



# Knowledge Management as the Primary Driver of Innovation Capability and Entrepreneur Performance in Indonesian Batik SMEs

Irwan Sugiarto<sup>1\*</sup>, Horas Djulius<sup>2</sup>, Heru Setiawan<sup>3</sup>

<sup>1,2,3</sup> Universitas Pasundan, Bandung, Indonesia

\*Corresponding e-mail: [irwansugiarto8@gmail.com](mailto:irwansugiarto8@gmail.com)

DOI: [doi.org/10.66314/famj.v4i2.1055](https://doi.org/10.66314/famj.v4i2.1055)

| ARTICLE INFO                                                                                                                                                                                                                               | ABSTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Keywords:</b> Batik SMEs; Entrepreneur Performance; Innovation Capability; Knowledge Management; Knowledge-based View.</p> <p><b>Received:</b> Feb 10, 2026<br/> <b>Revise:</b> May 29, 2026<br/> <b>Accepted:</b> June 26, 2026</p> | <p>This study examines the effects of Entrepreneurial Leadership, Intellectual Capital, and Knowledge Management on Innovation Capability and investigates the implications of Innovation Capability for Entrepreneur Performance among Indonesian batik Micro, Small, and Medium Enterprises (MSMEs). The study addresses inconsistencies in the literature regarding the relative importance of organizational capabilities in fostering innovation and business performance. A quantitative explanatory survey was conducted involving 166 batik MSME owners and managers in Garut Regency, Tasikmalaya Regency, and Tasikmalaya City, West Java, Indonesia. Data were collected through structured questionnaires and analyzed using path analysis with IBM SPSS Statistics 25. The results reveal that Entrepreneurial Leadership, Intellectual Capital, and Knowledge Management positively and significantly influence Innovation Capability. Among these variables, Knowledge Management emerged as the strongest predictor of Innovation Capability (<math>\beta = 0.454</math>), followed by Intellectual Capital (<math>\beta = 0.346</math>) and Entrepreneurial Leadership (<math>\beta = 0.335</math>). Furthermore, Innovation Capability demonstrated a strong positive effect on Entrepreneur Performance (<math>\beta = 0.862</math>). The model explained 72.2% of the variance in Innovation Capability and 74.3% of the variance in Entrepreneur Performance. This study extends the Resource-Based View, Knowledge-Based View, and Dynamic Capabilities Theory by identifying Knowledge Management as the dominant organizational capability driving innovation within knowledge-intensive cultural SMEs. The findings provide new insights into how organizational resources are transformed into innovation and business performance in traditional creative industries.</p> |

*This is an open access article under the [CC BY-SA](#) license*



## 1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in economic development by generating employment, stimulating innovation, and contributing to national economic growth. In an increasingly competitive business environment characterized by globalization, technological disruption, and digital transformation, MSMEs are required to continuously adapt and innovate to maintain their competitiveness and sustainability. The emergence of Industry 4.0 has intensified market competition and accelerated changes in consumer preferences, making innovation an essential capability for organizational survival and long-term performance (Marcucci et al., 2022; Sima et al., 2020).

In Indonesia, MSMEs constitute approximately 99 percent of all business entities and contribute significantly to national gross domestic product and employment. Despite their substantial contribution, many MSMEs continue to face challenges related to productivity, competitiveness, and business sustainability. These challenges are particularly evident in traditional and culture-based industries,



including the batik industry, which simultaneously serves as an economic sector and a cultural heritage asset. Following UNESCO's recognition of batik as an Intangible Cultural Heritage of Humanity, the batik industry has gained strategic importance in supporting local economic development and preserving Indonesian cultural identity.

Innovation capability has therefore become a critical determinant of sustainability and competitiveness among batik MSMEs. Innovation capability refers to an organization's ability to transform knowledge, resources, and competencies into new products, processes, marketing approaches, and organizational practices that generate value and improve performance (Migdadi, 2019; YuSheng & Ibrahim, 2020). Previous studies have consistently shown that firms with stronger innovation capability are better positioned to respond to environmental changes, exploit market opportunities, and achieve superior business performance (Cobbinah et al., 2026; Ferreira & Coelho, 2020). For resource-constrained MSMEs, innovation capability is particularly important because it enables firms to overcome limitations and compete effectively in dynamic markets.

The development of innovation capability is influenced by various organizational resources and capabilities. Entrepreneurial leadership encourages opportunity recognition, proactive behavior, creativity, and strategic risk-taking, all of which are essential for innovation development (Ageli et al., 2025; Ercantan et al., 2024). Intellectual capital contributes through human capital, structural capital, and relational capital, providing valuable knowledge resources that support organizational learning and innovation (Jordão et al., 2019; Kucharska, 2021). Meanwhile, knowledge management facilitates the acquisition, sharing, application, and preservation of knowledge that can be transformed into innovative outputs and competitive advantages (Ferreira et al., 2018; Rehman et al., 2021). Collectively, these organizational resources are frequently regarded as important antecedents of innovation capability and organizational performance.

Despite the growing body of literature, existing findings remain fragmented and inconclusive regarding the relative contribution of these organizational resources to innovation capability. Some studies emphasize entrepreneurial leadership as the primary driver of innovation because entrepreneurial leaders create opportunity-oriented and innovation-supportive environments (Mehmood et al., 2021; Yang & Bentein, 2023). Other studies highlight intellectual capital as the most strategic resource for innovation development because knowledge assets and organizational competencies provide the foundation for value creation and competitive advantage (Abeysekera, 2021; Ali et al., 2021). In contrast, a growing stream of research suggests that knowledge management may play a more dominant role because innovation fundamentally depends on an organization's ability to create, integrate, transfer, and utilize knowledge effectively (Anshari & Hamdan, 2022; Thomas, 2024). These differing perspectives indicate that the relative importance of entrepreneurial leadership, intellectual capital, and knowledge management in fostering innovation capability remains insufficiently understood.

Furthermore, previous studies have predominantly examined entrepreneurial leadership, intellectual capital, and knowledge management as independent predictors of innovation, resulting in fragmented explanations regarding how strategic organizational resources collectively contribute to innovation capability. Existing literature has also paid limited attention to identifying which organizational capability serves as the most influential mechanism for transforming resources into innovation outcomes. While innovation capability is widely acknowledged as an important determinant of firm performance, empirical evidence examining innovation capability as a strategic pathway linking organizational resources to entrepreneur performance remains relatively limited, particularly within MSME contexts.

Another important limitation concerns the research setting. Most empirical studies on innovation capability have been conducted in manufacturing firms, technology-oriented industries, or large organizations. Comparatively little attention has been devoted to traditional cultural industries such as batik MSMEs. This context is theoretically important because batik enterprises rely heavily on tacit knowledge embedded within artisans, inherited cultural practices, experiential learning, and creative

craftsmanship. Unlike technology-intensive industries that depend primarily on technological resources, batik MSMEs are highly dependent on the creation, sharing, preservation, and utilization of knowledge. Consequently, knowledge-related capabilities may play a more critical role in driving innovation capability within batik enterprises than in many other business sectors.

This study addresses these gaps by developing an integrated framework that examines the effects of entrepreneurial leadership, intellectual capital, and knowledge management on innovation capability and the implications of innovation capability for entrepreneur performance. Specifically, this study seeks to answer three research questions: (1) How do entrepreneurial leadership, intellectual capital, and knowledge management influence innovation capability among batik MSMEs? (2) Which organizational resource contributes most strongly to innovation capability? and (3) To what extent does innovation capability enhance entrepreneur performance?

The novelty of this study lies in three important aspects. First, it integrates entrepreneurial leadership, intellectual capital, and knowledge management within a single explanatory framework to provide a more comprehensive understanding of the antecedents of innovation capability. Second, it positions innovation capability as a strategic mechanism through which organizational resources are translated into entrepreneur performance. Third, and most importantly, it investigates the relative strength of entrepreneurial leadership, intellectual capital, and knowledge management in explaining innovation capability, thereby identifying the dominant organizational capability that drives innovation and business success in knowledge-intensive cultural SMEs. This perspective extends current applications of the Resource-Based View, Knowledge-Based View, and Dynamic Capabilities Theory by highlighting the strategic role of knowledge-related capabilities in traditional creative industries.

Therefore, this study aims to analyze the effects of entrepreneurial leadership, intellectual capital, and knowledge management on innovation capability and to examine the implications of innovation capability for entrepreneur performance among batik MSMEs in Indonesia. By focusing on batik enterprises in Garut Regency, Tasikmalaya Regency, and Tasikmalaya City, this study is expected to contribute both theoretically and practically to the literature on innovation, knowledge management, and MSME development. Based on the theoretical arguments and hypotheses developed in this study, the proposed research framework is presented in Figure 1.

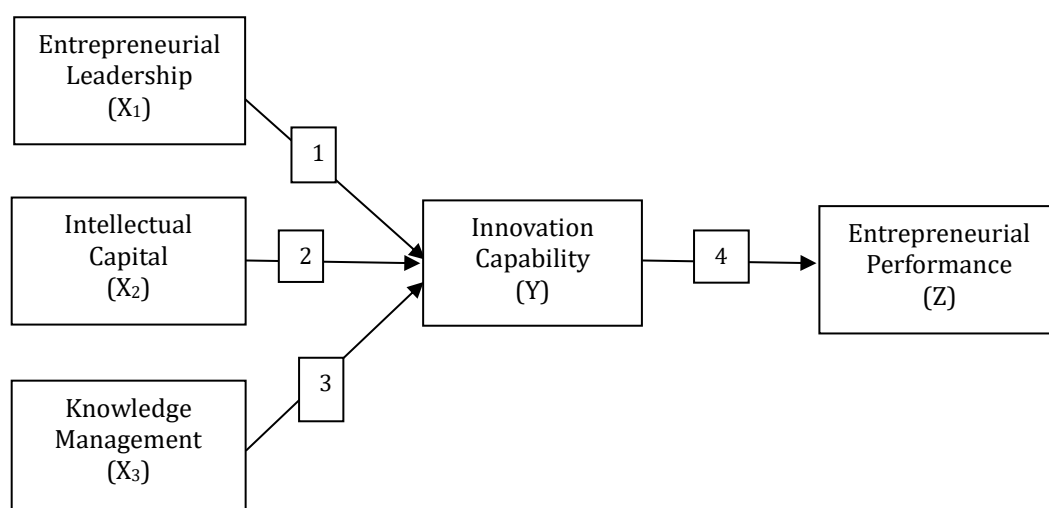


**Figure 1.** Conceptual Research Framework



## 2. METHOD

### 2.1 Research Design

This study employed a quantitative research approach using an explanatory survey design to investigate the relationships among Entrepreneurial Leadership, Intellectual Capital, Knowledge Management, Innovation Capability, and Entrepreneur Performance in batik Micro, Small, and Medium Enterprises (MSMEs). An explanatory survey was selected because the primary objective of the study was to test theoretically derived hypotheses and examine causal relationships among organizational resources, innovation capability, and entrepreneur performance within a real business context. This design enables the collection of standardized data from a relatively large number of respondents and facilitates statistical analysis of the proposed research model.

### 2.2 Research Setting and Period

The study was conducted in three major batik production centers in West Java, Indonesia, namely Garut Regency, Tasikmalaya Regency, and Tasikmalaya City. These locations were selected because they represent important clusters of traditional batik industries and contribute significantly to regional economic development and the preservation of Indonesian cultural heritage. Data collection was carried out from April 2025 to January 2026. This period allowed sufficient time for respondent recruitment, questionnaire administration, follow-up verification, and data validation.

### 2.3 Population and Sample

The target population consisted of 282 active batik MSMEs registered and operating within the selected research areas. The unit of analysis was the enterprise, while the respondents were business owners or primary managers directly involved in strategic decision-making, innovation activities, and daily business operations.

The sample size was determined using the Slovin formula with a 5% margin of error, resulting in a minimum sample requirement of 166 respondents. To ensure adequate representation across the three batik production centers, proportional random sampling was employed. This sampling technique was considered appropriate because it allowed respondents from different geographical locations to be proportionally represented according to the size of the batik MSME population in each area.

To be included in the study, respondents were required to meet the following criteria: (1) actively manage or own a batik MSME, (2) have operated the business for at least two years, and (3) be directly involved in managerial and strategic decision-making processes. Enterprises that were inactive during the data collection period or whose owners were unavailable to participate were excluded from the study.

### 2.4 Research Instrument and Measurement of Variables

Data were collected primarily through a structured questionnaire consisting of closed-ended statements measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was developed based on established constructs from previous studies and adapted to the context of batik MSMEs.

Entrepreneurial Leadership was measured through five dimensions: visionary orientation, innovative and proactive behavior, risk-taking, opportunity recognition, and empowerment and motivation. Intellectual Capital was measured through three dimensions, namely human capital, structural capital, and relational capital. Knowledge Management was operationalized through knowledge acquisition, knowledge sharing, knowledge application, and knowledge storage. Innovation Capability was measured through product innovation, process innovation, market innovation, and organizational innovation. Entrepreneur Performance was assessed using financial performance, non-financial performance, and growth and sustainability indicators. In addition to the questionnaire, supporting information was obtained through field observations, informal interviews, and document reviews to improve contextual understanding and verify the consistency of responses.

## 2.5 Intrumen Validity and Reliability

Prior to the main survey, the questionnaire underwent content validation through expert judgment involving three groups of experts: academics specializing in entrepreneurship and innovation management, government representatives responsible for MSME development, and practitioners from the batik industry. This process ensured the relevance, clarity, and contextual suitability of all measurement items.

A pilot study was subsequently conducted to evaluate the psychometric properties of the instrument. Construct validity was assessed using item-total correlation analysis, and items with corrected item-total correlation values exceeding 0.30 were retained. Reliability was examined using Cronbach's Alpha coefficients. Following commonly accepted standards, reliability values greater than 0.70 were considered satisfactory. The results indicated that all constructs met the required validity and reliability criteria and were therefore suitable for use in the main study.

## 2.6 Data Collection Procedure

The data collection process was conducted in several stages. First, permission was obtained from relevant local authorities and MSME associations operating within the selected regions. Second, potential respondents were identified based on the established inclusion criteria. Third, the questionnaire was distributed directly to eligible business owners and managers. Prior to participation, respondents received information regarding the purpose of the study, confidentiality procedures, and voluntary participation requirements.

Completed questionnaires were reviewed to identify incomplete or inconsistent responses. Where necessary, follow-up communication was conducted to clarify ambiguous answers. All collected data were coded, verified, and entered into a database for subsequent statistical analysis.



**Figure 2.** Research Procedure Flowchart

## 2.7 Data Analysis

Data analysis was performed using IBM SPSS Statistics version 25. Initially, descriptive statistics were calculated to summarize respondent characteristics and evaluate the general condition of each research variable. Measures including means, standard deviations, frequencies, and percentages were used to provide an overview of the data.

Prior to hypothesis testing, data quality and statistical assumptions were examined. Normality was assessed using the One-Sample Kolmogorov–Smirnov test. The results indicated that all variables were normally distributed ( $p > 0.05$ ), thereby satisfying the assumptions required for parametric analysis.



To test the proposed relationships among variables, path analysis was employed. This technique was selected because it enables the estimation of direct effects among multiple variables within a theoretically specified causal framework. The structural model was expressed as follows:

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_1 \quad (1)$$

$$Z = \beta_4 Y + \varepsilon_2 \quad (2)$$

where  $X_1$  represents Entrepreneurial Leadership,  $X_2$  represents Intellectual Capital,  $X_3$  represents Knowledge Management,  $Y$  represents Innovation Capability,  $Z$  represents Entrepreneur Performance,  $\beta$  denotes the path coefficient, and  $\varepsilon$  represents the residual error term.

Hypothesis testing was conducted using t-tests at a significance level of 0.05. Relationships were considered statistically significant when p-values were less than 0.05. The coefficient of determination ( $R^2$ ) was used to assess the explanatory power of the model and determine the proportion of variance explained by the independent variables.

## 2.8 Research Ethics

This study adhered to generally accepted ethical principles in social science research. Participation was entirely voluntary, and informed consent was obtained from all respondents prior to data collection. Participants were informed about the objectives of the study, their right to withdraw at any stage, and the confidentiality of the information provided. No personally identifiable information was disclosed in any publication or research report. All data were used exclusively for academic purposes and were stored securely to protect respondent privacy and anonymity.

## 3. RESULTS AND DISCUSSION

### 3.1 Descriptive Statistics

Descriptive statistics were calculated to provide an overview of the research variables. Table 1 presents the mean scores and standard deviations of Entrepreneurial Leadership, Intellectual Capital, Knowledge Management, Innovation Capability, and Entrepreneur Performance.

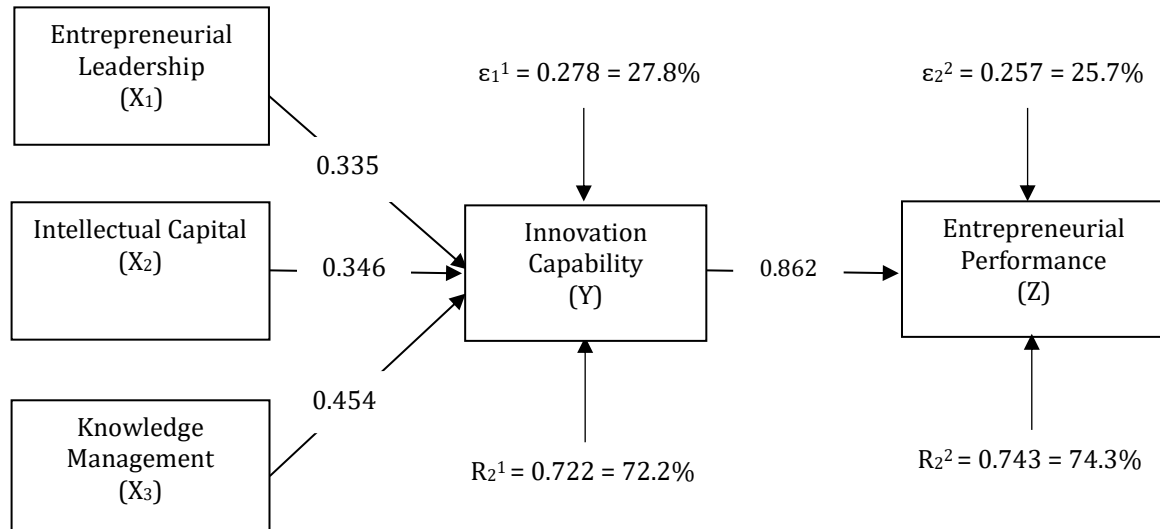
**Table 1.** Descriptive Statistics of Variables

| Variable                             | Mean | Standard Deviation |
|--------------------------------------|------|--------------------|
| Entrepreneurial Leadership ( $X_1$ ) | 3.92 | 0.890              |
| Intellectual Capital ( $X_2$ )       | 2.96 | 0.972              |
| Knowledge Management ( $X_3$ )       | 3.09 | 1.012              |
| Innovation Capability ( $Y$ )        | 4.04 | 0.943              |
| Entrepreneur Performance ( $Z$ )     | 3.97 | 0.932              |

As shown in Table 1, Innovation Capability recorded the highest mean score ( $M = 4.04$ ,  $SD = 0.943$ ), followed by Entrepreneur Performance ( $M = 3.97$ ,  $SD = 0.932$ ) and Entrepreneurial Leadership ( $M = 3.92$ ,  $SD = 0.890$ ). Meanwhile, Knowledge Management ( $M = 3.09$ ,  $SD = 1.012$ ) and Intellectual Capital ( $M = 2.96$ ,  $SD = 0.972$ ) exhibited comparatively lower mean scores. Overall, the results indicate that respondents perceived innovation capability and entrepreneur performance at relatively high levels, while opportunities remain for strengthening intellectual capital and knowledge management practices within batik MSMEs.

### 3.2 Path Analysis Results

Path analysis was conducted to examine the effects of Entrepreneurial Leadership, Intellectual Capital, and Knowledge Management on Innovation Capability, as well as the effect of Innovation Capability on Entrepreneur Performance. The structural relationships among the variables are illustrated in Figure 3.

**Figure 3.** Results of Path Analysis

\*Note:  $\beta$  indicates standardized path coefficients.  $R^2$  indicates the coefficient of determination, while  $\epsilon^2$  represents unexplained variance.  
 \*\* $p < 0.001$ .

The statistical significance of the proposed hypotheses is summarized in Table 2.

**Table 2.** Hypothesis Testing Summary

| Hypothesis | Relationship                                        | $\beta$ | t-value | p-value | Decision  |
|------------|-----------------------------------------------------|---------|---------|---------|-----------|
| H1         | Entrepreneurial Leadership on Innovation Capability | 0.335   | 7.471   | 0.000   | Supported |
| H2         | Intellectual Capital on Innovation Capability       | 0.346   | 7.487   | 0.000   | Supported |
| H3         | Knowledge Management on Innovation Capability       | 0.454   | 10.017  | 0.000   | Supported |
| H4         | Innovation Capability on Entrepreneur Performance   | 0.862   | 21.767  | 0.000   | Supported |

The results indicate that all proposed relationships were positive and statistically significant. Entrepreneurial Leadership demonstrated a positive effect on Innovation Capability ( $\beta = 0.335$ ,  $p < 0.05$ ), supporting H1. Similarly, Intellectual Capital positively influenced Innovation Capability ( $\beta = 0.346$ ,  $p < 0.05$ ), providing support for H2.

Knowledge Management exhibited the strongest effect on Innovation Capability ( $\beta = 0.454$ ,  $p < 0.05$ ), indicating that knowledge-related capabilities play a substantial role in enhancing innovation among batik MSMEs. Therefore, H3 was supported.

Furthermore, Innovation Capability showed a strong positive effect on Entrepreneur Performance ( $\beta = 0.862$ ,  $p < 0.05$ ), supporting H4. This finding suggests that enterprises with stronger innovation capabilities tend to achieve better business performance outcomes.

### 3.3 Coefficient of Determination

The coefficient of determination ( $R^2$ ) was used to evaluate the explanatory power of the proposed model. The results are presented in Table 3.

**Table 3.** Coefficient of Determination ( $R^2$ )

| Endogenous Variable      | $R^2$ |
|--------------------------|-------|
| Innovation Capability    | 0.722 |
| Entrepreneur Performance | 0.743 |

The results show that Entrepreneurial Leadership, Intellectual Capital, and Knowledge Management jointly explained 72.2% of the variance in Innovation Capability ( $R^2 = 0.722$ ). This indicates that the three organizational capabilities included in the model provide substantial explanatory power in predicting innovation capability among batik MSMEs. In addition, Innovation Capability explained 74.3% of the variance in Entrepreneur Performance ( $R^2 = 0.743$ ). This finding demonstrates that innovation capability represents an important explanatory factor associated with entrepreneur performance within the studied enterprises.

Overall, the results provide empirical support for all proposed hypotheses and indicate that Knowledge Management represents the strongest predictor of Innovation Capability, while Innovation Capability serves as a key determinant of Entrepreneur Performance.

The findings demonstrate that Entrepreneurial Leadership has a positive and significant effect on Innovation Capability among batik MSMEs. This result suggests that entrepreneurial leaders play a crucial role in fostering an organizational environment that encourages creativity, opportunity recognition, and proactive responses to market changes. In the context of batik enterprises, entrepreneurial leadership appears to facilitate the exploration of new product designs, production improvements, and market expansion strategies. From the perspective of the Resource-Based View (RBV), leadership can be regarded as a strategic organizational resource that enables firms to mobilize and coordinate other resources effectively to generate innovation (R. Jia et al., 2021; Mueller-Saegebrecht & Walter, 2025). The finding is consistent with recent studies reporting that entrepreneurial leadership positively influences innovation-oriented behaviors and organizational adaptability (Akbari et al., 2020; Alharthi, 2025). However, the relatively lower coefficient compared with Knowledge Management suggests that leadership alone may not be sufficient to generate innovation unless supported by effective knowledge-related capabilities. This finding contributes to the growing literature by indicating that leadership functions primarily as an enabling mechanism rather than the sole driver of innovation capability within knowledge-intensive cultural industries.

The positive effect of Intellectual Capital on Innovation Capability further confirms the importance of intangible organizational assets in supporting innovation development. Intellectual capital provides the knowledge foundation through human expertise, organizational systems, and external relationships that facilitate the generation and implementation of new ideas. This result supports the Knowledge-Based View (KBV), which emphasizes that organizational knowledge constitutes a strategic asset capable of creating sustainable competitive advantages (Mahdi & Nassar, 2021; Malik et al., 2023). The finding is aligned with previous studies showing that firms with stronger intellectual capital are more capable of developing innovative products, improving operational processes, and responding effectively to environmental changes (Shehzad et al., 2022; Wang & Juo, 2021). Nevertheless, the magnitude of the relationship indicates that intellectual capital alone does not automatically produce innovation outcomes. Knowledge assets must be effectively utilized, integrated, and transformed into actionable practices before they can contribute meaningfully to innovation capability. This observation extends previous intellectual capital research by highlighting the distinction between possessing knowledge resources and effectively leveraging those resources to generate innovation.

Among the antecedent variables examined in this study, Knowledge Management emerged as the strongest predictor of Innovation Capability. This finding is particularly significant because it demonstrates that the ability to acquire, share, apply, and preserve knowledge contributes more substantially to innovation development than either leadership or intellectual resource ownership. The result strongly supports the central argument of the Knowledge-Based View, which positions knowledge as the most strategically important organizational resource and emphasizes the processes through



which knowledge is managed and utilized (Mahdi & Nassar, 2021; Sahoo et al., 2023). The finding is consistent with recent empirical evidence indicating that effective knowledge management enhances organizational learning, creativity, problem-solving capability, and innovation performance (S. Jia et al., 2024; Patwary et al., 2022). However, the present study goes beyond previous research by comparing multiple organizational capabilities within a single framework and demonstrating the relative dominance of knowledge management. This contribution is important because much of the existing literature has examined entrepreneurial leadership, intellectual capital, and knowledge management separately, making it difficult to determine which capability exerts the strongest influence on innovation capability.

The dominance of Knowledge Management can be explained by the unique characteristics of batik MSMEs as knowledge-intensive cultural enterprises. Unlike technology-driven industries that rely heavily on advanced technological infrastructure, batik production depends largely on tacit knowledge, artisanal expertise, accumulated experience, and inherited cultural practices. Much of the knowledge required for product design, motif development, dyeing techniques, and market adaptation resides within individual artisans and entrepreneurs. Consequently, the effectiveness of knowledge acquisition, sharing, and preservation becomes a critical determinant of innovation performance. This interpretation is consistent with studies emphasizing the strategic importance of tacit knowledge management in traditional industries and creative sectors (Mohd Nor et al., 2024; Zia et al., 2023). The finding therefore suggests that knowledge-related capabilities may play a more influential role in cultural and creative industries than in conventional manufacturing contexts. In this regard, the study contributes a contextual extension to existing KBV and Dynamic Capabilities literature by demonstrating how industry-specific characteristics shape the relative importance of organizational capabilities.

The results also reveal a strong positive relationship between Innovation Capability and Entrepreneur Performance. This finding indicates that batik MSMEs possessing stronger innovation capabilities tend to achieve superior business outcomes, including financial performance, business growth, and long-term sustainability. Innovation capability enables firms to respond more effectively to changing customer preferences, develop differentiated products, improve operational efficiency, and exploit emerging market opportunities. This result is consistent with Dynamic Capabilities Theory, which argues that organizations achieve superior performance when they continuously renew and reconfigure resources in response to environmental changes (J Nair et al., 2024; Karman, 2020). Similar findings have been reported in recent studies demonstrating that innovation capability serves as a critical driver of organizational competitiveness and business success (Liu et al., 2019; Pak et al., 2024). The exceptionally strong coefficient observed in this study further suggests that innovation capability functions as a strategic mechanism through which organizational resources are translated into tangible performance outcomes. Therefore, innovation should be viewed not merely as an operational activity but as a core organizational capability that directly influences business sustainability.

An important theoretical implication of this study is its contribution to the ongoing debate regarding the relative strategic importance of organizational resources and capabilities. Previous studies have often assumed that entrepreneurial leadership, intellectual capital, and knowledge management contribute equally to innovation outcomes. However, the present findings suggest a more nuanced perspective in which knowledge management occupies a central position in transforming organizational resources into innovation capability. This observation extends the Resource-Based View by emphasizing that resource ownership alone is insufficient to generate competitive advantages unless accompanied by effective knowledge utilization processes. Furthermore, the findings complement Dynamic Capabilities Theory by illustrating that organizational adaptability depends not only on the availability of resources but also on the capability to continuously create, integrate, and apply knowledge. Consequently, this study provides empirical evidence supporting a more capability-oriented interpretation of organizational competitiveness in MSME environments.

Beyond its theoretical contribution, the findings offer several practical implications for batik MSMEs and policymakers. The dominance of Knowledge Management suggests that efforts to improve



innovation capability should focus not only on leadership development or resource accumulation but also on strengthening organizational learning processes. Batik entrepreneurs should be encouraged to establish systematic mechanisms for knowledge sharing, documentation of best practices, and intergenerational transfer of artisanal expertise. Collaboration with universities, vocational institutions, and government agencies may also facilitate knowledge acquisition and innovation development. Furthermore, policymakers should design support programs that promote knowledge networks, innovation ecosystems, and collaborative learning among batik enterprises. Such initiatives are likely to enhance innovation capability and, ultimately, improve the competitiveness and sustainability of Indonesia's batik industry. By identifying knowledge management as the most influential capability within a knowledge-intensive cultural industry, this study provides a new perspective that enriches the global literature on innovation, entrepreneurship, and organizational capabilities.

#### 4. CONCLUSIONS AND RECOMMENDATIONS

This study examined the effects of Entrepreneurial Leadership, Intellectual Capital, and Knowledge Management on Innovation Capability and the subsequent effect of Innovation Capability on Entrepreneur Performance among batik MSMEs in West Java, Indonesia. The findings provide empirical evidence that all three organizational capabilities positively and significantly influence Innovation Capability. Furthermore, Innovation Capability was found to have a strong positive effect on Entrepreneur Performance, indicating that innovation serves as a critical mechanism through which organizational resources are translated into business success and long-term sustainability.

Among the antecedent variables investigated, Knowledge Management emerged as the most influential predictor of Innovation Capability. This finding highlights the strategic importance of knowledge acquisition, sharing, application, and preservation in fostering innovation within knowledge-intensive cultural enterprises. While Entrepreneurial Leadership and Intellectual Capital also contributed significantly to Innovation Capability, their effects were comparatively weaker than those of Knowledge Management. These results suggest that the effective utilization of knowledge resources is more critical than the mere possession of leadership qualities or intellectual assets in generating innovation outcomes among batik MSMEs.

From a theoretical perspective, this study contributes to the integration of the Resource-Based View, Knowledge-Based View, and Dynamic Capabilities Theory by demonstrating that organizational competitiveness is not determined solely by the availability of strategic resources but also by the capability to manage and transform knowledge into innovation. The findings extend existing literature by identifying Knowledge Management as the dominant organizational capability influencing Innovation Capability within a traditional cultural industry context. Consequently, this study provides a more nuanced understanding of how organizational resources and capabilities interact to enhance entrepreneur performance in MSMEs.

This study examined the effects of Entrepreneurial Leadership, Intellectual Capital, and Knowledge Management on Innovation Capability and the subsequent effect of Innovation Capability on Entrepreneur Performance among batik MSMEs in West Java, Indonesia. The findings provide empirical evidence that all three organizational capabilities positively and significantly influence Innovation Capability. Furthermore, Innovation Capability was found to have a strong positive effect on Entrepreneur Performance, indicating that innovation serves as a critical mechanism through which organizational resources are translated into business success and long-term sustainability.

Among the antecedent variables investigated, Knowledge Management emerged as the most influential predictor of Innovation Capability. This finding highlights the strategic importance of knowledge acquisition, sharing, application, and preservation in fostering innovation within knowledge-intensive cultural enterprises. While Entrepreneurial Leadership and Intellectual Capital also contributed significantly to Innovation Capability, their effects were comparatively weaker than those of Knowledge Management. These results suggest that the effective utilization of knowledge resources is



more critical than the mere possession of leadership qualities or intellectual assets in generating innovation outcomes among batik MSMEs.

From a theoretical perspective, this study contributes to the integration of the Resource-Based View, Knowledge-Based View, and Dynamic Capabilities Theory by demonstrating that organizational competitiveness is not determined solely by the availability of strategic resources but also by the capability to manage and transform knowledge into innovation. The findings extend existing literature by identifying Knowledge Management as the dominant organizational capability influencing Innovation Capability within a traditional cultural industry context. Consequently, this study provides a more nuanced understanding of how organizational resources and capabilities interact to enhance entrepreneur performance in MSMEs.

## REFERENCE

- Abeysekera, I. (2021). Intellectual capital and knowledge management research towards value creation: From the past to the future. *Journal of Risk and Financial Management*, 14(6), 238. <https://doi.org/10.3390/jrfm14060238>
- Ageli, R., Alzubi, A. B., Aljuhmani, H. Y., & Iyiola, K. (2025). How and when entrepreneurial leadership drives sustainable bank performance: Unpacking the roles of employee creativity and innovation-oriented climate. *Sustainability*, 17(20), 9259. <https://doi.org/10.3390/su17209259>
- Akbari, M., Bagheri, A., Imani, S., & Asadnezhad, M. (2020). Does entrepreneurial leadership encourage innovation work behavior? The mediating role of creative self-efficacy and support for innovation. *European Journal of Innovation Management*, 24(1), 1–22. <https://doi.org/10.1108/EJIM-10-2019-0283>
- Alharthi, S. (2025). Developing enterprise performance and sustainability in SMEs through entrepreneurship leadership, innovation, analytical thinking and creativity. *Discover Sustainability*, 6(1), 801. <https://doi.org/10.1007/s43621-025-01699-4>
- Ali, M. A., Hussin, N., Haddad, H., Alkhodary, D., & Marei, A. (2021). Dynamic capabilities and their impact on intellectual capital and innovation performance. *Sustainability*, 13(18), 10028. <https://doi.org/10.3390/su131810028>
- Anshari, M., & Hamdan, M. (2022). Understanding knowledge management and upskilling in Fourth Industrial Revolution: Transformational shift and SECI model. *VINE Journal of Information and Knowledge Management Systems*, 52(3), 373–393. <https://doi.org/10.1108/VJIKMS-09-2021-0203>
- Cobbinah, J., Osei, A., & Amoah, J. O. (2026). Innovating for a greener future: Do digital transformation and innovation capacity drive enterprise green total factor productivity in the knowledge economy? *Journal of the Knowledge Economy*, 17(1), 325–363. <https://doi.org/10.1007/s13132-025-02673-1>
- Ercantan, K., Eyupoglu, Ş. Z., & Ercantan, Ö. (2024). The entrepreneurial leadership, innovative behaviour, and competitive advantage relationship in manufacturing companies: A key to manufactural development and sustainable business. *Sustainability*, 16(6), 2407. <https://doi.org/10.3390/su16062407>
- Ferreira, J., & Coelho, A. (2020). Dynamic capabilities, innovation and branding capabilities and their impact on competitive advantage and SME's performance in Portugal: The moderating effects of entrepreneurial orientation. *International Journal of Innovation Science*, 12(3), 255–286. <https://doi.org/10.1108/IJIS-10-2018-0108>
- Ferreira, J., Mueller, J., & Papa, A. (2018). Strategic knowledge management: Theory, practice and future challenges. *Journal of Knowledge Management*, 24(2), 121–126. <https://doi.org/10.1108/JKM-07-2018-0461>



- J Nair, A., Manohar, S., & Mittal, A. (2024). Reconfiguration and transformation for resilience: Building service organizations towards sustainability. *Journal of Services Marketing*, 38(4), 404–425. <https://doi.org/10.1108/JSM-04-2023-0144>
- Jia, R., Hu, W., & Li, S. (2021). Ambidextrous leadership and organizational innovation: The importance of knowledge search and strategic flexibility. *Journal of Knowledge Management*, 26(3), 781–801. <https://doi.org/10.1108/JKM-07-2020-0544>
- Jia, S., Khassawneh, O., Mohammad, T., & Cao, Y. (2024). Knowledge-oriented leadership and project employee performance: The roles of organisational learning capabilities and absorptive capacity. *Current Psychology*, 43(10), 8825–8838. <https://doi.org/10.1007/s12144-023-05024-y>
- Jordão, R. V. D., Novas, J., & Gupta, V. (2019). The role of knowledge-based networks in the intellectual capital and organizational performance of small and medium-sized enterprises. *Kybernetes*, 49(1), 116–140. <https://doi.org/10.1108/K-04-2019-0301>
- Karman, A. (2020). Flexibility, coping capacity and resilience of organizations: Between synergy and support. *Journal of Organizational Change Management*, 33(5), 883–907. <https://doi.org/10.1108/JOCM-10-2019-0305>
- Kucharska, W. (2021). Leadership, culture, intellectual capital and knowledge processes for organizational innovativeness across industries: The case of Poland. *Journal of Intellectual Capital*, 22(7), 121–141. <https://doi.org/10.1108/JIC-02-2021-0047>
- Liu, C.-H., Chang, A. Y.-P., & Fang, Y.-P. (2019). Network activities as critical sources of creating capability and competitive advantage: The mediating role of innovation capability and human capital. *Management Decision*, 58(3), 544–568. <https://doi.org/10.1108/MD-08-2017-0733>
- Mahdi, O. R., & Nassar, I. A. (2021). The business model of sustainable competitive advantage through strategic leadership capabilities and knowledge management processes to overcome COVID-19 pandemic. *Sustainability*, 13(17), 9891. <https://doi.org/10.3390/su13179891>
- Malik, M., Ali, M., Latan, H., & Jabbour, C. J. C. (2023). Green project management practices, green knowledge acquisition and sustainable competitive advantage: Empirical evidence. *Journal of Knowledge Management*, 27(9), 2350–2375. <https://doi.org/10.1108/JKM-06-2022-0466>
- Marcucci, G., Antomarioni, S., Ciarapica, F. E., & Bevilacqua, M. (2022). The impact of operations and IT-related Industry 4.0 key technologies on organizational resilience. *Production Planning & Control*, 33(15), 1417–1431. <https://doi.org/10.1080/09537287.2021.1874702>
- Mehmood, M. S., Jian, Z., Akram, U., & Tariq, A. (2021). Entrepreneurial leadership: The key to develop creativity in organizations. *Leadership & Organization Development Journal*, 42(3), 434–452. <https://doi.org/10.1108/LODJ-01-2020-0008>
- Migdadi, M. M. (2019). Organizational learning capability, innovation and organizational performance. *European Journal of Innovation Management*, 24(1), 151–172. <https://doi.org/10.1108/EJIM-11-2018-0246>
- Mohd Nor, I. N., Abdullah, M. H., Hashim, H. Z., & Osman, N. S. (2024). Tacit knowledge sharing as a catalyst for innovation capability in small and medium enterprises (SMEs) in the Malaysian furniture industry. *Journal of Entrepreneurship & Business*, 12(1), 17. <https://doi.org/10.17687/jeb.v12i1.1186>
- Mueller-Saegebrecht, S., & Walter, A.-T. (2025). Strategic agility—An urgent capability for successful business model innovation? A conceptual process model and theoretical framework. *Strategic Change*, 34(3), 407–428. <https://doi.org/10.1002/jsc.2645>
- Pak, A., Seo, D. J., & Roh, T. (2024). The effect of intellectual property rights on firm performance in service firms: The role of process and organizational innovation. *Cross Cultural & Strategic Management*, 32(1), 49–76. <https://doi.org/10.1108/CCSM-08-2023-0163>
- Patwary, A. K., Alwi, M. K., Rehman, S. U., Rabiul, M. K., Babatunde, A. Y., & Alam, M. M. D. (2022). Knowledge management practices on innovation performance in the hotel industry: Mediated



- by organizational learning and organizational creativity. *Global Knowledge, Memory and Communication*, 73(4–5), 662–681. <https://doi.org/10.1108/GKMC-05-2022-0104>
- Rehman, S. U., Bresciani, S., Ashfaq, K., & Alam, G. M. (2021). Intellectual capital, knowledge management and competitive advantage: A resource orchestration perspective. *Journal of Knowledge Management*, 26(7), 1705–1731. <https://doi.org/10.1108/JKM-06-2021-0453>
- Sahoo, S., Kumar, A., & Upadhyay, A. (2023). How do green knowledge management and green technology innovation impact corporate environmental performance? Understanding the role of green knowledge acquisition. *Business Strategy and the Environment*, 32(1), 551–569. <https://doi.org/10.1002/bse.3160>
- Shehzad, M. U., Zhang, J., Dost, M., Ahmad, M. S., & Alam, S. (2022). Linking green intellectual capital, ambidextrous green innovation and firms' green performance: Evidence from Pakistani manufacturing firms. *Journal of Intellectual Capital*, 24(4), 974–1001. <https://doi.org/10.1108/JIC-02-2022-0032>
- Sima, V., Gheorghe, I. G., Subić, J., & Nancu, D. (2020). Influences of the Industry 4.0 revolution on human capital development and consumer behavior: A systematic review. *Sustainability*, 12(10), 4035. <https://doi.org/10.3390/su12104035>
- Thomas, A. (2024). Digitally transforming the organization through knowledge management: A socio-technical system (STS) perspective. *European Journal of Innovation Management*, 27(9), 437–460. <https://doi.org/10.1108/EJIM-02-2024-0114>
- Wang, C. H., & Juo, W.-J. (2021). An environmental policy of green intellectual capital: Green innovation strategy for performance sustainability. *Business Strategy and the Environment*, 30(7), 3241–3254. <https://doi.org/10.1002/bse.2800>
- Yang, J., & Bentein, K. (2023). Entrepreneurial leadership and employee creativity: A multilevel mediation model of entrepreneurial self-efficacy. *Management Decision*, 61(9), 2645–2669. <https://doi.org/10.1108/MD-04-2022-0449>
- YuSheng, K., & Ibrahim, M. (2020). Innovation capabilities, innovation types, and firm performance: Evidence from the banking sector of Ghana. *SAGE Open*, 10(2), Article 2158244020920892. <https://doi.org/10.1177/2158244020920892>
- Zia, U., Zhang, J., & Alam, S. (2023). Role of tacit knowledge management process and innovation capability for stimulating organizational performance: Empirical analysis using the PLS-SEM approach. *Kybernetes*, 53(11), 4976–5000. <https://doi.org/10.1108/K-03-2023-0444>