

The Role of Intellectual Capital and Knowledge Management in Enhancing FMCG Firm Performance

Aburizal Maharsyah*, Ignatius Trisna Adi, Sahwa Putri Utami, Syarif Hanoum, Thedosia
Yunita Durman

^{1 2 3 4 5} Department of Business Management, Faculty of Creative Design and Digital Business,
Institut Teknologi Sepuluh Nopember, Indonesia

Email: aburizalmaharsyah@gmail.com

Abstract

This study aims to analyze the role of Intellectual Capital (IC) and Knowledge Management (KM) in influencing Firm Performance (FP) in companies within the Fast-Moving Consumer Goods (FMCG) sector. A quantitative approach was employed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. Data were collected through questionnaires distributed to 104 respondents across various job levels. The results indicate that both IC and KM have a positive and significant impact on FP. Furthermore, KM was found to partially mediate the relationship between IC and FP, implying that a firm's success is not only determined by intellectual capital but also by its ability to manage and utilize knowledge effectively. This study contributes to the development of IC and KM literature by highlighting the mediating role of KM in enhancing firm performance, particularly in the FMCG sector. The findings provide practical insights for managers in designing and implementing knowledge-based strategies that integrate IC and KM to strengthen firm performance and build sustainable competitive advantage in dynamic markets. The study is limited by its sample size and focus on the FMCG sector. Future research may expand to other industries and employ longitudinal data to capture performance dynamics over time.

Article info

Article history:

Received 06 October 2025

Received in revised form 13 March 2026

Accepted 30 March 2026

Available online 31 March 2026

Keywords: Firm Performance, FMCG, Intellectual Capital, Knowledge Management, PLS-SEM

How to Cite: Maharsyah, A., Adi, I. T., Utami, S. P., Hanoum, S., & Durman, T. Y. (2026). The Role of Intellectual Capital and Knowledge Management in Enhancing FMCG Firm Performance. *Journal Ilmiah Manajemen dan Bisnis*, 12 (1), 138-155.

INTRODUCTION

The Fast-Moving Consumer Goods (FMCG) industry plays a crucial role in the global economy, offering products that are frequently consumed, widely accessible, and affordably priced. FMCG products include various items such as food, beverages, personal care, and

household essentials that are quickly used and regularly repurchased. Consumers typically purchase FMCG products with minimal deliberation, unlike durable goods that require a longer decision-making process (Karthik & Prasad, 2020). This industry faces numerous dynamic challenges, particularly due to its highly competitive and fast-changing nature, which is significantly influenced by consumer behavior. A study by Nwabekee et al. (2024) outlines several challenges faced by companies in the FMCG sector, including complex logistics, difficulties in redesigning products for recycling and waste reduction, limited initial investment funding, especially for smaller companies, and regulatory and market uncertainties. To thrive in such an environment, FMCG firms must be capable of navigating intense competition and rapid market dynamics.

To survive the growing market pressure, companies are required to formulate strategies that not only focus on operational efficiency and product quality but also leverage their internal potential. One critical internal aspect that often receives less attention is the management of intangible resources, which plays a vital role in creating and sustaining long-term competitive advantage. Previous research has shown that managing intangible assets, such as intellectual capital and organizational knowledge can significantly contribute to improved firm performance. A relevant approach in this context is leveraging Intellectual Capital (IC) and Knowledge Management (KM) as drivers of Firm Performance (FP). IC refers to non-physical resources such as employee competencies, internal systems, and valuable external relationships that support long-term corporate success. Meanwhile, Knowledge Management encompasses a series of processes that enable organizations to identify, share, and apply knowledge across departments. The effective management of IC and KM can become a key differentiator in achieving superior firm performance. Therefore, this study aims to evaluate the influence of IC and KM on FP within the FMCG sector.

Most studies that examine the relationship between Intellectual Capital (IC) and Knowledge Management (KM) with Firm Performance (FP) are primarily focused on the technology sector (Wang et al., 2016) and manufacturing sector (Truong et al., 2024a, 2024b), while research on the FMCG sector, especially in developing countries such as Indonesia, remains limited (Inkinen, 2016). However, FMCG has unique characteristics, such as high production volume, low profit margins, fast market dynamics, and dependence on process efficiency and innovation, setting it apart from other sectors. Furthermore, most prior studies were conducted in developed countries such as Australia (Clarke, Seng, & Whiting, 2011), South Korea (Xu & Liu, 2020), and Spain (Sánchez et al., 2015), making it potentially problematic to generalize their findings to the Indonesian FMCG context.

Based on the Resource-Based View (RBV) theory, Intellectual Capital and Knowledge Management are intangible assets that play a critical role in generating competitive advantage and enhancing firm performance. However, there is still a lack of studies that simultaneously examine the relationship among IC, KM, and FP, particularly exploring the mediating role of KM within the Indonesian FMCG context. Hence, this study aims to thoroughly examine the influence of Intellectual Capital on Firm Performance in the Indonesian FMCG industry, assess the contribution of Knowledge Management, and analyze the mediating role of KM in the relationship between IC and FP in Indonesia's FMCG industry. Accordingly, the following research questions are posed: (1) How does Intellectual Capital influence Firm Performance? (2) To what extent does Knowledge Management contribute to enhancing Firm Performance? (3) Does Knowledge Management mediate the relationship between Intellectual Capital and Firm Performance? This research offers a theoretical contribution by expanding the understanding of managing intangible assets in under-explored sectors and provides practical implications for FMCG companies in designing adaptive and sustainable knowledge-based strategies to improve efficiency, drive innovation, and strengthen competitiveness in the market.

The Resource-Based View (RBV) theory focuses on the internal resources possessed by an organization. According to RBV, a company's success is not solely determined by external environmental factors, but also by its unique resources and capabilities, both tangible and intangible. RBV emphasizes that these assets and capabilities play a crucial role in creating competitive advantage and enhancing organizational performance. These resources also influence how efficiently and effectively a firm operates. A company is more likely to succeed if it possesses resources that align closely with its business needs and strategic goals (Madhani, 2009).

On the other hand, the Knowledge-Based View (KBV) posits that knowledge is the most strategic asset within a firm. KBV provides important insights into how companies can leverage their intellectual wealth to attain and sustain competitive advantage. It explores the strengths and limitations of knowledge management and how organizational structures can be adapted to the types of knowledge being developed. This theory also explains the very existence of firms, as entities that can create, manage, and apply knowledge more efficiently than the open market. Problem-solving and knowledge creation lie at the heart of this perspective. If a firm aims to develop unique knowledge or capabilities, it must deliberately identify significant problems and seek solutions effectively. This knowledge development may occur through absorbing external knowledge or creating new solutions, either by innovating or improving products and services, or by enhancing the efficiency of production and delivery processes (Nickerson & Zenger, 2004).

According to Shujahat et al. (2020), the KBV framework is increasingly linked to Knowledge Management (KM) practices, where the success of KM implementation is a determining factor in transforming knowledge into actual competitive advantage. This suggests that simply possessing knowledge is insufficient; firms must establish internal mechanisms such as documentation systems, knowledge-sharing cultures, and organizational learning to manage knowledge sustainably. KBV views knowledge as a co-re strategic resource that, when effectively managed, enables firms to create value. Consequently, firms act as knowledge managers who continually develop and adapt their knowledge in line with changing needs and environments. One of the key challenges in achieving competitive advantage lies in the lack of attention to processes of knowledge development, retention, and transfer, even though knowledge has long been recognized as a critical strategic asset in business strategy. Therefore, firms must design and implement various activities or initiatives to fully capitalize on their organizational capabilities and derive value from their existing knowledge. In other words, companies need to adopt knowledge management practices. The primary objective of KM is to ensure organizational awareness of both individual and collective knowledge, and to manage that knowledge most efficiently and effectively (Alavi & Leidner, 2001; Donate & de Pablo, 2015).

The RBV and KBV frameworks play a significant role in contemporary business and management literature. Both offer unique perspectives on how firms acquire, sustain, and exploit competitive advantage. RBV traditionally prioritizes tangible resources such as financial capital, physical infrastructure, and human resources, while KBV delves into intangible assets, arguing that among all resources, knowledge is the most strategic and impactful (Arief et al., 2023). These two perspectives provide a valuable framework for understanding internal factors that drive firm performance, especially in the FMCG sector. In this context, RBV highlights the importance of intellectual capital as a strategic and inimitable resource, such as employee knowledge, organizational capabilities, and external relationships. Meanwhile, KBV posits that long-term competitive advantage hinges on how effectively knowledge is managed and how well it fosters innovative work behavior among employees. By integrating both RBV and KBV, this study seeks to explain how intellectual capital and knowledge management can create an innovative work environment, ultimately having a positive impact on FMCG firm performance (Arief et al., 2023).

Intellectual Capital

Intellectual Capital (IC) refers to non-physical assets that play a critical role in helping organizations achieve competitive advantage. In the literature, IC is typically classified into three main components: Human Capital (HC), Structural Capital (SC), and Relational Capital (RC). HC represents the knowledge, skills, intuition, attitudes, and experiences possessed by individuals within an organization, and is often viewed as the collective capability of the firm to generate optimal solutions from its workforce's knowledge. SC refers to the organizational capabilities that support the

company in meeting market demands, encompassing organizational routines, structures, internal networks, systems, databases, and legal rights over technologies, processes, inventions, copyrights, trademarks, trade secrets, brands, and licenses. RC, meanwhile, concerns the organization's relationships with external parties such as customers and business partners, which contribute to performance through networks, stakeholder satisfaction, and loyalty. It includes knowledge related to market channels, customer and supplier relationships, industry associations, and an understanding of public policy impacts (Akpinar & Akdemir, 1999).

Knowledge Management

Knowledge Management (KM) is a process that involves the creation, sharing, and application of knowledge within an organization to enhance performance and competitiveness. KM is essential because it ensures that knowledge within the organization is accessible and effectively utilized by all members. In practice, KM consists of several core steps, including generating new knowledge through research and collaboration, sharing knowledge across individuals and departments, and applying that knowledge in decision-making and operational processes. KM refers to a set of practices and techniques employed by organizations to identify, represent, and distribute knowledge, expertise, intellectual capital, and other forms of information to facilitate the reuse, application, and transfer of knowledge across the organization (Evangelista, 2010). KM comprises three key dimensions: knowledge creation, knowledge sharing, and knowledge application. Through social and collaborative processes, as well as individual cognitive activities such as reflection, knowledge is created, shared, reinforced, expanded, and validated within the organizational setting. At any given time, organizations and their members may be engaged in multiple, simultaneous KM processes. Therefore, knowledge management is not a fixed or singular activity, but rather a dynamic and ongoing organizational phenomenon (Alavi & Leidner, 2001).

Firm Performance

Firm Performance (FP) refers to the measure of a company's success in achieving its objectives, typically observed through two primary dimensions: financial and non-financial. The financial dimension includes profitability, revenue, and growth, while the non-financial dimension emphasizes aspects such as innovation, product quality, and customer satisfaction. Strong performance in both dimensions reflects an organization's ability to adapt and innovate, an essential trait in the highly dynamic FMCG sector. Similarly, Intellectual Capital (IC) plays a crucial role in financial performance by enhancing innovation and operational efficiency (Dancaková & Glova, 2024). An organization's success also depends on its capacity to create, discover, capture, disseminate, and evaluate knowledge. As organizations improve their learning capabilities, their

knowledge base and intellectual capital also grow. Learning, therefore, serves as the foundation for adaptability and innovation (Akpinar & Akdemir, 1999).

In the highly competitive and dynamic FMCG industry, managing Intellectual Capital (IC) becomes essential for sustaining competitive advantage and enhancing firm performance. FMCG companies are required to continuously innovate, improve operational efficiency, upgrade internal systems, and maintain strong collaboration with external stakeholders. Intellectual capital comprises a set of knowledge, experience, skills, and other intangible assets, rather than physical assets or financial capital, that increasingly determine a company's competitive position. IC consists of three main components: Human Capital, Structural Capital, and Relational Capital. In the FMCG context, Human Capital includes employees' abilities to innovate, improve processes, and quickly interpret market trends. Structural Capital, such as information systems and customer databases, supports rapid and accurate decision-making, which is crucial in a fast-paced industry. Relational Capital, which covers relationships with distributors, retailers, and consumers, is key to expanding distribution networks and maintaining market loyalty.

Previous studies have shown that IC influences firm performance through the complementary roles of employee knowledge, organizational structure, and valuable external relationships (Inkinen, 2015). Inkinen's findings confirm that IC positively affects various organizational capabilities that contribute to performance improvement. Similarly, Muftiasa et al. (2023) highlighted the importance of optimizing human and structural capital, while Dancaková & Glova (2024) emphasized that Value Added Intellectual Capital (VAIC) has a direct impact on financial performance. These studies collectively affirm that IC, as an intangible asset, directly influences a company's ability to innovate, improve efficiency, and enhance overall performance. Given the FMCG sector's demand for speed, cost efficiency, and broad market relations, managing IC systematically can offer significant performance benefits.

H₁: Intellectual Capital (IC) has a positive effect on Firm Performance (FP).

Knowledge Management (KM) is a process involving the creation, sharing, and application of knowledge within an organization to improve performance and competitiveness. KM is crucial as it ensures organizational knowledge is accessible and effectively utilized by all members. In the FMCG sector, characterized by fast-moving markets, short product life cycles, rapid innovation, and intense price competition, KM enables firms to remain adaptive by storing, disseminating, and leveraging internal knowledge. Through KM, FMCG companies can manage insights related to customer preferences, market trends, logistics efficiency, and product innovation, while also reducing operational errors. Knowledge obtained from external sources such as competitors, customers, and regulatory bodies helps firms strategically respond to market challenges. Prior research supports the positive impact of KM on firm performance, as it enables organizations to manage relevant

information for effective decision-making and strategic execution. Inkinen (2016) found that implementing KM practices enhances innovation and operational effectiveness. Moreover, KM allows firms to maximize the use of existing intellectual capital. Truong et al. (2024) also demonstrated that effective knowledge management enables rapid innovation and better market adaptation, ultimately improving firm performance.

H₂: Knowledge Management (KM) has a positive effect on Firm Performance (FP).

In the FMCG industry, a firm's sustainability and growth are influenced not only by physical or financial assets but also by the complementary roles of Intellectual Capital (IC) and Knowledge Management (KM). The three components of IC—Human Capital, Structural Capital, and Relational Capital—are strategic resources that can generate competitive advantage when effectively managed through KM processes. The interaction between IC and KM plays a critical role in enhancing Firm Performance (FP). Prior studies have shown that effective management of both IC and KM accelerates innovation performance, which in turn positively affects FP (Hussinki et al., 2017). Uhlaner et al. (2007) also confirmed that firms capable of managing both factors tend to perform better. Truong et al. (2024) and Muftiasa et al. (2023) emphasized that companies leveraging both IC and KM are more profitable and competitive, particularly relevant for FMCG firms operating in complex markets. The synergy between IC and KM enhances effective knowledge management, enabling greater innovation, faster adaptation, and more productive resource utilization. Alignment between IC components and KM strategies has been found to predict operational and financial performance, especially in high-tech industries (Sánchez et al., 2015). Furthermore, IC has been shown to significantly influence Knowledge Sharing and Organizational Agility, with knowledge sharing serving as a mediator (Wahyudi et al., 2023). Hsu & Sabherwal (2011) concluded that IC does not directly drive FP; instead, it does so through enhanced KM capabilities, which then lead to innovation and improved performance. KM thus serves as a vital bridge connecting the potential of IC to the achievement of firm performance.

H₃: Knowledge Management (KM) mediates the relationship between Intellectual Capital (IC) and Firm Performance (FP).

METHOD

This study adopts a quantitative approach with a causal research design, aimed at identifying and testing cause-and-effect relationships among the variables under investigation. The primary objective of this research is to analyze the influence of Intellectual Capital (IC) and Knowledge Management (KM) on Firm Performance (FP) within the context of FMCG companies in Indonesia. Data were collected through an online questionnaire distributed to 104 respondents, consisting of

managers, supervisors, and staff who are directly involved in the management of IC and KM at Paragon Corp. Each item in the questionnaire used a 5-point Likert scale, ranging from “Strongly Disagree” to “Strongly Agree,” to capture respondents’ level of agreement with each statement. Sample items include,

Intellectual Capital – Human Capital: "Our employees possess the necessary skills for their roles, and our company provides training to support their skill development."

Knowledge Management-Knowledge Sharing: "Employees in our company actively share knowledge to solve problems and improve work effectiveness."

Firm Performance –Customer Satisfaction: "Our customers are satisfied with our products, and we actively collect feedback to enhance product quality."

The data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. The analysis involved two main stages: evaluation of the measurement model and evaluation of the structural model. The data analysis process in this study consists of three main stages: evaluation of the measurement model (outer model), the structural model (inner model), and mediation testing. The outer model evaluation aims to assess the validity and reliability of indicators of their latent constructs. Convergent validity is considered achieved when the outer loading values exceed 0.70 and the Average Variance Extracted (AVE) is greater than 0.50. Construct reliability is assessed using Composite Reliability and Cronbach’s Alpha, with ideal values above 0.80. Discriminant validity is tested using the Heterotrait-Monotrait Ratio (HT-MT), with a threshold value of less than 0.90.

The inner model evaluation assesses the relationships between latent constructs, using R-square (R^2) values, significance testing via bootstrapping (with 5,000 subsamples), and effect size (f^2). Additionally, the Standardized Root Mean Square Residual (SRMR) value is used to evaluate the overall model fit, with an ideal cut-off value of less than 0.08. The mediation analysis is conducted to determine whether the effect of IC on FP occurs directly or indirectly through KM. This test is carried out using bootstrapping and indirect effect analysis in SmartPLS. Before conducting the main analysis, the measurement instrument is first tested for validity and reliability based on the results of outer loading, AVE, Composite Reliability, and Cronbach’s Alpha.

RESULTS AND DISCUSSION

Respondent Characteristics

The characteristics of the respondents in this study are shown in the following table.

Table 1. Respondent Characteristics

CHARACTERISTICS	%	
GENDER		
MAN	35	34%
WOMAN	69	66%
AGE		
<25 YEARS	36	34.61%
25-34 YEARS	58	55.76%
35-44 YEARS	7	6.73%
45-54 YEARS	3	2.88%
WORK TENURE		
<1 YEARS	27	25.96%
1-3 YEARS	51	49.03%
4-6 YEARS	18	17.30%
7-10 YEARS	4	3.84%
POSITION		
STAFF	88	84.61%
SUPERVISOR	1	0.96%
MANAGER	4	3.84%
OTHERS	11	10.57%

Based on the respondent characteristics table, the total number of respondents in this study was 104 individuals, with the majority being female (66%). Most of the respondents held staff-level positions (86%). In terms of age distribution, the majority fell within the 25–34 age range (55.76%), followed by respondents aged under 25 (34.61%), while only 9.61% were aged 35 and above. These findings indicate that the workforce at Paragon Corp is predominantly composed of younger employees.

Convergent Validity

Based on the results of the measurement model evaluation, all constructs in this study, Firm Performance (FP), Intellectual Capital (IC), and Knowledge Management (KM), met the recommended criteria for validity and reliability in PLS-SEM analysis. This is evidenced by the outer

loading values of most indicators, which exceed the minimum threshold of 0.70, indicating that each indicator makes a strong contribution in representing its respective construct.

Table 2. Results of Measurement Model Evaluation

	Loading	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
FP1	0.866	0.901	0.904	0.927	0.718
FP2	0.879				
FP3	0.857				
FP4	0.794				
FP5	0.836				
IC1	0.581	0.934	0.939	0.944	0.632
IC10	0.826				
IC2	0.759				
IC3	0.769				
IC4	0.841				
IC5	0.845				
IC6	0.828				
IC7	0.868				
IC8	0.798				
IC9	0.798				
KM1	0.745	0.959	0.961	0.964	0.711
KM10	0.803				
KM11	0.802				
KM2	0.775				
KM3	0.834				
KM4	0.885				
KM5	0.902				
KM6	0.884				
KM7	0.912				
KM8	0.891				
KM8	0.824				

Table 3 Discriminant Validity

	FP	IC	KM
FP			
IC	0.884		
KM	0.924	0.855	

One of the indicators within the Intellectual Capital construct has an outer loading value of 0.581. Although this value falls below the ideal threshold of 0.70, the indicator was retained because the construct overall demonstrated a Composite Reliability of 0.944 and an Average Variance Extracted (AVE) of 0.632, both exceeding the recommended minimum thresholds of 0.70 and 0.50, respectively which indicates that reliability and convergent validity were still satisfactorily achieved (Hair et al., 2021). This implies that the inclusion of this indicator does not compromise the overall quality of the measurement model.

The Firm Performance construct showed strong results, with a Cronbach's Alpha of 0.901, a Composite Reliability of 0.927, and an AVE of 0.718. Likewise, the Knowledge Management construct demonstrated the highest reliability among all constructs, with a Cronbach's Alpha of 0.959, a Composite Reliability of 0.964, and an AVE of 0.711. These values confirm that each construct possesses excellent internal consistency and can sufficiently explain the variance of its indicators. Therefore, it can be concluded that the measurement model in this study fulfills the criteria for convergent validity and construct reliability.

Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT) approach. The results show that all HTMT values were below the maximum threshold of 0.95, although relatively high, this HTMT value is within acceptable limits due to the conceptual closeness between KM and FP, as supported by Henseler et al. (2015). According to Henseler et al. (2015), high HTMT values may indicate a lack of discriminant validity. However, the threshold should be interpreted in light of the conceptual similarity between constructs. In this case, KM and FP are theoretically and practically interrelated, as an organization's capability to manage knowledge directly contributes to firm performance outcomes such as innovation, operational efficiency, and customer satisfaction. Given this close relationship, an HTMT value below 0.95 can still be considered acceptable, particularly when constructs are complementary or mutually reinforcing.

Hypothesis Test

Table 4 Direct Effect Path Coefficient

	Original Sample	T statistic	P values	Effect Size (F ²)	R-Square (R ²)
IC -> FP	0.338	3.584	0.000	0.814	
IC -> KM	0.810	18.487	0.000	0.810	0.656
KM -> FP	0.587	6.129	0.000	0.587	0.782

Based on the test results, all paths in the model demonstrated statistically significant relationships ($t > 1.96$ and $p < 0.05$), thereby supporting the proposed hypotheses. The path from Intellectual Capital (IC) to Firm Performance (FP) showed a coefficient of 0.338, with a t-statistic of 3.584 and a p-value of 0.000, indicating a significant positive effect. The effect size (f^2) was 0.814, which falls into the large category, suggesting that Intellectual Capital directly contributes strongly to enhancing firm performance. This implies that the utilization of organizational intellectual assets, such as knowledge, capabilities, and networks can directly improve business outcomes.

The path from Intellectual Capital (IC) to Knowledge Management (KM) showed a coefficient of 0.810, with a t-statistic of 18.487, indicating a very strong and significant relationship. The R² value for KM was 0.656, meaning that approximately 65.6% of the variance in Knowledge Management is explained by Intellectual Capital. The corresponding effect size (f^2) of 0.810 also falls into the large category, suggesting that higher intellectual capacity within the organization leads to more effective knowledge management practices.

Furthermore, the path from Knowledge Management (KM) to Firm Performance (FP) showed a coefficient of 0.587 and a t-statistic of 6.129, which is also statistically significant. The R² value for FP was 0.782, indicating that 78.2% of the variance in organizational performance is explained by the combination of Intellectual Capital and Knowledge Management. The effect size ($f^2 = 0.587$) is also considered large, reinforcing that knowledge management plays a critical role in supporting the achievement of firm performance.

Table 5 Indirect Effect Path Coefficient

	Original Sample	T statistic	P values
IC -> KM -> FP	0.476	5.580	0.000

The results of the indirect effect test indicate that the indirect effect of Intellectual Capital (IC) on Firm Performance (FP) through Knowledge Management (KM) is statistically significant ($t =$

5.580; $p < 0.05$). This finding provides evidence of a partial mediation effect of KM in the relationship between IC and FP. In addition to its direct effect, Intellectual Capital also enhances firm performance indirectly by strengthening knowledge management systems. These results suggest that firms should not only focus on building their intellectual capital but also ensure that such knowledge is strategically managed and utilized to maximize its impact on performance.

Standardized Root Mean Square Residual (SRMR)

Table 6 SRMR

	Original Sample	Sample Mean	95%	99%
Saturated Model	0.066	0.049	0.059	0.064
Estimated Model	0.066	0.049	0.059	0.064

The Standardized Root Mean Square Residual (SRMR) indicator is used to assess the overall model fit. An SRMR value of less than 0.08 indicates a good level of fit between the model and the empirical data. The analysis results show that the SRMR values for both the saturated model and the estimated model were 0.066, indicating that the proposed model fits the data well and is statistically valid. The values within the 95% and 99% confidence intervals further demonstrate the model's consistency across different confidence levels. Therefore, it can be concluded that the structural model employed in this study is adequate and reliable for explaining the relationships among the variables under investigation.

DISCUSSION

The results of this study confirm that all three hypotheses are supported. Intellectual Capital (IC) and Knowledge Management (KM) were found to have a positive influence on Firm Performance (FP). Moreover, KM was proven to significantly mediate the relationship between IC and FP.

Hypothesis 1, which posits that Intellectual Capital positively affects Firm Performance, is supported. This finding indicates that greater utilization of intellectual capital within an organization leads to improved company performance. The analysis revealed a path coefficient of 0.338, with a t-statistic of 3.584 and p-value < 0.001 , indicating statistical significance. In addition, the effect size ($f^2 = 0.814$) was categorized as large, confirming the strong impact of IC on FP. This is further supported by the R^2 value for Firm Performance of 0.782, indicating that a substantial portion (78.2%) of the variance in FP can be explained by IC and KM combined. In the highly competitive FMCG sector, the use and management of IC are among the key drivers of corporate success. From the perspective of

Human Capital, such as employees' willingness to learn and solve problems, enables companies to respond quickly to market changes and innovate effectively. Regarding Relational Capital, strong external relationships also contribute to improved FP through enhanced collaboration and customer loyalty. Structural Capital, including efficient systems and documented knowledge, supports decision-making, boosts productivity, and reduces operational errors. These findings align with Xu & Li (2022) and Torre et al. (2021), who emphasize the significance of IC in improving firm performance across profit, productivity, and relational outcomes.

Hypothesis 2, which states that Knowledge Management positively affects Firm Performance, is also supported. The statistical analysis yielded a path coefficient of 0.587, t- statistic of 6.129, and p-value < 0.001, confirming a strong and significant impact. The effect size ($f^2 = 0.587$) also falls into the large category. As mentioned earlier, the R^2 value of 0.782 for Firm Performance demonstrates that IC and KM together explain the majority of the variance in firm outcomes, further emphasizing the importance of KM in achieving performance goals. These findings suggest that the processes of creating, sharing, and applying knowledge within an organization contribute directly to success. Firms that actively manage knowledge, collaborate strategically, and acquire external insights can adapt more efficiently, innovate effectively, and make informed decisions quickly. These results support previous findings by Subrahmanyam et al. (2024) and Christofi et al. (2023), who argue that effective KM practices enable firms to leverage their data assets, foster a learning culture, and maintain a competitive edge.

Hypothesis 3, which posits that Knowledge Management mediates the relationship between Intellectual Capital and Firm Performance, is also accepted. The indirect effect of IC on FP through KM was found to be statistically significant ($t = 5.580$; $p < 0.05$). Moreover, the path coefficient from IC to KM was 0.810, with an exceptionally strong t-statistic of 18.487, and an R^2 value for KM of 0.656, indicating that 65.6% of the variance in KM is explained by IC alone. These results highlight that the effect of IC on performance is optimized when supported by structured KM processes. For example, superior Human Capital will not yield maximum benefit if knowledge is not documented or shared across departments. Therefore, it is not only important to build intellectual capital but also to manage it strategically through integrated KM systems. This finding is in line with the studies of Hsu & Sabherwal (2011) and Hussinki et al. (2017), which demonstrate the critical role of KM as a mediator in transforming intellectual potential into organizational performance. Effective knowledge mediation supports innovation, responsiveness, and strategic agility, which are vital for firms operating in fast-moving sectors such as FMCG.

CONCLUSION

This study is grounded in the Resource-Based View (RBV) and Knowledge-Based View (KBV) theories. RBV highlights the importance of Intellectual Capital (IC) as a strategic and inimitable resource such as employee knowledge, organizational capabilities, and external relationships that positively influences firm performance. Meanwhile, KBV posits that knowledge is the most strategic asset in a company, offering crucial insight into how organizations can leverage their intellectual wealth to gain and sustain a competitive advantage. Based on the research findings, it can be concluded that both Intellectual Capital and Knowledge Management (KM) have a positive and significant effect on Firm Performance (FP). This demonstrates that the higher the quality and utilization of intellectual capital, including human capital, structural capital, and relational capital, the better the company's performance. Furthermore, the firm's ability to manage knowledge effectively through KM is proven to enhance competitiveness. In addition, Knowledge Management was found to mediate the relationship between Intellectual Capital and Firm Performance, indicating that intellectual capital influences performance not only directly but also indirectly through KM. Companies that are capable of managing, utilizing, and disseminating knowledge effectively can optimize their intellectual assets, resulting in improved firm performance. These findings underscore the strategic importance of effectively managing intangible assets as fundamental drivers of firm performance in dynamic, knowledge-driven business environments.

This research strengthens the application of RBV and KBV theories within the FMCG industry in developing countries such as Indonesia, a context that remains under-explored. Moreover, the identification of KM as a mediator between IC and FP offers a valuable contribution to the literature by clarifying the mechanism through which IC affects firm performance, both directly and indirectly. The results of this study offer practical guidance for FMCG managers to improve and reinforce knowledge management practices within their organizations to ensure that knowledge is absorbed and utilized across functions and levels. Managers should prioritize the identification, development, and retention of Human Capital, Structural Capital, and Relational Capital, as these are essential assets that significantly impact business success.

REFERENCES

- Akpınar, A. T., & Akdemir, A. (1999). Intellectual capital. In *Third European Conference* (pp. 332–340).
- Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107–136.

- Arief, I., Hasan, A., Putri, N. T., & Rahman, H. (2023). Literature reviews of RBV and KBV theories reimaged technological approach using text analysis and Power BI visualization. *JOIV: International Journal on Informatics Visualization*, 7(4), 2532–2542.
- Ausat, A. M. A., Widayani, A., Rachmawati, I., Latifah, N., & Suherlan, S. (2022). The effect of intellectual capital and innovative work behavior on business performance. *Journal of Economics, Business, & Accountancy Ventura*, 24(3), 363–378.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Christofi, K., Chourides, P., & Papageorgiou, G. (2023). Revealing a non-linear relationship between knowledge assets and firm's value. *Electronic Journal of Knowledge Management*, 21(1), 1–12.
- Clarke, M., Seng, D., & Whiting, R. H. (2011). Intellectual capital and firm performance in Australia. *Journal of Intellectual Capital*, 12(4), 505–530.
- Donate, M. J., & de Pablo, J. D. S. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research*, 68(2), 360–370.
- Evangelista, P. (2010). The adoption of knowledge management systems in small firms. *Electronic Journal of Knowledge Management*, 8(1), 33–42.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.)*. Sage Publications.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Evaluation of reflective measurement models. In *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (pp. 75–90). Springer.
- Hejazi, R., Ghanbari, M., & Alipour, M. (2016). Intellectual, human and structural capital effects on firm performance as measured by Tobin's Q. *Knowledge and Process Management*, 23(4), 259–273.
- Hesniati, H., Margaretha, F., & Kristaung, R. (2019). Intellectual capital, knowledge management, and firm performance in Indonesia. *European Journal of Business and Management Research*, 4(6).
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115–135.
- Hsu, I., & Sabherwal, R. (2011). From intellectual capital to firm performance: The mediating role of knowledge management capabilities. *IEEE Transactions on Engineering Management*, 58(4), 626–642. <https://doi.org/10.1109/TEM.2011.2111456>
- Hussinki, H., Ritala, P., Vanhala, M., & Kianto, A. (2017). Intellectual capital, knowledge management practices and firm performance. *Journal of Intellectual Capital*, 18(4), 904–922.
- Inkinen, H. (2015). Review of empirical research on intellectual capital and firm performance. *Journal of Intellectual Capital*, 16(3), 518–565.

- Inkinen, H. (2016). Knowledge management practices and intellectual capital in the context of corporate performance. *Journal of Knowledge Management*, 20(2), 278–300.
- Karthik, T. T., & Prasad, T. R. (2020). SWOT (strength, weakness, opportunities and threats) analysis of fast moving consumer goods (FMCG) industries in India. *Shanlax International Journal of Commerce*, 8(1), 92–100.
- Klein, D. A. (2009). *The strategic management of intellectual capital*. Routledge.
- Madhani, P. M. (2009). Resource based view (RBV): Concepts and practices.
- Nickerson, J., & Zenger, T. (2004). A knowledge-based theory of governance choice: A problem-solving approach. *Organization Science*, 15(6), 617–632.
- Nwabekee, U. S., Abdul-Azeez, O. Y., Agu, E. E., & Ignatius, T. (2024). Challenges and opportunities in implementing circular economy models in FMCG industries. *International Journal of Frontline Research in Science and Technology*, 3(2), 73–91.
- Sánchez, A. A., Marín, G. S., & Morales, A. M. (2015). The mediating effect of strategic human resource practices on knowledge management and firm performance. *Revista Europea de Dirección y Economía de la Empresa*, 24(3), 138–148.
- Shujahat, M., Sousa, M. J., Hussain, S., Nawaz, F., Wang, M., & Umer, M. (2020). Translating the impact of knowledge management processes into knowledge-based innovation: The neglected and mediating role of knowledge-worker productivity. *Journal of Business Research*, 129, 652–663.
- Subrahmanyam, S., Aishwaryalaxmi, N. S., Khalife, D., Shaikh, I. A. K., Faldu, R., & Asthana, N. (2024). Impact of knowledge management and big data analytics capabilities on firm performance. In *Ninth International Conference on Science Technology Engineering and Mathematics (ICONSTEM)* (pp. 1–5). IEEE.
- Torre, C., Tommasetti, A., & Maione, G. (2021). Technology usage, intellectual capital, firm performance and employee satisfaction: The accountants' idea. *The TQM Journal*, 33(3), 545–567.
- Truong, B. T. T., Nguyen, P. V., & Vrontis, D. (2024b). 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, D., Van, L. T., & Le, T. H. (2024a). Knowledge management and its impact on business performance: An empirical study in the FMCG sector. *International Journal of Business and Management*, 25(3), 45–61.
- Uhlaner, L., van Stel, A., Meijaard, J., & Folkeringa, M. (2007). The relationship between knowledge management, innovation and firm performance: Evidence from Dutch SMEs. *Scientific Analysis of Entrepreneurship and SMEs*, 3(2), 1–26.
- Wahyudi, W., Sulistyowati, P., Iriyanto, S., Poerbantor, H., & Sukanto, S. (2023). The effects of intellectual capital on organisational agility: The role of knowledge sharing as mediation. *International Journal of Economics and Management Research*, 2(1), 9–25.
- Wang, Z., Wang, N., Cao, J., & Ye, X. (2016). The impact of intellectual capital–knowledge management strategy fit on firm performance. *Management Decision*, 54(8), 1861–1885.

- Xu, J., & Li, J. (2022). The interrelationship between intellectual capital and firm performance: Evidence from China's manufacturing sector. *Journal of Intellectual Capital*, 23(2), 313–341.
- Xu, J., & Liu, F. (2020). The impact of intellectual capital on firm performance: A modified and extended VAIC model. *Journal of Competitiveness*, 12(1), 161-176. <https://doi.org/10.7441/joc.2020.01.10>