Bartlett, C. A. (1995). Changing the role of management. *Harvard Business Review*, 73(1), 86–96.
- Gordon, G. G., & DiTomaso, N. (1992). Predicting corporate performance from organizational culture. *Journal of Management Studies*, 29(6), 783–798.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122.
- Gromoff, A., Bilinkis, Y., & Kazantsev, N. (2017). Business architecture flexibility as a result of knowledge-intensive process management. *Global Journal of Flexible Systems Management*, 18(1), 73–86.
- Grover, V., Tseng, S.-L., & Pu, W. (2022). A theoretical perspective on organizational culture and digitalization. *Information & Management*, 59(4), Article 103639.
- Gu, D., Deng, S., Zheng, Q., Liang, C., & Wu, J. (2019). Impacts of case-based health knowledge system in hospital management: The mediating role of group effectiveness. *Information & Management*, 56(8), Article 103162.
- Gupta, A. K., & Govindarajan, V. (1991). Knowledge flows and the structure of control within multinational corporations. *Academy of Management Review*, 16(4), 768–792.
- Gupta, S., Justy, T., Kamboj, S., Kumar, A., & Kristoffersen, E. (2021). Big data and firm marketing performance: Findings from knowledge-based view. *Technological Forecasting and Social Change*, 171, Article 120986.
- Hair, J. F. (2015). *Essentials of business research methods* (2nd ed.). Taylor and Francis.
- Hair, J. F., Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis with readings*. Prentice-Hall Inc.
- Hair, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Haleem, A., Kumar, S., & Luthra, S. (2018). Flexible system approach for understanding requisites of product innovation management. *Global Journal of Flexible Systems Management*, 19(1), 19–37.
- Hassandoust, F., Subasinghage, M., & Johnston, A. C. (2022). A neo-institutional perspective on the establishment of information security knowledge sharing practices. *Information & Management*, 59(1), Article 103574.
- He, W., Qiao, Q., & Wei, K.-K. (2009). Social relationship and its role in knowledge management systems usage. *Information & Management*, 46(3), 175–180.

- Heath, M., Appan, R., & Henry, R. (2022). Value alignment's role in mitigating resistance to IT use: The case of physicians' resistance to electronic health record systems. *Information & Management*, 59(8), Article 103702.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *New challenges to international marketing* (pp. 277–319). Emerald Jai.
- Hijazi, R. (2023). The moderating effect of knowledge-sharing on learning organisation and quality improvement practices. *Business Process Management Journal*, 29(6), 1810–1837.
- Ho, L. A. (2008). What affects organizational performance? The linking of learning and knowledge management. *Industrial Management & Data Systems*, 108(9), 1234–1254.
- Holm, U., Pedersen, T., & Björkman, I. (2001). *The emergence and impact of MNC centres of excellence*. Macmillan Press.
- Huber, G. P. (2001). Transfer of knowledge in knowledge management systems: Unexplored issues and suggested studies. *European Journal of Information Systems*, 10(2), 72–79.
- Hung, S.-Y., Lai, H.-M., & Chang, W.-W. (2011). Knowledge-sharing motivations affecting R&D employees' acceptance of electronic knowledge repository. *Behaviour & Information Technology*, 30(2), 213–230.
- Jackson, S. E., Chuang, C.-H., Harden, E. E., & Jiang, Y. (2006). Toward developing human resource management systems for knowledge-intensive teamwork. In *Research in personnel and human resources management* (pp. 27–70). Emerald Group Publishing Limited.
- Jiang, G., & Xu, Y. (2020). Tacit knowledge sharing in IT R&D teams: Nonlinear evolutionary theoretical perspective. *Information & Management*, 57(4), Article 103211.
- Kaiser, H. F. (1974). An Index of Factorial Simplicity. *Psychometrika*, 39(1), 31–36.
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). Strategy, not technology, drives digital transformation. *MIT Sloan Management Review*.
- Kankanhalli, A., Tan, B. C., & Wei, K.-K. (2005). Contributing knowledge to electronic knowledge repositories: An empirical investigation. *MIS Quarterly*, 29, 113–143.
- Kar, A. K., Varsha, P., & Rajan, S. (2023). Unravelling the impact of generative artificial intelligence (GAI) in industrial applications: A review of scientific and grey literature. *Global Journal of Flexible Systems Management*, 24(4), 659–689.
- Kavoossi, M. (2000). *The globalization of business and the Middle East: Opportunities and constraints*. Bloomsbury Publishing.
- Khari, C., & Sinha, S. (2018). Organizational spirituality and knowledge sharing: A model of multiple mediation. *Global Journal of Flexible Systems Management*, 19(4), 337–348.
- Kim, T. H., Choi, B., Lee, J.-N., & Sambamurthy, V. (2021). Portfolio effects of knowledge management strategies on firm performance: Complementarity or substitutability? *Information & Management*, 58(4), Article 103468.
- King, W. R., & Marks, P. V., Jr. (2008). Motivating knowledge sharing through a knowledge management system. *Omega*, 36(1), 131–146.
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3(3), 383–397.
- Kostova, T., Roth, K., & Dacin, M. T. (2008). Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review*, 33(4), 994–1006.
- Kraus, P., Stokes, P., Tarba, S. Y., Rodgers, P., Dekel-Dachs, O., Britzelmaier, B., & Moore, N. (2022). The ambidextrous interaction of RBV-KBV and regional social capital and their impact on SME management. *Journal of Business Research*, 142, 762–774.
- Kucharska, W., & Erickson, G. S. (2023). Tacit knowledge acquisition & sharing, and its influence on innovations: A Polish/US cross-country study. *International Journal of Information Management*, 71, Article 102647.
- Kulkarni, U. R., Ravindran, S., & Freeze, R. (2006a). A knowledge management success model: Theoretical development and empirical validation. *Journal of Management Information Systems*, 23(3), 309–347.
- Kulkarni, U. R., Ravindran, S., & Freeze, R. (2006b). A knowledge management success model: Theoretical development and empirical validation. *Journal of Management Information Systems*, 23(3), 309–347.
- Laitinen, K., & Sivunen, A. (2021). Enablers of and constraints on employees' information sharing on enterprise social media. *Information Technology & People*, 34(2), 642–665.
- Le, T. T., Behl, A., & Graham, G. (2023). The role of entrepreneurship in successfully achieving circular supply chain management. *Global Journal of Flexible Systems Management*, 24(4), 537–561.
- Le, T. T., & Mohiuddin, M. (2024). Organizational inertia and firm performance: Mediating role of green business model, and open innovation in manufacturing SMEs of emerging markets. *Global Journal of Flexible Systems Management*, 25(2), 325–341.
- Leidner, D. E., & Elam, J. J. (1993). Executive information systems: Their impact on executive decision making. *Journal of Management Information Systems*, 10(3), 139–155.
- Leidner, D. E., & Elam, J. J. (1995). The impact of executive information systems on organizational design, intelligence, and decision making. *Organization Science*, 6(6), 645–664.
- Leso, B. H., Cortimiglia, M. N., & Ghezzi, A. (2023). The contribution of organizational culture, structure, and leadership factors in the digital transformation of SMEs: A mixed-methods approach. *Cognition, Technology & Work*, 25(1), 151–179.
- Lesser, E. L., & Storck, J. (2001). Communities of practice and organizational performance. *IBM Systems Journal*, 40(4), 831–841. <https://doi.org/10.1147/sj.404.0831>
- Lewis, J. R., & Sauro, J. (2023). Effect of perceived ease of use and usefulness on UX and behavioral outcomes. *International Journal of Human-Computer Interaction*, 40, 6676–6683.
- Lin, T.-C., Chang, C.L.-H., & Tseng, T.-T. (2023). A study of knowledge use effectiveness in IS department—A human agency perspective. *Information Technology & People*, 36(1), 115–139.
- Loorbach, D., Van der Brugge, R., & Taanman, M. (2008). Governance in the energy transition: Practice of transition management in the Netherlands. *International Journal of Environmental Technology and Management*, 9(2–3), 294–315.
- López-Sáez, P., Cruz-González, J., Navas-López, J. E., & del Mar Perona-Alfageme, M. (2021). Organizational integration mechanisms and knowledge transfer effectiveness in MNCs: The moderating role of cross-national distance. *Journal of International Management*, 27(4), Article 100872.
- Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate Social Responsibility and Environmental Management*, 22(1), 32–44.
- Mahajan, V., Sharma, J., Singh, A., Bresciani, S., & Alam, G. M. (2024). Knowledge sharing behavior of service sector's employees to attain sustainable development goals. *Journal of Knowledge Management*, 28(8), 2253–2274.
- Mahdi, O. R., Nassar, I. A., & Almsafir, M. K. (2019). Knowledge management processes and sustainable competitive advantage:

- An empirical examination in private universities. *Journal of Business Research*, 94, 320–334.
- Mäkelä, K., Andersson, U., & Seppälä, T. (2012). Interpersonal similarity and knowledge sharing within multinational organizations. *International Business Review*, 21(3), 439–451.
- Mao, H., Liu, S., Zhang, J., Zhang, Y., & Gong, Y. (2021). Information technology competency and organizational agility: Roles of absorptive capacity and information intensity. *Information Technology & People*, 34(1), 421–451.
- Meher, J. R., Nayak, L., Mishra, R. K., & Patel, G. (2022). Impact of organizational learning culture on organizational effectiveness: A serial mediation analysis with knowledge sharing and employee competencies. *VINE Journal of Information and Knowledge Management Systems*, 54(2), 324–338.
- Mellahi, K., Demirbag, M., & Riddle, L. (2011). Multinationals in the Middle East: Challenges and opportunities. *Journal of World Business*, 46(4), 406–410.
- Mesmer-Magnus, J. R., & DeChurch, L. A. (2009). Information sharing and team performance: A meta-analysis. *Journal of Applied Psychology*, 94(2), 535.
- Metaxiotis, K., Ergazakis, K., Samouilidis, E., & Psarras, J. (2003). Decision support through knowledge management: The role of the artificial intelligence. *Information Management & Computer Security*, 11(5), 216–221.
- Michailova, S., & Minbaeva, D. B. (2012). Organizational values and knowledge sharing in multinational corporations: The Danisco case. *International Business Review*, 21(1), 59–70.
- Mishra, A., Shukla, A., Rana, N. P., Currie, W. L., & Dwivedi, Y. K. (2023). Re-examining post-acceptance model of information systems continuance: A revised theoretical model using MASEM approach. *International Journal of Information Management*, 68, Article 102571.
- Montazemi, A. R., Pittaway, J. J., Qahri Saremi, H., & Wei, Y. (2012a). Factors of stickiness in transfers of know-how between MNC units. *The Journal of Strategic Information Systems*, 21(1), 31–57.
- Montazemi, A. R., Pittaway, J. J., Saremi, H. Q., & Wei, Y. (2012b). Factors of stickiness in transfers of know-how between MNC units. *The Journal of Strategic Information Systems*, 21(1), 31–57.
- Moon, H., & Lee, C. (2014). The mediating effect of knowledge-sharing processes on organizational cultural factors and knowledge management effectiveness. *Performance Improvement Quarterly*, 26(4), 25–52. <https://doi.org/10.1002/piq.21161>
- Naveed, R. T., Alhaidan, H., Al Halbusi, H., & Al-Swidi, A. K. (2022). Do organizations really evolve? The critical link between organizational culture and organizational innovation toward organizational effectiveness: Pivotal role of organizational resistance. *Journal of Innovation & Knowledge*, 7(2), Article 100178.
- Nielsen, B. B., & Michailova, S. (2007). Knowledge management systems in multinational corporations: Typology and transitional dynamics. *Long Range Planning*, 40(3), 314–340.
- Nonaka, I. (2009). The knowledge-creating company. In *The economic impact of knowledge* (pp. 175–187). Routledge.
- Nunnally, J. (1978). *Psychometric methods*. McGraw-Hill.
- Nunnally, J., & Bernstein, I. (1994). The assessment of reliability. *Psychometric Theory*, 3(1), 248–292.
- Olan, F., Ogiemwonyi Arakpogun, E., Suklan, J., Nakpodia, F., Damij, N., & Jayawickrama, U. (2022). Artificial intelligence and knowledge sharing: Contributing factors to organizational performance. *Journal of Business Research*, 145, 605–615. <https://doi.org/10.1016/j.jbusres.2022.03.008>
- Othman, A. A. E., & ElKady, M. M. (2023). A knowledge management based framework for enhancing the learning culture in architectural design firms in developing countries. *Journal of Engineering, Design and Technology*, 21(1), 23–57.
- Pandey, A. K., Daultani, Y., Pratap, S., Ip, A. W., & Zhou, F. (2025). Analyzing industry 4.0 adoption enablers for supply chain flexibility: Impacts on resilience and sustainability. *Global Journal of Flexible Systems Management*, 26(Suppl 1), S1–S24.
- Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the elusive black box of dynamic capabilities. *Decision Sciences*, 42(1), 239–273.
- Pedraza-Rodríguez, J. A., Ruiz-Vélez, A., Sánchez-Rodríguez, M. I., & Fernández-Esquinas, M. (2023). Management skills and organizational culture as sources of innovation for firms in peripheral regions. *Technological Forecasting and Social Change*, 191, Article 122518.
- Pereira, V., & Bamel, U. (2021). Extending the resource and knowledge based view: A critical analysis into its theoretical evolution and future research directions. *Journal of Business Research*, 132, 557–570.
- Persaud, A. (2005). Enhancing synergistic innovative capability in multinational corporations: An empirical investigation. *Journal of Product Innovation Management*, 22(5), 412–429.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Pool, J. K., Asadi, A., Forte, P., & Ansari, M. R. (2014). The effect of organisational culture on attitude and intention toward knowledge sharing: A study of Iranian SMEs. *International Journal of Management and Decision Making*, 13(3), 286–301.
- Prabhu, H. M., & Srivastava, A. K. (2023). CEO transformational leadership, supply chain agility and firm performance: A TISM modeling among SMEs. *Global Journal of Flexible Systems Management*, 24(1), 51–65.
- Prahalad, C. K., & Hamel, G. (2009). The core competence of the corporation. In *Knowledge and strategy* (pp. 41–59). Routledge.
- Putra, A. M. A., & Wijayanto, A. W. (2021). Knowledge Management System in Official Statistics: An Empirical Investigation on Indonesia Population Census. Proceedings of The International Conference on Data Science and Official Statistics.
- Radaelli, G., Mura, M., Spiller, N., & Lettieri, E. (2024). Social bonding and the multi-professional service teams: A cross-level test of team social capital influence on knowledge sharing. *Production Planning & Control*, 35(10), 1112–1126.
- Raman, M., Nair, S., Sandhu, M. S., & Falahat, M. (2024). Co-evolutionary dynamics and heterogeneity in corporate social responsibility: A case study on multinational corporation subsidiaries. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(3), Article 100332.
- Richter, N. F., Sinkovics, R. R., Ringle, C. M., & Schlägel, C. (2016). A critical look at the use of SEM in international business research. *International Marketing Review*, 33(3), 376–404. <https://doi.org/10.1108/imr-04-2014-0148>
- Riege, A. (2007). Actions to overcome knowledge transfer barriers in MNCs. *Journal of Knowledge Management*, 11(1), 48–67.
- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). *SmartPLS 3*. SmartPLS GmbH.
- Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: A critical look at the use of PLS-SEM in "MIS Quarterly". *MIS Quarterly*, 36, iii–xiv.
- Rožman, M., Tominc, P., & Štrukelj, T. (2023). Competitiveness through development of strategic talent management and agile management ecosystems. *Global Journal of Flexible Systems Management*, 24(3), 373–393.
- Ruppel, C. P., & Harrington, S. J. (2001). Sharing knowledge through intranets: A study of organizational culture and intranet

- implementation. *IEEE Transactions on Professional Communication*, 44(1), 37–52.
- Saeed, K., Janjua, U. I., Alharthi, S. Z., Madni, T. M., & Akhunzada, A. (2023). An empirical study to investigate the impact of factors influencing knowledge sharing in virtual teams. *IEEE Access*, 11, 92715–92734.
- Salehzadeh, R., Pool, J. K., Mohseni, A.-M., & Tahani, G. (2017). Factors influencing organisational performance: The role of knowledge sharing and organisational agility. *International Journal of Business Excellence*, 11(3), 344–356.
- Sambamurthy, V., Bharadwaj, A., & Grover, V. (2003). Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms. *MIS Quarterly*, 27, 237–263.
- Samiei, E., & Habibi, J. (2020). The mutual relation between enterprise resource planning and knowledge management: A review. *Global Journal of Flexible Systems Management*, 21(1), 53–66.
- Sánchez-García, J. Y., Núñez-Ríos, J. E., López-Hernández, C., & Rodríguez-Magaña, A. (2023). Modeling organizational resilience in SMEs: A system dynamics approach. *Global Journal of Flexible Systems Management*, 24(1), 29–50.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 587–632). Springer.
- Sassanelli, C., & Terzi, S. (2022). The D-BEST reference model: A flexible and sustainable support for the digital transformation of small and medium enterprises. *Global Journal of Flexible Systems Management*, 23(3), 345–370.
- Schein, E. (2012). Corporate culture. *Handbook for strategic HR: Best practices in organization development from the od network*. Amacom.
- Shao, Z., Wang, T., & Feng, Y. (2015). Impact of organizational culture and computer self-efficacy on knowledge sharing. *Industrial Management & Data Systems*, 115(4), 590–611. <https://doi.org/10.1108/imds-12-2014-0377>
- Shin, M. (2004). A framework for evaluating economics of knowledge management systems. *Information & Management*, 42(1), 179–196.
- Sia, S. K., Soh, C., & Weill, P. (2010). Global IT management: Structuring for scale, responsiveness, and innovation. *Communications of the ACM*, 53(3), 59–64.
- Singh, S., Misra, S. C., & Singh, G. (2024). Leveraging additive manufacturing for enhanced supply chain resilience and sustainability: A strategic integration framework. *Global Journal of Flexible Systems Management*, 25(2), 343–368.
- Sonmez Cakir, F., Kalaycioglu, O., & Adiguzel, Z. (2024). Examination the effects of organizational innovation and knowledge management strategy in information technology companies in R&D departments on service quality and product innovation. *Information Technology & People*, 37(4), 1540–1559.
- Srivastava, S., Agarwal, V., Dwivedi, A., Patil, A., Bag, S., & Foropon, C. R. (2025). Contributing factors for building a flexible supply chain in the digital age: Studying their impact on SDGs. *Global Journal of Flexible Systems Management*, 26(1), 141–161.
- Srivastava, S. K., & Bag, S. (2023). Recent developments on flexible manufacturing in the digital era: A review and future research directions. *Global Journal of Flexible Systems Management*, 24(4), 483–516.
- Sullivan-Taylor, B., & Branicki, L. (2011). Creating resilient SMEs: Why one size might not fit all. *International Journal of Production Research*, 49(18), 5565–5579.
- Sushil. (2017). *Flexible systems management as an iterative process* (pp. 87–88). Springer.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
- Tehrani, A. N., Ray, S., Roy, S. K., Gruner, R. L., & Appio, F. P. (2024). Decoding AI readiness: An in-depth analysis of key dimensions in multinational corporations. *Technovation*, 131, Article 102948.
- Trivedi, K., & Srivastava, K. B. (2024). The impact of intellectual capital-enhancing HR practices and culture on innovativeness—mediating role of knowledge management processes. *Journal of Organizational Effectiveness: People and Performance*, 11(3), 573–593.
- Trivedi, K., & Srivastava, K. B. (2025). Is improvisation a mediating link driving knowledge management processes towards innovativeness in Indian IT firms? *Management Research Review*, 48, 883–907.
- Tseng, S.-M. (2017). Investigating the moderating effects of organizational culture and leadership style on IT-adoption and knowledge-sharing intention. *Journal of Enterprise Information Management*, 30(4), 583–604.
- Tucker, E., & Kotnour, T. (2021). Why people keep using knowledge management systems: A causal analysis of continuance behavior. *Electronic Journal of Knowledge Management*, 19(3), 237–254.
- Varma, S., Singh, N., & Patra, A. (2024). Supply chain flexibility: Unravelling the research trajectory through citation path analysis. *Global Journal of Flexible Systems Management*, 25(2), 199–222.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27, 425–478.
- Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing digital transformation*, 13–66.
- Wang, S., Abbas, J., Sial, M. S., Alvarez-Otero, S., & Cioca, L.-I. (2022). Achieving green innovation and sustainable development goals through green knowledge management: Moderating role of organizational green culture. *Journal of Innovation & Knowledge*, 7(4), Article 100272.
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115–131.
- Werts, C. E., Linn, R. L., & Jöreskog, K. G. (1974). Intraclass reliability estimates: Testing structural assumptions. *Educational and Psychological Measurement*, 34(1), 25–33. <https://doi.org/10.1177/001316447403400104>
- Willem, A., & Scarbrough, H. (2006). Social capital and political bias in knowledge sharing: An exploratory study. *Human Relations*, 59(10), 1343–1370.
- Wold, H. (1980). Model construction and evaluation when theoretical knowledge is scarce. In J. Kmenta & J. B. Ramsey (Eds.), *Evaluation of econometric models* (pp. 47–74). Academic Press.
- Wu, I.-L., & Chen, J.-L. (2014). Knowledge management driven firm performance: The roles of business process capabilities and organizational learning. *Journal of Knowledge Management*, 18(6), 1141–1164.
- Wu, Y., Hu, X., Wei, J., & Marinova, D. (2023). The effects of attitudes toward knowledge sharing, perceived social norms and job autonomy on employees' knowledge-sharing intentions. *Journal of Knowledge Management*, 27(7), 1889–1903.
- Khafa, F., Kryvinska, N., & Gregus, M. (2017). *Models and management of elasticity and openness: Towards flexible organizations*. Springer.
- Yadav, N. (2014). Flexibility aspects in performance management system: An illustration of flexible strategy game-card. *Global Journal of Flexible Systems Management*, 15(3), 181–189.

- Yadav, V. (2016). A flexible management approach for globally distributed software projects. *Global Journal of Flexible Systems Management*, 17(1), 29–40.
- Yang, F., & Yang, M. M. (2023). Examining motivation of IT vendors to share knowledge with clients. *International Journal of Information Management*, 71, Article 102646.
- Yin, P., Wang, C., & Liang, L. (2023). Consumer information technology use in the post-pandemic workplace: A post-acceptance adaptation perspective. *Information Technology & People*, 36(4), 1484–1508.
- Yoshikuni, A. C., Dwivedi, R., Dutra-de-Lima, R. G., Parisi, C., & Oyadomari, J. C. T. (2023). Role of emerging technologies in accounting information systems for achieving strategic flexibility through decision-making performance: An exploratory study based on North American and South American firms. *Global Journal of Flexible Systems Management*, 24(2), 199–218.
- Yu, X., Xu, S., & Ashton, M. (2023). Antecedents and outcomes of artificial intelligence adoption and application in the workplace: The socio-technical system theory perspective. *Information Technology & People*, 36(1), 454–474.
- Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: A review, model and research agenda. *Journal of Management Studies*, 43(4), 917–955.
- Zamir, Z., & Kim, D. (2022). The effect of quality dimensions of information systems on knowledge sharing and user satisfaction. *International Journal of Entrepreneurial Knowledge*, 10(1), 1–19.
- Zheng, W., Yang, B., & McLean, G. N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research*, 63(7), 763–771.

Key Questions

1. How can flexible management systems be designed to adapt knowledge management practices to the diverse cultural and operational contexts of multinational corporations?
2. In what ways does organisational culture influence the agility and responsiveness of flexible knowledge systems in supporting dynamic decision-making?
3. What role do user perceptions; such as perceived usefulness and ease of use play in enhancing the flexibility and scalability of KMSs in rapidly changing environments?
4. How can multinational corporations integrate flexibility into the architecture of KMSs to ensure resilience, innovation, and continuity during disruptions or transformation initiatives?
5. What mechanisms within flexible management systems can best support knowledge sharing across geographically and culturally dispersed teams in MNCs?

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Dr Mahmoud Abdelrahman is an Associate Professor of Business Analytics at Manchester Metropolitan University. He holds a PhD in Knowledge Management Systems for Decision-Making in Multinational Corporations and an MSc in Information Systems, Organisations and Management from Alliance Manchester Business School, The University of Manchester. With over 25 years of academic and consultancy experience, he has held leadership roles and contributed

to the design and delivery of undergraduate, postgraduate, and executive programmes across institutions in the UK, EU, Egypt, and the Middle East. His research focuses on user acceptance of emerging technologies, knowledge management systems, digital transformation, decision support systems, and business analytics. Dr Abdelrahman has published in peer-reviewed journals, contributed to edited volumes and international conferences, and participated in multi-institutional research collaborations. He serves as a reviewer for leading journals. He is a Fellow of the UK Higher Education Academy and a member of the Institute of Analytics, Association of Information Systems and Academy of Management.

Professor K. Nadia Papamichail is Professor of Information and Decision Sciences and Director of the Centre for AI and Decision Sciences at Alliance Manchester Business School, The University of Manchester. She has served as a Fellow of the Alan Turing Institute (2018–2024). Her research focuses on enhancing organisational decision-making through the application of advanced technologies and decision analytics tools. She has led and contributed to high-impact projects funded by EPSRC, Innovate UK, and Horizon2020, with industry collaborators such as British Telecom and DWF. Her scholarly interests include the development, evaluation, and practical integration of decision support systems, multiple criteria decision-making, and analytics for complex organisational environments. Professor Papamichail is co-author of the Cambridge University Press Book *Decision Behaviour, Analysis and Support* and has served in multiple international academic leadership roles, including Secretary/Treasurer of the INFORMS MCDM Section and Chair of the Decision Analysis Special Interest Group (DASIG) of the OR Society. She also co-leads WORAN and directs the Law and Technology Initiative (LaTI), bridging research with professional practice in legal services.

Dr. Ramy Hammady received the PhD degree from the University of Staffordshire in 2019. He is a Senior Lecturer at Winchester School of Art, the University of Southampton, and he is a Microsoft Most Valuable Professional (MVP) in Mixed Reality in addition to being a Researcher/Expert in AR/VR/MR technologies and a Game Designer/Developer. He has industrial outputs in the immersive systems and games domains. He has extensive experience using Microsoft HoloLens and other AR glasses. He has also been one of the pioneers who used MS HoloLens since 2016. He has a number of publications in Serious Games, Gamification, Augmented, Virtual, and Mixed Reality technologies in cultural heritage. In 2019, he is a certified UX by the Nielsen Norman Group (NN/g) in USA. He is a Fellow of the Higher Education Academy.

Dr Yusuf Kurt (PhD, The University of Manchester) is a Senior Lecturer (Associate Professor) in International Business and Management at Alliance Manchester Business School, The University of Manchester. His work has been published in the *Journal of World Business*, *International Business Review*, *International Marketing Review*, *European Management Journal*, and the *Journal of Business and Industrial Marketing*, and as chapter contributions. His research focuses on internationalisation, social network theory, and emerging markets, enhancing insights into global strategy and strategic decision-making within multinational companies. He is a Fellow of the Higher Education Academy.

Dr Wael Abdallah is an Assistant Professor of Finance at the American University in Cairo (AUC), with research interests spanning financial economics, fintech, market resilience, and knowledge economics in emerging markets, particularly the MENA region. He holds a PhD in Finance from the University of Salford, UK. Dr Abdallah's work integrates econometric and machine learning

approaches to investigate the interplay between financial systems, corporate governance, and digital innovation. His research has been published in internationally ranked journals (i.e., *Global Knowledge, Memory and Communication*, *Risks*, *Journal of Modelling in Management* and *Journal of Economic and Administrative Sciences*) and addresses issues such as cryptocurrency markets, financial technology, and organisational dynamics in finance. Dr Abdallah is also a non-executive board member and Head of the Audit and Governance Committee at Beltone Financial Holding. He also serves on the supervisory committee of two mutual funds operated by the Azimut portfolio management team: the Opportunity Equity Fund and the Menthum Money Market Fund.

Dr Leo Shixiong Liu is a Senior Lecturer in Business Analytics at Manchester Metropolitan University, with over a decade of academic and professional experience. His research explores information systems, digital transformation, and the application of business analytics in organisational settings, with a strong emphasis on data-

driven decision-making. He has published extensively in these areas and is actively engaged in research projects that bridge theory and practice. Dr Liu began his academic journey as a data analyst and doctoral researcher at the University of Reading, following earlier industry experience as an IT consultant. His work reflects a sustained commitment to innovation in enterprise systems, analytics, and flexible management solutions, aiming to deliver impactful insights across both academic and applied contexts.

Professor Sebastian Kapser is Professor of Logistics and Supply Chain Management at Heilbronn University, Germany. He earned his PhD from Northumbria University, UK, with a focus on the adoption of autonomous delivery vehicles in last-mile logistics. His research integrates technology acceptance models—particularly UTAUT2—with the study of digital transformation, sustainability, and system flexibility in logistics. Prof. Kapser's scholarly work explores user behaviour, perceived risk, and organisational readiness in adopting emerging technologies across supply chains. He has published in leading academic journals and actively contributes to the discourse on agile and adaptive logistics systems. Prior to his academic career, he worked as a consultant at CAMELOT Management Consultants, advising firms on digital supply chain innovation and flexibility management. His expertise sits at the nexus of industry relevance and scholarly impact, closely aligned with the *Global Journal of Flexible Systems Management's* focus on adaptive, technology-driven strategies for complex systems.

