

NEW PRODUCT LAUNCH PROFICIENCY AND PERFORMANCE IN MSMEs: MEDIATION EFFECTS OF PRODUCT INNOVATION

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Abstract:

Background: The creative industries (culinary, fashion, and crafts) are growing rapidly and have become a magnet for investment and a pillar of Central Java's economy. Many Micro, Small, and Medium Enterprises (MSMEs) in the culinary, fashion, and crafts sectors generate creative ideas. However, they are still constrained by a lack of systematic launch capabilities, such as market testing, tactical planning, and budget management for new product launches, which often lead to innovation failures. Therefore, it is important to analyze how New Product Launch Proficiency can improve the performance of culinary, fashion, and craft MSMEs, which have great potential as a new center of economic growth.

Purpose: This study investigates the relationship between New Product Launch Proficiency (NPLP) and New Product Performance (NPP) mediated by Product Innovation (PI).

Design/methodology/approach: This quantitative study uses data from 284 MSMEs in the creative industries (fashion, culinary, and crafts) from 15 districts in Central Java, Indonesia. The data were analyzed using Partial Least Squares-Structural Equation Modelling (PLS-SEM). This study used indicators of new product launch proficiency, such in market testing competence, tactical planning knowledge, and budget expertise for launch. Indicators of new product performance include new product portfolio, development success, sales performance, and customer acceptance. Indicators of product innovation include product improvement, product diversification, and market penetration.

Findings/Result: The results show that new product launch proficiency has a positive impact on product innovation and new product performance. Product innovation was also found to mediate the relationship between new product launch proficiency and new product performance.

Conclusion: This research can be a reference for MSMEs and policymakers to adopt new product launch proficiency through product innovation as an important strategy for the growth of MSMEs. MSMEs should adopt simple routines for market testing, tactical launch plans, cross-functional teams, shared supplier networks, and low-cost digital tools to expand new product proficiency.

Originality/value (State of the art): This study provides a new perspective on how Creative Industry MSMEs in developing countries especially in Central Java, Indonesia to develop new product launch proficiency and product innovation, which will increase their competitive advantage and achieve sustainable growth.

Keywords: MSME, NPLP, new product performance, launch proficiency, product innovation

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) in the Creative Industry in Central Java have experienced a decline in sales turnover despite the increasing number of MSMEs, indicating suboptimal marketing performance and competitiveness at both the local and national levels (Fazira et al. 2025). Low levels of knowledge management literacy and MSME capabilities in utilizing digital marketing also limit knowledge accumulation, design collaboration, and responsiveness to customer needs, resulting in new product launches that are often irrelevant to the Central Java market context (Patricia & Rodhiah, 2024). Challenges in the supply chain, downstreaming, access to financing, and product certification also limit the execution of product innovation and the potential for market expansion of the creative industry in Central Java (Nurhidayah & Muliansyah, 2023). The integration of technology in the supply chain and digital prototyping is also limited by cost constraints, infrastructure, and the technical capabilities of SME actors, thereby hindering the acceleration of product innovation into a competitive advantage (Potolau & Safriansyah, 2022). Technology adoption is also related to improvements in packaging design through digital design tools, which are important for branding and product differentiation in local and national markets (Syaputra et al. 2023). Although technology has the potential to accelerate downstreaming and access to financing through digital solutions, challenges in financial literacy and access to technological inputs remain major obstacles to the implementation of sustainable product innovation in MSMEs in Central Java (Kiswanto & Abdul Aziz Nugraha Pratama, 2024).

Porter's Five Forces enables the evaluation of external pressures that affect the ability of MSMEs to launch new products, such as the intensity of competition, the threat of new entrants, the power of suppliers, the power of buyers, and the threat of substitution, so that the product innovation framework as a mediator can be positioned in the context of creative industry competition in Central Java (Kurniawan et al. 2022), while highlighting how these external factors interact with design, prototyping, and market testing capabilities to increase the speed and success of new product launches as well as the marketing and financial performance of MSMEs (Mehjabeen, 2018). The application of Porter's framework in this context confirms the relevance of external analysis

in understanding how product innovation can act as a mediating mechanism between market orientation and the performance of creative industry MSMEs in launching new products, while considering regional market dynamics and the technological adaptation capabilities of business actors (Nisa & Fatimah, 2024).

The determinants of MSMEs typically include investment size, workforce size, and annual revenue. These parameters are calibrated in accordance with prevailing economic conditions and governmental aspirations (Yuwono et al. 2024). The significance of MSMEs is underscored by their propensity for innovation and their agility in capitalizing on emerging market opportunities, often surpassing that of larger corporations (Coulibaly et al. 2018). Approximately 90% of enterprises and over 50% of global employment are attributable to MSMEs. These enterprises are crucial for stimulating economic advancement, alleviating poverty, and fostering social stability, particularly within developing nations (Yuwono et al. 2025). The integration of digital technology is paramount for the operational efficacy of MSMEs (Kumar et al. 2024). Contemporary Information and Communication Technology (ICT) capabilities possess the potential to mitigate traditional resource constraints and enhance operational effectiveness. This advancement empowers MSMEs to engage in more robust global competition. These findings substantiate the pivotal role of MSMEs in economic development, especially in developing countries (Dutta et al. 2020).

Organizations with a diminished reputation are advised to implement an more robust strategy for introducing new products. The successful introduction of new products serves as an indicator of a firm's marketing acumen and its competitive stance in an ever-evolving marketplace (Yulianto et al. 2024). The development of the requisite skills for launching new products is a challenge frequently encountered by MSMEs. MSMEs, which often face resource constraints, must strategically cultivate and enhance their technical expertise to effectively convert innovative concepts into superior-performing products (Batra et al. 2015). A dedicated effort to surmount the obstacles associated with developing proficiency in new product launches aids MSMEs in optimizing their capabilities and fosters long-term growth through the sustainable performance of new products (Knudsen et al. 2023). Organizations can navigate uncertainty and leverage the advantages of new product launches by developing meticulous

proficiency in new product launches, encompassing market analysis, appropriate timing, and adaptive planning (Blais & Agbodoh-Falschau, 2023). Proficiency in new product launches can positively influence new product performance; this proficiency equips MSMEs to effectively manage the intricacies of new product launch processes, thereby maintaining competitiveness and adapting to fluctuations in the business landscape (Saul & Gebauer, 2018).

This study uses the Diffusion of Innovation (DOI) theory (Rogers, 2003), a framework that explains how new ideas, practices, or products spread through a population from early adopters to the majority. DOI emphasises four key elements: innovation, communication channels, adoption time, and social context that influence the speed and pattern of adoption. DOI helps explain how product innovations developed by MSMEs are adopted by customers, design partners, and distribution networks, and how factors such as compatibility with customer needs, product complexity, observability, and relative advantage accelerate or slow adoption (Pelaez et al. 2025). This approach also highlights the roles of promotion, market testing, and communication between stakeholders as key channels for accelerating the spread of innovation, enabling product innovation to serve as a mediator between new product launch proficiency and SME marketing performance (Shi et al. 2025).

This study uses Partial Least Squares-Structural Equation Modelling (PLS-SEM) for data analysis. PLS-SEM is flexible in assessing how product innovation mediates the relationship between new product launch proficiency and the marketing performance of creative MSMEs (Cahyani et al. 2025). PLS-SEM also allows for robust mediation path estimation through path analysis and significance testing through bootstrapping, thereby identifying whether the full or partial mediation effect between product innovation and MSME performance is truly significant in the context of new product launches (Pasaribu et al. 2025). The application of PLS-SEM not only provides empirical support for the hypothesised product innovation mediation model but also provides a strong analytical basis for practical recommendations to creative industry SMEs in improving their product launch capabilities and performance sustainably (Arief et al. 2025).

New product launch proficiency alone is not enough to improve Performance. Additional capabilities are needed for new products to reach their full potential

(Nik Hashim, 2013). An analysis of how new product launch proficiency affects new product performance is incomplete if it does not consider Product Innovation (PI). This suggests that it is important to consider PI as a way to link new product launch proficiency to the new product performance. One part of new product launch proficiency, market orientation, can only be fully achieved by companies that have PI. This shows that PI can act as a mediating variable, increasing the impact of new product launch proficiency on the new product performance (Wiwoho et al. 2020).

Businesses must continue to develop new products to compete with the increasingly fierce competition in the modern era (Wu et al. 2024). PI includes product improvement, development, and market penetration (Jajja et al. 2017). PI is beneficial because it allows them to launch new products to achieve success and improve their Performance. As a mediator, PI can provide important insights into how MSMEs can improve their new product launch proficiency to achieve better new product performance results, thus filling an important gap in understanding the dynamics of new product success (Fakhreddin, Foroudi, & Rasouli Ghahroudi, 2021). Innovation is the main driver of MSME growth and competitiveness; it allows them to adapt to changing market conditions, meet evolving customer needs, and differentiate themselves from competitors. This study further looks at the idea made by Kalro & Joshipura (2024) and finds the keyword PI in the basic theme of the bibliometric analysis of 208 articles. Basic themes are important for various undeveloped fields, so additional development is needed. This study also investigates how PI affects the relationship between new product launch proficiency and new product performance, following the recommendation of Blais & Agbodoh-Falschau (2023).

This study presents a new contribution by examining the relationship between new product launch proficiency and business performance in the context of MSMEs, with product innovation as a mediator. This study expands on the literature on product launches, which has thus far focused on large companies. The findings are expected to provide empirical context for policy formulation and practical interventions to improve product launch and innovation capabilities among MSMEs. Previous studies have looked at how various variables mediate new product performance, but there is still a clear gap in the literature regarding the mediating role of PI. Millson & Wilemon (2010) found that market dynamism does not affect new product performance or

its launch speed. Matikainen et al. (2016) investigated how product profitability and market-based assets influence strategic orientation towards new product performance. Calantone et al. (2018) focused on the mediating variables of launch activities, timing and speed to market. Sun & Liu (2023) examined how nuanced business analysis capabilities, entrepreneurial tendencies, and social legitimacy impact new product performance.

This explanation shows a lack of knowledge about how PI can mediate the relationship between new product launch proficiency and new product performance of MSMEs. This study aims to improve our understanding of how MSMEs can maximize new product launch proficiency to achieve new product performance success by utilizing PI on MSMEs in developing countries engaged in the Fashion, Culinary, and Craft sectors. This study is expected to make a significant contribution to current knowledge and offer practical insights for MSMEs in developing countries to improve the performance of their new products.

METHODS

The data used comes from Creative Industry MSMEs (fashion, culinary, and crafts) in various districts and cities in Central Java Province, Indonesia. Central Java Province is the third-most populous province in Indonesia, with most MSMEs operating in the fashion, culinary, and craft sectors. A total of 284 samples were used in this study, with 14 samples from Banjarnegara,

182 samples from Banyumas, 10 samples from Boyolali, 6 samples from Demak, 1 sample from Jepara, 2 samples from Karanganyar, 3 samples from Kebumen, 10 samples from Klaten, 9 samples from Pekalongan, 6 samples from Pemalang, 16 samples from Purbalingga, 2 samples from Purworejo, 2 samples from Semarang, 7 samples from Surakarta, and 14 samples from Wonosobo (Yuwono et al. 2025).

Data was gathered using an online survey, deemed a suitable approach (Evans & Mathur, 2018). Questionnaires were sent from February 1 to March 16, 2025, to a random sample of MSMEs in Central Java, Indonesia. Of 350 sent questionnaires, 290 were returned, with 284 being legitimate, for a response rate of roughly 81 percent. The return rate is acceptable, surpassing the minimal criterion for using structural equation modeling and evaluating the psychometric characteristics of measurement scales (Williams et al. 2004). In Central Java, 55% of Creative Industry MSMEs are mostly male. Seventy-four percent are mostly from senior high school, with sixty-eight percent of MSMEs operating in the culinary industry. Most MSME enterprises are between 4 and 6 years old, as seen in Table 1. Most responders were from the Banyumas district (64%), followed by the Purbalingga district (6%), and both Banjarnegara and Wonosobo districts at 5% apiece. The proportion of Creative Industry MSMEs sampled in this study was larger in Banyumas due to accessibility and responsiveness factors. MSME respondents in Banyumas were more responsive to the online questionnaire, with a higher participation rate than those in other regions.

Table 1. Respondent characteristics

Category	Characteristics	(%)
Gender	Male	55
	Female	45
Education	Junior high school	2
	Senior high school	74
	Associate degree	5
	Bachelor's degree	18
	Master's degree	0.4
Type of business	Culinary	68
	Fashion	14
	Craft	18
Length of business	1-3	27
	4-6	36
	7-9	17
	>9	20

The Partial Least Squares Structural Equation Modeling (PLS-SEM) approach is the structural equation technique employed in this study, specifically using Smart PLS version 3.0 software, as delineated by Ringle et al. (2015). Furthermore, the conceptual framework was scrutinized through the structural model posited by Hair et al. (2021). The unique characteristics of PLS-SEM have facilitated its proliferation among scholars across various fields, including management and market analysis, as noted by Richter et al. (2016). The assessment employed a Likert scale comprising the response categories of strongly disagree, disagree, moderately agree, agree, and strongly agree. The questionnaire specifics are presented in Table 2.

The purpose of hypothesis testing is to formulate hypotheses for this study. The hypotheses (H1-H4) state that the independent variables, namely new product launch proficiency and product innovation, affect the dependent variable, namely new product performance.

H1: New Product Launch Proficiency (NPLP) positively affects New Product Performance (NPP). MSMEs face enormous pressure in an increasingly

rapidly developing market to continuously innovate and attract consumer interest. The urgency to hone NPLP is underlined by research by Calantone et al. (2018), who emphasized the importance of improving NPLP. This study emphasized that timing and ability to launch new products positively correlate with new product performance. New product launch strategies strongly influence competitive market (Ching Gu & Burns, 2016). Both innovative and imitative new products will receive reactions from competitors. Fakhreddin et al. (2021) found that market orientation can increase new product performance with the necessary proficiency for product launch. The extent to which market orientation facilitates NPP depends on the level of proficiency required for the launch of the new product. Liu et al. (2018) found evidence that MSMEs with low reputations must adopt more complex product launch skills to achieve a better NPP. NPLP, especially market testing skills, will be used by market-oriented MSMEs to reduce the failure rate of new product launches (Salmen, 2021). This insight shows that MSMEs that have NPLP can achieve better NPP. Hence, it can be inferred that NPLP positively affects NPP (H1).

Table 2. Questionnaire questions

Variable	Item	Questions
New Product Launch Proficiency (Fakhreddin, Foroudi, & Rasouli Ghahroudi, 2021)	NPLP1	My business has the expertise to conduct market testing
	NPLP2	My business has the expertise to create a budget for the launch of new products
	NPLP3	My business has the expertise to create tactics for the launch of new products
Product Innovation (Jajja et al. 2017)	PI1	My business has introduced new products in addition to existing products
	PI2	My business has made updates to existing products
	PI3	My business has added products for new market segments
	PI4	My business can generate new ideas to create other new products
	PI5	My business has used new products to penetrate the market
New Product Performance (García-Villaverde et al. 2017)	NPP1	My business is very good because it has several new products
	NPP2	The percentage of total sales of new products in my business is very good
	NPP3	The success rate of new product development in my business is very good
	NPP4	My business has met the new product sales growth target
	NPP5	My business's new products have successfully reached more consumers
	NPP6	The new product of My Business can reach a wider range of consumer satisfaction

H2: New Product Launch Proficiency (NPLP) positively affects Product Innovation (PI). NPLP is an important component significantly affecting PI and NPP (Awwad & Akroush, 2016). NPLP greatly affects PI, especially the exploratory and exploitative abilities of the company (Zhou et al. 2016). Kalro & Joshipura (2024) argue that leveraging product advantages during launch activities significantly results in better product outcomes because it encourages continuous innovation, which offers specific advantages to meet customer needs and desires. Kumar (2022) supports this opinion by saying that incorporating sustainability elements into the new product development process will improve product launch proficiency. This will have a positive impact on PI, which provides a competitive advantage by solving current problems. This insight shows that MSMEs with proficiency in new product launches can produce better PI. Hence, it can be inferred that NPLP positively affects PI (H2).

H3: Product Innovation (PI) positively affects New Product Performance (NPP). Previous studies have shown that PI is crucial to improving the NPP MSMEs. Khuong et al. (2025) found that PI can improve business performance. According to Fouad et al. (2018), a systematic innovation process can improve the performance of new products by encouraging systematic development and shortening the time to market for new products. Hsu (2016) highlights that PI and innovative services are significantly correlated with the performance of new products because companies adopt innovation strategies to develop these products and improve customer satisfaction. Modolo et al. (2021) emphasize that innovation related to knowledge absorption, dynamics, and market orientation affects the performance of new products in Brazilian technology-based companies. Silva et al. (2022) prove that PI contributes significantly to business network and export performance. PI is a strong argument for MSMEs to attract potential customers because it allows customers to access knowledge, assets, technology, new markets, and new products. This insight shows that MSMEs that innovate their products can achieve better new product performance. Hence, it can be inferred that PI positively affects NPP (H3).

H4: Product Innovation (PI) mediate the relationship between New Product Launch Proficiency (NPLP) and New Product Performance (NPP). PI is defined by Silva et al. (2022) as new or improved goods or services that are different from the company's previous goods or services and have been introduced to the market. Jajja dkk. (2017) showed that PI positively impacts the company's business Performance in Pakistan and India's automotive, chemical, engineering, consumer goods, pharmaceutical, textile, and telecommunications sectors. Previous research also emphasizes the importance of intermediary variables for NPLP. Ching Gu & Burns (2016) showed that alignment significantly mediates the relationship between product launch strategy and new product performance. Zehir & Vural (2024) further elaborate that dynamic capabilities and overall firm performance are connected through PI mediation. Yu et al. (2023) also added that radical PI partially mediates the relationship between internal quality integration and the Financial performance of manufacturing firms in China. In contrast, Yulianto et al. (2024) found that not all forms of innovation generate profits, and digital marketing adoption does not mediate NPLP on NPP. Gameti & Morrish (2025) also found that PI does not mediate entrepreneurial orientation to MSME business growth in Australia and New Zealand. Overall, the literature suggests that PI is an important element that drives new product performance directly and is an important mediator of NPLP to NPP. Hence, it can be inferred that PI mediate the relationship between NPLP and NPP (H4).

The research framework illustrated in Figure 1 posits that Product Innovation (PI) functions as a mediating variable in assessing the influence of New Product Launch Proficiency (NPLP) on New Product Performance (NPP) within MSMEs. This study utilizes PI metrics encompassing product enhancement, product diversification, and market penetration (Jajja et al. 2017). Furthermore, this investigation incorporates market testing competencies, strategic planning expertise, and budgeting acumen for product launch as indicators of NPLP (Fakhreddin, Foroudi, & Rasouli Ghahroudi, 2021). The indicators of NPP considered in this research include the new product portfolio, success in development, sales performance, and customer acceptance (García-Villaverde et al. 2017).

RESULTS

Measurement model analysis

The investigation used partial least squares structural equation modeling (PLS-SEM). The results are presented in Tables 3 and 4. All constructs underwent evaluation, encompassing convergent validity, internal consistency reliability, and discriminant validity the measurement model employed for the first-order constructs fulfilled all criteria without necessitating the elimination of any items. The stipulations for achieving satisfactory convergent validity require that the external loadings of the items evaluating the constructs be 0.7 or higher, in that the Average Variance Extracted (AVE) be 0.5 or higher. The results in Table 3 demonstrate that all items exceed the required thresholds of 0.7 for loadings and 0.5 for AVEs. A collection of products must encompass a uniform foundational structure to ensure acceptable internal consistency and reliability. Internal consistency reliability was evaluated using Cronbach's Alpha (CA), Composite Reliability (CR), and Rho A. The CA and CR coefficients must be 0.70 or higher to

meet the criterion for internal consistency reliability. The results in Table 3 indicate that, for all constructs, CA, CR, and Rho_A exceed the minimum threshold of 0.70. Discriminant validity constitutes the final criterion employed to evaluate reflective measurement models; it denotes the uniqueness of a specific concept in relation to others. The Fornell-Larcker criterion. The Fornell-Larcker criterion (Fornell & Larcker, 1981) and the cross-loading criterion (Hair et al. 2024) represent the primary methodologies for assessing discriminant validity.

Structural model analysis

Field-collected empirical data will be used to evaluate many hypotheses, as seen in Figure 2. NPLP has a direct effect on NPP. PI, as a mediator, directly influences the impact of NPLP on NPP. Figure 2 presents the structural model outcomes, including R Square values, path coefficients, and significance levels. Chin (1998) classified the dependent variables as considerable, moderate, and weak, corresponding to R² values of 0.6, 0.3, and 0.1, respectively.

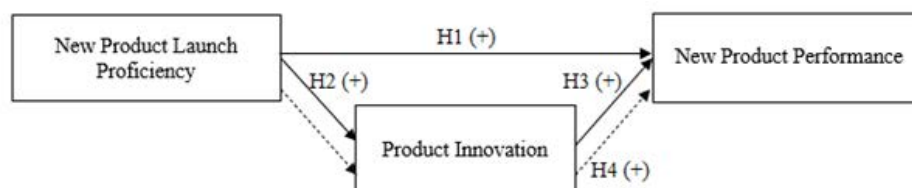


Figure 1. Theoretical model and hypotheses

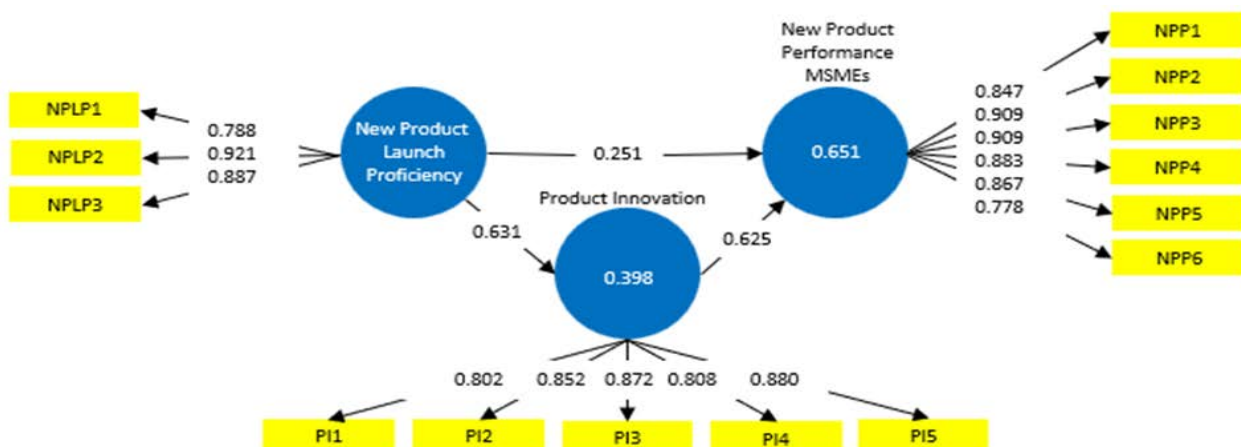


Figure 2. Structural equation modeling results

Table 3. Data quality test questionnaire items

Variable	Item	Loading factor	Result	CA	Rho_A	CR	AVE	Result
New product launch proficiency	NPLP1	0.788						
	NPLP2	0.921	Valid	0.834	0.852	0.901	0.752	Reliable
	NPLP3	0.887						
Product innovation	PI1	0.802						
	PI2	0.852						
	PI3	0.872	Valid	0.898	0.899	0.925	0.711	Reliable
	PI4	0.808						
	PI5	0.880						
New product performance MSMEs	NPP1	0.847						
	NPP2	0.909						
	NPP3	0.909	Valid	0.933	0.935	0.948	0.751	Reliable
	NPP4	0.883						
	NPP5	0.867						
	NPP6	0.778						

Table 4. Dirrect effect new product launch proficiency and product innovation

Hypotheses	t-critical	t-statistics	P values	Supported
H1 New product launch proficiency → New product performance MSMEs		4.309		
H2 New product launch proficiency → Product innovation	0.1968	15.273	0.000	Rejected Null Hypotheses
H3 Product innovation → New product performance MSMEs		11.289		

The squared value of the primary dependent variable of MSMEs' new product Performance is 0.651, which is deemed significant. This signifies that, according to the model, new product launch proficiency and PI constitute 65.1% of the variation in the new product performance of MSMEs. PI mediates the association between new product launch proficiency and new product performance of MSMEs in the suggested study model. The R Square value for the PI variable (0.398) is very low, indicating that new product launch proficiency accounts for 39.8% of the variation in PI.

The results delineated in Table 4 substantiate the proposed research framework, as the majority of the components exhibit statistical significance. NPLP is hypothesized to influence NPP positively. The results reveal a favorable association between NPLP and NP. The investigation demonstrated P values < 0.05 and t-statistics > 0.1968, thereby corroborating Hypothesis 1. It is anticipated that NPLP will exert a positive effect on PI, and the results reaffirm the affirmative relationship between NPLP and PI. The analytical results indicated that the P value was below 0.05 and the t-statistic was 15.273, surpassing 0.1968. These

outcomes support Hypothesis 2. The model further asserts that PI will exert a significant positive impact on NPP. The findings suggest that the relationship between PI and NPP is positively associated, with P values < 0.05 and t-statistics > 0.1968. This discovery reinforces Hypothesis 3. Table 4 presents the results for the direct effects in the model.

NPLP positively impacts their NPP. In the context of the creative industry, MSMEs in Central Java can use market testing practices to quickly gather feedback on local consumer preferences, ensuring that product features are more appropriate, tactical planning can accelerate time to market, and structured budgeting ensures that promotional and distribution resources are available. This combination enhances the new product portfolio, development success rate, sales, and customer acceptance, resulting in strong and significant relationships. NPLP has a positive impact on PI. Positive relationships emerge because a good launch process generates market information and resource discipline that drives product improvement, diversification, and market penetration. In Central Java, creative industry MSMEs often work in local networks that accelerate

the transfer of feedback from market testing to product iteration. In addition, launch planning and budgeting facilitate measurable experimentation, making innovation a natural output of launch capabilities. PI positively impacts NPP. PI, such as improvements, diversification, and market penetration, can increase the value consumers directly feel and open new market segments, thereby directly affecting new product performance metrics. In Central Java, MSMEs often adapt their innovations to local culture and regional consumer trends, so product changes are quickly accepted and drive sales and development success. The existence of local distribution channels and community support also strengthens the effect of innovation on customer acceptance and sales performance.

Testing mediation effect

The preceding section investigated the direct relationships among the elements within the proposed study model. Smart PLS Structural Equation Modeling (SEM) can assess both direct and indirect effects (Hair et al. 2014). This section delves into the indirect ramifications of the study model. The mediation analysis framework articulated by Hair et al. (2021) is employed to evaluate the mediating effect. The initial phase involves assessing the significance of the indirect influence. The study model hypothesizes that the NPLP will exert a direct positive effect on the NPP and an indirect positive effect on the NPP through the mediating variable PI. The mediation effect outcomes, obtained using the Smart PLS bootstrapping method, are presented in Table 5. The study model posited that PI would positively moderate the association between NPLP and NPP. The results suggest that the hypothesized PIs in the study model exert a partial, favorable influence on the relationship between NPLP and NPP. The findings from the mediation analysis demonstrate that P-values < 0.05 and t-statistics > 0.1968 substantiate Hypothesis 4 (H4).

The principal investigator functions as an intermediary between the NPLP and the NPP. The findings from the mediation analysis indicate that the non-profit

leadership program can enhance the non-profit organization's performance, primarily by facilitating greater innovation. Consequently, innovation emerges as the primary conduit that transposes these competencies into an improved portfolio, successful development outcomes, and increased sales. Within the context of the creative industry MSMEs in Central Java, the influence of local networks, access to test markets, and a culture of collaboration render this indirect pathway significantly more pronounced.

Numerous scholars in the academic literature (Calantone et al. 2012; Liu et al. 2018) have posited that NPLP has a beneficial impact on NPP. The outcomes of this investigation suggest that NPLP positively affects NPP. MSMEs in the creative sector of Central Java, Indonesia, which implement rigorous market testing, formulate meticulously constructed budgets, and devise effective strategies for new product launches, exhibit improvements in decision-making and business processes. Market testing facilitates MSMEs in the collection and analysis of customer feedback, which can subsequently be utilized to refine product attributes prior to market introduction. A meticulously organized budget ensures equitable resource allocation throughout the new product launch-to-market continuum.

An effective new product launch proficiency enhances market awareness and enables entry to competitive markets for innovative products. The implementation of NPLP culminates in an augmented level of market acceptance and a more favorable NPP for MSMEs. These findings align with the research conducted by Calantone et al. (2018), which shows that NPLP positively impacts NPP, as measured by profitability and market share. Research by Liu et al. (2018), indicates that complexity and heterogeneity in the new product launch process positively influence corporate Performance. According to García-Villaverde et al. (2017) assert that tailored launch strategies greatly enhance competitive market advantage. Tailored launch strategies substantially enhance the Performance advantage of new goods in competitive marketplaces (Milichovský, 2015).

Table 5. Product innovation mediation

Hypotheses	T-Statistics	P values	Significance ($p \leq 0.05$)	Result
New product launch proficiency → Product innovation → New product performance MSMEs	8.996	0.000	Yes	Rejected Null Hypotheses

Among Creative Industry MSMEs in Central Java, Indonesia, PI is substantially influenced by new product launch proficiency, including market testing capabilities, budget formulation for launches, and developing strategic launch tactics. New product launch proficiency assists MSMEs in enhancing their goods, facilitating strategic development, and augmenting market penetration, allowing them to adapt to client input (Zozulov & Boboshko, 2025). New product launch proficiency can expedite the innovation process and guarantee that goods stay competitive and responsive to evolving market demand (Fakhreddin, Foroudi, & Rasouli Ghahroudi, 2021). The results suggest that the capability to execute new product introductions significantly improves PI. This conclusion is consistent with the study by Zhou et al. (2016), which shows that competencies and methodologies associated with product development, including product design, prototyping, the timing of new product introductions, and tailoring for entirely novel local markets, positively affect PI performance.

This study demonstrates that robust PI, characterized by product enhancement, strategic product diversification, and efficient market penetration, may enhance NPP in MSMEs within Central Java's creative industries (Valencia-Arias et al. 2022). Incorporating innovative features at every level of product development may connect MSME offers with changing market trends and customer demands, thereby enhancing market success (Sudarwati et al. 2018). This result is noteworthy since several research indicate a positive correlation between PI and NPP (Khuong et al. 2025), however Gameti & Morrish (2025) assert that PI does not positively influence SME company development.

Managerial Implications

This research endeavor has the potential to aid MSMEs in leveraging proficiency in new product launches through PI as a pivotal strategy for the holistic growth of MSMEs, especially concerning the performance metrics of newly introduced products. The results of this investigation advocate that MSME practitioners, particularly those engaged in the Creative Industry domain, refine their product launch processes, as such enhancements are instrumental in fostering superior performance outcomes for new products. MSMEs should prioritize talent development, market evaluation acumen, strategic planning, and financial management skills. MSMEs need to invest in PI to maximize their product launch capabilities.

MSMEs in Central Java need to institutionalize new product launch proficiency by creating simple routines for market testing, tactical launch planning, and launch budgets. MSMEs can form small cross-functional teams that combine design, production, and marketing to accelerate product diversification and market penetration, leverage local supplier networks to share costs and scale successful product launches, and adopt affordable digital tools for broader distribution. The Central Java Provincial Government should also prioritize capacity building and targeted innovation financing by providing training on market testing and launch planning, as well as grants to improve new product launch proficiency among Creative Industry MSMEs. The government needs to establish sector centers, business incubation services, and market research support for Creative Industry MSMEs.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The results of this study indicate that New Product Launch Proficiency (NPLP) has a substantial positive impact on New Product Performance (NPP). Empirically, these results corroborate the research by Florea et al. (2020), which substantiates that the effectiveness of new product launches, associated with the capacity to comprehend and respond to market dynamics effectively, can lead to a notable improvement in new product performance. Conversely, the outcomes of this investigation stand in contrast with those reported by Fakhreddin, Foroudi, & Ghahroudi, (2021), who found that launch proficiency does not significantly influence the performance of new products. Product Innovation (PI) notably contributes to improving new product performance. It serves as a mediating factor in the relationship between new product launch proficiency and new product performance. Furthermore, product innovation has been demonstrated to significantly bolster new product performance and function as a mediator in the nexus between new product launch proficiency. These findings align with the conclusions of Chaliraf (2024) research, whose research similarly identified a direct positive effect and mediatory role of product innovation on market performance. Nevertheless, these results differ from those reported by Terra et al. (2015), who found an positive correlation between product innovation performance and profitability within firms. The results indicate that

Creative Industry MSMEs in Central Java significantly benefit from implementing a structured launch plan that promotes innovation. This technique eventually results in an enhanced product portfolio, increased development success, superior sales Performance, and improved customer acceptability.

The results of this investigation align with the Diffusion of Innovation theory, which asserts that the dissemination and communication of novel ideas are critical for the adoption of innovations and their subsequent commercial viability. The results of this investigation correspond with the Dynamic Capabilities framework, which highlights the importance of harmonizing strategic planning with operational agility to discern and capitalize on market opportunities. Both theoretical approaches are substantiated by empirical data indicating that the incorporation of efficient market testing, strategic planning, and budgeting enhances PI and directly elevates the Performance of new items in the market. This research substantially contributes to the MSME NPLP, PI, and NPP literature. However, it also has drawbacks. Although MSMEs are geographically concentrated in Central Java, the results do not apply to other provinces in Indonesia or other MSME sectors, despite Central Java being the country's third most populated province. The definition of MSMEs varies by country, leading to differing outcomes when examined independently in each nation. MSMEs in developing nations such as Indonesia vary from those in wealthy nations. Doing more studies using a longitudinal design, broadening the geographical sample breadth, and employing a mixed techniques approach is advisable.

Recommendations

Increasing MSMEs' participation in the creative sector might enhance local economic diversity and resilience. Policymakers need to explore strategies to foster new product launch proficiency among MSMEs and advance the evolution of PIs. These tactics may include facilitating access to essential skills and resources or establishing a legislative framework that fosters the introduction of innovative MSME goods capable of penetrating worldwide markets. This presents a significant opportunity to enhance the labor force's competencies and flexibility, a prerequisite for addressing the challenges posed by an increasingly dynamic economic landscape. Policymakers and practitioners must consider the societal implications

when promoting MSMEs and advancing inclusive development. Emphasizing new product launch proficiency and PI may mitigate regional inequities by promoting the advancement of MSMEs in underserved regions, particularly regarding new product launch proficiency, PI, and company sustainability. This may lead to more equitable economic growth, enhancing the capacity and quality of MSMEs in product launches. Future studies may explore mediating factors outside PI, such as green PI, to address customers' growing concerns over environmental problems. This investigation was conducted in Central Java Province, a developing nation. The results may differ in affluent nations; therefore, conducting this study in developed countries or engaging in a comparative analysis across both contexts is imperative for future research. This study elucidates the advantageous influence of new product launch proficiency on the performance of new products through product innovation; however, subsequent investigations should examine alternative scenarios, such as moderated mediation, that were not explored in this analysis.

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