

MEDIATING ROLE OF KNOWLEDGE SHARING BETWEEN ORGANIZATIONAL CULTURE AND INNOVATION PERFORMANCE IN JORDAN'S PHARMACEUTICAL SMES IN THE DIGITAL ERA

FATIMA ABDULLAH AL FAQARA

Doctoral Student, Department of Management and Economics, Universiti Putra Malaysia, Serdang, Selangor, Malaysia. Email: gs60926@student.upm.edu.my

Dr. MASS HAREEZA ALI

Associate Professor, School of Business and Economics, Universiti Putra Malaysia, Upm Serdang.

Dr. AZMAWANI ABD RAHMAN

Putra Business School, 43400 Serdang Selangor, Malaysia.
Professor, School of Business and Economics, Universiti Putra Malaysia.

Abstract

The combined effects of rapid globalization together with technological advancements and expanding digital economies create tougher challenges for knowledge-based pharmaceutical SMEs and similar organizations in the market. The modern market demands along with technological changes require Jordanian pharmaceutical SMEs to adjust their operations and develop innovative capabilities. The transformation requires organizations to use digital tools as well as develop inner forces that support innovation development. The performance of innovation within these conditions relies heavily on organizational culture together with knowledge sharing practices. These elements emerge as fundamental strategic management foundations that should not be treated as detached concepts. A firm with effective knowledge exchange systems as well as a strong collaborative culture uses its members' combined expertise to learn and foster sustainable innovation. Knowledge sharing plays a fundamental intermediary role by transforming organizational cultural values into innovative practices especially during digital transformation. The study creates foundational theoretical knowledge through existing literature review to support future empirical research by establishing the intellectual connections between organizational culture and knowledge sharing and innovation performance. This paper seeks to establish a functional model for explaining how cultural elements inside organizations produce better innovation results when knowledge-sharing practices act as intermediary channels in the digital transformation of Jordan's pharmaceutical industry. The research consequences impact decision makers across the pharmaceutical industry of Jordan as well as organizational leaders and their stakeholders. The findings explain how implementing knowledge-sharing culture brings benefits for innovation alongside market competitiveness and digital success in ways that build economic strength of the pharmaceutical sector along with the national economy.

Keywords: Knowledge Sharing, Organizational Culture, Innovation Performance, Pharmaceutical SMEs, Digital Era.

INTRODUCTION

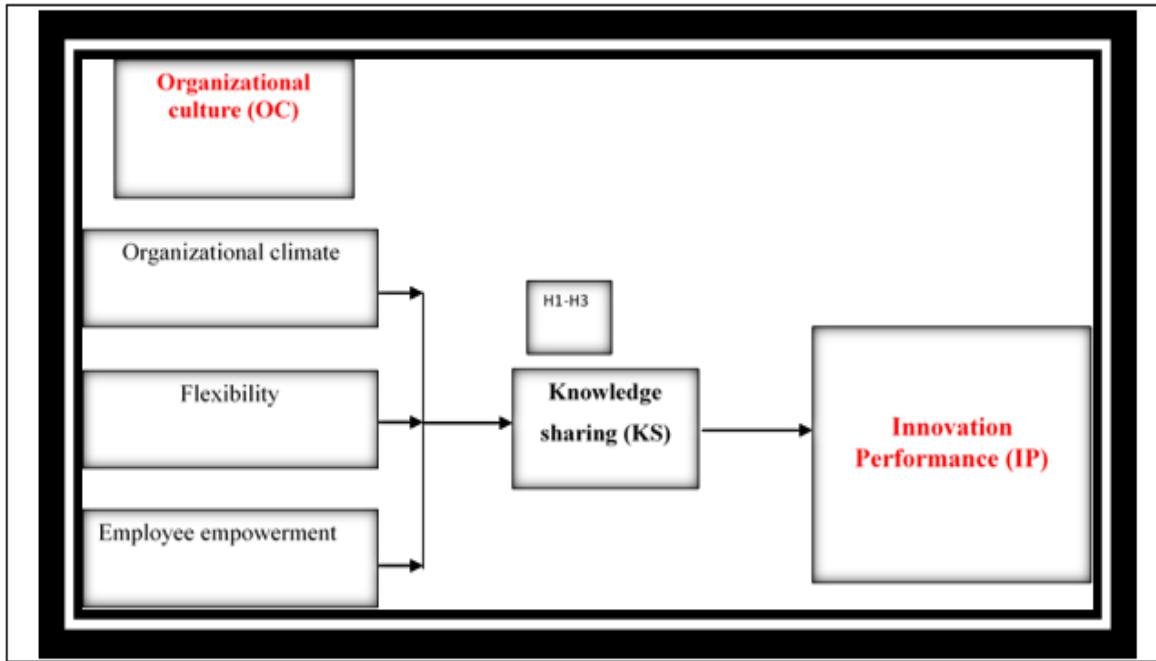
Innovation is a critical component for staying ahead of the competition and ensuring sustainability in a rapidly changing digital environment, especially for small and medium-sized enterprises (SMEs). In the Jordanian pharmaceutical sector, many SMEs have begun to understand the importance of enhancing their innovation capabilities as a key measure to maintaining their competitiveness amidst emerging market trends.

Accordingly, innovation is becoming a key factor determining companies' success in addressing the challenges posed by digital transformation and ongoing developments in the pharmaceutical sector (Antara et al, 2024; alqudah et l., 2025). To achieve outstanding innovation performance, organizations must create an internal environment that encourages knowledge sharing and collaborative learning, as well as building a culture of shared information. This requires an organizational structure that enables employees to easily access knowledge, which contributes to generating innovative ideas and achieving tangible performance improvements. The nature of organizational culture is a key factor in how employees approach the creation, sharing, and use of knowledge in the workplace, as Al-Khatib (2025) points out. Through a work environment that supports continuous learning through openness and trust among individuals, innovation opportunities become more powerful and effective. Academic research at universities needs to examine the impact of organizational culture on innovation more deeply, particularly by examining emerging markets and the pharmaceutical industry. Although numerous studies have examined the impact of organizational culture on innovation in various sectors, the specific context of Jordanian SMEs, particularly in the pharmaceutical sector, warrants in-depth examination (Pauliene et al., 2025; ali et al., 2021).

This study aims to explore the role of knowledge sharing as a mechanism for linking organizational culture with innovation performance evaluation in Jordanian small and medium-sized pharmaceutical companies. The research also delves into how internal knowledge sharing systems can be used as a bridge between cultural values and tangible innovation outcomes. In doing so, this study seeks to provide valuable insights that can help Jordanian small and medium-sized pharmaceutical companies develop their innovation capabilities in the era of digital transformation (Al-Abbad et al., 2025; Abualrejal et al., 2021). Furthermore, knowledge sharing is considered a pivotal tool in fostering innovation, as it can be a decisive factor in developing a cultural environment that supports sustainable success for companies in facing the challenges of the digital market. The research also examines how organizational culture influences innovation in pharmaceutical small and medium-sized companies by building strong knowledge-sharing networks and providing a solid scientific foundation to support this digital transformation.

Businesses Model

The study aims to examine the relationship between organizational culture and innovation performance in Jordan's pharmaceutical SMEs within the context of the digital era. Specifically, it investigates how knowledge sharing mediates this relationship, highlighting its role as a vital mechanism through which organizational culture can influence and enhance innovation outcomes. The study's central focus is on understanding the interconnectedness of these three variables to provide insights that support innovation-driven growth in pharmaceutical SMEs operating in a digitally transforming environment.



LITERATURE REVIEW

Organizational Culture

The shared solutions to problems that organizational members use to develop their assumptions are considered the basis that determines their behavior toward various challenges. According to Mazur & Zaborek (2016), these shared solutions guide the actions of individuals within the organization and shape their responses to various work situations. It can be argued that a shared understanding of how to deal with problems and transformations within an organization is based on a set of assumptions that members develop and share as a reference for understanding how to interact with different situations. Organizational culture consists of a combination of influences, beliefs, and basic assumptions that determine how individuals within an organization behave and what they care about or value (Alshawabkeh et al, 2025; alqudah et al., 2021).

As Twaissi et al. (2025) point out, these elements significantly influence how individuals within organizations behave and how they define work values and priorities. Therefore, organizational culture is not simply a set of established customs or behaviors; rather, it is a complex structure that determines how individuals deal with work challenges and various situations, directly impacting the organization's overall performance. For a cultural assessment, there are essential components to consider, such as autonomy and organizational structure, as well as managerial support, which can have a significant impact on the effectiveness of organizational culture. Group identity and the reward system within the organization are also key factors in shaping culture. Tolerance for conflict is also an important element; organizational culture is incomplete without space

for constructive criticism and debate, which allows for the creation of an interactive and open environment (Momani et al, 2025; Abualrejal & Shtawi, 2021).

Through Schein's framework, organizational culture can be understood as a combination of influences, underlying assumptions, and espoused values—the core elements that define the overall understanding of culture. Schein suggests that these elements combine to form a cultural environment that influences organizational behavior. Overall, this framework helps understand how individuals within an organization express their values and work orientations, and how these values impact the organization's productivity (Dunger, 2025; alqudah & Abualrejal, 2021). From a functional perspective, organizational culture provides members with a sense of identity and a clear behavioral direction, which helps guide their behavior toward achieving organizational goals. Through big data, organizations can reshape social behavior and organizational responses to innovative approaches.

According to Abualoush (2025), digital systems are a powerful tool for changing and developing cultural understanding within organizations, enabling teams to approach challenges in a new and thoughtful way. In this context, modern information technology is not only limited to improving processes but also directly impacts individual behavior and the way they approach change and innovation. Therefore, it can be said that organizational culture is the driving force that influences innovation within organizations, providing an environment that enables individuals to learn and develop. Success in this context depends on the ability to integrate digital systems and traditional working methods to provide a flexible work environment capable of adapting to new challenges arising from technological developments.

Research on the cultural innovation relationship has started yet further investigation regarding psychological safety and both collectivism and power distance would be valuable. The current trends of globalization and sharing economy emphasize that innovation strategies should develop strategies which take both inner and outer environment elements into account. Research should examine how behavioral aspects are shaped by the talent ecosystem and perceived organizational support together with organizational identity. along with investigating the impact of institutional elements such as bureaucracy and hierarchy and membership duration on public service motivation (Al-Balushi, 2025; alqudah et al; 2021).

Innovation Performance

The ability of companies to produce radical innovations which comprise both new and improved products within company operations or worldwide markets defines innovation performance. Organizations depend on innovation as their key to success while scholars and practitioners equally show rising interest. The widespread understanding shows that innovation performance creates substantial effects on competitive advantage together with market share and profitability (Hammouch, 2025). Research on this subject area bridges individual innovation behaviors along with complete assessments of organizational strategies and capabilities.

The research findings reveal innovation performance depends on several influencing elements. Performance depends heavily on four vital activities described by the innovation capability model according to Moftah et al. (2025). They specify that these activities include idea generation, selection, implementation and commercialization. The performance levels of innovation demonstrate positive correlations with the stated activities for companies within specific industry sectors according to Teece (2023). The resource-based view suggests that organizational assets such as R&D investment and IP portfolios and skilled labor force enable better innovation success. Leadership support function as a dual catalyst in innovation achievements through committed resource allocation and innovation-oriented policies. Success in innovation requires business model development to generate value from newly developed ideas. Businesses require customized strategy selection since there exists no single innovation approach that suits all organizations (AYALEW, 2024; alqudah et al., 2021). Success in innovation requires organizations to adopt new products together with innovative processes effectively.

Knowledge Sharing

Companies exchange expertise and information for task accomplishment through knowledge sharing to achieve improved employee performance and better decision quality as well as innovative solutions. An exchange of information through documents and experience-based data makes up knowledge sharing systems. The knowledge sharing procedure promotes both creative thinking along with mutual learning and problem-solving capabilities. SMEs in developing nations must embrace knowledge sharing as a resource optimization strategy which enables them to obtain better results from both their employees and various knowledge sources (Almehairbi, 2024; Abualrejal et al., 2021). The implementation of this methodology leads to enhanced performance levels and innovation efficiency and absorptive capacity. The digital age enables instant digital platform collaboration to strengthen internal corporate decisions as well as external partner relationships. Most scholarly research about digitalization/targeted large enterprises while disregarding the specific challenges faced by small and medium enterprises. The relationship between digital tools, performance and knowledge management in small and medium enterprises in high-tech sectors needs further investigation through research. Research requires additional investigation to understand how digital transformation supports knowledge movement across company units along with innovative practices (Zighan, 2024).

Organizational Culture and Innovation Performance in Jordan's Pharmaceutical SMEs in the Digital Era

Institutions need organizational culture as a fundamental component for improved innovation performance because this cultural element shapes employee conduct toward innovation ideas. This relationship stands central to small and medium-sized enterprises (SMEs) in Jordan's pharmaceutical sector particularly during the rapid digital transformation phase (Mesaadah, 2025). In the field of organizational culture and creativity research Al-Zoubi (2009) conducted an applied study titled "The Impact of Organizational Culture on Creativity: An Applied Study in Jordanian Pharmaceutical

Companies." The research examined the link between organizational culture and employee creativity within pharmaceutical organizations in Jordan.

The authors examined 459 participants to determine how different organizational cultural characteristics influence employee creative performance. Employee creativity differed based on demographic characteristics yet educational background and job role diversity did not affect it (Al-Balushi, 2025). Top management should enable idea generation among all organizational staff while encouraging an organizational culture based on support and encouragement. The primary value of this study exists despite its 2009 publication date since additional modern research should incorporate current digital evolution. The digital transformation has modified both organizational processes and innovation approaches which require research into how organizational culture affects innovation performance in digital contexts. The available research fails to provide specific insights about how organizational culture affects innovation performance in Jordanian pharmaceutical SMEs operating in the digital period. The authors recommend future research to concentrate on this domain because it represents an important gap in knowledge so effective techniques could be developed to promote innovation in these companies (Al-Omar, 2022).

METHODOLOGY

This research conducts a literature review by focusing on organizational culture together with innovation performance measurement within pharmaceutical SMEs in Jordan. The study emphasizes the importance of studying how knowledge sharing functions as a middle element between primary constructs in digital times.

Future empirical research will delve deeper into which ways organizational culture affects innovation performance using knowledge sharing as the intermediary factor. This study investigates the crosspoint effects of organizational culture with knowledge sharing and innovation performance for academic and practical framework development. The plan establishes a complete approach to boost innovation results using organizational strengths alongside powerful methods for knowledge exchange in modern digital contexts. The current research uses an exploration method to investigate knowledge sharing as the mediator between cultural elements and innovation outcomes within pharmaceutical small and medium enterprises. The study requires additional empirical research to validate and expand upon its conceptual insights because of the complex relationships along with the restrictions from using electronic resources alone (Yuen, 2024).

DISCUSSION

The fundamental nature of company culture determines staff attitudes and behaviors and innovation abilities in all small and medium-sized pharmaceutical organizations (Al-Zoubi, 2009). Modern digital industry requires a complex management of organizational culture combined with innovation performance because firms must continuously adapt to new technologies and knowledge-intensive business environments (Lee et al., 2021). The

relationship between organizational culture and innovation performance receives support through knowledge sharing as a mediating component which provides channels for better collaboration and information sharing. Shared organizational values alongside employee beliefs and established norms steer both employee communication and strategic organizational path (Al-Omoush, 2024).

Culture within Jordanian pharmaceutical SMEs functions as both an operational framework and a facilitator of innovation receptiveness through trust development and operational flexibility and participatory culture. The effectiveness of knowledge exchange depends heavily on how supportive an organization's culture becomes. Knowledge-driven business sectors depend heavily on the presence of suitable cultural conditions for sustained improvement and adaptability through their operational cycles. Knowledge sharing consists of voluntary information exchanges between individuals and teams which allow them to learn collectively while innovating (Mbaidinet al., 2022). Small and medium enterprises benefit from sharing knowledge between departments and hierarchical levels because it unlocks current resources together with generating innovative solutions. Han et al. (2024) establishes in their studies that digital transformation together with robust knowledge-sharing practices dissolves organizational knowledge barriers to allow teams to implement cross-functional innovation projects.

Digital platforms facilitate quick-time communication and comprehensive knowledge databases to make decisions better and enhance innovation performance. The ability of firms to create and commercialize new ideas depends largely on their cultural environment and knowledge-sharing system effectiveness. Proof from research indicates that SMEs implementing knowledge-sharing approaches inside their organizational environment become better equipped for both digital transformation adaptation and ongoing innovation success. The pharmaceutical SME sector in Jordan has received minimal empirical research into knowledge sharing as a mediator between organizational culture and innovation despite extensive research on their relationship. The research investigates through extensive literature review how knowledge sharing enables the connection between organizational culture and innovation performance in digitally transforming pharmaceutical SMEs.

This research investigates cultural qualities which either facilitate or obstruct knowledge exchange activities before evaluating their combined impact on innovation outputs. This research makes its theoretical contribution by analyzing the impact of digital transformation on knowledge transfer and innovation performance within Jordanian SMEs in specific industrial contexts. By conducting this research, the work boosts existing knowledge about organizational behavior and innovation management and digital adaptation strategies in emerging marketplaces (Zoubi, 2022).

CONCLUSION

The research investigates how organizational culture powers innovation performance within Jordanian pharmaceutical SMEs during the time of swift digital transformation. This research stands distinctive because it portrays knowledge sharing as a tool through which

cultural aspects of organizations connect to their innovation abilities. Knowledge-based trust combined with organizational support along with collaborative work methods allow medical organizations to exchange explicit and tacit information effectively which promotes innovation specifically within pharmaceutical knowledge domains. The digital era gives SMEs unique possibilities and settings that can both help and harm their progress (Hijazi, 2023). Digital tools enhance communication along with knowledge sharing but their success rates rely heavily on how organizations develop readiness for adopting these technological platforms. According to the research innovation results from numerous aspects including technological progress and the social dynamics of companies and their members. Jordanian pharmaceutical SMEs need to maintain dual investment between digital infrastructure development together with organizational culture development supporting continuous learning and widespread knowledge sharing to guarantee sustainability and competitive advantages.

A well-established cultural framework will lead to improved innovation performance and helps businesses sustain growth throughout changing business conditions. The authors invite researchers to explore these relationships empirically while studying additional variables that could moderate or mediate the studied effects between leadership style and digital capabilities and organizational learning capabilities (Alabdullah, 2023).

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