

STRATEGIC MARKET MANAGEMENT AND DIGITAL LITERACY IN PREVENTING BUSINESS FAILURES AMONG INDONESIAN MIGRANT WORKERS

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Abstract:

Background: This study investigates the role of strategic market management and digital marketing literacy in preventing the failure of micro-enterprises managed by former Indonesian Migrant Workers (PMIs) in Korea. Despite contributing significantly to Indonesia's economy, Micro, Small, and Medium Enterprises (MSMEs) face high failure rates, particularly among PMIs who struggle with market knowledge, managerial skills, and adapting to digital tools.

Purpose: The research emphasizes the importance of market research, business strategy, and digital literacy in overcoming the challenges faced by PMIs in managing their businesses and preventing failure.

Design/methodology/approach: A quantitative approach was employed, with primary data collected in August 2025 from 104 PMIs managing micro-enterprises using structured questionnaires. The analysis was performed using SmartPLS 4.0 to assess the relationships between market research, business strategy, and digital literacy.

Findings/Result: The findings revealed significant relationships between market research, business strategy, and digital literacy. All factors were found to play a crucial role in preventing business failures. The study found that enhancing digital marketing literacy and integrating market research into business strategies significantly boosts the sustainability of these businesses.

Conclusion: The study concludes that improving digital marketing literacy and incorporating market research into business strategies are essential for enhancing the sustainability and success of micro-enterprises managed by PMIs. It also highlights the need for targeted programs to improve business management skills and digital capabilities.

Originality/value (State of the art): This study provides valuable insights into supporting PMIs by developing targeted programs that improve business management skills and digital capabilities. It also offers recommendations for policies that foster resilience in micro-enterprises, ensuring their long-term growth and success in a competitive market environment.

Keywords: micro small and medium enterprises (MSMEs), business failure prevention, SmartPLS analysis, managerial skill, business sustainability

How to Cite:

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INTRODUCTION

Micro, small, and medium enterprises (MSMEs) form the backbone of Indonesia's economy, contributing significantly to job creation, poverty alleviation, and the overall economic development of the nation (Andika et al. 2021). These enterprises account for a substantial portion of the country's GDP, with estimates indicating that they contribute approximately 60.5% to Indonesia's GDP and employ 96.9% of the workforce, particularly in rural and underserved areas (Rumijati & Hakim, 2023). However, despite their critical role, MSMEs in Indonesia face a persistently high failure rate, which is exacerbated by various factors including limited access to capital, inadequate managerial skills, and a lack of market knowledge (Fatih & Fachrizah, 2021). This challenge is particularly pronounced among former Indonesian Migrant Workers (PMIs), who, upon returning to their home country, often face unique hurdles when transitioning into entrepreneurship.

Many former workers experience significant difficulties adapting their skills and knowledge to the domestic business environment after having spent years engaged in low-skilled labor abroad. The shift from migrant work to managing one's own business involves a complex process of adaptation which many find overwhelming, as they may lack necessary competencies in areas such as business management, financial literacy, and market research. As they attempt to navigate the complexities of entrepreneurship, returnees often struggle with establishing their ventures due to limited understanding of local market dynamics, legal regulations, and business practices. Furthermore, the emotional and psychological toll of returning home after years of arduous labor abroad can hinder their ability to manage entrepreneurial stress, making them more vulnerable to failure (Marlina et al. 2023). Without effective support systems, including access to mentoring and business networks, these challenges become even more pronounced, further limiting the ability of PMIs to grow and sustain their businesses. As a result, despite the strong entrepreneurial spirit that many PMIs possess, the lack of adequate resources and supportive infrastructures makes it difficult for them to thrive as entrepreneurs, leading to high failure rates and missed opportunities for economic empowerment (Anatan & Nur, 2022).

According to data from the Indonesian Migrant Workers Protection Agency (BP2MI), many PMIs struggle

to manage their businesses effectively due to limited market knowledge and insufficient digital literacy. These challenges hinder their ability to adapt to the evolving business landscape, especially as the economy becomes more reliant on technology and digital tools. The lack of awareness about market dynamics and the inability to leverage digital platforms for marketing, sales, and customer engagement pose significant barriers to the sustainability of their businesses (Haer et al. 2024). This issue aligns with findings from the UNDP, which emphasize the importance of managerial skills and digital access in determining the success of the reintegration process for former migrant workers. The study suggests that reintegration into the domestic economy requires not just financial support but also equipping these individuals with business management skills and digital capabilities. Without access to modern tools and platforms, their chances of success in the competitive MSMEs sector remain limited (Nugroho et al. 2023).

Strategic market management is an essential component of a successful business strategy, serving as the foundation for understanding consumer needs, identifying emerging trends, and uncovering new business opportunities. By systematically collecting and analyzing data on consumer behavior, preferences, and broader market conditions, businesses can gain valuable insights into how the market is evolving and what drives customer decisions (Suryawardani et al. 2021). This comprehensive approach allows companies to anticipate shifts in demand and adapt their offerings to meet the changing expectations of their target audience, thereby ensuring that their products or services remain relevant and attractive in a competitive landscape. Moreover, market research provides a deeper understanding of competitor strategies, enabling businesses to benchmark their performance, identify gaps in the market, and implement strategies that offer a competitive advantage (Genaro & Rifiyanti, 2023). This can involve tweaking product features, adjusting pricing strategies, or enhancing customer service, all informed by solid data. Additionally, business strategy helps businesses assess the feasibility and potential success of launching new products or expanding into new markets, allowing them to make more informed and calculated decisions. In an era marked by rapid technological advancements and fluctuating consumer preferences, strategic market management plays a pivotal role in minimizing risks and increasing the likelihood of success by guiding businesses to align

their strategies with market realities. Ultimately, this data-driven approach ensures that businesses remain agile, responsive, and capable of sustaining long-term growth in an increasingly dynamic and unpredictable business environment (Nguyen et al. 2015).

On the other hand, digital marketing literacy has become an indispensable asset for empowering MSMEs to harness the vast potential of digital platforms, including social media, e-commerce sites, and other online marketing channels, thereby enhancing their competitive edge in an increasingly digital world. With the rapid growth of the digital economy, MSMEs are presented with unique opportunities to reach a global audience at a fraction of the cost of traditional marketing methods, allowing them to level the playing field with larger competitors. The ability to effectively engage in digital marketing strategies such as search engine optimization (SEO), content marketing, email campaigns, and social media interactions allows MSMEs to increase brand visibility, attract new customers, and foster long-term loyalty with existing ones (Gunawan & Winarto, 2024). These digital tools provide businesses with invaluable insights into customer preferences and behaviors, enabling more personalized and targeted marketing efforts that resonate with the audience. Additionally, digital marketing opens doors for MSMEs to tap into e-commerce platforms, providing them with the capability to offer their products or services to a broader market beyond their immediate geographic location, enhancing sales potential (Oklander et al. 2024). Digital literacy ensures that MSMEs owners are not only aware of these tools but also equipped with the necessary skills to use them effectively and strategically. By understanding how to optimize content, measure the impact of marketing campaigns, and engage with customers through digital channels, MSMEs owners can transform these platforms into powerful business assets, driving growth, increasing profitability, and ensuring long-term sustainability (Sayudin et al. 2023a). In a world where digital presence has become synonymous with business success, fostering digital marketing literacy within MSMEs is crucial for their survival and thriving in a competitive, technology-driven market landscape.

This research investigates the relationship between market research, business strategy, and digital literacy in mitigating the risk of business failures among PMIs. A quantitative approach was used to analyze primary data collected from PMIs managing micro-

enterprises through structured questionnaires. The study aims to understand how market research, digital marketing skills, and business strategies influence business sustainability. By examining the interactions between these factors, the research seeks to identify key elements that contribute to the success or failure of PMIs' businesses and offer practical insights for enhancing business management practices. When effectively managed, these aspects enable micro-enterprises to better withstand challenges and thrive. A well-conducted market research process ensures that MSMEs understand their customers' needs and preferences, while a strong foundation in digital marketing enables them to reach these customers efficiently and effectively. Together, these elements provide a comprehensive approach to improving business resilience (Soedarsono et al. 2020). By continuously adapting to market changes and embracing the digital landscape, MSMEs can enhance their long-term prospects and secure a stronger foothold in their respective industries.

Based on the aforementioned discussion, this study is crucial to conduct in order to understand the role of strategic market management and digital marketing literacy in preventing the failure of micro-enterprises run by former PMI in Korea. Through this study, the relationship between market research, business strategy, digital marketing literacy, and business success among PMIs will be examined in detail. By understanding the influence of these factors on the operational strategies and survival of micro-enterprises, this research aims to provide valuable insights and recommendations that could help mitigate the risks of failure. Furthermore, the findings could contribute to the development of targeted programs or interventions that foster both market research skills and digital marketing literacy among PMIs, thus supporting the sustainable growth of their businesses in an increasingly competitive market environment.

METHODS

The framework outlines the research methodology, starting with a quantitative approach using primary data collected via closed questionnaires employing a 5-point Likert scale. It then details the data analysis using SmartPLS 4.0 for Structural Equation Modeling (SEM), specifically PLS-SEM, which evaluates both outer (measurement) and inner (structural) models to test

the proposed hypotheses. The hypotheses investigate the influence of market research, business strategy, and digital literacy on each other and their collective role in preventing business failures among Indonesian Migrant Worker-managed micro-enterprises (Figure 1).

A quantitative research approach was employed, which is widely recognized as the scientific method due to its adherence to fundamental scientific principles such as objectivity, measurability, rationality, and systematic analysis. This method is distinguished by its reliance on numerical data and statistical techniques to draw conclusions, ensuring that the research process is grounded in empirical evidence. In this study, the researchers focused on examining the influence of various variables, such as the role of market research, digital literacy and business strategy, in preventing the failure of MSME businesses of the respondents. These variables were chosen due to their increasing importance in modern business practices, particularly in how businesses adapt to and leverage digital tools to enhance their marketing efforts.

Employing a quantitative research design, this study utilized primary data garnered from PMIs via a structured, closed-ended questionnaire administered in August 2025. From a total population of 167 individuals, a sample of 104 respondents was purposively selected, comprising both active workers in South Korea and returnees (ex-PMIs) in Indonesia who are currently engaged in entrepreneurial ventures. To ensure standardized data collection and facilitate robust statistical analysis, the instrument utilized a five-point Likert scale ranging from Strongly Agree (1) to Strongly Disagree (5) following the methodological framework established by Ringle et al. (2020). This systematic approach provided quantifiable insights into the respondents' business practices, enabling an objective examination of the interconnectedness between market research, digital literacy, and business strategy within the specific socio-economic context of the PMI community.

In this study, the researchers utilized SmartPLS 4.0, a sophisticated software tool for analyzing data through Structural Equation Modeling (SEM) with Partial Least Squares (PLS). PLS is an effective analytical method because it is flexible and does not require strict assumptions about data scale or distribution. It is particularly suitable for complex data and combines elements of econometrics (prediction-focused) and

psychometrics (measurement of latent variables), enabling researchers to model relationships and predict outcomes even when dealing with abstract or unobservable constructs (Weng et al. 2021). The use of SEM with latent variables enables a deeper understanding of how different constructs, such as digital literacy or digital marketing skills, influence other variables in the model. One of the key advantages of PLS is its ability to perform complex path analysis with relatively small sample sizes, making it particularly useful for studies where obtaining large datasets is challenging or impractical. PLS-SEM consists of two main components: the Outer model and the Inner model. The Outer model evaluates the measurement model by assessing the validity and reliability of the relationships between indicators and their latent constructions, ensuring that the instruments accurately and consistently measure the intended variables. Meanwhile, the Inner model examines the structural relationships among latent constructs, focusing on the model's explanatory power through indicators such as the Coefficient of Determination (R^2) and overall model fit through the Goodness of Fit (GOF). Hypothesis testing, including both direct and indirect effects, is also conducted to determine the significance of the relationships between variables, allowing the researchers to draw conclusions about the underlying mechanisms driving the observed patterns in the data. This comprehensive approach to data analysis provides a robust framework for testing the research hypotheses and ensuring the accuracy and reliability of the study's findings.

This study proposes several hypotheses based on existing literature, highlighting the critical roles of market research, business strategy, and digital literacy in preventing business failures among micro-enterprises managed by PMIs (Figure 2). The first hypothesis (H1) suggests that market research positively influences digital literacy, as businesses engaged in regular research are better equipped to leverage digital tools (Suryawardani et al. 2021). The second hypothesis (H2) posits that a strong business strategy enhances digital literacy by prioritizing digital transformation (Henseler et al. 2016). The third hypothesis (H3) asserts that market research helps prevent business failures by enabling informed decision-making and early identification of potential risks (Genaro & Rifiyanti, 2023). Furthermore, the fourth hypothesis (H4) suggests that a well-defined business strategy contributes to preventing business

failures by aiding businesses in anticipating challenges and adapting to market changes (Wichmann & Leyer, 2021). Finally, the fifth hypothesis (H5) contends that digital literacy is crucial in preventing business failures, as businesses with high digital competencies are better able to navigate market fluctuations, optimize strategies, and engage with customers, ensuring long-term sustainability (Gunawan & Winarto, 2024). These hypotheses collectively aim to explore how these factors interact to enhance the resilience and success of PMIs' businesses.

RESULTS

This study involved a total population of 167 PMIs, consisting of those currently working in South Korea while managing micro-enterprises in Indonesia as well as former PMIs who had returned from South Korea. From this population, 104 respondents were selected as the sample. Figure 3a shows the demographic profile is

dominated by respondents aged 31–40 (61%), a group whose professional experience and financial stability often drive successful micro-business management. While younger entrepreneurs (23%) are motivated by a desire for economic independence, those over 40 (16%) represent the smallest share, potentially hindered by shifting market dynamics and evolving consumer trends. The business sector (Figure 3b) is dominated by trade (55%), favored for its easy market access and high margins, followed by services (36%) reflecting diverse interests. Conversely, agriculture (9%) remains the smallest sector due to significant barriers like limited capital and market constraints. Income analysis reveals that 73% of respondents earn less than 10 million IDR monthly, highlighting significant economic challenges and the need for scaling (figure 3c). While a combined 27% earn higher incomes, the overall findings suggest that Indonesian micro-enterprises require targeted support specifically in skill development and resource access to boost productivity and market reach (Mardhotillah & Sofhani, 2024).

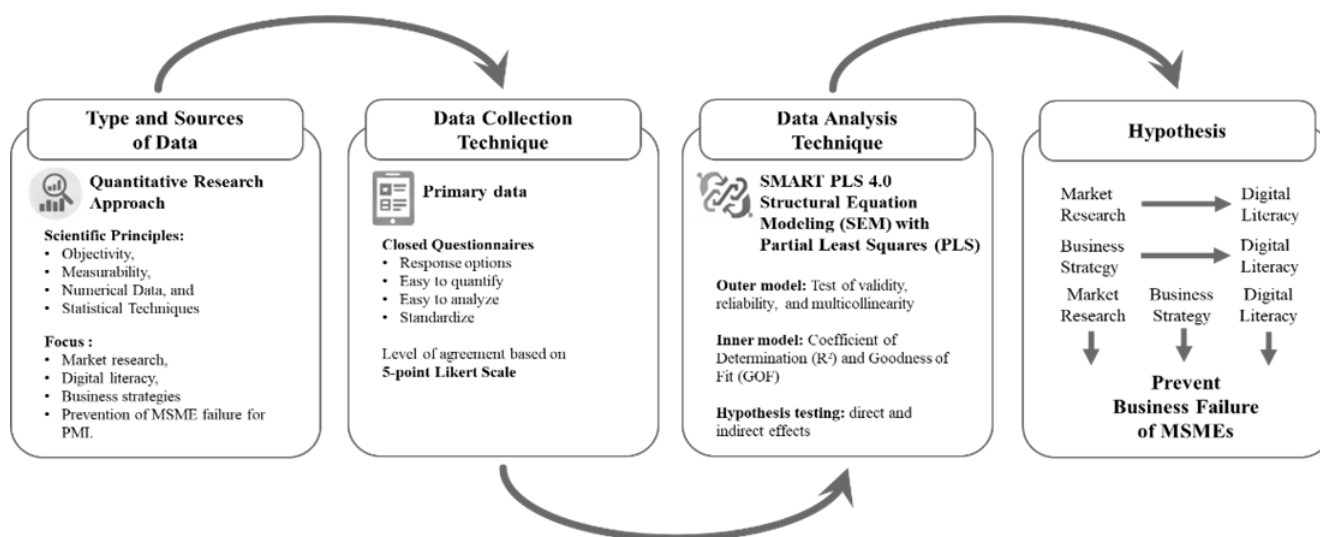


Figure 1. The framework outlines study of preventing Micro, Small, and Medium Enterprises (MSMEs) business failure among Indonesian migrant workers

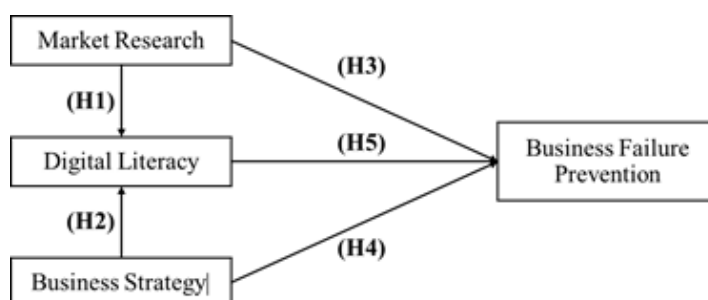


Figure 2. Research hypothesis pathways

Measurement Model (Outer Model)

To ensure the validity of the questionnaire in this study, convergent validity was assessed using the Partial Least Squares (PLS) approach, which is widely recognized as an effective method in structural equation modeling (SEM). Convergent validity measures the extent to which a set of indicators reflects the intended constructs in a valid manner (Table 1). In alignment with established practices in the early stages of scale development, this study employed an outer loading value threshold of 0.60, recognizing that while the conventionally suggested standard is ≥ 0.70 for mature scales, a threshold of 0.60 is often deemed acceptable for newly developed instruments. The adoption of this threshold allows for a more thorough evaluation of the questionnaire's quality, although it is acknowledged that further refinements may be warranted in future iterations of the instrument (Hair et al. 2021). Moreover, the PLS analysis also delved into the relationships among constructs within the structural model. The factor loadings generated within this model are crucial

as they offer significant insights into the strength of the interconnections between the constructors. Figure 4 visually encapsulates these relationships, enhancing understanding of how each variable interrelates within the context of this study.

Discriminant validity was rigorously evaluated using the Heterotrait-Monotrait ratio (HTMT) criteria to ensure that the constructs in the model are distinct from one another. As shown in Table 2, all constructs met the HTMT criterion by maintaining values below the critical threshold of 0.9, confirming that they are sufficiently separate and not highly correlated. This threshold is widely accepted in empirical research as it ensures that constructs are not measuring the same underlying concept. By meeting this criterion, the study confirms that the constructs evaluated are distinct, thereby enhancing the validity of the model. This rigorous assessment strengthens the reliability of the study's findings, ensuring that the relationships observed between constructs are not distorted by overlap or measurement error (Rönkkö & Cho, 2022).

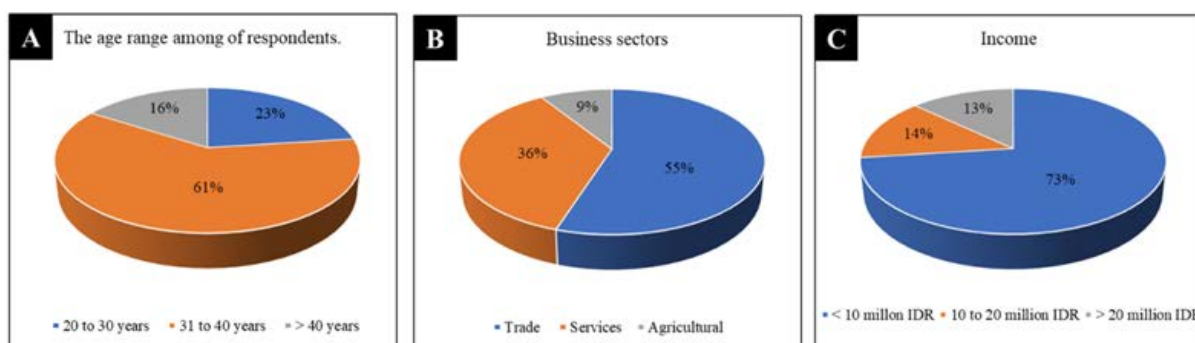


Figure 3. Respondent demographics and business profiles: (a) Age range on PMI; (b) Business sectors and (c) Monthly income earned from the business

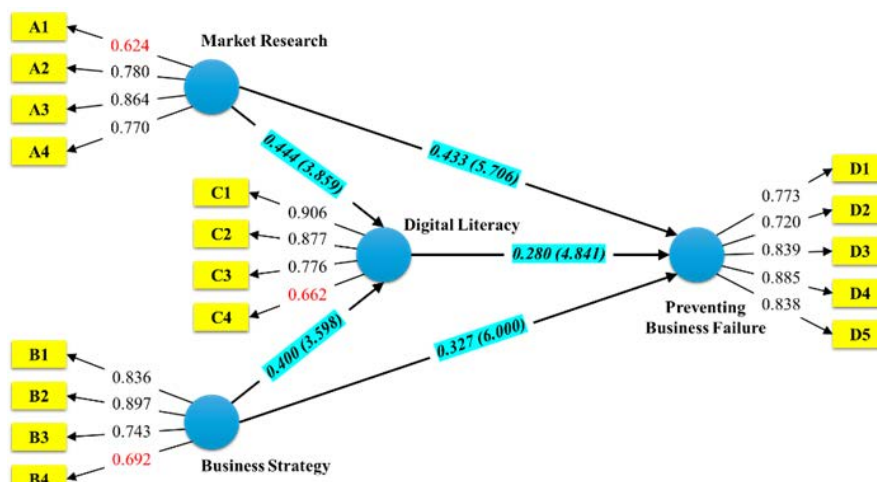


Figure 4. Structural path model illustrating factor loadings and t-values (in brackets). Significance levels for t-values are set at $p < 0.05$

Table 1. The definitions of variables and their corresponding indicators

Variable	Definition	Indicator
Market Research (A)	The systematic identification of consumer needs and competitive market gaps.	A1. Understand customer needs. A2. Follow current market trends. A3. Find low-competition opportunities. A4. Differentiate from competitors.
Business Strategy (B)	The operational framework for product testing, promotion, and iterative growth.	B1. Use social media/online promotion. B2. Test products on a small scale. B3. Improve based on feedback. B4. Plan for future expansion.
Digital Literacy (C)	The technical competency to utilize online platforms for strategic audience engagement.	C1. Select the right digital platforms. C2. Use digital ads for reach. C3. Engage with customers online. C4. Use free social media tools.
Preventing Business Failure (D)	Proactive management of risk and capital to ensure long-term organizational resilience.	D1. Anticipate and manage risks. D2. Maintain emergency capital. D3. Have a 1–3 year business plan. D4. Pivot if market conditions change. D5. Change ads if results are poor.

Table 2. Heterotrait-Monotrait Ratio (HTMT) for the relationships between market research, business strategy, digital literacy, and preventing business failures

Variable	Market Research	Business Strategy	Digital Literacy	Preventing Business Failures
Market Research				
Business Strategy	0.841			
Digital Literacy	0.833	0.87		
Preventing Business Failures	0.767	0.726	0.856	

Reliability testing ensures data consistency and stability throughout the measurement process, primarily evaluated in the PLS approach through composite reliability and Cronbach’s Alpha to determine the extent to which the instruments produce accurate and dependable results (Hair et al. 2021). Composite reliability serves as the primary measure for assessing a construct’s true reliability by consistently representing how indicators reflect their intended variable, and it is generally considered a more precise measure of internal consistency than Cronbach’s Alpha because it more effectively accounts for the interrelationships between measurement items (Shafie Rosli et al. 2021). As a reinforcement of convergent validity, Table 3 demonstrates that all constructs achieved Cronbach’s Alpha values exceeding 0.70, thereby confirming the satisfactory reliability and consistency of the measurement instrument in capturing the intended variables (Atas & Yildirim, 2022). Additionally, the analysis confirms strong convergent validity and statistical credibility as all constructions surpassed the

AVE > 0.50 threshold, a result that supported by Hair et al. 2021 highlights the critical role of internal consistency in ensuring the overall reliability and validity of the PLS model. With a peak AVE of 0.661, the “Preventing Business Failures” construct serves as a robust central variable that links market research, business strategy, and digital literacy, effectively positioning these three factors as the primary facilitators of overall business success. Following the validation of the measurement model, the study proceeds to evaluate the reliability and structural model, an essential phase for exploring the strength and direction of hypothesized relationships to either validate or refute the research propositions (Yu et al. 2022).

Assessment of the Structural Model (Inner Model)

The next phase of the structural model analysis involves a comprehensive evaluation of the relationships between latent constructs, path coefficients, statistical significance, and R-squared values to test the theoretical

framework and determine how independent variables namely market research, business strategy, and digital literacy influence the prevention of business failures, utilizing various statistical methodologies inherent to Structural Equation Modeling (SEM) to highlight the efficacy of latent variable analysis in deciphering complex interdependencies within a business context (Steffani & Gunardi, 2022). The R-squared coefficient serves as a pivotal metric for assessing model accuracy by quantifying the proportion of variance in the dependent variable explained by the independent variables, where higher values indicate a more robust capture of data dynamics and based on accepted thresholds of 0.75 (strong), 0.5 (moderate), and 0.25 (weak) the significant results observed in this analysis underscore the critical reliance of business outcomes on these specific independent predictors (Kass-Hanna et al. 2022).

Table 4 shows the analysis reveals that digital literacy, as a dependent variable, possesses an R-squared value of 0.764 and an adjusted R-squared of 0.759, suggesting that approximately 76.4% of the variation in digital literacy is attributable to market research and business strategy. This underscores the predominant role these two factors play in fostering digital competencies, which are crucial for operating in increasingly digitized markets. Furthermore, the construction of Preventing Business Failures shows an even higher R-squared value of 0.918, with an adjusted R-squared value of 0.915, indicating that over 91% of the variation in outcomes relating to business failures is explained by

the trio of market research, business strategy, and digital literacy. These findings accentuate the interrelationship and combined impact of these factors in reinforcing business sustainability (Steffani & Gunardi, 2022). Overall, the results from the structural model analysis demonstrate that the constructed model proficiently describes the influences of key business variables. This can potentially inform future strategic decisions and optimize operational strategies aimed at minimizing business failure risks.

Hypothesis Testing for Direct Relationship

The hypotheses in this study are tested using bootstrapping in SmartPLS, a technique that involves resampling the data to assess the significance of path coefficients in structural equation modeling (SEM). Bootstrapping helps estimate standard errors and t-statistics, which are essential for determining the statistical significance of the relationships in the model. Specifically, a t-statistic greater than the critical value of 1.96 at a 5% significance level ($p\text{-value} < 0.05$) indicates that the hypothesis is statistically significant, allowing for the rejection of the null hypothesis (Aghili & Amirkhani, 2021). Tables 5 provides a concise overview of the analytical findings, presenting the path coefficients, p-values, and confidence intervals, which facilitate the interpretation of the strength and significance of the relationships between the constructs. These tables offer a clear summary, allowing for an easy assessment of which relationships are supported by the data and which are not.

Table 3. Cronbach's alpha, composite reliability and average variance extracted (AVE) value

	Cronbach's alpha	Composite reliability	Average Variance Extracted (AVE)
Market Research	0.761	0.791	0.584
Business Strategy	0.805	0.816	0.634
Digital Literacy	0.821	0.823	0.657
Preventing Business Failures	0.87	0.877	0.661

Table 4. R-Square and Adjusted R-Square values for digital literacy and preventing business failures

	R-square	R-square adjusted
Digital Literacy	0.637	0.63
Preventing Business Failures	0.918	0.915

Table 5. Direct relationship among variables including mean (M), standard deviation (STDEV), T-values, P-values, and significance results

Hypothesis Path	Mean (M)	(STDEV)	T value	P values	Results
Market Research → Digital Literacy	0.437	0.115	3.859	0.000	Significant
Business Strategy → Digital Literacy	0.409	0.111	3.598	0.000	Significant
Market Research → Preventing Business Failures	0.433	0.076	5.706	0.000	Significant
Business Strategy → Preventing Business Failures	0.335	0.054	6.000	0.000	Significant
Digital Literacy → Preventing Business Failures	0.272	0.058	4.841	0.000	Significant

The statistically significant relationship between market research and digital literacy as evidenced by a T value of 3.859 and a P value of 0.000 demonstrates that market research positively influences digital literacy, suggesting that businesses engaging in regular and effective research are better equipped with the essential knowledge and tools to adapt to evolving technological advancements and market trends (Obenza et al. 2024). The relationship between business strategy and digital literacy is similarly significant, indicated by a T value of 3.598, exceeding the critical threshold of 1.96, and a P value of 0.000, well below the significance level of 0.05. These results confirm a meaningful connection between business strategy and digital literacy, suggesting that a clear and well-defined business strategy is a key predictor in enhancing digital literacy within organizations. Notably, companies that integrate digital transformation into their strategic objectives are more inclined to invest in the essential tools, training, and systems that aid in digital skill development (Henseler et al. 2016).

Furthermore, the study reveals that the relationship between market research and preventing business failures is highly significant, with a T value of 5.706 and a P value of 0.000. This highlights that market research is a critical factor in preventing business failures, enabling organizations to identify potential risks and consumer demands, thus allowing more informed decision-making (Svensson et al. 2018). By continuously monitoring market trends, businesses can preemptively address challenges and mitigate risks, underscoring the importance of market research as a vital tool for organizational survival and success. Likewise, the connection between Business Strategy and Preventing Business Failures is confirmed with a T value of 6.000 and a P value of 0.000. A robust business strategy equips an organization to establish clear goals, allocate resources effectively, and navigate potential challenges, thereby enhancing resilience against failure (Wichmann & Leyer, 2021).

Lastly, the relationship between digital literacy and preventing business failures is also statistically significant, indicated by a T value of 4.841 and a P value of 0.000. Companies investing in digital skills development are better equipped to adapt to technological changes and optimize operations. This highlights the essential nature of digital literacy in fortifying a company's capacity to navigate challenges and decreasing the likelihood of failure (Wichmann & Leyer, 2021). These findings confirm that integrating market research, business strategy, and digital literacy is essential for boosting organizational performance and mitigating the risk of failure. Therefore, organizing efforts toward strengthening these areas can significantly augment the likelihood of business success.

Hypothesis Testing for Indirect Relationship

The analysis of indirect relationships between Market Research, Business Strategy, and Preventing Business Failures through Digital Literacy suggests statistically significant evidence supporting the hypotheses (Table 6). For the first hypothesis path, Market Research → Digital Literacy → Preventing Business Failures, Mean (M) is 0.121, Standard Deviation (STDEV) is 0.046, T value is 2.676, and P value is 0.007. These values indicate that the relationship is statistically significant, as the T value exceeds the critical threshold of 1.96, and the P value is well below the 0.05 significance level. This implies that businesses that engage in market research are more likely to enhance their digital literacy, which, in turn, helps prevent business failures. Through market research, companies gain valuable insights into market trends and technological advancements, which aids in developing digital skills. These enhanced digital capabilities allow businesses to adapt to challenges more effectively, thereby reducing the risk of failure and improving their long-term sustainability (Mushtaq et al. 2024).

Table 6. Indirect relationship between market research, digital literacy, and preventing business failure.

Hypothesis Path	Mean (M)	(STDEV)	T value	P values	Results
Market Research → Digital Literacy → Preventing Business Failures	0.121	0.046	2.676	0.007	Significant
Business Strategy → Digital Literacy → Preventing Business Failures	0.11	0.034	3.273	0.001	Significant

For the second hypothesis path, Business Strategy → Digital Literacy → Preventing Business Failures, the Mean (M) is 0.11, the Standard Deviation (STDEV) is 0.034, the T value is 3.273, and the P value is 0.001. These results confirm that the relationship is highly significant, as the T value exceeds the critical value of 1.96, and the P value is much lower than 0.05. This indicates that a strong business strategy that integrates digital literacy plays a crucial role in preventing business failures. By prioritizing digital transformation, a business strategy fosters the development of digital skills among employees, equipping them to adapt effectively to market changes, technological advancements, and operational challenges. This alignment between business strategy and digital literacy enhances organizational resilience, helping businesses respond more efficiently to disruptions and thereby reducing the risk of failure (Mejía-Trejo & Loza-Vega, 2022).

The key implications of the findings highlight both statistical and practical significance. Statistical Significance: Both hypothesis paths demonstrate significant results, with T values exceeding 1.96 and P values below 0.05, confirming that the indirect effects are not due to random variation but reflect a meaningful relationship. This ensures that the observed effects of market research and business strategy on digital literacy and preventing business failures are reliable and substantial. The results suggest that businesses can mitigate the risk of failure by focusing on enhancing digital literacy through regular market research and a robust business strategy. Market research provides critical insights for making informed decisions, allowing businesses to stay ahead of market trends. Meanwhile, a well-crafted business strategy that prioritizes digital literacy helps ensure that employees are equipped to handle technological disruptions, market shifts, and operational. This strategic integration fosters a workforce that is adaptable, resilient, and capable of driving long-term success, ultimately reducing the likelihood of failure (Mushtaq et al. 2024).

Managerial Implications

This study offers important managerial implications for micro-enterprises, particularly those run by former Indonesian Migrant Workers, by emphasizing the role of strategic market management, digital literacy, and business strategy in enhancing business success and sustainability. One key finding is the importance of integrating market research into business strategies. Managers are advised to pivot their market research focus from merely trailing popular trends toward the specialized skill of identifying low-competition opportunities. This strategic shift enables small enterprises to establish a secure foothold in niches where larger competitors are absent (Yani et al. 2023). In addition, regarding business strategy managers should prioritize lean validation by launching small-scale product trials to gather direct customer feedback, allowing them to refine their business model and protect limited capital from high-risk investments before committing to a full-scale market entry (Sayudin et al. 2023b). Moreover, enhancing digital literacy is crucial, as it empowers businesses to understand that the priority is not simply “being online,” but rather making strategic selections of digital platforms. Managers must evaluate which specific tools whether WhatsApp, TikTok, or localized e-marketplaces best align with their target audience’s behavior to ensure that marketing efforts are not wasted (Ali et al. 2023). The study also highlights the importance of capacity building for PMIs, recommending targeted programs to enhance business management and digital skills. Finally, policymakers are encouraged to create an enabling environment for MSMEs by prioritizing policies that support digital literacy, market access, and financial resources. This includes investing in digital infrastructure, offering incentives for digital adoption, and fostering public-private partnerships to help PMIs overcome barriers to business success (Yani et al. 2023).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study confirms that the sustainability of micro-enterprises managed by Indonesian Migrant Workers (PMIs) both those who have returned and those currently working in Korea while pioneering businesses in Indonesia depends on transforming market insights into technical resilience through strategic digital literacy. By shifting focus from broad trends to low-competition niches and implementing lean validation through small-scale product trials, these entrepreneurs can protect limited capital while aligning their digital presence with specific platforms like TikTok or WhatsApp for marketing efficiency. While financial stability and international work experience provide a foundational advantage, long-term success requires a synergy between managerial agility and institutional support, where policymakers provide the digital infrastructure and capacity-building programs necessary to mitigate the risk of failure. Ultimately, integrating deep market research with adaptive business strategies allows PMIs to navigate technological disruptions, turning overseas labor experience into robust and sustainable business performance at home.

Recommendations

Given the significant relationships observed in this study, it is recommended that targeted support mechanisms be put in place to help PMIs develop essential skills in market research and digital marketing. Providing training programs focused on these areas could help them gain deeper insights into market trends and technological advancements, which are crucial for their business growth. Additionally, initiatives aimed at strengthening digital literacy should be incorporated into business strategies to enhance the adaptability and competitiveness of micro-enterprises. Policymakers and support organizations could consider establishing programs that promote digital tools and platforms tailored to the needs of PMIs. Lastly, encouraging business strategy workshops and networking opportunities could help foster resilience in their enterprises, ensuring that they are better equipped to navigate evolving market dynamics and safeguard against potential business failures.

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REFERENCES

- Aghili, N., & Amirkhani, M. (2021). SEM-PLS approach to green building. *Encyclopedia*, 1(2), 472–481. <https://doi.org/10.3390/encyclopedia1020039>
- Ali, O., Osmanaj, V., Kwiatek, P., Alryalat, M., Chimhundu, R., & Dwivedi, Y. K. (2023). The impact of technological innovation on marketing: Individuals, organizations and environment: A systematic review. *Economic Research-Ekonomska Istraživanja*, 36(3), Article 2210661. <https://doi.org/10.1080/1331677X.2023.2210661>
- Anatan, L., & Nur, N. (2022). A review of MSME's competitiveness in Indonesia. Dalam Proceedings of the 4th International Conference on Economics, Business and Economic Education Science, ICE-BEES 2021, 27-28 July 2021, Semarang, Indonesia. EAI. <https://doi.org/10.4108/eai.27-7-2021.2316891>
- Andika, A., Jennifer, J., Huang, J. C., & Sebastian, J. C. (2021). Analysis of digital marketing adoption in Indonesian Micro, Small, and Medium Enterprises. *Jurnal Manajemen Bisnis*, 18(3), 308–328. <https://doi.org/10.38043/jmb.v18i3.3173>
- Atas, A. H., & Yildirim, Z. (2022). Adaptation of the shared-metacognition questionnaire (SMQ) into Turkish for online collaborative learning environments. *Journal of Educational Technology and Online Learning*, 5(3), 585–599. <https://doi.org/10.31681/jetol.1106008>
- Fatih, A., & Fachrizah, H. (2021). Business coaching of a local F&B MSME: Building financial projection for external funding and measuring digital marketing activities. *Journal of International Conference Proceedings*, 4(1), 12–27. <https://doi.org/10.32535/jicp.v4i1.1121>
- Genaro, S., & Rifiyanti, H. (2023). Analyzing the applications and implications of current emerging technologies on digital trends. *International Journal Education and Computer Studies (IJECS)*, 3(3), 67–71. <https://doi.org/10.35870/>

ijecs.v3i3.1452

- Gunawan, A. W., & Winarto, S. H. (2024). Strategy for improving business performance in Micro and Small Enterprises through innovation and digitalization. *International Journal of Social and Human*, 1(2), 97–105. <https://doi.org/10.59613/qtcfze12>
- Haer, J., Gravitiani, E., & Putro, T. R. (2024). Digital technology adoption in entrepreneurs: Are ex-migrant workers more adaptive? *Etikonomi*, 23(1), 1–10. <https://doi.org/10.15408/etk.v23i1.34681>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). An introduction to structural equation modeling. Dalam *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R* (hlm. 1–29). Springer. https://doi.org/10.1007/978-3-030-80519-7_1
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20. <https://doi.org/10.1108/IMDS-09-2015-0382>
- Kass-Hanna, J., Lyons, A. C., & Liu, F. (2022). Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa. *Emerging Markets Review*, 51, Article 100846. <https://doi.org/10.1016/j.ememar.2021.100846>
- Mardhotillah, A., & Sofhani, T. F. (2024). The creation of community-based enterprise in Indonesian return migrant workers: The role of internal and external factors. *Indonesian Journal of Business and Entrepreneurship*, 10(1), 192–204. <https://doi.org/10.17358/ijbe.10.1.192>
- Marlina, L., Wahyuni, S., & Sulistianingsih, I. (2023). The information system for promotion of products for Micro, Small, and Medium Enterprises in Hinai Village is website-based with a membership method. *International Journal of Computer Sciences and Mathematics Engineering*, 2(2), 141–151. <https://doi.org/10.61306/ijecom.v2i2.35>
- Mejía-Trejo, J., & Loza-Vega, I. (2022). Social media information literacy vs. fake news: Probing the business decisions under COVID-19 times as innovation skills with fsQCA. *Scientia et Praxis*, 1(02), 27–50. <https://doi.org/10.55965/setp.1.02.a2>
- Mushtaq, N., Hussain, F., Dad, A., Rehman, S. U., & Waseem, M. (2024). Digital transformation and its impact on business performance in SMEs of Pakistan: An empirical study. *The Asian Bulletin of Big Data Management*, 3(2), 103–114. <https://doi.org/10.62019/abbdm.v3i2.92>
- Nguyen, T. H., Newby, M., & Macaulay, M. J. (2015). Information technology adoption in small business: Confirmation of a proposed framework. *Journal of Small Business Management*, 53(1), 207–227. <https://doi.org/10.1111/jsbm.12058>
- Nugroho, A., Firmansyah, D. A., Ashilah, F. D. D., & Permatasari, E. (2023). The urgency of providing Indonesian migrant workers protection centers in the country of placement. Dalam *Proceedings of the International Conference on Intellectuals' Global Responsibility (ICIGR 2022)* (hlm. 83–90). Atlantis Press. https://doi.org/10.2991/978-2-38476-008-4_12
- Obenza, B. N., Cuaresma, N. B. G., Carandang, Y. G. D., Dalugdug, L. J. S., Resus, K. S. M., Jumamoy, B. C. A., Mamon, P. A. T., & Chi, K. C. Y. (2024). The mediating effect of financial self-efficacy on financial behavior and financial well-being of college students in Region XI. *American Journal of Economics and Business Innovation*, 3(1), 21–30. <https://doi.org/10.54536/ajebi.v3i1.2313>
- Oklander, M., Yashkina, O., Zlatova, I., Cicekli, I., & Letunovska, N. (2024). Digital marketing in the survival and growth strategies of small and medium-sized businesses during the war in Ukraine. *Marketing and Management of Innovations*, 15(1), 15–28. <https://doi.org/10.21272/mmi.2024.1-02>
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2020). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 31(12), 1617–1643. <https://doi.org/10.1080/09585192.2017.1416655>
- Rönkkö, M., & Cho, E. (2022). An updated guideline for assessing discriminant validity. *Organizational Research Methods*, 25(1), 6–14. <https://doi.org/10.1177/1094428120968614>
- Rumijati, A., & Hakim, A. R. (2023). Innovative work behavior and self-efficacy: Does entrepreneurial leadership impact MSME business performance? *Problems and Perspectives in Management*, 21(4), 304–315. [https://doi.org/10.21511/ppm.21\(4\).2023.24](https://doi.org/10.21511/ppm.21(4).2023.24)
- Sayudin, S., Kartono, K., & Curatman, A. (2023a). Increasing business effectiveness through the implementation of an integrated digital marketing strategy. *Journal of World Science*,

- 2(11), 1908–1913. <https://doi.org/10.58344/jws.v2i11.478>
- Sayudin, S., Nurjanah, A., & Yusup, A. (2023b). Innovation strategy and product development to increase company competitiveness in digital era. *Eduvest - Journal of Universal Studies*, 3(5), 966–973. <https://doi.org/10.59188/eduvest.v3i5.814>
- Shafie Rosli, M., Saleh, N. S., Alshammari, S. H., Ibrahim, M. M., Atan, A. S., & Atan, N. A. (2021). Improving questionnaire reliability using construct reliability for researches in educational technology. *International Journal of Interactive Mobile Technologies (iJIM)*, 15(04), 109–123. <https://doi.org/10.3991/ijim.v15i04.20199>
- Soedarsono, D. K., Mohamad, B., Adamu, A. A., & Pradita, K. A. (2020). Managing digital marketing communication of coffee shop using Instagram. *International Journal of Interactive Mobile Technologies (iJIM)*, 14(05), 108–123. <https://doi.org/10.3991/ijim.v14i05.13351>
- Steffani, C. N., & Gunardi, G. (2022). Enacting Alternating Least Square algorithm to estimate model fit of SEM Generalized Structured Component Analysis. *Mathematics and Statistics*, 10(6), 1239–1246. <https://doi.org/10.13189/ms.2022.100610>
- Suryawardani, B., Wulandari, A., Marcelino, D., Satrya, G. B., Wijaya, R., Lukito, W., & Prabawa, B. (2021). Creative digital marketing and advanced internetworking assistance programs for Micro, Small and Medium Enterprises in Buah Batu District Bandung. *Engagement: Jurnal Pengabdian Kepada Masyarakat*, 5(2), 361–376. <https://doi.org/10.29062/engagement.v5i2.217>
- Svensson, G., Ferro, C., Hogevoid, N., Padin, C., & Sosa Varela, J. C. (2018). Developing a theory of focal company business sustainability efforts in connection with supply chain stakeholders. *Supply Chain Management: An International Journal*, 23(1), 16–32. <https://doi.org/10.1108/SCM-12-2015-0461>
- Weng, S.-F., Malik, A., Wongsin, U., Lohmeyer, F. M., Lin, L.-F., Atique, S., Jian, W.-S., Gusman, Y., & Iqbal, U. (2021). Health service access among Indonesian migrant domestic workers in Taiwan. *International Journal of Environmental Research and Public Health*, 18(7), Article 3759. <https://doi.org/10.3390/ijerph18073759>
- Wichmann, J., & Leyer, M. (2021). Factors influencing the intention of actors in hospitals to use indoor positioning systems: Reasoned action approach. *Journal of Medical Internet Research*, 23(10), Article e28193. <https://doi.org/10.2196/28193>
- Yani, A., Suparwata, D. O., & Hamka. (2023). Product and service innovation strategies to expand MSME markets. *Journal of Contemporary Administration and Management (ADMAN)*, 1(3), 163–169. <https://doi.org/10.61100/adman.v1i3.67>
- Yu, T., Shang, W., Liu, S., & Zhu, J. (2022). How to assess generic competencies: From sustainable development needs among engineering graduates in industry. *Sustainability*, 14(15), Article 9270. <https://doi.org/10.3390/su14159270>