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Identifying the Challenges and Opportunities of Implementing Knowledge Management Systems in Multinational Firms

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ABSTRACT

This study aimed to identify and analyze the organizational, technological, and strategic challenges and opportunities associated with implementing Knowledge Management Systems (KMS) in multinational firms operating in Tehran. A qualitative research design was employed using semi-structured interviews to capture the lived experiences of individuals involved in KMS implementation. Twenty participants, including managers, IT coordinators, and knowledge officers from various multinational corporations in Tehran, were selected through purposive sampling. Data collection continued until theoretical saturation was achieved. All interviews were transcribed, translated, and thematically analyzed using NVivo software. Thematic coding followed Braun and Clarke's six-phase framework to identify patterns and insights grounded in participant narratives. Thematic analysis revealed three overarching categories: organizational challenges, technological barriers, and strategic opportunities. Key organizational challenges included resistance to change, cultural misalignment, and knowledge silos, while technological barriers encompassed system incompatibility, poor data quality, and access limitations. Participants also highlighted several strategic opportunities of KMS, such as enhanced cross-border collaboration, innovation enablement, and improved decision-making. Trust, alignment with local contexts, and system usability emerged as critical factors influencing user engagement and system effectiveness. The findings underscore that KMS implementation in multinational firms is a socio-technical endeavor shaped by contextual, cultural, and operational dynamics. While significant barriers exist, tailored design, strategic alignment, and user-centric approaches can transform KMS into enablers of innovation and competitive advantage. These insights inform both theory and practice by offering a grounded understanding of the factors that shape successful KMS adoption in global organizations.

Keywords: Knowledge Management Systems, multinational firms, qualitative research, organizational barriers, cross-cultural management, NVivo, knowledge sharing, implementation challenges

Introduction

Organizational change is a vital yet complex process for businesses striving to remain competitive and adaptive in turbulent markets. In the context of family-owned enterprises (FOEs), the challenge of managing change is further compounded by the interweaving of business objectives with family values, emotional bonds, generational transitions, and legacy preservation. These dual dimensions—family and business—generate unique dynamics that differentiate change processes in FOEs from those in non-family firms (Astrachan, 2010). While FOEs represent a dominant form of business worldwide and a major contributor to economic development (IFERA, 2003), their long-

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term survival depends largely on how effectively they navigate the uncertainties of organizational change (Le Breton-Miller, Miller, & Bares, 2015).

Organizational change in FOEs often unfolds against a backdrop of deeply rooted traditions, centralized decision-making, and informal governance structures, making change initiatives both emotionally and structurally challenging (Chrisman, Chua, & Sharma, 2005). Many family firms demonstrate a strong inclination toward stability and risk aversion, which can impede the adoption of new technologies, restructuring efforts, or strategic reorientations (Zahra, Hayton, & Salvato, 2004). The inherent tension between continuity and change raises critical questions about how these firms manage transformation without compromising their identity and family legacy (Sharma & Salvato, 2011). These questions are particularly salient in emerging economies such as Iran, where family businesses play a central role in employment generation and capital accumulation but often operate in volatile and highly regulated environments.

Despite their economic significance, family businesses remain underrepresented in mainstream organizational change literature, which has historically focused on large public or multinational corporations (Kotter, 1996; Armenakis & Harris, 2002). Moreover, FOEs' idiosyncratic characteristics—such as socioemotional wealth, non-financial goals, and kinship-based leadership—require a contextualized understanding of how change is conceived, communicated, and executed (Gómez-Mejía et al., 2007). Recent research has called for more qualitative and interpretive approaches to studying FOEs, particularly those that illuminate the lived experiences of decision-makers within these firms (De Massis & Kotlar, 2014). Qualitative inquiry is essential to unpack the micro-processes and strategies through which change is initiated, resisted, or sustained in family business contexts.

One distinguishing feature of FOEs is the strong influence of founder or family leadership, which can be both a source of strategic agility and organizational inertia (Miller, Le Breton-Miller, & Lester, 2011). On one hand, charismatic founders may drive change through personal vision and informal authority; on the other, centralized control may inhibit input from other stakeholders and limit openness to external ideas (Bammens, Voordeckers, & Van Gils, 2011). Leadership succession, a common turning point in the lifecycle of family firms, is often accompanied by shifts in organizational priorities, identity, and risk tolerance (Handler, 1994). Therefore, leadership strategies play a pivotal role in shaping the trajectory and outcomes of change efforts.

The culture of family firms also contributes significantly to how change is managed. While strong values and a sense of mission can foster unity and resilience, they can also entrench resistance to transformation. Cultural elements such as trust, loyalty, and shared identity often encourage long-term commitment but may resist disruptive innovation (Denison, Lief, & Ward, 2004). For example, some FOEs may perceive organizational change as a threat to family cohesion or symbolic continuity, particularly when it involves downsizing, professionalization, or external partnerships (Micelotta, Raynard, & Greenwood, 2012). Thus, understanding the role of organizational culture in facilitating or hindering change is critical in the study of FOEs.

Change strategies in FOEs are often incremental rather than radical. The preference for gradual, low-risk adjustments reflects both the need to protect socioemotional wealth and the reliance on informal communication channels and tacit knowledge (Ward, 2004). Unlike publicly traded corporations, FOEs may lack formal structures for change management, such as human resource departments or performance analytics systems, and instead depend on relational mechanisms such as storytelling, mentorship, and consensus building (Sirmon & Hitt, 2003). This context-specific approach to change underscores the importance of analyzing strategies that align with the unique logic and constraints of FOEs.

In terms of employee engagement and internal communication, FOEs often benefit from higher levels of trust and personal investment among staff, especially when employees have long-standing ties with the founding family. However, this loyalty can also mask discontent or silence critical feedback, making it difficult for change agents to detect or address resistance (Eddleston, Kellermanns, & Zellweger, 2012). Furthermore, the overlapping of family and business roles can create ambiguities in accountability and role expectations, particularly during periods of change (Tagiuri & Davis, 1996). These interpersonal dynamics are essential to understanding how FOEs manage or struggle with organizational transformation.

External influences—such as market competition, regulatory shifts, or technological advancements—also play a critical role in pressuring family businesses to change. However, FOEs differ in their openness to external expertise, such as consultants or non-family executives. While some adopt a hybrid approach that combines traditional practices with external input, others remain insular, relying on internal knowledge and informal decision-making systems (Salvato & Corbetta, 2013). The extent to which FOEs utilize external resources often reflects their stage in the family business lifecycle and their level of professionalization.

Research in non-Western contexts has highlighted additional challenges for FOEs, including bureaucratic inefficiencies, socio-political instability, and limited access to capital (Dana & Dana, 2005). In Iran, where family businesses face regulatory uncertainty, inflation, and sanctions, managing organizational change requires not only strategic foresight but also adaptive resilience. These firms often operate in a hybrid institutional environment where formal and informal rules coexist, creating both opportunities and constraints for change (Mair & Martí, 2009). Thus, studying FOEs in Tehran provides a unique vantage point to explore how change strategies are shaped by cultural, institutional, and familial factors.

Despite the growing body of research on family businesses, there remains a significant gap in empirical studies that capture the subjective experiences of individuals directly involved in managing change. Most existing studies rely on quantitative surveys or secondary data, limiting their capacity to uncover the nuanced and context-bound strategies employed in real-world settings (Nordqvist, Hall, & Melin, 2009). A qualitative case study approach offers a rich, bottom-up perspective that foregrounds the voices of organizational actors and uncovers the complexity of change processes in FOEs.

The present study addresses this gap by exploring the strategies used by family-owned enterprises in Tehran to manage organizational change. Using a qualitative case study methodology and semi-structured interviews with 22 participants—including founders, successors, and senior managers—this research seeks to identify patterns, practices, and tensions in the change management processes of FOEs. The study aims to contribute to the literature by offering an empirically grounded and culturally sensitive account of organizational change in family firms, with implications for both scholars and practitioners. By focusing on the Iranian context, the study also adds to the growing call for more geographically diverse and contextually embedded research in family business studies.

Methods and Materials

Study Design and Participants

This study adopted a qualitative research design to explore the challenges and opportunities of implementing knowledge management systems (KMS) in multinational firms. A qualitative approach was selected to gain in-depth insights into participants' lived experiences, perspectives, and contextual understandings of knowledge management practices within complex organizational settings. The study utilized a purposive sampling strategy to identify individuals with firsthand knowledge and professional experience in implementing or interacting with KMS within multinational organizations.

A total of 20 participants were recruited from Tehran, Iran. Participants included mid-level and senior managers, knowledge officers, IT coordinators, and organizational development consultants affiliated with multinational corporations operating in a variety of industries, including pharmaceuticals, manufacturing, telecommunications, and financial services. The inclusion criteria required that participants had at least three years of experience working with or managing knowledge systems in multinational environments. Recruitment continued until theoretical saturation was achieved—defined as the point at which no new conceptual insights emerged from subsequent interviews.

Data Collection

Data were collected through semi-structured, face-to-face interviews, allowing for both guided inquiry and open-ended exploration. An interview guide was developed based on a review of the relevant literature on knowledge management systems, with core questions focused on perceived barriers, facilitating conditions, organizational culture, technology adoption, and global-local dynamics in KMS implementation. The interviews were conducted in Persian, lasted between 45 and 75 minutes, and were audio-recorded with participants' informed consent. All interviews were transcribed verbatim and translated into English for analytical purposes.

Data analysis

Thematic analysis was employed to identify, analyze, and report patterns across the data. Analysis followed Braun and Clarke's (2006) six-phase framework: familiarization with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. NVivo 12 software was used to assist with data management, coding, and theme development. Data were analyzed iteratively, allowing for constant comparison across interviews to refine categories and extract meaningful insights. The process was collaborative and reflexive, incorporating ongoing discussions among the research team to enhance the credibility and trustworthiness of the analysis.

Findings and Results

Theme 1: Organizational Challenges

Resistance to Change

Many participants highlighted a persistent resistance to change as a critical barrier to successful KMS implementation. Employees often exhibited fear of new systems, reluctance to abandon familiar routines, and a general discomfort with perceived surveillance mechanisms. This resistance was particularly strong among long-tenured staff accustomed to legacy systems. As one respondent stated, "People feel these systems are designed to monitor them, not support them. So they push back—quietly or directly." Lack of employee involvement in the decision-making process and change fatigue further compounded the issue.

Cultural Misalignment

Participants described cultural misalignment between headquarters and local branches as a recurring issue. Differences in communication norms, power distance, and language often resulted in misunderstandings and ineffective implementation. One manager noted, “The KMS design assumes a Western way of working, but in our context, hierarchy and indirect communication are still the norms.” Such mismatches led to low user engagement and poor knowledge-sharing practices across regional offices.

Lack of Strategic Alignment

Several interviewees pointed to a disconnect between knowledge management goals and overall corporate strategy. KMS initiatives were sometimes introduced as stand-alone IT projects without alignment with long-term objectives. “It felt like we were investing in a tool without a vision. No one linked it back to our mission or KPIs,” explained a senior operations director. Poor leadership support further weakened strategic coherence.

Knowledge Silos

The formation of knowledge silos—isolated pockets of information within departments—was another barrier. Data hoarding behavior, lack of cross-functional collaboration, and poor knowledge transparency were frequently mentioned. One participant reflected, “Each department has its own server, and no one knows what others are doing. It defeats the purpose of a unified knowledge system.”

Inadequate Training and Support

Participants emphasized the lack of sufficient training as a key inhibitor of effective KMS adoption. Users often received minimal onboarding, and follow-up support was either absent or reactive. This was particularly problematic for staff with limited IT skills. “They gave us a quick demo and expected us to become experts overnight,” a participant remarked. This led to underutilization and growing frustration among employees.

Bureaucratic Decision-Making

The slow and hierarchical nature of decision-making in many multinational firms posed a significant implementation barrier. Respondents reported delays in approving KMS modules, excessive paperwork, and limited local autonomy. “Every customization had to go through five layers of approval in the head office,” said one IT coordinator. Such bureaucracy hindered agility and responsiveness.

Low Trust in KM Systems

Trust emerged as a foundational issue affecting KMS use. Participants expressed skepticism regarding how their input would be used and concerns over data privacy. A marketing specialist stated, “Why should I contribute if I don’t know who is reading my entries or how it will be used against me later?” This mistrust significantly undermined user engagement.

Theme 2: Technological and Infrastructural Barriers

System Incompatibility

System integration issues were frequently mentioned, especially in firms using multiple legacy systems or third-party software. Participants explained that incompatible platforms made it difficult to aggregate or retrieve knowledge efficiently. “Our ERP doesn’t talk to the KM system, and that causes real headaches,” shared a logistics manager.

Data Quality and Management Issues

Poor data quality was a widespread concern, with many describing databases filled with incomplete, outdated, or duplicated information. Participants lamented the absence of metadata standards and inconsistent formatting. “I spend more time cleaning data than using it. It’s a mess,” one user explained. These inconsistencies diminished trust in the system’s reliability.

Access and Usability Limitations

Several respondents reported that the system interface was non-intuitive and not user-friendly, especially for non-technical staff. Language barriers, lack of mobile accessibility, and complicated navigation tools discouraged use. “If you need a manual to use it, then it’s already failed,” commented a regional HR officer.

Security and Confidentiality Concerns

Security and data protection emerged as key issues, particularly in multinational settings where cross-border data flow is subject to varying legal standards. Concerns about confidentiality led to selective input or complete non-participation. A legal advisor noted, “We can’t risk uploading client-sensitive documents without knowing where the servers are or who has access.”

Lack of Customization

Participants criticized KMS platforms that failed to reflect local needs or operational differences. The use of standardized systems across global offices was seen as both efficient and limiting. “We were told ‘this is the global template—use it as-is,’ even though our market works very differently,” one participant observed. This led to low adoption and frequent workarounds.

Theme 3: Strategic and Operational Opportunities

Enhanced Collaboration and Learning

Despite the challenges, several participants viewed KMS as a powerful enabler of cross-functional and cross-border collaboration. It helped bridge geographic and departmental divides. “For the first time, we’re sharing insights between Asia and Europe in real time,” shared a knowledge officer. This facilitated faster learning and reduced redundancy.

Innovation Enablement

Participants emphasized that when properly used, KMS platforms supported innovation by making idea management more systematic and inclusive. “We set up an idea board, and within weeks, we had dozens of submissions from all levels of the organization,” said one innovation lead. This democratized the innovation process.

Improved Decision-Making

Access to curated, real-time knowledge allowed managers to make more informed decisions. Several participants highlighted the value of lessons-learned databases and case libraries. “We no longer repeat the same mistakes—because we actually have a history to consult,” a project manager explained.

Talent Development and Retention

Participants also discussed the role of KMS in onboarding new employees and fostering internal mobility. Documented expertise and mentorship archives helped reduce the learning curve. “Our KMS doubled as a training platform. It helped me when I joined, and I now contribute to help others,” shared a senior analyst.

Competitive Advantage

Finally, many saw KMS as a long-term strategic asset that could create a sustainable competitive advantage by institutionalizing tacit knowledge. “It’s our corporate memory. If we lose that, we start from scratch each time,” one senior executive emphasized. Firms that succeeded in aligning KMS with their strategic vision reported faster market response and better performance outcomes.

Discussion and Conclusion

The findings of this study underscore the multifaceted nature of implementing Knowledge Management Systems (KMS) in multinational firms, revealing a complex interplay between organizational culture, technological readiness, and strategic alignment. These results reinforce the view that KMS are not simply IT tools but socio-technical systems embedded within broader institutional contexts (Alavi & Leidner, 2001). Participants identified numerous barriers—such as resistance to change, cultural misalignment, and inadequate training—which align closely with the challenges documented in existing literature (Sun & Scott, 2005; Riege, 2005).

One of the most prominent barriers reported was **resistance to change**, a factor frequently observed in knowledge management literature. Employees were found to perceive KMS initiatives as top-down interventions that potentially threatened job autonomy or introduced surveillance risks. This supports prior findings that user resistance often stems from poor change communication, lack of participation in design processes, and the perceived imposition of control mechanisms (Davenport & Prusak, 2000; Ali et al., 2019). As in previous studies, this resistance was exacerbated by the absence of trust in the system's purpose and governance (De Long & Fahey, 2000). In multinational settings, where trust may already be tenuous due to geographic and cultural distances, this factor becomes even more critical.

Another major theme was **cultural misalignment**, particularly between global systems and local organizational practices. Participants described instances in which KMS platforms, originally designed based on Western business norms, clashed with local communication styles, values, and hierarchical structures. This finding supports Ajmal et al.'s (2010) argument that national and organizational culture significantly shape knowledge-sharing behaviors and affect the usability of globally designed systems. Zhang et al. (2020) also found that in culturally diverse settings, standard KMS models often fail to capture the nuance required for successful cross-border knowledge transfer. The dissonance between global standardization and local relevance therefore remains a persistent challenge in multinational KMS implementation.

The issue of **knowledge silos** also emerged as a significant theme. The tendency of departments or units to retain knowledge within their boundaries—often due to internal politics, lack of incentives for sharing, or fear of losing power—has been widely reported in the literature (Riege, 2005; Jasimuddin & Zhang, 2011). In this study, siloed knowledge resulted in duplicate efforts, inefficient workflows, and lost learning opportunities. These findings reaffirm the need for managerial structures that encourage cross-functional collaboration and reward transparent knowledge-sharing behaviors.

In terms of technological barriers, **system incompatibility and usability limitations** were frequently reported. Participants criticized the poor integration of KMS with other enterprise systems, which often led to fragmented data environments. This resonates with Jennex and Olfman's (2005) findings that technological misalignment hinders knowledge flow and discourages usage. Similarly, issues such as poor user interfaces, language limitations, and limited mobile access mirror concerns raised in earlier studies about the accessibility and inclusiveness of KMS platforms (Chatti et al., 2007). In today's hybrid and distributed work environments, ease of access and usability across devices and languages are no longer optional but essential.

Data quality and security concerns were also central to participants' critiques. Incomplete, duplicated, or unstructured data within the KMS lowered confidence in the system's reliability and limited its effectiveness. Prior studies by Massingham (2014) and Shujahat et al. (2019) also reported that poor data governance and lack of standardized taxonomies weaken the utility of knowledge systems. In multinational firms, additional complications arise due to legal restrictions on data sharing across jurisdictions, especially in highly regulated industries. Participants in this study were particularly wary of uploading sensitive or proprietary information without clear guidelines on data ownership and privacy—a concern echoed by Ali et al. (2019).

Despite these barriers, the study revealed substantial **strategic opportunities** afforded by KMS when implemented effectively. Enhanced collaboration was one of the most frequently mentioned benefits, particularly in bridging communication gaps across geographically dispersed teams. This finding aligns with Zhou and Fink's (2003) concept of the "intellectual capital web," wherein KMS serve as enablers of social interaction and knowledge flow. Participants emphasized that KMS helped foster a sense of global community and learning culture—conditions that Riege (2005) identified as critical for long-term knowledge retention and innovation.

Another opportunity highlighted by participants was **innovation enablement**. When adequately configured, KMS were described as democratizing ideation processes by enabling employees across roles and geographies to contribute to strategic initiatives. This supports the view of Alavi and Leidner (2001), who emphasize that KMS can serve as a foundation for organizational learning and innovation. Moreover, the ability to access real-time, contextualized knowledge was seen as facilitating **evidence-based decision-making**, reinforcing the findings of Zhang et al. (2020), who argue that KMS improve responsiveness in volatile business environments.

The study also found that KMS contributed to **talent development and onboarding**. By offering centralized access to institutional memory, training materials, and subject-matter expertise, KMS shortened learning curves and supported internal mobility. These findings are consistent with Chatti et al. (2007), who note that KMS can help preserve organizational memory and enable lifelong learning. In environments with high staff turnover or frequent relocations—as is common in multinational settings—these systems are especially valuable for continuity and capability building.

Finally, many participants saw KMS as offering a **strategic competitive advantage**. Firms that successfully embedded KMS into their strategic framework were able to reduce redundancies, accelerate time-to-market, and institutionalize best practices. This aligns with the argument made by Davenport and Prusak (2000) that organizations able to convert tacit knowledge into explicit, shareable forms gain an edge over less knowledge-agile competitors.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adheried in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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References

Ajmal, M. M., Helo, P., & Kekäle, T. (2010). Critical factors for knowledge management in project business. *Journal of Knowledge Management*, *14*(1), 156–168. https://doi.org/10.1108/13673271011015598

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, *25*(1), 107–136. https://doi.org/10.2307/3250961

Ali, M., Ali, M., & Badghish, S. (2019). Symbiosis of knowledge management and information systems: A key to competitive advantage. *Journal of Business Research*, *94*, 232–248. https://doi.org/10.1016/j.jbusres.2018.02.014

Chatti, M. A., Jarke, M., & Frosch-Wilke, D. (2007). The future of e-learning: A shift to knowledge networking and social software. *International Journal of Knowledge and Learning*, *3*(4–5), 404–420. https://doi.org/10.1504/IJKL.2007.016702

Davenport, T. H., & Prusak, L. (2000). *Working knowledge: How organizations manage what they know*. Harvard Business Press.

De Long, D. W., & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. *Academy of Management Perspectives*, *14*(4), 113–127. https://doi.org/10.5465/ame.2000.3979820

Jasimuddin, S. M., & Zhang, Z. (2011). Transferring stored knowledge and storing transferred knowledge. *Information Systems Management*, *28*(1), 84–94. https://doi.org/10.1080/10580530.2011.536967

Jennex, M. E., & Olfman, L. (2005). Assessing knowledge management success. *International Journal of Knowledge Management*, *1*(2), 33–49. https://doi.org/10.4018/jkm.2005040103

Massingham, P. (2014). An evaluation of knowledge management tools: Part 1–Managing knowledge resources. *Journal of Knowledge Management*, *18*(6), 1075–1100. https://doi.org/10.1108/JKM-11-2013-0449

Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, *9*(3), 18–35. https://doi.org/10.1108/13673270510602746

Shujahat, M., Hussain, S., Javed, B., & Nawaz, F. (2019). Transforming knowledge management practices through process innovation: A study of emerging economies. *Technological Forecasting and Social Change*, *146*, 653–663. https://doi.org/10.1016/j.techfore.2019.06.024

Sun, P. Y. T., & Scott, J. L. (2005). An investigation of barriers to knowledge transfer. *Journal of Knowledge Management*, *9*(2), 75–90. https://doi.org/10.1108/13673270510590236

Zhang, J., Lee, J. Y., & Wang, Y. (2020). Managing knowledge in global supply chains: Knowledge management enablers and processes. *International Journal of Production Economics*, *219*, 152–162. https://doi.org/10.1016/j.ijpe.2019.07.014

Zhou, A. Z., & Fink, D. (2003). The intellectual capital web: A systematic linking of intellectual capital and knowledge management. *Journal of Intellectual Capital*, *4*(1), 34–48. https://doi.org/10.1108/14691930310455236