

KNOWLEDGE MANAGEMENT AND INNOVATION IN HIGHER EDUCATION INSTITUTIONS: EMPIRICAL EVIDENCE FROM VIETNAM

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ABSTRACT

In the context of increasing university autonomy, digital transformation, and international integration in Vietnam, strengthening innovation capability has become an important strategic priority for higher education institutions. Knowledge management (KM), encompassing knowledge creation, sharing, storage, and application, provides a critical mechanism through which universities can transform individual and organizational knowledge into innovative outcomes. Despite its growing importance, KM practices in Vietnamese universities remain relatively fragmented, while empirical evidence on how different KM processes contribute to institutional innovation is still limited. This study investigates the effects of four key KM processes knowledge creation, knowledge sharing, knowledge storage, and knowledge application on innovation capability in teaching, research, and organizational management. Data were collected from 312 lecturers and managers across 16 public and private universities in Vietnam and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings demonstrate that all four KM processes have positive effects on university innovation capability, with knowledge application and knowledge sharing emerging as the most influential factors. The analysis also reveals significant differences between public and private universities, suggesting that institutional context shapes the effectiveness of KM practices in fostering innovation. By providing empirical evidence from the Vietnamese higher education sector, this study extends the understanding of the KM innovation relationship in an emerging higher education context. The findings also offer practical implications for university leaders seeking to develop more integrated KM systems, strengthen knowledge-sharing cultures, and leverage institutional knowledge to support university autonomy, digital transformation, and sustainable innovation.

Keywords: Knowledge management, innovation capability, higher education, university autonomy.

1. INTRODUCTION

In the context of the knowledge economy and rapid digital transformation, universities worldwide are under increasing pressure to enhance their innovation capability. In Vietnam, many higher education institutions particularly public and regional universities continue to face significant challenges in fostering innovation due to limitations in managing and leveraging internal knowledge resources. These challenges are reflected in fragmented knowledge storage systems, weak knowledge-sharing culture, and the underutilization of tacit knowledge [1]. In contrast, in many developed countries, Knowledge Management (KM) has become a fundamental driver of innovation capability in higher education institutions [2].

According to Nonaka and Takeuchi, effective KM enables the transformation of individual knowledge into organizational knowledge, creating new value and fostering innovation through organizational learning processes, research collaboration, curriculum improvement, and technology adoption in universities [3]. However, empirical research examining the relationship between KM and innovation capability in Vietnamese higher education remains limited. Recent reports from the Ministry of Education and Training (MOET, 2023) [4] indicate that approximately 63% of universities in Vietnam do not have formal KM systems, and knowledge sharing largely occurs informally. As a result, many institutions have not fully recognized the strategic role of KM in promoting innovation.

Today, innovation in universities is not only driven by competitive pressures and digital transformation but also fundamentally depends on KM capability, which enables institutions to capture, transform, and apply knowledge to enhance organizational learning, management quality, and sustainable innovation [5,6]. As higher education systems increasingly transition toward knowledge-based models, universities must develop effective KM systems to strengthen competitiveness and contribute more effectively to socio-economic development [7].

Motivated by these gaps, this study aims to examine the impact of Knowledge Management on innovation capability in Vietnamese universities. Specifically, it evaluates how KM components influence innovation in teaching, research, and organizational management. By providing empirical evidence and policy implications, this research positions KM as a strategic tool for digital transformation, university autonomy, and comprehensive quality enhancement in higher education.

2. THEORETICAL BACKGROUND

2.1. Theoretical Foundations

2.1.1. Resource-Based View (RBV)

The Resource-Based View (RBV) provides a fundamental theoretical lens for explaining the relationship between Knowledge Management (KM) and organizational innovation. According to RBV, organizations possess heterogeneous resources that are not easily transferable or imitable across competitors [8]. Based on these assumptions, organizations that own resources meeting the VRIN criteria valuable, rare, inimitable, and non-substitutable can establish and sustain competitive advantage [9]. Such resources enable organizations to create new value, enhance efficiency, and maintain long-term competitiveness [10].

From this perspective, internal environments and intangible resources including organizational culture, reputation, experience, and knowledge play a decisive role in organizational performance. Among these, knowledge is considered a strategic resource. Therefore, this study adopts RBV to examine the role of knowledge sharing and other KM processes in fostering innovation capability, aligning with the view that sustainable advantage arises from the effective utilization of both tangible and intangible resources.

2.1.2. Dynamic Capabilities Theory (DCT)

Dynamic Capabilities Theory extends RBV by emphasizing the organization's ability to reconfigure resources in response to rapidly changing environments. Developed from Barney's RBV perspective, DCT highlights the importance of adaptability and continuous renewal [11]. Dynamic capabilities represent the organization's ability to integrate, build, and reconfigure internal and external competencies to maintain competitive advantage. While RBV focuses on the possession of valuable resources, DCT emphasizes the organization's ability to adapt those resources over time [12, 13]. Organizations with strong dynamic capabilities can identify opportunities, reorganize resources quickly, and transform operational models to align with

environmental changes. Ali and colleagues proposed a knowledge-based dynamic capability framework consisting of knowledge acquisition, knowledge creation, and knowledge integration processes [14]. Similarly, Zollo and Winter argued that dynamic capabilities enable organizations to continuously reconfigure knowledge resources to sustain performance [15]. Without such capabilities, initial competitive advantages quickly erode. In this study, DCT is applied to explain how knowledge sharing and other KM processes enhance innovation capability in universities, thereby strengthening long-term competitiveness.

2.1.3. Diffusion of Innovation Theory (DIT)

Diffusion of Innovation Theory explains how new ideas and innovations spread within social systems over time [17]. The theory emphasizes the role of social networks, organizational culture, and individual perceptions in innovation adoption [18, 19]. Innovation adoption adopts at both individual and organizational levels. Grants and co-authors identified three key determinants influencing organizational innovation adoption: (i) Managerial characteristics and commitment; (ii) Organizational culture and internal communication; (iii) External environmental conditions [17]. Organizations with strong communication networks and collaborative cultures are more likely to adopt and diffuse innovations effectively. This perspective is highly relevant to universities, where knowledge sharing and collaboration play critical roles in innovation diffusion.

2.1.4. Knowledge-Based View (KBV)

The Knowledge-Based View (KBV) extends RBV by positioning knowledge as the most strategically significant organizational resource. According to Kogut and Zander, organizations exist to create, share, and transfer knowledge, transforming ideas into actions, products, and innovations [16]. Grant further emphasized that knowledge is generated by individuals but integrated at the organizational level to maintain stability and performance [17]. Nonaka and Takeuchi introduced the SECI model: Socialization, Externalization, Combination, and Internalization to describe the dynamic process of knowledge creation [3]. The SECI model explains how tacit and explicit knowledge interact continuously to generate new organizational knowledge, ultimately driving innovation and competitive advantage. When supported by organizational culture, technology, and learning incentives, the SECI cycle enables continuous knowledge creation and innovation.

2.2. Empirical research

A growing body of empirical research has examined the relationship between Knowledge Management (KM) and innovation capability across various organizational contexts. These studies consistently highlight KM as a critical mechanism for transforming organizational knowledge into innovative outcomes.

One of the most influential empirical studies was conducted by Lee and Choi, who developed an integrated KM framework and tested it using structural equation modeling [12]. Their findings demonstrated that knowledge creation, sharing, storage, and application positively influence innovation capability, while organizational enablers such as culture, structure, and IT infrastructure indirectly support innovation through KM processes. This study provides a strong methodological and theoretical foundation for subsequent KM research.

Further empirical evidence confirms the central role of knowledge sharing and knowledge application in driving innovation. Kiessling et al. found that knowledge application is the most significant predictor of innovation performance in U.S. firms [19]. Similarly, Donate and de Pablo reported that KM acts as a mediator between knowledge-oriented leadership and innovation capability, highlighting the importance of leadership and governance in facilitating knowledge-based innovation [20].

In the higher education context, Fullwood et al. surveyed academic staff in the United Kingdom and found that knowledge-sharing culture, trust, and organizational support strongly influence knowledge-sharing behavior, which in turn promotes teaching and research innovation [2]. Ramayah et al. using PLS-SEM in Malaysian universities, confirmed that knowledge-sharing behavior significantly enhances service innovation and organizational performance, demonstrating the relevance of KM in Southeast Asian higher education systems [21].

Recent studies further emphasize institutional and contextual factors. Galgotia and Lakshmi showed that private universities tend to implement KM more effectively than public institutions due to flexible governance and greater technological investment [22]. Rehman and Iqbal highlighted the role of knowledge-oriented leadership in promoting innovation in research universities, while Iqbal et al. found that KM indirectly improves organizational performance through innovation and intellectual capital [23, 22].

Despite the growing international evidence, empirical research on KM and innovation in Vietnamese higher education remains limited. Existing domestic studies mainly focus on KM practices, teaching innovation, or policy implications, but rarely examine the comprehensive KM–innovation relationship using robust quantitative methods. Moreover, comparative analysis between public and private universities is still scarce. Therefore, this study addresses this research gap by empirically testing the impact of the four KM processes on innovation capability in Vietnamese universities using PLS-SEM and multi-group analysis.

2.3. Research hypotheses

This study examines the impact of the four core Knowledge Management (KM) processes on innovation capability in higher education institutions. Innovation capability in universities is reflected in improvements in teaching, research, and organizational management. Based on prior theoretical and empirical studies, the following hypotheses are proposed.

Knowledge creation and innovation capability: Knowledge creation refers to an organization's ability to generate new knowledge through learning, research, and creative activities. In universities, knowledge creation plays a central role in improving teaching quality, research productivity, and managerial decision-making. Lee and Choi demonstrated that knowledge creation significantly enhances organizational performance and innovation capability, particularly in knowledge-intensive organizations [12]. Similarly, Donate and Pablo confirmed the strong mediating role of knowledge creation in transforming knowledge-oriented leadership into innovation outcomes [20]. Therefore, the following hypothesis is proposed:

H1: Knowledge creation positively influences innovation capability in universities.

Knowledge sharing and innovation capability: Knowledge sharing refers to the exchange of information, expertise, and experiences among individuals and departments. It is a critical mechanism for disseminating ideas and accelerating innovation across organizations. Fullwood et al. found that knowledge-sharing culture is directly associated with innovation in teaching and research in universities [2]. Likewise, Ramayah et al. showed that knowledge-sharing behavior significantly improves service innovation and educational quality in higher education institutions [21]. Accordingly, the study proposes:

H2: Knowledge sharing positively influences innovation capability in universities.

Knowledge storage and innovation capability: Knowledge storage refers to the organization's ability to codify, systematize, and preserve knowledge for long-term use. In higher education, where staff turnover, curriculum changes, and research priorities frequently evolve, effective knowledge storage ensures organizational continuity and learning. Lee and Choi identified knowledge storage as a key KM component that indirectly enhances innovation by supporting knowledge application [12]. Iqbal et al. further emphasized that knowledge

retention and reuse contribute to intellectual capital accumulation and sustainable innovation [24]. Thus, the following hypothesis is proposed:

H3: Knowledge storage positively influences innovation capability in universities.

Knowledge application and innovation capability: Knowledge application represents the transformation of knowledge into practical actions and organizational improvements. It reflects the ability of universities to implement new teaching methods, research practices, and governance mechanisms. Kiessling et al. found that knowledge application is the strongest predictor of innovation performance [19]. Donate and Pablo also highlighted that applying knowledge is the final step in converting knowledge into tangible value [20]. Therefore, the final hypothesis is proposed:

H4: Knowledge application positively influences innovation capability in universities.

3. METHODOLOGY

This study employs a quantitative research design to examine the impact of Knowledge Management (KM) processes on innovation capability in Vietnamese universities. The research model was developed based on established theoretical foundations, including the Resource-Based View (RBV), the Knowledge-Based View (KBV), and Dynamic Capabilities Theory (DCT), combined with insights from prior empirical studies such as Gold et al., Lee and Choi, and Fullwood et al [18, 12, 2]. To ensure the relevance of the research model to the Vietnamese higher education context, the proposed framework was refined through consultation with five experts who are senior leaders from five Vietnamese universities, including both public and private institutions. Their feedback focused on the clarity, feasibility, and contextual suitability of the measurement constructs and questionnaire items.

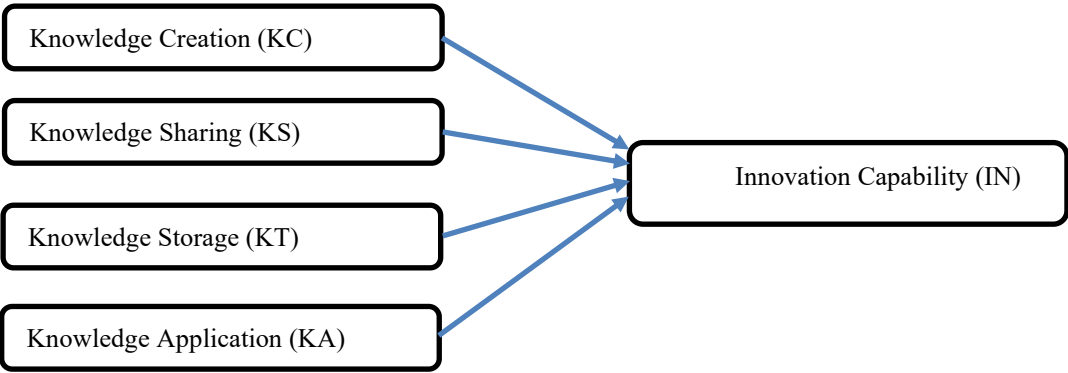


Figure 1. Proposed Research Model - Source: Own research

Based on the theoretical foundation and expert consultation, the research model proposes that Knowledge Management consists of four key processes: knowledge creation, knowledge sharing, knowledge storage, and knowledge application. These processes are hypothesized to directly influence innovation capability in universities. Innovation capability in this study is conceptualized as the ability of universities to introduce improvements and new practices in teaching, research, and organizational management.

The measurement scales were adapted from internationally validated instruments to ensure reliability and comparability. The constructs for knowledge creation, knowledge sharing, knowledge storage, and knowledge application were adapted primarily from Gold et al, Lee and Choi, while several items related to knowledge sharing were refined based on Fullwood et al. to better reflect the academic environment [18,12]. The measurement of

innovation capability was adapted from Lee and Choi and Donate and Sánchez de Pablo and adjusted to capture innovation in teaching, research, and governance [12, 20]. All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was translated into Vietnamese and then back-translated into English to ensure semantic accuracy. A pilot test with 30 respondents was conducted to verify clarity and reliability before the official survey was administered.

Data were collected from lecturers, academic managers, and administrative staff working at Vietnamese universities. A purposive sampling approach was adopted to target individuals who are directly involved in teaching, research, and organizational decision-making. The final dataset consists of 312 valid responses collected from 16 universities, including both public and private institutions. This sample size satisfies the recommended requirements for PLS-SEM analysis and provides sufficient statistical power for hypothesis testing.

Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to analyze the data using SmartPLS software. This method is appropriate because the study focuses on prediction and theory development in an emerging research context and involves multiple latent constructs with complex relationships. The analysis was conducted in two stages. First, the measurement model was assessed in terms of reliability and validity, including indicator reliability, composite reliability, average variance extracted (AVE), and discriminant validity. Second, the structural model was evaluated through path coefficients, bootstrapping procedures with 5,000 resamples, coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2). In addition, Multi-Group Analysis (MGA) was conducted to compare the structural relationships between public and private universities. Participation in the survey was voluntary and anonymous. Respondents were informed that the data would be used solely for academic research purposes.

4. RESULTS

4.1. Descriptive Statistics of the Survey Sample

The analysis of descriptive statistics for the survey sample is a crucial step in determining the representativeness and reliability of the data before conducting in-depth quantitative analyses. In this study, a total of 312 valid questionnaires were collected, meeting the minimum sample size requirement recommended by Hair et al. (2010) for the PLS-SEM method, while also ensuring a reasonable distribution across different characteristic groups within the Vietnamese higher education system.

Table 1. Descriptive Statistics of the Survey Sample

Demographic Variables	Frequency (N)	Percentage (%)
Gender (Female)	183	58.7%
Gender (Male)	129	41.3%
Age group 31- 45	194	62.2%
Position: Lecturer	200	64.1%
Position: Manager	66	21.2%
Position: Staff	46	14.7%
Public universities	221	70.8%
Private universities	91	29.2%
Northern region	131	42.0%
Central region	56	17.9%

Southern region	125	40.1%
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Source: Own research

Detailed Analysis of Demographic Groups (Table 1): Female respondents account for 58.7% of the sample, while males make up 41.3%. This distribution aligns with the reality in many Vietnamese universities, where female lecturers and staff tend to be more prevalent, particularly in fields such as social sciences, education, and administration. In terms of age distribution, 62.2% of respondents fall within the 31 - 45 age group. This group typically represents mid-career professionals who possess considerable experience and often play a core role in academic and institutional activities. Regarding occupational positions, lecturers constitute the majority at 64.1%, followed by managerial staff at 21.2%, and administrative staff at 14.7%. This structure reflects the central role of teaching staff in higher education institutions, while still ensuring representation from management and administrative functions. By type of institution, respondents from public universities account for 70.8%, whereas those from private institutions represent 29.2%. This distribution is consistent with the current structure of the Vietnamese higher education system, where public universities dominate in number and scale. Finally, in terms of regional distribution, the North accounts for 42.0% of respondents, the Central region 17.9%, and the South 40.1%. This relatively balanced regional representation enhances the generalizability and geographic coverage of the survey findings.

4.2. Assessment of Reliability and Validity of Measurement Scales

Before testing the structural model, the study evaluates the quality of the measurement scales to ensure the validity and reliability of the latent constructs. The assessment indicators include Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), and discriminant validity. The results of the reliability and validity assessment for the five main constructs - Knowledge Creation (KC), Knowledge Sharing (KS), Knowledge Storage (KT), Knowledge Application (KA), and Innovation Capability (IN) are presented in Table 2 below:

Table 2. Reliability and Convergent Validity of Measurement Scales

Factor	Cronbach's Alpha	Composite Reliability (CR)	AVE
Knowledge Creation (KC)	0.596	0.867	0.612
Knowledge Sharing (KS)	0.698	0.879	0.623
Knowledge Storage (KT)	0.733	0.861	0.596
Knowledge Application (KA)	0.699	0.889	0.655
Innovation Capability (IN)	0.844	0.905	0.678

Source: Own research

The results indicate that all measurement scales have Cronbach's Alpha values around 0.6 and Composite Reliability (CR) values greater than 0.86, demonstrating a high level of internal consistency among the observed variables within each latent construct. This provides an important basis for confirming that the developed scales are appropriate and reliable in the context of higher education research in Vietnam.

In addition, all constructs exhibit Average Variance Extracted (AVE) values exceeding the threshold of 0.50 specifically ranging from 0.596 to 0.678 indicating that the observed variables explain a substantial proportion of the variance of the latent constructs they represent. This confirms the convergent validity of the measurement model, meaning that the observed variables are strongly correlated with their corresponding theoretical constructs.

Discriminant validity was also assessed using two widely accepted methods: the Fornell–

Larcker criterion and the Heterotrait–Monotrait ratio (HTMT). The results show that the square root of AVE for each construct is greater than its correlations with other constructs, while all HTMT values are below 0.85, satisfying the required thresholds for discriminant validity. This confirms that the constructs in the model are distinct and measured independently. Overall, based on these indicators, it can be concluded that the measurement model demonstrates strong reliability and validity, providing a solid foundation for subsequent testing of the structural model and research hypotheses.

After confirming that the measurement model meets the requirements for reliability and validity, the study proceeds to evaluate the structural model to examine the causal relationships among the latent constructs in the theoretical framework. The analysis is conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) through the SmartPLS software. The structural model assessment includes key aspects such as model fit, predictive capability, and hypothesis testing.

4.3. Model Fit Assessment

Model fit is evaluated using key indicators, including: (i) the coefficient of determination (R^2), which represents the explanatory power of independent variables on the dependent variable; and (ii) the predictive relevance (Q^2), which assesses the model's predictive capability using the blindfolding technique. The results show that the R^2 value for the dependent variable "Innovation Capability" (IN) is 0.603, indicating that the model explains 60.3% of the variance in innovation capability. According to Hair et al. (2017), an R^2 value of 0.60 or higher is considered relatively strong in organizational behavior research [25]. The Q^2 value is 0.417, which is greater than zero, suggesting that the model has acceptable predictive relevance. Based on these two indicators, it can be concluded that the theoretical model in this study demonstrates a relatively good level of fit, providing a solid basis for further in-depth analysis of the research hypotheses.

The theoretical model proposed in this study includes four main relationships between the components of knowledge management and innovation capability. Hypothesis testing is conducted using the bootstrapping method with 5,000 resamples.

Table 3. Results of Hypothesis Testing

Hypothesis	Relationship	β Coefficient	t-value	p - value
H1	KC $\rightarrow$ IN	0.271	4.32	<0.001
H2	KS $\rightarrow$ IN	0.198	3.75	<0.001
H3	KT $\rightarrow$ IN	0.122	2.14	0.034
H4	KA $\rightarrow$ IN	0.361	5.17	<0.001

Source: Own research

All tested hypotheses are supported at a high level of statistical significance ($p < 0.05$), confirming that the components of knowledge management have a positive impact on the innovation capability of universities.

Among them, Knowledge Application (KA) has the strongest effect on innovation capability ($\beta = 0.361$), indicating that the ability to transform knowledge into action is a critical factor in driving improvement and innovation. Knowledge Creation (KC) also shows a significant effect ($\beta = 0.271$), reflecting its role as the origin of new knowledge within the organization. Knowledge Sharing (KS) and Knowledge Storage (KT) have positive but more modest effects, suggesting their supporting and diffusion roles within the knowledge cycle.

Overall, the proposed theoretical model is validated with empirical data from Vietnam.

These findings contribute to strengthening the theoretical foundation regarding the relationship between knowledge management and innovation in the higher education sector, while also providing a basis for practical solutions to enhance innovation capability through effective utilization of organizational knowledge.

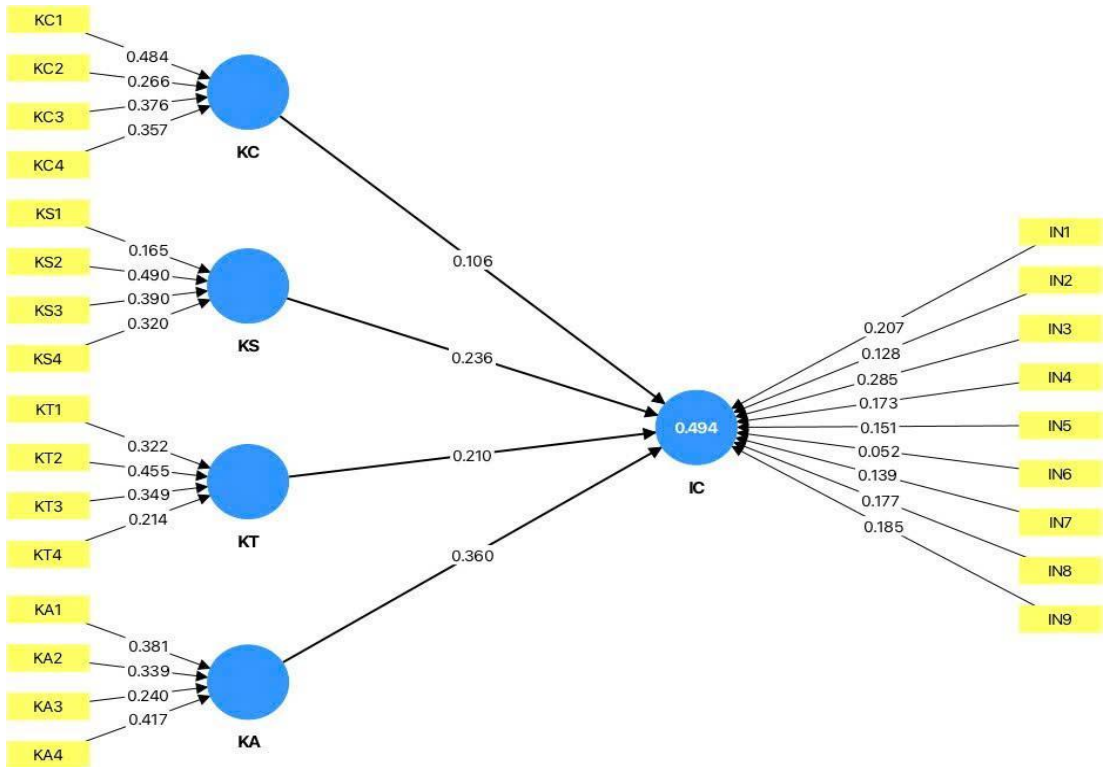


Figure 2. Results of the PLS-SEM Structural Model - Source: Own research

4.4. Discussion

4.4.1. Vietnamese Higher Education Transformation Context

Vietnamese higher education is currently experiencing a major transition toward university autonomy, digital transformation, and international integration. National strategies increasingly emphasize innovation, digital education, and research capacity as key drivers for improving institutional competitiveness and educational quality. Many universities have begun implementing blended learning, e-learning platforms, and industry-linked programs to prepare graduates for the digital economy and global labor market.

However, the implementation of knowledge management (KM) practices remains uneven across institutions. While several leading universities have invested in digital infrastructure, knowledge repositories, and collaboration platforms, many institutions still lack formal knowledge management systems, incentive mechanisms, and organizational cultures that encourage knowledge sharing. This gap highlights the importance of understanding how KM contributes to innovation capability in Vietnamese universities.

The dataset used in this study, collected from 312 lecturers, administrators, and managers across 16 universities, reflects a critical period in which universities are accelerating digital transformation and autonomy reforms. Therefore, the findings provide timely empirical evidence on how knowledge management influences innovation capability during this transformation phase.

4.4.2. Interpretation of Empirical Findings

The results confirm that all four knowledge management processes significantly contribute to innovation capability in universities, although their impacts differ in magnitude. The regression results reveal a clear hierarchy of influence: knowledge application, knowledge creation, knowledge sharing, and knowledge storage.

Knowledge application emerges as the strongest predictor of innovation capability. This finding suggests that innovation in universities is primarily driven by the ability to translate knowledge into practice. Universities that effectively apply knowledge in teaching, research, and governance are more capable of developing innovative educational programs, improving research productivity, and enhancing organizational efficiency. This result reinforces the idea that knowledge generates value only when it is actively implemented.

Knowledge sharing is the second most influential factor, highlighting the importance of collaboration and organizational learning in academic institutions. Universities that foster open communication and encourage interdisciplinary interaction are more likely to develop innovative teaching approaches and research initiatives. This finding is particularly relevant in the Vietnamese context, where traditional academic culture may still limit knowledge exchange.

Knowledge creation also demonstrates a strong positive impact on innovation capability. As knowledge-producing organizations, universities rely on research, experimentation, and academic learning to generate new ideas. The results confirm that the creation of new knowledge remains a fundamental driver of innovation.

Knowledge storage has the weakest but still significant effect. This suggests that while knowledge repositories and databases are necessary, they are insufficient on their own to stimulate innovation. Stored knowledge must be actively shared and applied to create value. This finding highlights the need for universities to move beyond building repositories toward developing dynamic knowledge ecosystems.

4.4.3. Theoretical and Practical Implications

The findings of this study provide both theoretical and practical contributions to the literature on knowledge management and innovation in higher education.

From a theoretical perspective, the results offer strong empirical support for the Resource-Based View, Knowledge-Based View, and Dynamic Capabilities Theory in the higher education context of a developing country. The study demonstrates that knowledge management represents a strategic organizational capability that significantly enhances innovation performance. By identifying knowledge application and knowledge sharing as the most influential drivers, the research extends existing theories by clarifying how different KM processes contribute differently to innovation capability.

From a practical perspective, the findings provide important implications for university leaders and policymakers. Universities should prioritize the development of centralized knowledge repositories integrated with digital transformation strategies. Institutional leaders should foster a knowledge-sharing culture through incentives, collaborative platforms, and interdisciplinary activities. Training programs should be implemented to enhance the ability of staff to apply knowledge in teaching, research, and governance. Finally, knowledge management should be integrated into university autonomy and governance reforms to ensure that knowledge resources are systematically leveraged to support long-term innovation and competitiveness.

5. CONCLUSION

This study investigates the impact of knowledge management (KM) processes on innovation capability in Vietnamese universities in the context of digital transformation,

university autonomy, and international integration. Using survey data collected from 312 lecturers, administrators, and managers from 16 public and private universities and applying quantitative analysis techniques, the study provides empirical evidence on the role of knowledge management in enhancing innovation capability in higher education institutions.

The findings confirm that all four knowledge management processes knowledge creation, knowledge sharing, knowledge storage, and knowledge application have significant positive effects on innovation capability. Among them, knowledge application and knowledge creation emerge as the most influential drivers, highlighting the importance of translating knowledge into practice and fostering collaborative academic environments. Knowledge creation also plays an important role, while knowledge storage shows the weakest yet still significant impact, indicating that knowledge repositories must be actively utilized to generate innovation.

Overall, the regression model explains 72,4% of the variance in innovation capability, demonstrating the strong explanatory power of knowledge management in the higher education context. The results provide empirical support for the Resource-Based View, Knowledge-Based View, and Dynamic Capabilities Theory by confirming that knowledge management represents a strategic capability that enhances organizational innovation.

From a practical perspective, the study highlights the urgent need for Vietnamese universities to develop comprehensive knowledge management strategies. Universities should invest in centralized knowledge repositories, promote knowledge-sharing cultures, and enhance the capacity of staff to apply knowledge in teaching, research, and governance. Integrating knowledge management into digital transformation and university autonomy initiatives is essential to strengthen innovation capability and improve institutional competitiveness.

Despite its contributions, this study has several limitations. First, the research relies on cross-sectional survey data, which limits the ability to examine long-term causal relationships. Second, the sample focuses on Vietnamese universities, which may limit the generalizability of the findings to other countries. Future research could employ longitudinal data, comparative international studies, and advanced analytical techniques such as structural equation modeling to further explore the mechanisms linking knowledge management and innovation.

In conclusion, this study provides timely empirical evidence demonstrating that knowledge management is a critical driver of innovation capability in Vietnamese higher education institutions. Strengthening knowledge management practices will be essential for universities seeking to adapt to the rapidly changing demands of the knowledge economy and digital era.

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