RESEARCHARTICLE



From Knowledge to Performance: How Intellectual Capital Drives Organizational Outcomes through Knowledge Sharing

Syed M Basit Raza Bukhari¹, Zainab Nawaz¹ and Kelvin Agyemang²

¹Department of Business Administration, Government College Women University, Sialkot, Pakistan

²Department of Management Studies Education, Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development (AAMUSTED), Kumasi, Ghana

Correspondence: kelvinagyemang125@gmail.com

Abstract

Knowledge is power that drives organizations on the way to success. The objective of this study is to explore the linkage between organizational performance (OP), intellectual capital (IC), and the mediating role of knowledge sharing (KNS). Data were gathered from 364 individuals employed in senior and middle management. Knowledge has a beneficial impact on the performance of the organization. Significantly, the findings indicated that knowledge exchange served as a mediating factor, enhancing the relationship between IC and OP. The results underscore the significance of intellectual capital in improving outcomes and also point out the essential function of knowledge sharing in optimizing organizational success. Despite certain constraints, this study presents major challenges to both academics and professionals, offering insights into how organizations can utilize intellectual capital and knowledge-sharing practices to improve performance.

KEYWORDS

Intellectual Capital; Organizational Performance; Knowledge Sharing; Pakistan

1 |INTRODUCTION

To ensure demographic change, technological advancements, global industrialization, increasing population and social developments, organizations need to change their strategies, policies and point of focus (Chand & Tung, 2014). Areas like research and development, customer relations, computer systems, and employee training are on the attention list of the organizations to cope with these dramatic changes to increase knowledge resources and their adaption (Shannak et al., 2012). Therefore, to address these domains and to compete in the market, organizations need to consider the traditional organizational management strategies and needs (Murthy & Mouritsen, 2011). Recently, Ahmad (2025) proposed that to achieve a competitive advantage, instead of focusing on traditional financial capital or physical capital, organizations have shifted their focus to IC. Cosa, Pedro, and Urban (2024) stated that IC is being well recognized in today's knowledge-based economy and works as a foundation. Although organizations have neglected this area for several decades, several researchers have come to admit the importance of IC. its measurement, and its management. According to Shahbaz & Malik (2025), IC is the key resource of competitiveness for businesses; that's why its importance is acknowledged. On the other hand, managers, stakeholders, policy makers, and scholars have focused on the IC for the same reason. Proposed that for survival mode, IC has gained significant importance in organizations and to lead on a track to success, it is necessary to sustain with IC knowledge; this survival mode is defined in many areas, such as value creation (Paunović, Milovanović, Štrbac, & Domazet, 2025), job performance (Truong, Nguyen, Vrontis, & Ahmed, 2024), competitiveness, business performance (Hina et al., 2024), sustainability (Y. Li, Li, & Zhai, 2024), and economic growth (Oltulular, 2025). IC ensures the organizational characteristics by creativity, supportive structures, computer systems, maintaining customer relationships, distinguishable employees with knowledge and contributing to making the organization superior in the market (Aribi, & Micheaux, 2025).

Furthermore, apart from IC, knowledge is another resource of success in businesses (Morris, 2024). Xiong, Yang, and Duan (2025) framed knowledge as blood that runs in the veins of the organizations, as it is necessary to survive and thrive in the competitive and

Bukhari et al. 2024; pages.129-140 https://ijeass.com © 2024 Unwan Sciences Society 129

dynamic environments. According to (Kazemi, Kazemi, Heshmat, Nazarian-Jashnabadi, & Tomášková, 2024) knowledge maintains a sustainable competitive advantage; organizations have to adopt strategies, create infrastructure and manage the knowledge effectively; hence, this all can be possible through better knowledge sharing and management (Ashraf, Li, Dodor, & Murad, 2018). A better knowledge management and sharing environment can lead to effective financial performance and efficiency (Truong, Nguyen, & Vrontis, 2024).

Moreover, OP is a central theme in business; yet, it is a multifaceted concept, influenced by stakeholders, diverse market conditions, and temporal factors (Mulyono & Rolando, 2025). (Khan & Badulescu, 2025). Organizations exhibit varying performance due to differences in organizational resources, encompassing both material and intangible assets (Larabi, 2025). Enhancing organizational performance depends on seek effective use of both resources, particularly the knowledge management and employee behavior (Rahim, Chaudhry, Mahmood, & Batool, 2025). Shahzad, Batool, Anjum, Mahmood, and Chauhdhry (2024) Support this by saying that the knowledge capital of business, which includes human resources as well, if managed effectively, enables enterprises to be able to transmit, acquire, develop, and use knowledge to achieve their goals and objectives.

This study aims to examine the impact of IC on OP and KNS of manufacturing companies in Pakistan. Additionally, the effect of KNS on OP is reviewed. Furthermore, the study investigates the mediating role of KNS in the relationship between IC and OP. As per the authors' knowledge, there are no studies conducted in Pakistan to examine the discussed relationships (C. Li, Murad, Javed, Firdousi, & Ashraf, 2021). Furthermore, the study emphasizes its significance within the Pakistani manufacturing sector, which is currently facing intense global competition and must identify and leverage all available opportunities to improve organizational performance (Ashraf, Li, Wattoo, Murad, & Mahmood, 2024).

2. Theoretical Evidence & Literature Review 2.1. Intellectual Capital

Since the advent of the new economy, intellectual capital has risen to prominence as a hot issue (Mention, 2012). The new economy, sometimes termed the information economy, has supposedly moved its focus to the intangibles, as stated in (Pulic, 2004; Teece, 1998). Intangibles resources that companies have and the way they are handled. In support of this view, Callon, Caliskan, & MacKenzie (2025) argue that in the modern economy, a company's most valuable asset is its people, not its physical space or equipment. Intangible assets are more beneficial than physical goods, which

is why intellectual capital is prized so highly (Taie, Ismail, & Sayed, 2025). A systematic approach to intellectual capital is also required if these firms are to maintain their competitiveness, as indicated in (Al-Zoubi, Masa'deh, & Twaissi, 2025). IC has evolved into a much different idea from its original conception. The gap between market value and book value is defined as IC (Ahmad, 2025). The definition "value can be achieved by knowledge through conversion" was later used to describe IC in (Dumah & Gaywala, 2025; Luthy, 1998). According to IC is the capacity to generate value despite ongoing change (Mouritsen, 1998). On top of that, IC was defined as the whole of all knowledge utilized in company operations to obtain a competitive advantage by (Rahimli, 2012). According to (Mahdi, Almsafir, & Yao, 2011) companies get better performance and a sustainable competitive advantage due to their intellectual capital, which consists of resources and competencies. These resources possess distinct characteristics, are unparalleled, hold significant value, and cannot be replaced (Bontis, Janošević, & Dženopoljac, 2015).

Furthermore, various models for calculating intellectual capital can be found in the literature. There are four parts to IC, as stated in (Bukhari, Shoaib, & 2021)people, customers, processes. innovations. Individual competency, internal structure, and external structure are the three primary components of IC, according to (Y. Zhang, Li, & Yao, 2025). The idea that human, structural, and relational capital are all interconnected forms of intellectual capital that must be present for organizations to succeed is backed up by the fact that they are all necessary for the achievement of organizational goals (Ngah & Ibrahim, 2011). It is clear, however, that structural capital (organizational values), human capital (HR), and relational capital (relationships) make up the three mainstays of the widely accepted IC paradigm (Bontis et al., 2015; Bukhari et al., 2021; Y. Zhang et al., 2025). Moreover, as mentioned, these three IC dimensions are interdependent and, as a result, significantly impact the value position and performance of an organization. (Asiaei & Jusoh, 2015). In this research, we will follow the study of (Kamukama, 2013) and employ the IC aspects of structural capital, relational capital, and human capital. Moreover, the performance of organizations is regarded as a significant concern for all entities, whether profitoriented or non-profit (González, 2025).

2.1.1. Human Capital

The most important resource that companies depend on, because it helps them come up with new ideas when the environment changes, is human capital. Human capital is also thought to be very important because it affects how well organizations do their jobs (Rony et al., 2024). Human capital encompasses the

attitudes, values, and habits of individuals within the organization, as well as the leadership that inspires them to realize their potential (Dinu, 2025). It's necessary to note that one organization's human capital differs from another organization's human capital, rendering it unique, rare, and irreplaceable (Shara & Narsa, 2025). Moreover, Revellino and Mouritsen (2024) stated that the significance of human capital resides in its capacity to enhance the efficacy and efficiency of organizations, thereby securing a competitive advantage.

Consequently, human capital is regarded as the paramount component of intellectual capital, as the firm's existence is contingent upon it (Buenechea-Elberdin, Sáenz, & Kianto, 2024). Human Capital (HC) refers to the sum of knowledge, skills, attitude, behavior, confidence, wisdom, commitment, competence, and experiences of manpower in an organization (Bontis et al., 2015; Bukhari et al., 2021; Y. Zhang et al., 2025). Additionally, (Buenechea-Elberdin et al., 2024) and (Revellino & Mouritsen, 2024) indicated that human capital is not entirely governed by the firm, setting it apart from other resources within the organization. Consequently, (He & Chen, 2024) recommended that organizations should consistently invest in their human capital to enhance their competitive advantage (Hongbo et al., 2021).

2.1.2. Structural Capital

Structural capital (SC) refers to the methods and structures of an organization that eventually affect its ability to innovate, making it an essential resource for the organization (Ahmed et al., 2024). According to (Ali, Zin, & bin Ismail, 2024). Additionally, (Nurseha, Afif, & Anwar, 2024) indicated that structural capital is employed to preserve the human capital of companies. Structural capital serves as a supportive framework for human capital, creating the essential conditions for individuals to apply their knowledge and skills (Shin & Shin, 2025). Consequently, (Behera & Mishra, 2024) defined structural capital as the knowledge generated and possessed by an organization. Structural capital is held by the company, unlike human capital. This means that it can be traded, copied, and shared within the company (Barak & Sharma, 2024).

2.1.3. Relational Capital

The concept of relational capital centers on linking internal intellectual resources with external stakeholders, hence impacting an organization's capacity to generate value (Ali et al., 2024). Relational capital (RC) is described as the derived value from an organization's stakeholder (Mohammad Shafiee, Warkentin, & Motamed, 2024). X. Zhang et al. (2024) proposed that relational capital is good for both the

company and its people because they all own it. Additionally, (Karagiorgos, Stavropoulos, Karagiorgou, Zaharenia, & Katsifas, 2024) stated that relational capital is vital for realizing the wealth-generating potential of human and structural capital. Consequently, (Asutay & Ubaidillah, 2024) indicated that the establishment and preservation of relational capital is necessary for the success of organizations (Jidda Jidda, Zhen, Ashraf, Nasir, & Amoako, 2025).

2.2. Knowledge Sharing

Organizations function within an environment marked by change, uncertainty, and instability, resulting in the emergence of many issues (Magdy & Elmakkawy, 2024). Furthermore, globalization has given rise to numerous trends that necessitate organizations to swiftly and effortlessly adjust in order to endure (J. Zhang, Jehangir, Yang, Tahir, & Tabasum, 2025). Since this age is called the "intellectual age," knowledge, which is both intellectual and intangible capital, is seen as a crucial asset for businesses (Safitri, 2024). This is because information helps a company improve its fundamental skills and gives it the tools it needs to bring new ideas and compete (C. Li et al., 2020). Consequently, entities aspiring to endure in a dynamic and competitive landscape must prioritize the notion of knowledge. This is corroborated by (Cabrera & Cabrera, 2002; S. Wang & Noe, 2010; Zheng, 2017), which said that the generation of information, its dissemination across organizational units, and its integration into new technologies and products are essential for organizational competitiveness. Furthermore, Ma, & Wang, (2008) asserted that the efficacy of organizations is significantly upon knowledge and knowledae contingent management. Consequently, the significance of information for organizations is markedly evident in the existing literature that facilitates an organization in accomplishing its goals, mission, and vision, thus augmenting its value (Bratianu, 2023) . There are two kinds of knowledge: explicit and implicit (Ellis, 2017). Explicit knowledge can be easily put into words, while implicit knowledge is knowledge that is hard to share with others since it is very personal (Dienes & Perner, 1999). Knowledge management refers to the processes of acquiring, utilizing, and disseminating knowledge through many methods, systems, and practices inside an organization (Igbinovia & Ikenwe, 2017). KNS is a part of knowledge management and is the most essential thing people do with knowledge that has a direct linkage with knowledge integration, knowledge invention and knowledge behaviors (Cao & Xiang, 2012). KNS is when people choose to let others see their knowledge and experiences. C. Li et al. (2020) called it "Process of explicit and implicit flow of knowledge among individuals or shared in groups, organizations and departments". KNS occurs between two individuals, one who owns

knowledge and the other who gains it (Boisot, 2013). This process includes the dissemination of information, ideas, experiences, and suggestions pertinent to an organization (Yang & Wu, 2008). Organizations recognize KNS as a significant concern for various reasons, including the escalating relevance of knowledge value and the rising acknowledgment that tacit knowledge surpasses explicit information in value. Also, (C. Li et al., 2020) said that sharing knowledge can help solve tough problems because many organizations have a lot of information but not a lot of resources (C. Li, Ashraf, Amin, & Safdar, 2023).

2.3. Organizational Performance

There are a lot of different definitions of organizational performance in the literature. According to (C. Li et al., 2020) performance is the ability to produce results and activities that are acceptable. Moreover, (C. Li et al., 2020) characterized organizational performance as an assessment of an organization's efficacy in attaining its objectives. There are many different ways to measure how well an organization is doing (C. Li et al., 2020). However, accomplishing this task is challenging, as relying exclusively on financial metrics to assess organizational success is inadequate; non-financial metrics must also be employed. Evaluating organizational success on five dimensions: operating cost, innovation, customer happiness, the pace of new product development, and customer retention (Restrepo-Morales, Valencia-Cárdenas, & López-Cadavid, 2024).

Conversely, (Saeed, Mohammed, Kumari, & Pandey, 2025) suggests four metrics for assessing organizational performance: revenue growth, return on assets (ROI), staff productivity and return on equity (ROE). According to (Kaur, Reddy, Reddy, & Hanafiah, 2025), operational effectiveness is often assessed through five dimensions. The reason these non-financial measurements are so popular is that they help turn a company's objectives into a tool that affects performance which could lead to better financial results (Yousaf, Kim, & Hyun, 2025). Furthermore, financial success is also described by (Agbejule, 2011) "the degree to which the organization performs with respect to profitability, total sales growth and return of investment (ROI)". Furthermore, (Carton & Hofer, 2010) characterized the organization's economic objective as an achievement with regard to financial performance (Tian et al., 2025).

Nadeak (2011) said that ROE, profit margin, ROA, value per employee, ROI, and earning per share are some of the most common ways to analyze financial success. Bukhari et al. (2021) stated that ROE and ROA are the most common ways to measure a company's financial performance. It is important to remember that looking only at financial performance as

a way to judge how well a company is doing is not good enough to improve economic performance. (Gruian, 2011) said that operational performance is what makes financial performance possible. Consequently, firms must implement a performance evaluation system that transcends the mere assessment of financial performance (Chatterji & Levine, 2006).

2.4. Hypothesis Development and Literature Evidence

2.4.1. Intellectual Capital and Organizational Performance

Several studies have been conducted regarding the linkage of IC and OP. Recently Rong, Sial, Álvarez-Otero, and Jo (2025) conducted a study, using a sample size of 599 commercial banks, investigated the value creation process through IC, and they reported a positive link between all IC components and organizational value-added performance. Another study conducted by (Laurentius, 2025) in recent times, it has been found that in terms of profitability and performance, there is a significant positive linkage between IC and organizational financial performance. Interestingly, Firer and Stainbank (2003) found a significant negative impact of human capital on firm's performance (Murad, Cai, Javed, Firdousi, & Ashraf, 2019). Furthermore, financial performance is the most common way to measure how well an organization is doing because the benefits of doing well frequently show up in the firm's financial outcomes (Feyisetan, Alkaraan, & Le, 2025). However, (Kamath, 2008) found no relationship between OP and IC. Kujansivu and Lönngvist (2009) explored the relationship between IC and OP concerning productivity and profitability and found positive relationship concerning productivity and no relationship concerning profitability. Thus, we pose our first hypothesis:

H1: Intellectual capital has a significant relationship with organizational performance

2.4.2. Intellectual Capital and Knowledge Sharing

Knowledge sharing seems to have a connection with intellectual capital in terms of gaining competitive advantage (Ghlichlee, Bayat, & Hatami, 2025). Recently, Fan and Beh (2025) conducted a study and found that knowledge sharing motivates an individual towards organizational duties hence increase performance. Another study conducted by (Qader et al., 2022) found that knowledge management positivity effect the organizational and entrepreneurial performance. Using a sample of 490 respondents, investigated the impact of KNS on OP and also the mediating role of innovation, they found that KNS has a positive relationship with OP and that innovation enhances performance. Thus we pose our second hypothesis;

H2: Intellectual capital has a significant positive relationship with knowledge sharing

2.4.3. Knowledge Sharing, Intellectual Capital, and Organizational Performance

Loong, Fabeil, and Yuan (2022) investigated the tacit and KNS on OP using the data of 145 manufacturing companies and found a positive influence of KNS on OP. Mokhchy et al. (2025) investigated the linkage of leadership styles, KNS as mediator, and organizational culture on OP and found a significant influence of KNS on OP. Another recent study conducted by (Lim, Ooi, Lee, Tan, & Sohal, 2025) examined the dynamic linkage organizational performance, KNS, and organizational innovation; their findings stated that KNS has gained much attention towards strategic business performance. Furthermore, in another recent study conducted by (Kaushal & Nyoni, 2025) It is noted that KNS has a significantly positive relationship with OP. KNS is not easy because employees of a company produce and store knowledge (Nakano, Muniz Jr, & Dias Batista Jr, 2013), and it takes a willingness to work together. Sharing incorrect Information can lead to disasters, which is bad for businesses (Casimir, Lee, & Loon, 2012). Thus, we pose our third and fourth hypotheses.

H3: Knowledge sharing significantly impacts organizational performance.

H4: Knowledge Sharing connects Intellectual Capital with Organization Performance as a mediator.

3. Research Framework and Methodology

This study investigates a dynamic linkage of IC and OP, and also examines their relationship with the mediation effect of KNS on them. The proposed research framework builds on the interactional model of IC and its impact on OP and the mediation role of KNS. Fig 1 below represents the model framework of the

study. Smart PLS SEM is used to analyze the data and model fit. The direct and indirect effects are reported to concretize the study.

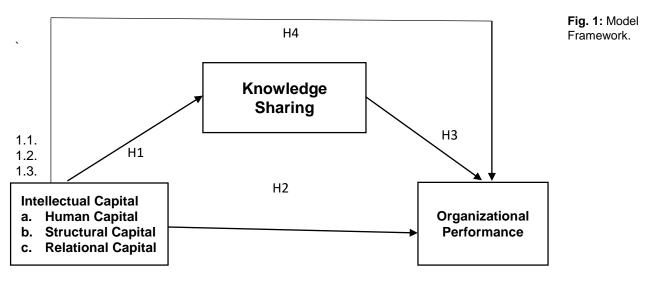
3.1. Research Design, Instrument, and Data Collection

This study used a quantitative approach, using the data of 364 respondents from different textiles companies all over Pakistan; these respondents are from middle and top management of the textile sector of Pakistan. A qualitative questionnaire was structured. The items for each variable are defined by a statement rated on 5 5-point Likert scale (1= Strongly Agree to 5 = Strongly Disagree). The sample was driven with respect to age, organizational size, and professional experience. Questionnaires are adapted, and this study also examines the validity and authenticity of scales.

3.2. Data Analysis and Methodology

This research utilized the five-point Likert scale for answer evaluation. This study employed this scale to assess and analyze the responses of participants, who were instructed to complete the questionnaires based on their experiences, knowledge, and preferences, thereby selecting the most appropriate option from the five provided choices. There were five categories, ranging from strongly disagreeing to strongly agreeing. We got 391 samples, and we used 364 of them for more statistical analysis because they were valid. The 8-item scale is used to assess IC through its components, the 7-item scale was used to evaluate KNS, and the 8-item scale was used to determine the OP. The questionnaire was derived from the studies conducted by (Rahimli, 2012; J. Zhang et al., 2025).

The five-item Likert scale questionnaire was developed from the research undertaken by. (Stern & Dietz, 2010) to assess OP.



3.3. Model Measurement

This study analyzes the validity and reliability of the measurement model to assess its fitness, which is the most crucial aspect of the research. As Table 1 shows, to verify construct dependability, Cronbach's alpha (CA) and composite reliability (CR) were utilized. The values of composite reliability for IC, OP, and KNS in Table 1 are (0.969, 0.947, 0.958), and the values of Cronbach's alpha for IC, OP, and KNS are (0.967, 0.894, 0.934). Furthermore, the CA and CR values for all variable constructions above the established threshold of 0.70, as determined by prior researchers (Henseler, 2017). Additionally, the AVE was assessed to evaluate validity, yielding a range of (0.56-0.83), which is deemed acceptable according to the literature, indicating that AVE values should exceed 0.5. Consequently, this study yielded positive findings on CA and CR, which said they should be. Figure 2 represents the graphical representation of the Smart PLS-SEM model.

Note: VIF <5 is commonly acceptable, close to 3 is considered ideal, and VIF <10 is the traditional cutoff.

The factor loading findings show that each item in the model does a good job of representing its construct. Intellectual Capital (IC) has very high loadings, from 0.812 to 0.974, which means that each item strongly represents the construct. Knowledge Sharing (KNS) also has significant loadings between 0.813 and 0.946, which shows that its indications are very consistent and reliable. Organizational Performance (OP) similarly has substantial factor loadings, with most components falling between 0.849 and 0.944. Even though several components (OP5, OP7, and OP8) have lower loadings

(0.721–0.759), they nonetheless satisfy the allowed level and add to the build in a meaningful way. The measurement model shows great convergent validity overall, which means that the items do a good job of capturing and explaining the latent variables they were meant to measure (Bontis et al., 2015). All of the outer loadings for the items are over the acceptable cutoff of 0.70, ranging from 0.721 to 0.974. This shows that the indicators are reliable. The same goes for all of the VIF values, which are between 2.243 and 8.632, which is below the threshold of 10. This shows that multicollinearity is not a big issue (Bukhari et al., 2021). VIF < 5 is commonly accepted as a cutoff in PLS-SEM. (Hair & Alamer, 2022).

The square root of AVE for Organizational Performance (0.741) was lower than its correlations with Intellectual Capital (0.842) and equal to its correlation with Knowledge Sharing (0.790). However, Intellectual Capital and Knowledge Sharing did meet the threshold of discriminant validity. AVE square root for IC (0.802) was also lower than its connection with OP (0.842). These findings indicate a strong correlation between IC, KNS, and OP, which raises questions about their discriminant validity.

3.4. Hypothesis Testing and Path Coefficients

The study found that IC has a very substantial direct positive effect on KNS (β = 0.966). This indicates that companies that have more intellectual resources, such as skilled employees, knowledge, and expertise, are much more likely to share information in valuable ways. IC has a high direct positive effect on OP again (β

Table 1: Composite Reliability and Validity

| | Cronbach's alpha | Composite reliability (rho a) | Composite reliability (rho c) | Average variance extracted (AVE) |
|-----|------------------|-------------------------------|-------------------------------|----------------------------------|
| IC | 0.967 | 0.969 | 0.972 | 0.814 |
| KNS | 0.955 | 0.958 | 0.964 | 0.791 |
| OP | 0.940 | 0.947 | 0.951 | 0.708 |

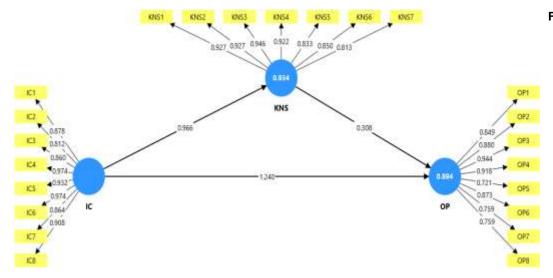


Fig 2: Smart PLS Model.

Table 2: Outer loadings and variance inflation factor VIF

| Table 2: Outer loadings and variance initiation factor vir | | | | |
|--|-------|-------|-------|-------|
| Items | IC | KNS | OP | VIF |
| IC1 | 0.878 | | | 2.409 |
| IC2 | 0.812 | | | 2.502 |
| IC3 | 0.860 | | | 3.29 |
| IC4 | 0.974 | | | 3.8 |
| IC5 | 0.932 | | | 4.217 |
| IC6 | 0.974 | | | 4.324 |
| IC7 | 0.864 | | | 4.666 |
| IC8 | 0.908 | | | 5.874 |
| KNS1 | | 0.927 | | 6.089 |
| KNS2 | | 0.927 | | 6.341 |
| KNS3 | | 0.946 | | 7.274 |
| KNS4 | | 0.922 | | 8.623 |
| KNS5 | | 0.833 | | 8.632 |
| KNS6 | | 0.850 | | 4.123 |
| KNS7 | | 0.813 | | 4.332 |
| OP1 | | | 0.849 | 2.951 |
| OP2 | | | 0.880 | 3.229 |
| OP3 | | | 0.944 | 3.423 |
| OP4 | | | 0.918 | 3.612 |
| OP5 | | | 0.721 | 3.834 |
| OP6 | | | 0.873 | 4.125 |
| OP7 | | | 0.759 | 4.343 |
| OP8 | | | 0.759 | 2.243 |

Table 3: Fornell-Larcker criterion

| | IC | KNS | OP |
|-----|-------|-------|-------|
| IC | 0.802 | | |
| KNS | 0.766 | 0.790 | |
| OP | 0.842 | 0.790 | 0.741 |

Table 4: Total Direct and Indirect Effects

| | Direct | Indirect | Total |
|----------------------------------|--------|----------|--------|
| | Effect | Effect | Effect |
| IC → KNS | 0.966 | _ | 0.966 |
| $IC \rightarrow KNS \rightarrow$ | 0.942 | 0.298 | 1.240 |
| OP | | | |
| $KNS \to OP$ | 0.308 | _ | 0.308 |

=0.942). IC Also has an indirect effect on OP through KNS (β = 0.298), which is even more relevant. So, the total influence of IC on OP is considerable (β = 1.240), which shows that IC is the main driver in this model. IC not only directly promotes performance but also fosters an environment conducive to KNS activities that further elevate performance. KNS itself has a small beneficial influence on OP (β = 0.308). This indicates that although KNS methods enhance performance, their effect is less significant than that of IC. Table 5 represents the structural model assessment, which provides evidence in support of the proposed hypotheses. Finally, the indirect effect of IC on OP through KNS was also found to be significant (β = 0.298, ρ = 0.003), indicating that

knowledge sharing acts as a partial mediator in this relationship. This implies that while IC directly improves performance, part of its impact is transmitted through enhanced knowledge-sharing processes. Overall, all four hypotheses were supported, thereby validating the conceptual model. The findings reinforce the notion that intellectual capital not only contributes directly to organizational outcomes but also fosters knowledge-sharing mechanisms that further enhance performance.

4. DISCUSSION, LIMITATIONS, AND FUTURE RECOMMENDATION

4.1. Discussion

The findings of this study robustly substantiate the proposed correlations among intellectual capital, knowledge sharing, and organizational performance within the Pakistani textiles sector. Overall, these findings add to the body of research by showing that intellectual capital is a key factor in the performance of businesses in emerging economies like Pakistan. They also build on earlier studies by showing that sharing information can directly improve performance and act as a critical mediator. This suggests that companies can only get the most out of their intellectual resources when they are shared and used properly.

Furthermore, the measurement model assessment showed that all constructs were very reliable and valid. The values for Cronbach's alpha, composite reliability, and average variance extracted (AVE) were all higher than the suggested levels, which showed that both internal consistency and convergent validity were present. The outside loadings of each item were also higher than the permissible cutoff (0.7) as instructed by (Hair & Alamer, 2022), which means that the indicators strongly represented the latent constructs they were based on. The Fornell-Larcker criterion also showed discriminant validity because the square root of each construct's AVE was higher than its correlations with other constructs. This guarantees that each construct was experimentally distinct and assessed separate facets of the model.

The initial hypothesis, asserting that intellectual capital positively affects information sharing, was validated, suggesting that organizations possessing robust human, structural, and relational resources are more inclined to foster an atmosphere conducive to knowledge exchange. This result is in line with other studies (Oliveira, Curado, Balle, & Kianto, 2020; Z. Wang, Wang, & Liang, 2014). That has looked at how intellectual resources affect how people work together.

Table 5: Hypothesis Testing

| Hypothesis | Path | β (Coefficient) | t-value | p-value | Result |
|------------|-------------------------------|-----------------|---------|---------|--------------|
| H1 | $IC \rightarrow KNS$ | 0.966 | 25.12 | 0 | Supported*** |
| H2 | $IC \rightarrow OP$ | 0.942 | 20.45 | 0 | Supported*** |
| H3 | $KNS \to OP$ | 0.308 | 3.52 | 0.001 | Supported** |
| H4 | $IC \rightarrow OP$ (via KNS) | 0.298 | 3.01 | 0.003 | Supported** |

The second hypothesis, positing a positive correlation between intellectual capital and organizational performance, was likewise validated. This finding emphasizes that entities possessing well-developed intellectual assets get a considerable advantage in efficiency, innovation, and competitive results, which are in line with previous studies (Asiaei & Jusoh, 2015; Bontis et al., 2015; Bukhari et al., 2021).

Furthermore, the third hypothesis asserted that knowledge sharing positively influences organizational performance, which was also corroborated. This research underscores the significance of collaborative and knowledge sharing in improving operational efficiency, decision-making, and overall productivity. These findings are in line with (Casimir et al., 2012; Lim et al., 2025; Nakano et al., 2013). Lastly, the fourth hypothesis, which looked at how information sharing can affect the connection between intellectual capital and organizational performance, was confirmed. The findings indicate that intellectual capital enhances performance immediately, with its effects being amplified by effective knowledge-sharing procedures. These findings are in line with (Mokhchy et al., 2025; Revellino & Mouritsen, 2024). This dual road underscores the imperative of cultivating intellectual resources while also facilitating their dissemination within the company.

4.2. Limitations

This study offers significant insights into the linkage intellectual capital, knowledge sharing, organizational performance in the Pakistani manufacturing sector; yet, certain limitations present opportunities for further research. First, the data were collected cross-sectionally, limiting the capacity to draw causal inferences; subsequent studies might utilize reflect longitudinal designs to the characteristics of intellectual capital and knowledgesharing behaviors over time. Second, our research concentrated solely on manufacturing enterprises in Pakistan, which may limit the generalizability of our findings; comparative studies across diverse industries or nations could provide more comprehensive insights and underscore cultural or contextual disparities. Third, although this study investigated knowledge sharing as a mediator, alternative processes such as capability, organizational learning, and innovation may elucidate the intellectual capital performance relationship and warrant examination in further models.

4.3. Future Implications

The findings of this study have significant implications for both scholars and managers. The results underscore the role of Intellectual capital, information sharing, and organizational success in developing

economies like Pakistan. Future research could enhance these insights by investigating supplementary mediators or moderators, such as leadership style, technological adoption, or organizational culture, to attain a more profound comprehension of performance determinants. Cross-industry comparisons may enhance the results. Training programs, collaboration platforms, and new ways of doing things can all help businesses be more competitive in both local and global markets. Additionally, policymakers can utilize these insights to formulate policies that facilitate knowledge-intensive growth and capacity development within the business. In general, the study gives a guide for future organizational initiatives that will lead to long-term growth and better performance.

5. Conclusion

This study looked at how intellectual capital affects knowledge exchange and performance in the Pakistani textile industry. The results show that intellectual capital is an essential intangible asset that not only improves direct organizational outcomes but also encourages people to share knowledge. A study found a significant positive relationship between intellectual capital and knowledge sharing. This means that when companies make good use of their human, structural, and relational capital, their employees are happy to share what they know. Intellectual capital was also found to directly improve the performance of organizations, which shows how important it is for businesses to be competitive in a quickly changing business world. Moreover, knowledge sharing itself became a significant factor in organizational performance, as well as collaboration and collective learning inside industrial companies. Additionally, the mediation effect indicated that knowledge sharing to some extent carries the influence of intellectual capital on performance, emphasizing its intermediary function. These findings together corroborate the presented hypotheses and are consistent with previous studies, while also expanding the evidence to the context of Pakistan's manufacturing industry. The study finds that Pakistani manufacturing companies can make long-term gains in their performance by investing in intellectual capital and encouraging behaviors that share information. Organizations can improve their potential to be innovative, flexible, and competitive both at home and abroad by seeing knowledge as a strategic resource.

Acknowledgment

We want to thank the editor, the editorial board of the journal, and the anonymous reviewers for their thoughtful comments, helpful recommendations, and insightful feedback, which substantially improved our work quality.

Author Contributions

Dr. Basit Raza helped develop the ideas and also worked on the writing, software implementation, data analysis, and methodology. Zainab Nawaz and Kelvin Agyemang wrote the first draft and were in charge of collecting and checking the data.

Disclosure of Potential Conflict

The authors affirm that they have no conflicts of interest about the study, authorship, and publishing of this work.

Statement about Data Availability

This study did not involve the creation of datasets or analysis; therefore, the sharing of data does not apply to this research.

REFERENCES

- Agbejule, A. (2011). Organizational culture and performance: the role of management accounting system. *Journal of Applied Accounting Research*, 12(1), 74-89.
- Ahmad, F. (2025). The relationship between intellectual capital, financial stability, firm performance, market value, and bankruptcy risk: Empirical evidence from Pakistan. *Journal of the Knowledge Economy*, *16*(1), 1347-1395.
- Ahmed, F., Rahman, M. U., Rehman, H. M., Imran, M., Dunay, A., & Hossain, M. B. (2024). Corporate capital structure effects on corporate performance pursuing a strategy of innovation in manufacturing companies. *Heliyon*, *10*(3).
- Al-Zoubi, M. O., Masa'deh, R. e., & Twaissi, N. M. (2025). Exploring the relationship among structured-on-the job training, mentoring, job rotation, work environment factors and tacit knowledge transfer. VINE Journal of Information and Knowledge Management Systems, 55(1), 240-267.
- Ali, Q. B., Zin, M. L. M., & bin Ismail, S. A. (2024). The role of human capital, structural capital, and relational capital in higher education institutions performance. *Journal of Management Info*, 11(2), 185-196.
- Aribi, A., Kociatkiewicz, J., & Micheaux, A. (2025). Intellectual capital profit chain: Linking human resource management practice systems to customer orientation. *Human Systems Management*, *44*(3), 448-459.
- Ashraf, S. F., Li, C., Dodor, A., & Murad, M. (2018). Entrepreneurial motivation is the key to success for entrepreneur business. *International Journal of Management Sciences and Business Research*, 7(3), 43-59.
- Ashraf, S. F., Li, C., Wattoo, M. U., Murad, M., & Mahmood, B. (2024). Green horizons: Unleashing green innovation through green business strategies and competencies. *Business Strategy and the Environment, 33*(5), 4233-4251.
- Asiaei, K., & Jusoh, R. (2015). A multidimensional view of intellectual capital: the impact on organizational performance. *Management decision*, *53*(3), 668-697.
- Asutay, M., & Ubaidillah. (2024). Examining the impact of intellectual capital performance on financial performance

- in islamic banks. Journal of the Knowledge Economy, 15(1), 1231-1263.
- Barak, M., & Sharma, R. K. (2024). Does intellectual capital impact the financial performance of Indian public sector banks? An empirical analysis using GMM. *Humanities and Social Sciences Communications*, 11(1), 1-11.
- Behera, M., & Mishra, R. K. (2024). Assessment of the impact of intellectual capital development on firm development: an ISM approach. *Global Knowledge, Memory and Communication*.
- Boisot, M. (2013). The creation and sharing of knowledge. Knowledge, organization, and management: Building on the work of Max Boisot, 109.
- Bontis, N., Janošević, S., & Dženopoljac, V. (2015). Intellectual capital in Serbia's hotel industry. *International Journal of Contemporary Hospitality Management*, 27(6), 1365-1384.
- Bratianu, C. (2023). Knowledge dynamics: Exploring its meanings and interpretations. *Management Dynamics in the Knowledge Economy*, *11*(2), 100-111.
- Buenechea-Elberdin, M., Sáenz, J., & Kianto, A. (2024). Intellectual capital-driven innovation: the influence of servitization degree. *R&D Management*, *54*(4), 818-832.
- Bukhari, S. M. B. R., Shoaib, M. A., & Nasir, A. (2021). Sustainable Growth and Profitability in the Pakistani Insurance Sector: An Intellectual Capital Perspective. *Global Economics Review*, *6*(2), 131-148.
- Cabrera, A., & Cabrera, E. F. (2002). Knowledge-sharing dilemmas. *Organization studies*, 23(5), 687-710.
- Cao, Y., & Xiang, Y. (2012). The impact of knowledge governance on knowledge sharing. *Management decision*, 50(4), 591-610.
- Carton, R. B., & Hofer, C. W. (2010). Organizational financial performance: Identifying and testing multiple dimensions. *Academy of Entrepreneurship journal*, *16*(2), 1.
- Casimir, G., Lee, K., & Loon, M. (2012). Knowledge sharing: influences of trust, commitment and cost. *Journal of Knowledge Management*, *16*(5), 740-753.
- Chand, M., & Tung, R. L. (2014). The aging of the world's population and its effects on global business. Academy of Management Perspectives, 28(4), 409-429.
- Chatterji, A., & Levine, D. (2006). Breaking down the wall of codes: Evaluating non-financial performance measurement. *California management review*, 48(2), 29-51.
- Cosa, M., Pedro, E., & Urban, B. (2024). How to assess the intellectual capital of firms in uncertain times: a systematic literature review and a proposed model for practical adoption. *Journal of Intellectual Capital*, 25(7), 1-22.
- Dienes, Z., & Perner, J. (1999). A theory of implicit and explicit knowledge. *Behavioral and brain sciences*, 22(5), 735-808.
- Dinu, E. (2025). Bridging intellectual capital management, technological orientation, innovativeness and innovative performance in KIBS: a new perspective. *Journal of Intellectual Capital*, 26(2), 526-561.
- Dumah, M., & Gaywala, D. (2025). Determinants of Intellectual Capital on Bank Profitability. *African Journal of Applied Research*, 11(3), 180-197.
- Ellis, N. C. (2017). Implicit and explicit knowledge about language. In *Language awareness and multilingualism* (pp. 113-124): Springer.
- Fan, Z., & Beh, L.-S. (2025). Individual motivation and knowledge sharing: the hindering effect of perceived

costs in higher education. Studies in Higher Education, 50(2), 419-437.

- Feyisetan, O. O., Alkaraan, F., & Le, C. (2025). The influence of ESG on mergers and acquisitions decisions and organisational performance in UK firms: comparison between financial and non-financial sectors. *Journal of Applied Accounting Research*, 26(3), 679-707.
- Firer, S., & Stainbank, L. (2003). Testing the relationship between intellectual capital and a company's performance: Evidence from South Africa. *Meditari Accountancy Research*, 11(1), 25-44. doi:10.1108/1022 2529200300003
- Ghlichlee, B., Bayat, F., & Hatami, A. (2025). Knowledgeoriented leadership and business performance: the mediating role of intellectual capital and sustainable competitive advantage in the knowledge-intensive service industry. *Journal of Intellectual Capital*, 26(1), 152-173.
- González, A. L. (2025). Non-Profit Organization and Proactive Behavior: A Critical Analysis of the Current Reality. In Empowering Employee Proactive Behavior: Concepts and Perspectives from Organization and Society (pp. 213-237): Springer.
- Gruian, C.-M. (2011). The influence of intellectual capital on romanian companies'financial performance. *Annales Universitatis Apulensis-Series Oeconomica*, 13(2).
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. Research Methods in Applied Linguistics, 1(3), 100027.
- He, X., & Chen, W. (2024). Digital transformation and environmental, social, and governance performance from a human capital perspective. *Sustainability*, *16*(11), 4737.
- Henseler, J. (2017). Bridging design and behavioral research with variance based structural equation modeling. *Journal of advertising*, *46*(1), 178-192.
- Hina, K., Khalique, M., Shaari, J. A. N., Mansor, S. A., Kashmeeri, S., & Yaacob, M. R. b. (2024). Nexus between green intellectual capital and the sustainability business performance of manufacturing SMEs in Malaysia. *Journal* of Intellectual Capital, 25(2-3), 233-252.
- Hongbo, L., Waqas, M., Tariq, H., Nana Abena, A. A., Akwasi, O. C., & Ashraf, S. F. (2021). Corrigendum: I Will Hurt You for This, When and How Subordinates Take Revenge From Abusive Supervisors: A Perspective of Displaced Revenge. *Frontiers in Psychology*, *12*, 672074.
- Igbinovia, M. O., & Ikenwe, I. J. (2017). Knowledge management: processes and systems. *Information Impact: Journal of Information and Knowledge Management*, 8(3), 26-38.
- Jidda Jidda, D., Zhen, L., Ashraf, S. F., Nasir, A., & Amoako, T. (2025). Value of Enterprise Risk Management Integration and Supply Chain Performance: Mediating Role of Firm's Resilience Capability. SAGE Open, 15(1), 21582440241305618.
- Kamath, B. (2008). Intellectual Capital and Corporate Performance in Indian Pharmaceutical Industry. *Journal* of Intellectual Capital, 9, 684-704. doi:10.1108/1469 1930810913221
- Kamukama, N. (2013). Intellectual capital: company's invisible source of competitive advantage. *Competitiveness Review: An International Business Journal*, 23(3), 260-283.

Karagiorgos, A., Stavropoulos, A., Karagiorgou, D., Zaharenia, T., & Katsifas, D. (2024). Describing the role of intellectual capital in financial performance improvement: A mediating role of knowledge sharing.

- Kaur, H., Reddy, K. K., Reddy, M. K., & Hanafiah, M. M. (2025). Collaborative approaches to navigating complex challenges and adapting to a dynamically changing world. In *Integration of AI, Quantum Computing, and Semi*conductor Technology (pp. 209-234): IGI Global.
- Kaushal, S., & Nyoni, A. M. (2025). Why do rewards fail to motivate knowledge sharing behavior among employees? VINE Journal of Information and Knowledge Management Systems, 55(1), 34-55.
- Kazemi, A., Kazemi, Z., Heshmat, H., Nazarian-Jashnabadi, J., & Tomášková, H. (2024). Ranking factors affecting sustainable competitive advantage from the business intelligence perspective: Using content analysis and F-TOPSIS. Journal of soft computing and decision analytics, 2(1), 39-53.
- Khan, F. U., & Badulescu, D. (2025). Sustainability Pressures Unveiled: Navigating the Role of Organizational Sustainable Culture in Promoting Sustainability Performance. Sustainability, 17(3), 1322.
- Kujansivu, P., & Lönnqvist, A. (2009). Measuring the impacts of an IC development service: the case of the Pietari Business Campus. *Electronic Journal of Knowledge Management*, 7.
- Larabi, C. (2025). Linking intangible resources to predict firm performance through technology innovation and strategic flexibility: leveraging the resource-based view of the manufacturing firms. *Journal of Strategy and Management*.
- Laurentius, K. S. R. (2025). The Effect of Intellectual Capital Towards Team Performance Mediated by Human Asset Specificity and Supplier Knowledge Integration: A Study on The Indonesian Motorsport Teams.
- Li, C., Ashraf, S. F., Amin, S., & Safdar, M. N. (2023). Consequence of resistance to change on AI readiness: Mediating–moderating role of task-oriented leadership and high-performance work system in the hospitality sector. *SAGE Open, 13*(4), 21582440231217731.
- Li, C., Ashraf, S. F., Shahzad, F., Bashir, I., Murad, M., Syed, N., & Riaz, M. (2020). Influence of knowledge management practices on entrepreneurial and organizational performance: A mediated-moderation model. *Frontiers in Psychology*, 11, 577106.
- Li, C., Murad, M., Javed, H., Firdousi, S. F., & Ashraf, S. F. (2021). An empirical investigation on the relationship between individual traits and entrepreneurial business intentions: measuring a mediation effect of entrepreneurial self-efficacy through partial least squares structural equation modeling. *Journal of Global Entrepreneurship Research*, 11(1), 533-549.
- Li, Y., Li, J., & Zhai, Y. (2024). Intellectual capital and sustainability performance: the mediating role of digitalization. *Journal of Intellectual Capital*, 25(5/6), 867-890.
- Lim, A.-F., Ooi, K.-B., Lee, V.-H., Tan, G. W.-H., & Sohal, A. (2025). Examining the nexus: supply chain quality management, knowledge sharing, organizational innovation and strategic business performance. *Industrial Management & Data Systems*, 125(5), 1710-1731.
- Loong, A. H., Fabeil, N. F., & Yuan, P. Y. (2022). Knowledge sharing and organizational performance. *The inter-*

disciplinary approach in economy, social science and education, 33-40.

- Luthy, D. H. (1998). *Intellectual capital and its measurement.*Paper presented at the Proceedings of the Asian Pacific Interdisciplinary Research in Accounting Conference (APIRA), Osaka, Japan.
- Ma, Z., Qi, L., & Wang, K. (2008). Knowledge sharing in Chinese construction project teams and its affecting factors: an empirical study. *Chinese Management* Studies, 2(2), 97-108.
- Magdy, A., & Elmakkawy, M. H. (2024). From Turmoil to Triumph: does environmental uncertainty matter to organizational creativity and competitive advantage: the role of organizational agility. *International Journal of Hospitality & Tourism Administration*, 1-22.
- Mahdi, O. R., Almsafir, M. K., & Yao, L. (2011). The role of knowledge and knowledge management in sustaining competitive advantage within organizations: A review. *African Journal of Business Management*, 5(23), 9912.
- Mention, A.-L. (2012). Intellectual capital, innovation and performance: A systematic review of the literature. *Business and Economic Research*, 2(1), 1-37.
- Mohammad Shafiee, M., Warkentin, M., & Motamed, S. (2024). Do human capital and relational capital influence knowledge intensive firm competitiveness? The roles of export orientation and marketing knowledge capability. *Journal of Knowledge Management*, 28(1), 138-160.
- Mokhchy, J., Chen, G., Ahmad, S., Khan, Y. A., Zhang, J., & Ahmed, M. (2025). Dynamic impact of leadership style, knowledge-sharing, and organizational culture on organizational performance. *Current Psychology*, 44(6), 4097-4112.
- Morris, L. E. (2024). Development strategies for the knowledge era. In *Learning Organizations* (pp. 323-336): Productivity Press.
- Mouritsen, J. (1998). Driving growth: economic value added versus intellectual capital. *Management accounting research*, *9*(4), 461-482.
- Mulyono, H., & Rolando, B. (2025). Consumer boycott movements: Impact on brand reputation and business performance in the digital age. *Multidisciplinary Reviews*, 8(9), 2025291-2025291.
- Murad, M., Cai, L., Javed, H., Firdousi, S. F., & Ashraf, S. F. (2019). An empirical investigation on inculcating women entrepreneurial success factors using partial least squares-structural equation modeling. *Pacific Business Review International*, 12(3).
- Murthy, V., & Mouritsen, J. (2011). The performance of intellectual capital: Mobilising relationships between intellectual and financial capital in a bank. *Accounting, Auditing & Accountability Journal*, 24(5), 622-646.
- Nadeak, A. S. (2011). Pengaruh Return on Assets (ROA), Return on Equity (ROE), Return on Investment (ROI), Debt to Equity Ratio (DER), dan Book Value (BV) Per Share terhadap Harga Saham Properti di Bursa Efek Indonesia (BEI). Universitas Sumatera Utara,
- Nakano, D., Muniz Jr, J., & Dias Batista Jr, E. (2013). Engaging environments: tacit knowledge sharing on the shop floor. *Journal of Knowledge Management*, 17(2), 290-306.

Ngah, R., & Ibrahim, A. R. (2011). The Influence of intellectual capital on knowledge sharing: small and medium enterprises' perspective. *Communications of the IBIMA*.

- Nurseha, B. P., Afif, M. N., & Anwar, S. (2024). The effect of human capital efficiency, structural capital efficiency, relational capital efficiency, capital employed efficiency & rate of growth of intellectual capital on financial performance. The Accounting Journal of Binaniaga, 9(01), 51-64.
- Oliveira, M., Curado, C., Balle, A. R., & Kianto, A. (2020). Knowledge sharing, intellectual capital and organizational results in SMES: are they related? *Journal of Intellectual Capital*, 21(6), 893-911.
- Oltulular, S. (2025). Human Capital Dynamics Are the Key to Economic Growth: Source of Value of the Future. *Economies*, *13*(8), 235.
- Paunović, M., Milovanović, V., Štrbac, D., & Domazet, I. (2025). Intellectual capital as a driver of value creation in Serbian entrepreneurial firms. *International Journal of Manpower*, 46(1), 111-127.
- Pulic, A. (2004). Intellectual capital—does it create or destroy value? *Measuring business excellence*, 8(1), 62-68.
- Qader, A. A., Zhang, J., Ashraf, S. F., Syed, N., Omhand, K., & Nazir, M. (2022). Capabilities and Opportunities: Linking Knowledge Management Practices of Textile-Based SMEs on Sustainable Entrepreneurship and Organizational Performance in China. Sustainability, 14(4), 2219. Retrieved from https://www.mdpi.com/2071-1050/14/4/2219
- Rahim, Y., Chaudhry, A., Mahmood, B., & Batool, Z. (2025). Associations in intergenerational fertility behavior and preferences in punjab, Pakistan: two-generation approach. *Policy Research Journal*, *3*(1), 756-762.
- Rahimli, A. (2012). Knowledge management and competitive advantage. Paper presented at the Information and Knowledge Management.
- Restrepo-Morales, J. A., Valencia-Cárdenas, M., & López-Cadavid, D. A. (2024). Interplay of customer satisfaction, innovation, and product quality: Key determinants of company performance. *Journal of technology management & innovation*, 19(2), 28-42.
- Revellino, S., & Mouritsen, J. (2024). Intellectual capital, innovation and the bushy form of knowledge capitalisation. *Journal of Management and Governance*, 28(4), 957-984.
- Rong, C., Sial, M. S., Álvarez-Otero, S., & Jo, H. (2025). Assessing the Intellectual Capital of Value Creation Process of Commercial Banks in the European Union. *Journal of the Knowledge Economy*, 1-30.
- Rony, Z., Wijaya, I., Nababan, D., Julyanthry, J., Silalahi, M., Ganiem, L., . . . Saputra, N. (2024). Analyzing the impact of human resources competence and work motivation on employee performance: A statistical perspective. *Journal of Statistics Applications & Probability*, 13(2), 787-793.
- Saeed, M. M., Mohammed, S. S., Kumari, M., & Pandey, G. (2025). The impact of corporate environmental reporting on the financial performance of listed manufacturing firms in Ghana (Csr-24-2036). Corporate Social Responsibility and Environmental Management, 32(1), 1230-1244.
- Safitri, D. (2024). The Importance of Intangible Assets in Achieving a Company's Competitive Advantage. International Journal of Economics, Business, and Entrepreneurship, 7(2), 94-101.

Shahzad, M., Batool, Z., Anjum, F., Mahmood, B., & Chauhdhry, A. (2024). Knowledge Work and Discontent: A Comparative Analysis of Work Alienation by Age and Experience. *Journal of Social Sciences Review*, 4(4), 77-86

- Shannak, R., Masa'deh, R. e., Al-Zu'bi, Z., Obeidat, B., Alshurideh, M., & Altamony, H. (2012). A theoretical perspective on the relationship between knowledge management systems, customer knowledge management, and firm competitive advantage. *European Journal* of Social Sciences, 32(4), 520-532.
- Shara, Y., & Narsa, I. M. (2025). Intellectual capital readiness and the performance of village-owned enterprises in Indonesia: mediation through entrepreneurial knowledge. Revista Brasileira de Gestão de Negócios, 27(1), e20240064.
- Shin, C., & Shin, D. (2025). Leveraging structural empowerment and human capital for organizational innovation. *International Journal of Manpower*, 1-18.
- Stern, P., & Dietz, T. (2010). The Value Basis of Environmental Concern. *Journal of Social Issues*, *50*, 65-84. doi:10.1111/j.1540-4560.1994.tb02420.x
- Taie, E. S., Ismail, H. A., & Sayed, Z. M. (2025). The Relationship between Green Intellectual Capital and Organizational Environmental Performance. Helwan International Journal for Nursing Research and Practice, 4(10), 167-182.
- Teece, D. J. (1998). Capturing value from knowledge assets: The new economy, markets for know-how, and intangible assets. *California management review*, 40(3), 55-79.
- Tian, H., Ali, S., Iqbal, S., Akhtar, S., Ashraf, S. F., & Ali, S. (2025). Data-driven disruptive competitiveness: Exploring the role of big data analytics capability and entrepreneurial marketing in disruptive innovation. *Journal of Competitiveness*, *17*(1).
- Truong, B. T. T., Nguyen, P. V., & Vrontis, D. (2024). Enhancing firm performance through innovation: the roles of intellectual capital, government support, knowledge sharing and knowledge management success. *Journal of Intellectual Capital*, 25(1), 188-209.

- Truong, B. T. T., Nguyen, P. V., Vrontis, D., & Ahmed, Z. U. (2024). Unleashing corporate potential: the interplay of intellectual capital, knowledge management, and environmental compliance in enhancing innovation and performance. *Journal of Knowledge Management*, 28(4), 1054-1073.
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human resource management review*, 20(2), 115-131.
- Wang, Z., Wang, N., & Liang, H. (2014). Knowledge sharing, intellectual capital and firm performance. *Management decision*, *52*(2), 230-258.
- Xiong, D., Liu, H., Yang, M., & Duan, Y. (2025). Does corporate environmental responsibility make firms greener in innovation? The role of knowledge flows. *Journal of Knowledge Management*, 29(2), 393-414.
- Yang, H.-L., & Wu, T. C. (2008). Knowledge sharing in an organization. *Technological Forecasting and Social Change*, 75(8), 1128-1156.
- Yousaf, S., Kim, J. M., & Hyun, S. (2025). 'Recommend to a Friend'Metric: A Non-Financial Measure of Firm Performance and Employee Satisfaction. *Accounting & Finance*.
- Zhang, J., Jehangir, F. N., Yang, L., Tahir, M. A., & Tabasum, S. (2025). Competitive advantage and firm performance: The role of organizational culture, organizational innovation, and knowledge sharing. *Journal of the Knowledge Economy*, 16(1), 3081-3107.
- Zhang, X., Shen, W., Tang, W., Duffield, C. F., Hui, F. K. P., Zhang, L., & Lou, C. (2024). How to improve the effects of knowledge governance on individual learning across projects: From the perspective of relational capital. *International Journal of Project Management*, 42(1), 102562.
- Zhang, Y., Li, H., & Yao, Z. (2025). Intellectual capital, digital transformation and firm performance: evidence based on listed companies in the Chinese construction industry. Engineering, Construction and Architectural Management, 32(4), 2128-2159.
- Zheng, T. (2017). A literature review on knowledge sharing. *Open Journal of Social Sciences*, *5*(3), 51-58.