Digital Business Journal (DIGIBIS)
Volume 4 No. 2 (2026)
Hal: 69 - 81

E-ISSN 2963-8585
DOI:10.31000/digibis.v4i2.15171

Knowledge Management and Innovative Behavior: The Mediating Role of Innovation in FMCG Firms

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Diterima	Direvisi	Disetujui
03-11-2025	28-11-2025	31-01-2026

Abstract: The Indonesian Fast-Moving Consumer Goods (FMCG) industry is currently facing heightened competition due to market growth deceleration and shifting consumer behavior, requiring firms to strengthen knowledge management and innovation capabilities to sustain performance. This study examines the influence of *Knowledge Management Process (KMP)* and *Innovation Work Behavior (IWB)* on *Firm Performance (FP)*, with *Innovation (INNO)* functioning as a mediating variable under the *Knowledge-Based View (KBV)* framework. A quantitative descriptive–explanatory design was employed, involving 104 employees of PT Paragon Technology and Innovation as respondents, and data were analyzed using *Partial Least Squares Structural Equation Modeling (PLS-SEM)*. The results reveal that IWB significantly enhances KMP but does not exert a direct effect on FP. Conversely, KMP positively affects both FP and INNO, while INNO fully mediates the relationship between IWB and FP and partially mediates the relationship between KMP and FP. High R^2 values for FP (76.6%) and INNO (74.2%) indicate strong explanatory power of the research model. Conceptually, this study provides novelty by integrating IWB and KMP simultaneously in predicting FP through the mediating mechanism of innovation within the Indonesian FMCG context. The study further contributes practical insights by emphasizing the need for organizations to reinforce knowledge management systems as a foundation for innovation and sustainable performance enhancement especially in the FMCG industry.

Keywords: Knowledge Management Process; Innovative Work Behavior; Innovation; Firm Performance

Introduction

The *Fast-Moving Consumer Goods (FMCG)* industry in Indonesia continues to exhibit complex dynamics amid global economic pressures and shifting consumer behavior. According to NielsenIQ (2025), Indonesian consumer spending on FMCG products reached IDR 208 trillion in the third quarter of 2024, marking a 1.1% increase compared to the same period in the previous year. Although positive, this figure remains below the Southeast Asian regional average growth of +2.4%, indicating a slowdown in Indonesia's FMCG sector growth.

The *Consumer Outlook: Guide to 2025* report by NielsenIQ also reveals that Indonesian consumers have become more selective in their spending, prioritizing essential needs and product value. Approximately 38.4% of Indonesian consumers perceive their economic condition as improving—significantly higher than the global average of –2.6%—reflecting strong optimism accompanied by caution. This situation compels FMCG companies to strengthen strategies based on efficiency, innovation, and knowledge management to sustain performance amid market uncertainty.

In addition, digitalization and the shift in distribution channels are reshaping the competitive landscape of Indonesia's FMCG industry. While general trade remains dominant, the fastest growth is observed in modern trade and e-commerce channels, demanding high adaptability through effective *Knowledge Management Processes (KMP)* and the enhancement of employees' *Innovation Work Behavior (IWB)*.

One prominent national FMCG company is PT Paragon Technology and Innovation (Paragon Corp)—a leading halal cosmetics manufacturer in Indonesia known for brands such

E-ISSN 2963-8585
DOI:10.31000/digibis.v4i2.15171

as Wardah, Make Over, and Emina. Paragon was awarded *Asia's Most Innovative Company* at the 2022 Fortune Times Awards for its success in sustainable product development and strong implementation of innovation management systems (*newfortunetimes.com*). This recognition emphasizes that Paragon is not merely focused on sales volume but also positions innovation and knowledge management as strategic advantages to maintain competitiveness in the FMCG market.

In view of these developments, a deeper and more holistic examination is required to understand how the Knowledge Management Process (KMP) and Innovative Work Behavior (IWB) contribute to enhancing Firm Performance (FP), particularly through the role of innovation (INNO) in converting organizational knowledge into measurable performance outcomes. Although previous studies have explored the links among knowledge management, innovation, and performance, the majority have concentrated on direct relationships and have not simultaneously assessed how KMP and IWB operate in tandem to drive FP through innovation within the Indonesian FMCG industry. Addressing this gap, the present study investigates the extent to which KMP and IWB affect FP and evaluates whether INNO functions as a mediating mechanism that connects knowledge-based organizational capabilities to firm performance. By doing so, this study provides empirical evidence regarding the dynamic interplay between KMP and IWB in shaping FP through INNO, thereby extending the Knowledge-Based View (KBV) literature and offering managerial implications for FMCG firms to reinforce knowledge management and innovative work behavior as strategic foundations for sustained performance.

Knowledge-Based View

The Knowledge-Based View (KBV) builds upon the foundation of the Resource-Based View (RBV), positioning knowledge as the most strategic resource for organizations in achieving sustainable competitive advantage (Grant, 1996). KBV argues that firms compete not merely through tangible resources but primarily through their capacity to create, manage, and apply knowledge effectively (Nickerson & Zenger, 2004). In modern industries—particularly the Fast-Moving Consumer Goods (FMCG) sector—KBV emphasizes that knowledge-based capabilities such as the Knowledge Management Process (KMP) and innovation capability serve as the primary drivers of organizational performance (Tian, Zhang, & Cheng, 2025). Recent empirical findings indicate that firms equipped with robust knowledge management systems and strong employee innovative behavior tend to be more adaptive and responsive to market dynamics (Rehman, 2025). Thus, KBV forms the theoretical foundation of the present study by explaining how knowledge-based capabilities—through KMP and Innovation Work Behavior (IWB)—generate Innovation (INNO) that ultimately enhances Firm Performance (FP). Supporting this line of reasoning, recent studies reaffirm knowledge management and innovation as essential mechanisms within KBV that determine performance outcomes in knowledge-intensive and competitive environments (Rehman, 2025; Abou-Moghli, 2025).

Innovative Work Behavior

Innovative Work Behavior (IWB) refers to individual behavior directed toward the creation, promotion, and implementation of new ideas that benefit the organization (De Jong & Den Hartog, 2010). Within the KBV framework, IWB constitutes a form of tacit knowledge manifested in creative, collaborative, and proactive work actions. Halawa (2023) highlights that behaviors such as generating new ideas, taking calculated risks, and addressing complex organizational problems positively influence organizational learning and knowledge management. Likewise, Rahman and Adnan (2024) concluded that active knowledge-sharing behavior strengthens the link between innovative behavior and organizational effectiveness. Accordingly, IWB can be viewed as the application of individual knowledge that drives both KMP and organizational innovation. This study adopts the IWB dimensions proposed by

E-ISSN 2963-8585
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Halawa (2023) and De Jong & Den Hartog (2010): idea generation, creative problem-solving, risk-taking, and opportunity anticipation.

Knowledge Management Process *(KMP)*

The *Knowledge Management Process (KMP)* encompasses the activities of creating, storing, sharing, and applying knowledge within an organization (Alavi & Leidner, 2001). Within the KBV framework, KMP serves as a system that converts individual knowledge into organizational knowledge. Sahibzada et al. (2023) found that effective KMP not only improves internal efficiency but also strengthens organizational creativity and innovation. Kumar and Patel (2024) demonstrated that firms with strong KMP capabilities can accelerate product development and improve overall productivity. In line with this, Abou-Moghli (2025) asserted that KMP represents the primary mechanism linking knowledge-based resources with firm performance, especially within highly dynamic industries such as FMCG.

Innovation

Within the *Knowledge-Based View (KBV)* framework, innovation is regarded as the outcome of applying organizational knowledge to create new value Innovation may take various forms, including product, process, organizational, or business model innovation (Teece, 2018). Rehman (2025) emphasized that innovation is a crucial pathway for transforming knowledge into competitive advantage and superior performance. Alvi, Ahmad, and Safdar (2024) showed that effective knowledge management enhances innovation through stronger collaboration and team creativity. Reinforcing this argument, Tian, Zhang, and Cheng (2025) demonstrated that innovation is a key mediator linking knowledge management and firm performance. Recent evidence (Rehman, 2025; Alvi et al., 2024; Tian et al., 2025) consistently confirms the mediating role of innovation in converting knowledge-based capabilities and innovative behaviors into measurable firm performance outcomes.

Firm Performance

Within the *Knowledge-Based View (KBV)* framework, *Firm Performance (FP)* represents the ultimate outcome of an organization's ability to manage and apply knowledge to generate both economic and social value. FP is measured through financial aspects—such as profitability and sales growth—as well as non-financial dimensions, including customer satisfaction, innovation capability, and corporate reputation (Xu & Li, 2022). Research by Dung and Dung (2024) indicates that firms with strong knowledge management practices tend to achieve higher levels of growth and operational efficiency. Similarly, Abou-Moghli (2025) asserts that knowledge-based capabilities influence FP both directly and indirectly by enhancing innovation and product quality. Firm performance is a multidimensional construct encompassing both financial and non-financial indicators (Abou-Moghli, 2025; Dung & Dung, 2024), reflecting an organization's ability to effectively leverage knowledge and innovation to achieve sustainable competitiveness.

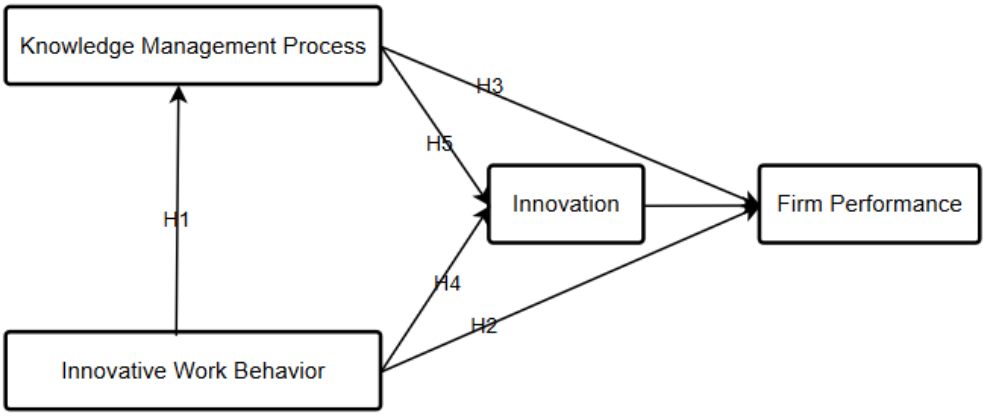

Figure 1. Conceptual Framework

E-ISSN 2963-8585
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Research Hypotheses

Based on the theoretical foundations and empirical evidence reviewed, the following hypotheses are formulated:

H1: Innovation Work Behavior (IWB) positively influences the Knowledge Management Process (KMP).

H2: Innovation Work Behavior (IWB) positively influences Firm Performance (FP).

H3: Knowledge Management Process (KMP) positively influences Firm Performance (FP).

H4: Innovation (INNO) mediates the relationship between Innovation Work Behavior (IWB) and Firm Performance (FP).

H5: Innovation (INNO) mediates the relationship between Knowledge Management Process (KMP) and Firm Performance (FP)

The Influence of Innovation Work Behavior (IWB) on Knowledge Management Process (KMP)

Within the *Knowledge-Based View (KBV)* framework, employees' *Innovation Work Behavior (IWB)* serves as a crucial mechanism that drives the creation and dissemination of knowledge within organizations. Innovative employees not only generate new ideas but also stimulate learning processes and knowledge sharing among team members. Research by Halawa (2023) in *The Importance of Innovative Work Behavior in Era 4.0* demonstrated that innovative behaviors—encompassing the creation, promotion, and implementation of new ideas—significantly influence the effectiveness of knowledge-sharing processes within organizations. Furthermore, the study by Rahman and Adnan (2024) in *Predicting Innovative Work Behavior through Knowledge Sharing, Perceived Organizational Support, and Psychological Empowerment* confirmed that employees who actively engage in knowledge sharing tend to exhibit higher levels of innovative behavior, which in turn strengthens the organization's knowledge management system.

H1: The higher the level of employees' innovative work behavior, the more effective the knowledge management process within the organization (FMCG).

The Influence of Innovation Work Behavior (IWB) on Firm Performance (FP)

According to the *Knowledge-Based View (KBV)*, employees' innovative behavior reflects an organization's capability to convert knowledge into economically valuable actions. Creative employees who are willing to take risks can generate new solutions that enhance organizational effectiveness, efficiency, and competitiveness. A study by Ketut (2025) in *The Transformative Impact of Innovative Work Behavior on Organizational Performance* found that innovative work behavior has a direct and positive influence on improving firm performance. Similarly, research by Li and Zhang (2023) confirmed that IWB enhances organizational performance by accelerating a firm's ability to adapt to environmental changes.

H2: Innovation Work Behavior (IWB) positively affects Firm Performance (FP) because innovative behavior enables the transformation of knowledge into increased productivity and competitiveness.

The Influence of Knowledge Management Process (KMP) on Firm Performance (FP)

Within the *Knowledge-Based View (KBV)* framework, the *Knowledge Management Process (KMP)* is regarded as a core organizational capability that enables the systematic management of knowledge—from its creation and storage to its application. This process enhances decision-making effectiveness and operational efficiency. Research by Sahibzada et al. (2023) found that effective knowledge management practices significantly influence organizational performance by improving efficiency and responsiveness to market changes. Similarly, Kumar and Patel (2024) reported that firms with well-developed KMP systems demonstrate higher productivity and more stable growth. The recent study by Abou-Moghli (2025), published in the *Journal of Knowledge and Performance Management*, also confirmed a direct positive relationship between KMP practices and organizational performance through

E-ISSN 2963-8585
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increased innovation capability.

H3 : Knowledge Management Process (KMP) positively affects Firm Performance (FP) because effective knowledge management strengthens the organization's ability to create added value.

Innovation (INNO) Mediates the Relationship between Innovation Work Behavior (IWB) and Firm Performance (FP)

Within the *Knowledge-Based View (KBV)* framework, innovation represents the application of knowledge generated through employees' creative behavior. The relationship between *Innovation Work Behavior (IWB)* and *Firm Performance (FP)* tends to be indirect—innovative behaviors produce new ideas that influence performance only when they are implemented as tangible innovations. Rehman (2025) emphasized that innovation serves as a key mechanism bridging the link between innovative behavior and organizational outcomes. Similarly, the study by Jiménez, Martínez, and Pérez (2023) demonstrated that employees' innovative behavior enhances firm performance by increasing the overall level of innovation within the organization.

H4 : Innovation mediates the relationship between Innovation Work Behavior (IWB) and Firm Performance (FP)—the higher the level of innovative behavior, the greater the potential for innovation to drive organizational performance.

Innovation (INNO) Mediates the Relationship between Knowledge Management Process (KMP) and Firm Performance (FP)

Within the *Knowledge-Based View (KBV)* framework, the *Knowledge Management Process (KMP)* generates a knowledge base that serves as the primary input for organizational innovation. However, the impact of KMP on *Firm Performance (FP)* does not occur directly but rather through the creation and implementation of innovation. Studies by Alvi, Ahmad, and Safdar (2024) as well as Rehman (2025) demonstrated that innovation plays a significant mediating role between KMP and FP, as a firm's ability to manage knowledge will only translate into superior performance when supported by strong innovative processes. Similarly, Tian, Zhang, and Cheng (2025) concluded that innovation serves as a critical pathway through which companies transform knowledge into competitive advantage.

H5: Innovation acts as a mediating variable linking Knowledge Management Process (KMP) and Firm Performance (FP)—the better the knowledge management process, the stronger the firm's innovation capability, and consequently, the higher its overall performance.

Research Design

This research adopts a quantitative explanatory design, grounded in the Knowledge-Based View (KBV), to empirically test the causal relationships among KMP, IWB, INNO, and FP. Partial Least Squares Structural Equation Modeling (PLS-SEM) is employed due to model complexity, the involvement of latent constructs with multiple indicators, and the predictive orientation of the study. The model integrates both direct and indirect (mediated) pathways to examine how IWB and KMP influence FP, with INNO positioned as the mediating mechanism. This design enables the simultaneous evaluation of (1) measurement validity and reliability of constructs, (2) structural relationships among variables, and (3) mediation effects within the conceptual model.

Methods

This study employs a quantitative approach with both descriptive and explanatory research designs. The descriptive design is used to identify and illustrate the level of implementation of the Knowledge Management Process (KMP), Innovative Work Behavior (IWB), Innovation (INNO), and Firm Performance (FP) within the FMCG industry in Indonesia. Meanwhile, the explanatory design aims to examine the causal relationships among the variables according to the conceptual model derived from the Knowledge-Based View

E-ISSN 2963-8585
DOI:10.31000/digibis.v4i2.15171

(KBV), with a focus on assessing the direct and indirect effects across the constructs.

To obtain empirical data, the study utilizes a structured questionnaire with a five-point Likert scale administered to 104 respondents—including staff, supervisors, and managers—at PT Paragon Technology and Innovation. The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) through the latest version of SmartPLS software. PLS-SEM was selected because it aligns with the characteristics of this study, namely: a structurally complex model with multiple latent variables, numerous indicators across constructs, a relatively small sample size ($n < 200$), non-parametric data distribution, and predictive and variance-based orientation (Hair et al., 2021).

The PLS-SEM analysis procedure is conducted in two main stages: (a) evaluation of the measurement model (outer model) to assess construct validity and reliability based on outer loading, Average Variance Extracted (AVE), Cronbach's Alpha, and Composite Reliability; and (b) evaluation of the structural model (inner model) to examine causal relationships among the latent variables using path coefficients, R-square (R^2), effect size (f^2), and significance testing via bootstrapping with 5,000 subsamples. Furthermore, mediation testing is performed to identify the role of Innovation (INNO) as a mediating mechanism linking KMP and IWB to FP

The stages of data analysis included the evaluation of the measurement model (*outer model*), the structural model (*inner model*), and the mediation test, as outlined below:

a. Measurement Model Evaluation (Outer Model)
   This evaluation was conducted to ensure the validity and reliability of the indicators in representing their corresponding latent constructs, with the following criteria:
   1) Convergent Validity: Achieves when outer loading > 0,7 dan AVE > 0,5.
   2) Discriminant Validity: Assessed using Fornell-Larcker Criterion.
   3) Construct Reliability: Determined based on *Composite Reliability* and *Cronbach's Alpha* values both expected > 0,7.
b. Structural Model Evaluation (Inner Model) This stage evaluated the relationships among the latent constructs with the following criteria:
   1) R-square (R^2): Measures the explanatory power of the independent variables in predicting the dependent variables.
   2) Significance Testing: Conducted through bootstrapping with 5,000 subsamples to obtain *t-statistics* and *p-values*.
   3) Effect Size (f^2) and Predictive Relevance (Q^2): Used to assess the magnitude of the effects and the predictive accuracy of the model.
c. Mediation Test: To examine the mediating role of *Innovation (INNO)* between *Knowledge Management Process (KMP)* and *Innovation Work Behavior (IWB)* on *Firm Performance (FP)*, an analysis of indirect effects was performed using the *bootstrapping* technique and the *Sobel test*, as suggested by Wamba et al. (2017). The results of this analysis determined whether the mediation was partial or full.

Before conducting the main analysis, the research instrument was validated and tested for reliability using *SmartPLS* output by examining the values of *outer loading*, *Average Variance Extracted (AVE)*, *Composite Reliability*, and *Cronbach's Alpha* for each construct. Data for this study were collected through questionnaires distributed to respondents consisting of managers, supervisors, and staff directly involved in managing *Innovation Work Behavior (IWB)*, *Knowledge Management (KM)*, and *Innovation* at Paragon Corp during May–June 2025. Each statement in the questionnaire employed a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" to reflect respondents' level of agreement with the provided statements. The variables, along with their dimensions and indicators, are described in the following research instrument table:

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Table1. Variables and Indicator

Variable	Indicator Statements (Likert scale 1–5)
Knowledge Management Process (KMP)	1 – Information and knowledge are actively shared across units.
	2 – Employees and managers frequently exchange information.
	3 – Knowledge is shared with strategic partners.
	4 – The organization often generates new ideas for work methods.
	5 – New methods are developed when traditional ones become ineffective.
	6 – Lessons learned are documented in writing.
	7 – Efforts are made to refine and store accumulated knowledge.
	8 – The organization possesses useful patents and licenses.
	9 – Knowledge is regularly captured from competitors.
	10 – Knowledge is obtained from public research institutions, including universities and government laboratories.
	11 – Knowledge is captured from industry associations, clients, and suppliers.
Innovation Work Behavior (IWB)	1 – Employees try various ways to solve problems.
	2 – Employees seek new methods, techniques, or tools.
	3 – Employees demonstrate innovative and creative behavior.
	4 – Employees take risks to be innovative.
	5 – Employees anticipate problems and opportunities.
Innovation (INNO)	1 – The organization accelerates commercialization through innovation.
	2 – Processes are improved by developing new technologies.
	3 – The company possesses more technical data, patents, and licenses than competitors.
	4 – The organization successfully builds new management practices.
	5 – The company effectively adopts new business models.
	6 – Marketing practices are managed more effectively than competitors.
	7 – The company acquires new equipment or instruments to enhance productivity.
Firm Performance (FP)	1 – The company has achieved sustainable business growth over the past three years.
	2 – Customers appreciate the quality of the company's products or services.
	3 – The company has achieved sales targets over the past three years.
	4 – The company has met profit targets over the past three years.

Respondent Characteristics

The respondents in this study were employees of PT Paragon Technology and Innovation (Paragon Corp), representing various age groups, work experiences, and job positions. A total of 104 respondents participated in the survey, with the majority being female (66%). Most respondents were at the staff level (86%), while the remainder were in supervisory or managerial positions. The majority of respondents were between 25–34 years old (55.76%), followed by those under 25 years old (34.61%), while only 9.61% were 35 years or older. These findings indicate that Paragon Corp's workforce is predominantly composed of young employees. This demographic profile reflects that most employees are young professionals who tend to be adaptive, creative, and innovation-oriented — characteristics that align closely with the focus of this study, which is grounded in the *Knowledge-Based View (KBV)* emphasizing knowledge and innovation as key organizational resources.

Table2. Respondence Characteristic

Characteristic	Category	Total	Percentage
Gender	Male	35	34%
	Female	69	66%
Age	< 25 Years	36	34,61 %

E-ISSN 2963-8585
DOI:10.31000/digibis.v4i2.15171

	25 – 34 Years	58	55,76 %
	35 – 44 Years	7	6,73 %
	> 45 Years	3	2,88 %
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 %

Result

Based on the results of the measurement model evaluation, all constructs in this study—*Knowledge Management Process (KMP)*, *Innovative Work Behavior (IWB)*, *Firm Performance (FP)*, and *Innovation (INNO)*—met the validity and reliability criteria recommended in *Partial Least Squares Structural Equation Modeling (PLS-SEM)* analysis. This is evidenced by the *outer loading* values of most indicators, which exceeded the minimum threshold of 0.70, indicating that each indicator makes a strong contribution in representing its respective construct and can serve as a reliable reference for further research.

Table3 Measurement Model Evaluation

	Outer Loading	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
FP1	0.859	0.872	0.873	0.913	0.723
FP3	0.808				
FP4	0.847				
FP5	0.885				
INNO1	0.868	0.943	0.944	0.953	0.745
INNO2	0.892				
INNO3	0.864				
INNO4	0.830				
INNO5	0.874				
INNO6	0.902				
INNO7	0.808				
IWB1	0.813	0.93	0.931	0.947	0.782
IWB2	0.913				
IWB3	0.893				
IWB4	0.917				
IWB5	0.882				
KMP1	0.745	0.959	0.961	0.964	0.711
KMP2	0.776				
KMP3	0.834				
KMP4	0.885				
KMP5	0.902				
KMP6	0.884				
KMP7	0.912				
KMP8	0.891				
KMP9	0.822				
KMP10	0.803				

E-ISSN 2963-8585
DOI:10.31000/digibis.v4i2.15171

KMP11	0.802

In Table3 above, the values of *Composite Reliability (ρc)*, *Cronbach's Alpha*, and *ρa* are all above 0.7. These results indicate that each construct demonstrates good internal consistency and adequately explains the variance of its respective indicators.

The discriminant validity test in this study was conducted using the *Fornell–Larcker Criterion* approach. From Table4 the results show that all constructs in the model meet the Fornell–Larcker criterion, where the diagonal values (the square roots of the AVE) for each construct are higher than their correlations with other constructs. Thus, the model satisfies the requirements for convergent validity, discriminant validity, and reliability, confirming that the measurement model is robust and suitable for proceeding to the structural analysis.

Table4 Fornell- Larcker Test

	Firm Performance	Innovation	Innovative Work Behavior	Knowledge Management Process
Firm Performance	0.85			
Innovation	0.828	0.863		
Innovative Work Behavior	0.728	0.81	0.884	
Knowledge Management Process	0.841	0.82	0.791	0.843

Inner Model Structural
Path Coefficients Test

The results of the path coefficient test presented in Table5 indicate that most of the relationships among variables in the research model are significant and support the proposed hypotheses, except for the direct relationship between *Innovation Work Behavior (IWB)* and *Firm Performance (FP)*, which is not significant (β = –0.019; p = 0.891). This finding implies that employees' innovative behavior does not directly enhance firm performance but rather operates through mediating mechanisms such as the *Knowledge Management Process (KMP)* and *Innovation (INNO)*. The path *IWB* → *KMP* shows the strongest influence (β = 0.791; t = 15.84; f^2 = 1.676), indicating that employees' innovative behavior substantially contributes to the effectiveness of the organization's knowledge management process.

Meanwhile, the relationships *KMP* → *FP* (β = 0.500; p = 0.001; f^2 = 0.30) and *INNO* → *FP* (β = 0.434; p = 0.000; f^2 = 0.208) demonstrate positive and significant effects, suggesting that both variables play essential roles in improving firm performance. Furthermore, the mediation analysis reinforces the role of *Innovation* as a connecting mechanism between innovative behavior and firm performance. The paths *IWB* → *INNO* → *FP* (β = 0.188; p = 0.005) and *KMP* → *INNO* → *FP* (β = 0.207; p = 0.004) are both significant, indicating that *Innovation* acts as a full mediator in the relationship between *IWB* and *FP* and as a partial mediator in the relationship between *KMP* and *FP*.

Table5. Path Coefficient

	Path Coefficient	T statistics	P values	Decision	Effect (f^2)
Innovation -> Firm Performance	0.434	4.079	0	Accepted	0.208
Innovative Work Behavior -> Firm Performance	-0.019	0.136	0.891	Declined	
Innovative Work Behavior -> Innovation	0.432	3.909	0	Accepted	0.27
Innovative Work Behavior -> Knowledge Management Process	0.791	15.84	0	Accepted	1.676

E-ISSN 2963-8585
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Knowledge Management Process -> Firm Performance	0.5	3.44	0.001	Accepted	0.3
Knowledge Management Process -> Innovation	0.478	4.484	0	Accepted	0.33
Mediation					
Innovative Work Behavior -> Innovation -> Firm Performance	0.188	2.821	0.005	Accepted	
Knowledge Management Process -> Innovation -> Firm Performance	0.207	2.85	0.004	Accepted	

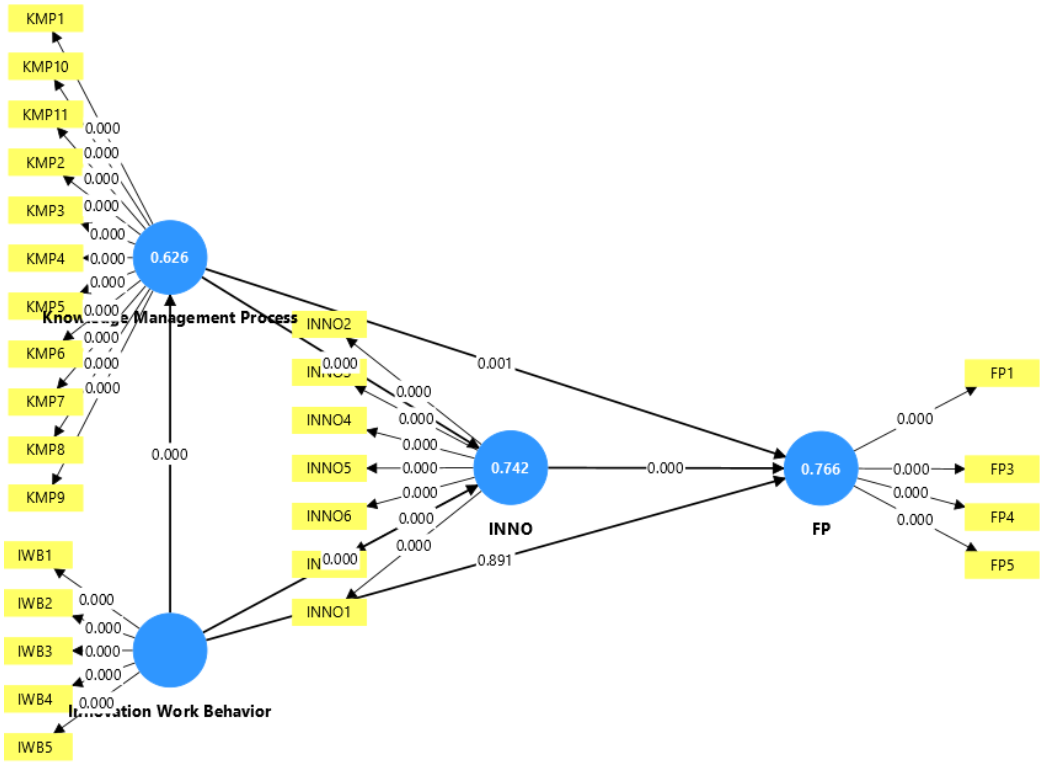

Figure2 P-values Structural Model

R-square (R^2)

The coefficient of determination (R^2) represents the proportion of variance in the dependent variable that is explained by the independent variables. The analysis results show that the independent variables explain 76.6% of the variance in *Firm Performance (FP)*, 74.2% of the variance in *Innovation (INNO)*, and 62.6% of the variance in *Knowledge Management Process (KMP)*. According to the interpretation criteria proposed by Hair et al. (2021), R^2 values above 0.67 are categorized as *strong*, while values between 0.33 and 0.67 are considered *moderate*. Therefore, the model is classified as *strong* in explaining *Firm Performance (FP)* and *Innovation (INNO)*, and *moderate* in explaining *Knowledge Management Process (KMP)*. These findings indicate that the combination of *Innovation Work Behavior (IWB)* and *Knowledge Management Process (KMP)* possesses a high predictive capability for firm performance, primarily through the mediating role of innovation.

Table6 R -Square

	R-square	R-square adjusted	Interpretation
Firm Performance	0.766	0.759	Strong

E-ISSN 2963-8585
DOI:10.31000/digibis.v4i2.15171

Innovation	0.742	0.737	Strong
Knowledge Management Process	0.626	0.623	Moderate

Discussion

Based on the results of the *Partial Least Squares Structural Equation Modeling (PLS-SEM)* analysis, all constructs in this study—*Knowledge Management Process (KMP)*, *Innovation Work Behavior (IWB)*, *Innovation (INNO)*, and *Firm Performance (FP)*—met the validity and reliability criteria recommended for structural model analysis. The *outer model* results indicate that all indicators have *outer loading* values above 0.70, and both *Composite Reliability* and *Cronbach's Alpha* values exceed 0.90. This demonstrates that each construct exhibits high internal consistency and strong convergent validity. Furthermore, the *Fornell–Larcker* test results show that the square root of the AVE for each construct is higher than its correlations with other constructs, confirming that discriminant validity is achieved. Therefore, all indicators and constructs are considered reliable and appropriate for use in a research model grounded in the *Knowledge-Based View (KBV)* theory, which posits that knowledge and innovation serve as primary sources of competitive advantage and enhanced organizational performance.

The *inner model* testing results reveal that four out of five main hypotheses were supported (H1, H3, H4, and H5), while one hypothesis was rejected (H2). The first hypothesis (H1) indicates that *Innovation Work Behavior (IWB)* significantly influences *Knowledge Management Process (KMP)* ($\beta = 0.791$; $p = 0.000$; $f^2 = 1.676$). This finding aligns with the studies of Halawa (2023) and Rahman & Adnan (2024), which emphasize that employees' innovative behaviors—such as seeking creative solutions and sharing new ideas—play a crucial role in enhancing the effectiveness of organizational knowledge management processes. Conversely, the direct relationship between *IWB* and *Firm Performance (FP)* (H2) was found to be insignificant ($\beta = -0.019$; $p = 0.891$), suggesting that innovative behavior alone does not directly improve firm performance without mediation. This finding supports those of Jiménez et al. (2023) and Rehman (2025), who assert that IWB contributes to performance through the transformation of ideas into implemented innovations.

The third hypothesis (H3), testing the effect of *KMP* on *FP*, was accepted ($\beta = 0.500$; $p = 0.001$; $f^2 = 0.30$), indicating that effective knowledge management directly enhances organizational performance. This result is consistent with Sahibzada et al. (2023) and Kumar & Patel (2024), who found that well-implemented knowledge management systems improve efficiency, productivity, and organizational adaptability to market changes. Additionally, *KMP* has a significant positive effect on *Innovation* ($\beta = 0.478$; $p = 0.000$; $f^2 = 0.33$), supporting Alvi et al. (2024), who concluded that firms with strong knowledge management practices are better equipped to develop continuous product and process innovations. Thus, *KMP* is not only critical for improving internal efficiency but also serves as the foundation for innovation capabilities that drive superior performance outcomes.

The mediation analysis further reveals that *Innovation (INNO)* plays a central role in linking *IWB* and *KMP* to *FP*. The path *IWB* → *INNO* → *FP* ($\beta = 0.188$; $p = 0.005$) indicates full mediation, whereas *KMP* → *INNO* → *FP* ($\beta = 0.207$; $p = 0.004$) demonstrates partial mediation. These findings align with Rehman (2025) and Tian et al. (2025), who highlight innovation as a key mechanism that transforms knowledge-based capabilities into superior performance outcomes. Overall, the research model exhibits strong explanatory power, with values of R^2 FP = 0.766, R^2 INNO = 0.742, and R^2 KMP = 0.626, suggesting that the combination of *IWB* and *KMP* effectively explains variations in innovation and firm performance. These results are consistent with the *Knowledge-Based View (KBV)* and reinforce the conclusions of Abou-Moghli (2025), which state that firm performance in

E-ISSN 2963-8585
DOI:10.31000/digibis.v4i2.15171

knowledge-intensive industries such as FMCG is determined by an organization's ability to manage knowledge and convert it into valuable innovation.

In summary, this study provides empirical evidence that, within the context of PT Paragon Technology and Innovation and the broader FMCG industry, organizational success is not solely dependent on individual innovative behavior but, more importantly, on the organization's ability to develop an effective knowledge management system that serves as the foundation for sustained innovation and long-term competitive advantage.

Limitations and Recommendations

Based on the results of the *Partial Least Squares Structural Equation Modeling (PLS-SEM)* analysis, this study has certain limitations, particularly regarding its scope, which focuses on a single company—PT Paragon Technology and Innovation. Therefore, the findings may not be fully generalizable to the entire FMCG sector in Indonesia. For future research, it is recommended to include a larger number of companies or conduct comparative analyses across different industries to enhance the robustness and applicability of the findings. Additionally, future studies could incorporate moderating variables such as *organizational culture*, *digital capability*, or *leadership style* to provide deeper insights into how innovative behavior and knowledge management interact to improve firm performance.

Reference

Abou-Moghli, A. (2025). The interplay between knowledge management and organizational performance measurement through the mediating effect of innovation capability. Knowledge and Performance Management, 9(1), 45–59.

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems. MIS Quarterly, 25(1), 107–136.

Alvi, A., Ahmad, M., & Safdar, S. (2024). Knowledge management practices and innovation capability in digital organizations. Journal of Innovation and Process Development, 7(2), 51–64.

Chen, Y., & Nguyen, T. (2023). Knowledge sharing, digital capability, and innovation performance in emerging markets. Journal of Business Research, 161, 113905.

De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behavior. Creativity and Innovation Management, 19(1), 23–36.

Dung, P., & Dung, L. T. H. (2024). Knowledge management capability and firm performance in manufacturing SMEs. Journal of Business Research Asia, 15(3), 221–238.

Halawa, F. (2023). The importance of innovative work behavior in era 4.0. Maksipreneur Journal of Management and Entrepreneurship, 13(2), 45–60.

Jiménez, F., Martínez, M., & Pérez, R. (2023). Innovation as a mediating factor in the relationship between knowledge management and organizational performance. International Journal of Productivity and Performance Management, 72(4), 887–906.

Ketut, I. A. (2025). The transformative impact of innovative work behavior on organizational performance. International Journal of Science, Technology & Management, 6(1), 47–58.

Kumar, P., & Patel, R. (2024). Enhancing performance through knowledge management: Evidence from emerging markets. Management Decision, 62(2), 315–334.

Li, X., & Zhang, L. (2023). Innovative behavior and firm performance: Evidence from Asia-Pacific enterprises. Asia Pacific Management Review, 28(1), 55–68.

Rahman, A., & Adnan, N. F. (2024). Predicting innovative work behavior through knowledge sharing, perceived organizational support, and psychological

E-ISSN 2963-8585
DOI:10.31000/digibis.v4i2.15171

empowerment. Indonesian Journal of Sustainable Entrepreneurship, 3(1), 25–36.

Rehman, M. A. (2025). Knowledge management and innovation as drivers of firm performance: Evidence from knowledge-based view perspective. Journal of Business Research Insights, 14(2), 111–127.

Sahibzada, U. F., Chen, S., & Latif, K. (2023). The effect of knowledge management on organizational performance: The mediating role of innovation. Business Process Management Journal, 29(1), 223–241.

Tian, J., Zhang, L., & Cheng, M. (2025). Knowledge-based resources and innovation performance in the digital economy. Technovation, 139, 103328.

Xu, H., & Li, W. (2022). Knowledge integration, innovation, and firm performance in emerging economies. Journal of Business Economics, 92(6), 1217–1238.