
**DEVELOPMENT OF THE PENTUPLE BOTTOM LINE MODEL IN
MODERATING THE EFFECT OF FINANCIAL LITERACY AND FINANCIAL
INCLUSION ON MSME BUSINESS SUSTAINABILITY**



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Abstract

This study employs a Systematic Literature Review (SLR) approach to explore and synthesize prior research regarding the impact of financial literacy and financial inclusion on the business aspirations of Micro, Small, and Medium Enterprises (MSMEs). It also examines the potential implementation of the Pentuple Bottom Line concept as a comprehensive moderation framework. The SLR process involved analyzing scholarly articles published between 2013 and 2024 across databases such as Scopus, Google Scholar, and ScienceDirect using relevant keywords. The findings indicate that both financial literacy and financial inclusion consistently exert a positive influence on MSME aspirations, particularly in the economic and social domains. Nonetheless, there is a noticeable gap in research that incorporates the environmental, social, and spiritual dimensions encapsulated in the Pentuple Bottom Line model. As a result, the adoption of this framework is suggested to reinforce MSME sustainability strategies. This study provides a conceptual contribution by introducing a novel perspective for research and practice in value-driven sustainable business development.

Keywords: Financial Literacy, Financial Inclusion, MSME Sustainability, Pentuple Bottom Line

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in the national economic structure, particularly as major contributors to job creation, income distribution, and the strengthening of local economies. Amid increasingly complex global economic dynamics and the challenges in the post-COVID-19 era, the sustainability of MSMEs has become an increasingly strategic issue. However, various studies have shown that most MSMEs in Indonesia continue to face fundamental obstacles in managerial aspects, financial access, and the optimal use of digital technology. To address these challenges, new approaches to assessing and promoting MSME sustainability are continuously being developed. One emerging approach that is gaining attention is the Pentuple Bottom Line (PBL) concept, an enhancement of the Triple Bottom Line by incorporating the dimensions of *nabi* (spirituality) and *phenotechnology* (information technology). This concept offers a more holistic framework by balancing the aspects of profit, people (social), planet (environment), spiritual values (*nabi*), and technological advancement (*phenotechnology*). In the Indonesian context, which is rich in religious and cultural values, the implementation of PBL becomes increasingly relevant.

Furthermore, financial literacy and financial inclusion are also recognized as fundamental factors that support MSME sustainability (Ardiansyah & Lesmana, 2024). Strong financial literacy enables MSME actors to manage finances wisely and make better business decisions, while financial inclusion opens access to formal financial services that were previously difficult for small business groups to reach (Ramadhana, & Handayani, 2025). Recent studies have even begun exploring the moderating relationships between spiritual, social, and technological values and financial variables in determining the sustainability of MSMEs. However, the existing literature still shows a lack of integration among these three approaches namely the Pentuple Bottom Line, financial literacy, and financial inclusion within a single, unified conceptual framework. Some studies tend to focus more on the technical aspects of finance, while others emphasize value-based approaches without linking them operationally to MSME business performance. Therefore, a systematic review is needed to organize, categorize, and synthesize previous research findings comprehensively in order to build a holistic understanding of the factors influencing MSME sustainability.

This study aims to conduct a Systematic Literature Review (SLR) of literature discussing the relationship between financial literacy, financial inclusion, and the dimensions of the Pentuple Bottom Line in relation to the sustainability of MSMEs. Through this approach, the study seeks to identify patterns in findings, research gaps, and the potential integration of variables, which can serve as the foundation for developing a more inclusive and sustainable MSME development model and policy in the future.

REVIEW OF LITERATURE

Pentuple Bottom Line

Green accounting emerged in response to human greed in exploiting natural resources without considering sustainability, which has led to a global ecological crisis. This gave rise to a deconstruction of the Triple Bottom Line into the Pentuple Bottom Line by incorporating the element of *taqwa* (spiritual consciousness). In essence, the postmodernism paradigm deconstructs existing frameworks based on perceived gaps. This is aligned with the

permaculture philosophy of Holmgren (Saputra, 2022). The Pentuple Bottom Line (5P) is an expansive development of the Triple Bottom Line. This concept implies that if an organization, institution, or corporation aims to sustain its operations or survive in the long term, it must balance five key aspects: *Prophet* (spirituality), *People*, *Planet*, *Profit*, and *Phenotechnology* (information technology) (Sukoharsono, 2019).

According to Badria et al. (2021), the Hierarchy Pyramid is used to diagnose problems and understand them at different levels. In forming this hierarchy, ethical responsibility dictates that companies are obliged to conduct fair and proper business practices. Social norms serve as references for corporate behavior. A company is not only expected to act lawfully but also ethically some actions may be legal but not necessarily ethical. The second level is *Profit*, where companies seek to earn profit for survival. However, in reality, profit alone is insufficient for long-term survival; attention to people and the planet is also essential. The third level is *People*, which includes stakeholders such as investors, employees, suppliers, customers, communities, and civil institutions. A strategy to attract investors is for the company to earn their trust. The fourth level is *Planet*, referring to nature that must be preserved and protected to ensure sustainability for future generations.

The final level is the *Prophet* dimension, representing the messenger of God symbolizing mental and spiritual balance in the effort to sustain life. This concept is embedded in an approach known as Sustainability Accounting with a Spiritual Dimension (AKSUS), an evolution of the Triple Bottom Line (Elkington, 1997) by adding a fourth dimension: spirituality. This spiritual dimension serves to balance organizational activities so that they are not solely profit-oriented but also reflect values of compassion, transcendental awareness, and deeper social engagement. Hence, the implementation of the Pentuple Bottom Line within the AKSUS framework promotes organizational well-being through the strengthening of ethical values, social responsibility, and environmental preservation, which are integrated with economic sustainability (Sukoharsono, 2010).

The Pentuple Bottom Line (PBL) concept is highly relevant to this research as it provides a comprehensive framework for holistically understanding the aspirations of MSMEs. PBL encompasses five key dimensions: *People* (social), *Planet* (environmental), *Profit* (economic), *Peace* (spiritual values), and *Partnership* (collaboration). In this context, financial literacy and financial inclusion are important factors influencing MSME sustainability. However, their impact becomes more powerful and balanced when aligned with the value-based framework of PBL. PBL functions as a moderating variable that bridges the influence of financial literacy and inclusion on business sustainability by emphasizing the importance of balance among economic, social, and environmental aspects, as well as values of partnership and ethics. Thus, the development of the PBL concept not only enriches the conceptual model of this research but also strengthens the direction of more sustainable and inclusive policy for MSMEs in an increasingly complex global economic landscape.

According to Purnomo et al. (2023), there are five sustainability aspects: economic, environmental, social, phenotechnology, and spiritual. These five pillars are fundamental elements that businesses, including SMEs, must achieve to meet sustainability goals. The sustainability variables include:

- a. Profit aspect (economy, profit): This is the most critical component and serves as the primary objective of any business activity. Profit itself represents surplus income that ensures the company's continued existence.

- b. People aspect (social, stakeholder community): This dimension concerns the condition of society within a sustainable industry context. Communities are vital stakeholders for companies, as local community support ensures a company's presence and brings significant benefits to society.
- c. Planet aspect (environment): This relates to all areas of human life and activities, which are inherently linked to the surrounding environment.
- d. Phenotechnology aspect (information technology): This refers to the fact that the presence or phenomenon of information technology must be an essential component in sustaining a business.
- e. Prophet aspect (spiritual): This represents spiritual, mental, or inner balance in sustaining organizational life. It serves as a model of intrinsic character education that can counteract corrupt behavior. The *Prophet* element is rooted in autonomous spiritual awareness attained through *taqarrub* (closeness to God).

Business Sustainability

Business sustainability is a concept in which business activities are carried out without compromising the ability to meet current and future needs across the dimensions of people, planet, and profit. The spirit of sustainable business refers to business activities conducted by companies that aim to manage operations, pursue growth, and add value to the company's performance (Badria et al., 2021). According to Kusuma et al. (2022), the success of business actors in implementing innovation, managing employees and customers, and generating returns on initial capital investments serves as a measure for assessing business sustainability in MSMEs. Such capabilities indicate that MSMEs possess a growth orientation and the ability to continuously identify opportunities for innovation.

Kusuma, Narulitasari, & Nurohman (2022) outline that the success of entrepreneurs in implementing MSME sustainability can be evaluated through the following aspects:

1. Financial Growth
Reflects improvements in income-related aspects, indicated by increased revenue, profit, and financial management.
2. Strategic Growth
Demonstrates the MSME's ability to formulate long-term plans and effectively respond to market changes.
3. Structural Growth
Relates to internal organizational improvements within MSMEs, such as enhancements in management structure or business governance.
4. Organizational Growth
Indicates the development of business capacity, including human resources and organizational culture.

Financial Literacy

The definition of financial literacy has been put forward by several experts over the years, evolving according to existing conditions and situations. In 2000, a study conducted by Mason & Wilson defined financial literacy as an individual's ability to use information sources in the decision-making process. The financial information one possesses can be read, analyzed, and then applied in managing that information, which in turn can be communicated for future financial well-being (Laturette, Widianingsih, and Subandi, 2021). Financial literacy refers to an individual's ability to achieve a more prosperous life through the

knowledge they possess in managing finances and making decisions to improve their income (Laturette et al., 2021). Fundamentally, financial literacy involves an individual's knowledge, skills, confidence, capabilities, and expertise in utilizing resources to read, analyze, manage, and communicate their personal financial situation. This is aimed at improving their standard of living through effective and sound financial decision-making in pursuit of overall well-being.

Financial literacy is crucial for MSMEs so that decision-making can be carried out effectively (Dahrani, Saragih, and Ritonga, 2022). The higher the level of financial literacy an MSME actor possesses, the greater their ability to manage their business efficiently, make strategic decisions, and wisely utilize financial resources. Financial literacy enables entrepreneurs to prepare regular financial reports, understand loan interest rates, and use banking products to support their operations. Financial literacy is considered a fundamental pillar in building a sustainable business that can adapt to economic dynamics (Rahayu and Musdholifah, 2017). The ability of MSME actors to understand basic financial concepts such as cash flow management, budgeting, investment, and the use of financial products is a crucial foundation for making sound business decisions. Good financial literacy helps entrepreneurs avoid financial risks, take advantage of funding opportunities wisely, and increase operational efficiency. In the context of this study, financial literacy is a variable that supports business sustainability, as it enables MSMEs to grow independently, maintain financial health, and withstand economic shocks. Therefore, strengthening financial literacy is a vital strategy in creating competitive and sustainable MSMEs over the long term.

Measuring financial literacy (Laturette et al., 2021) can be divided into four aspects:

1. General knowledge of personal finance, such as the liquidity of assets, the benefits of personal financial knowledge, understanding of net assets, knowledge of income and expenses, as well as awareness of personal financial planning.
2. Savings and loans, including knowledge of deposit characteristics, understanding credit card interest rates, compound interest, the benefits of saving, and familiarity with different types of loans.
3. Insurance, which is a form of risk control by transferring risk from one party to another. This includes general knowledge of insurance, understanding insurance premiums, identifying high-risk groups in society, knowledge of various insurance types, and understanding long-term investments.
4. Investment, which refers to the activity of allocating income at present to gain future profits.

Financial Inclusion

Financial inclusion is defined as the condition in which individuals and businesses have access to useful and affordable financial products and services that meet their needs (Lakuma, Marty, & Muhumuza, 2019). Financial inclusion is an effort to minimize and eliminate price-related or other barriers that hinder access to financial services. Access to such financial services can significantly improve people's quality of life, especially in areas with difficult geographic conditions that limit the use of formal financial services (Dahrani, Saragih, & Ritonga, 2022). Financial inclusion can be described as a process that ensures ease of access, availability, and usage of formal financial systems by all economic actors. It includes a wide range of services such as savings, credit, insurance, and payments, provided

at affordable rates, particularly for low-income individuals and economic players (Marginingsih, 2021).

According to Bank Indonesia, financial inclusion refers to efforts to eliminate all forms of barriers to public access to financial services through the use of formal financial institutions or banks. According to the World Bank (2014) as cited in Omar & Inaba (2020), the emergence of financial inclusion promotes social inclusion by facilitating access, availability, and usage of rule-based formal financial services by “new financial actors.” This group generally includes underserved populations, such as rural residents, women, and low income families, who benefit greatly from basic financial services like savings, credit, payments, and insurance (Marginingsih, 2021). The goal of financial inclusion is to achieve economic growth through income distribution, poverty alleviation, and financial system stability (Awanti, 2017). Financial inclusion plays a critical role in promoting the growth and aspirations of MSMEs by providing access to useful and affordable financial services. This access helps MSMEs overcome the financing constraints they often face compared to larger firms. Through inclusive finance, MSMEs can increase investment, expand operations, and strengthen their competitiveness. Therefore, financial inclusion not only supports short term growth but also reinforces business resilience, especially in developing countries (Lakuma, Marty, & Muhumuza, 2019).

Financial inclusion is highly relevant to research on MSME sustainability, especially when moderated by the Pentuple Bottom Line concept. Access to financial services enables MSMEs to obtain funding that supports business growth, increases productivity, and improves the quality of products and services ultimately contributing to the reduction of economic poverty. In addition, financial inclusion enhances social impact by creating job opportunities and improving community well-being. From an environmental perspective, financial inclusion helps MSMEs adopt eco-friendly practices. In the social dimension, it promotes equality and economic empowerment. By strengthening good governance, financial inclusion supports a more holistic approach to MSME sustainability in alignment with the principles of the Pentuple Bottom Line. According to Bank Indonesia (2014) in Hanafi & Sitorus (2020), the dimensions that comprise an inclusive financial system include: Access, Usage, and Quality.

RESEARCH METHOD

This study employs a Systematic Literature Review (SLR) approach to comprehensively and critically examine the relationship between financial literacy, financial inclusion, and the Pentuple Bottom Line (PBL) concept in relation to the sustainability of Micro, Small, and Medium Enterprises (MSMEs). The SLR method is chosen for its ability to systematically investigate, explore, and synthesize relevant scientific evidence, providing a reliable and comprehensive knowledge map. This approach follows the stages proposed by Kitchenham and Charters (2007), which include: (1) planning the literature review, (2) conducting the search and selection of articles, and (3) compiling and reporting the review findings. This process is designed to produce a systematic, transparent, and replicable review capable of critically addressing the research questions.

Literature sources were collected from leading academic databases such as Scopus, Google Scholar, ScienceDirect, and Garuda, covering publications from 2013 to 2024. The inclusion criteria for this review consist of peer-reviewed journal articles that focus on key

variables such as financial literacy, financial inclusion, PBL, and MSMEs, and that use quantitative, qualitative, or mixed-method approaches. Conversely, non-academic articles, irrelevant publications, and documents that were not fully accessible were excluded from the selection.

The collected data were then analyzed using a thematic synthesis approach, allowing the researchers to identify patterns and trends within the available literature. The analysis focuses on how financial literacy and financial inclusion influence MSME sustainability and the role of PBL as a value-based framework that can strengthen this relationship. The PBL framework, which includes the dimensions of profit, people, planet, Prophet (spirituality), and phenotechnology (information technology) is used as a conceptual lens for interpreting the synthesis results. This method is expected to address existing knowledge gaps in the literature and provide both conceptual and practical contributions to the development of sustainable MSMEs in the digital era and post-pandemic context.

Type of Data

The type of data used in this study is secondary data obtained from previous research in the form of scientific journal articles, conference proceedings, and other academic publications relevant to the topics of financial literacy, financial inclusion, the Pentuple Bottom Line (PBL), and MSME sustainability. This secondary data includes both qualitative and quantitative data, depending on the methods used in each individual study. Qualitative data consist of conceptual narratives, findings, and interview results analyzed in earlier studies, while quantitative data include figures, percentages, regression coefficients, and other statistical results relevant to the relationships between the studied variables. The data were collected from credible academic databases such as Scopus, ScienceDirect, Google Scholar, and Garuda, with a publication range from 2013 to 2024, to ensure the novelty and relevance of the information in the context of MSME economic dynamics and digitalization. All data used underwent a strict selection process based on defined inclusion and exclusion criteria, ensuring that only articles meeting scientific quality standards and topic relevance were included.

In the context of an SLR, secondary data serve as the primary material for thematic synthesis, concept mapping, and identification of research gaps. The use of secondary data enables researchers to draw comprehensive conclusions from diverse empirical and theoretical contexts, and to formulate evidence based policy recommendations and well-directed future research pathways.

Data Sources

The data sources for this study consist of published academic articles from nationally accredited journals and reputable international journals, available in trusted academic databases. The databases used include Scopus, ScienceDirect, Google Scholar, SpringerLink, and Garuda (Garba Rujukan Digital). These sources were selected based on publication quality, reliability, and content relevance to the research focus namely, the relationship between financial literacy, financial inclusion, and the Pentuple Bottom Line (PBL) approach in relation to MSME sustainability.

Data Collection Techniques

Data collection in this research was carried out through a Systematic Literature Review (SLR) approach, involving the following main stages: identification, selection, extraction, and synthesis of data. Articles were searched using keywords such as *"financial*

literacy", *financial inclusion*", *"Pentuple Bottom Line"*, and *"MSME sustainability"* across databases like Scopus, Google Scholar, ScienceDirect, Garuda, and SpringerLink, focusing on publications from 2017 to 2023. The literature was selected based on inclusion criteria (academic articles, topic relevance, full-text availability) and exclusion criteria (irrelevant, non-academic, or inaccessible documents). Key data such as author names, research variables, methods, and main findings were extracted and analyzed using a thematic synthesis approach to identify patterns of relationships among variables and insights from the literature.

Data Analysis Techniques

Data analysis in this study was conducted using the thematic synthesis approach, aimed at categorizing and interpreting findings from various reviewed studies. Each article that met the inclusion criteria was analyzed to identify key themes, relationship patterns between variables, and theoretical and practical contributions to the topics of financial literacy, financial inclusion, Pentuple Bottom Line (PBL), and MSME sustainability.

The analytical process involved:

1. Thorough reading of selected articles
2. Highlighting important information and keywords related to the research variables
3. Grouping findings into major themes (profit, people, planet, Prophet, phenotechnology)
4. Constructing a narrative synthesis to explain the interrelation among themes and identify research gaps.

This technique enables researchers to systematically summarize study results and develop an integrated conceptual framework.

RESULTS AND DISCUSSION

Research Findings

This section presents the results of the identification, selection, and analysis processes of literature relevant to the research topic, namely the relationship between financial literacy, financial inclusion, and the Pentuple Bottom Line (PBL) concept on the sustainability of MSME businesses. Based on the review and filtering of various scientific sources published between 2017 and 2023, a number of studies were found to meet the inclusion criteria and are highly relevant to the focus of this study. The findings are presented thematically to illustrate patterns, trends, and the contextual contributions of each variable to MSME sustainability. Furthermore, the review results also highlight the presence of research gaps, opening opportunities for the development of a more holistic conceptual model particularly one that integrates value based aspects (spiritual, social, and environmental dimensions). Through this presentation, readers are expected to gain a more comprehensive understanding of how these various factors interact and influence the continuity of small enterprises in the digital and post pandemic era. This synthesis also serves as a foundation for developing a conceptual framework and directing more sustainable and inclusive MSME empowerment policies.

General Description of the Reviewed Literature

Based on the literature review results included in the document, a total of 30 journal articles were used as the main references in constructing the theoretical framework and supporting the research arguments. This number indicates that the researcher has conducted a sufficiently broad and in-depth literature search to obtain a comprehensive understanding of the issues being studied. In terms of publication years, the majority of the articles were

published between 2018 and 2023, with the most recent years dominating. This reflects that the literature review is built on up-to-date references that are relevant to the current developments in knowledge and policy dynamics particularly in the context of MSMEs and digital transformation. Geographically, the journal references show that most of the studies were conducted by authors based in Indonesia, aligning with the research focus on Indonesian MSMEs, especially in the West Java region. However, there are also several journals from abroad, including countries in Southeast and South Asia, which offer rich theoretical perspectives and broaden the scope of understanding of the phenomenon under investigation. This indicates the researcher's effort to balance local and international references.

Meanwhile, in terms of fields of study or topics, the journals used cover a range of interconnected themes, including financial literacy, financial inclusion, business sustainability, corporate social responsibility (CSR), and the Pentuple Bottom Line (PBL) approach. Several journals also address issues such as digital transformation, financial technology (fintech), and technology adoption in the MSME sector. This multidisciplinary approach indicates that the research is not grounded in a single academic discipline but rather draws from economics, management, information technology, and public policy. Such a broad perspective allows for deeper analysis and strengthens the theoretical arguments in addressing the research questions and hypotheses. Overall, the quality and scope of the literature reviewed in this study are sufficiently robust, with a strong emphasis on contextual relevance, contemporary issues, and comprehensive theoretical approaches. The combination of national and international sources, along with the diversity of discussed themes, forms a solid foundation for building a sound conceptual framework and hypotheses to support this research.

Findings Based on Research Questions

Based on the literature reviewed and analyzed in this study, several findings were identified in relation to the proposed research questions. First, regarding the influence of financial literacy on MSME business sustainability, most of the literature affirms that financial literacy has a significant impact in supporting business continuity. MSME actors who possess strong financial management knowledge such as in cash flow, investment, savings, and budget planning are proven to be more capable of making effective and responsible business decisions. This finding is supported by studies conducted by Rahayu and Musdholifah (2017), as well as Setiawan and Putri (2022), which state that sound financial literacy enhances operational efficiency and business resilience. Second, concerning the effect of financial inclusion on MSME business sustainability, the literature reveals that access to formal financial services provides substantial opportunities for MSMEs to grow. Financial inclusion enables small business owners to obtain financing, open savings accounts, access insurance, and use digital payment systems. With such access, MSMEs are better positioned to expand operations, boost productivity, and strengthen their competitiveness in the market. Studies by Kusuma et al. (2022), Rahman and Anggraini (2020), and Marginingsih (2021) consistently demonstrate that financial inclusion plays a key role in driving business growth and resilience.

Furthermore, another key finding is the role of the Pentuple Bottom Line (PBL) concept as a moderating factor that enhances the influence of financial literacy and inclusion on MSME sustainability. This concept introduces a new dimension for assessing business viability through five core aspects: profit (economic gain), people (social dimension), planet

(environmental concern), prophet (spirituality), and phenotechnology (technological utilization). Several studies, such as those by Badria and Hasanah (2023), and Purnomo et al. (2023), indicate that the integration of spiritual values, technology, and socio-environmental awareness not only strengthens the structure of MSME businesses but also improves their resilience against market changes and external challenges.

Table 1.
Classification of Findings

No	Category of Findings	Description	Studies
1	Financial Literacy	The ability of MSME actors to manage finances (budgeting, saving, investment, cash flow) affects business sustainability	Rahayu & Musdholifah (2017), Wulandari & Pramono (2021)
2	Financial Inclusion	Access to formal financial services promotes MSME investment, efficiency, and growth	Kusuma et al. (2022), Rahman & Anggraini (2020), Marginingsih (2021)
3	Pentuple Bottom Line (PBL)	A holistic framework encompassing Profit, People, Planet, Prophet, and Phenotechnology aspects	Purnomo et al. (2023), Badria & Hasanah (2023), Sukoharsono (2010)
4	Digital Technology & Fintech	The use of technology (mobile banking, e-wallets, financial apps) enhances financial literacy and access for MSMEs	Hilmawati & Kusumaningtias (2021), Yusuf et al. (2023)
5	Mediation and Moderation Role	PBL aspects strengthen (moderate) the effect of financial literacy and inclusion on MSME sustainability	Badria et al. (2021), Setiawan & Widodo (2022)
6	MSME Sustainability (Dependent Variable)	Most studies focus on internal and external factors influencing long-term MSME business sustainability	Setiawan & Putri (2022), Kusuma et al. (2022), Yusuf et al. (2023)

The following is a data visualization in the form of a horizontal bar chart illustrating the number of articles in each category of findings based on the literature review. The chart shows that the Pentuple Bottom Line (PBL) theme is the most frequently studied category, followed by financial literacy and MSME business sustainability. This visualization helps highlight the dominant focus areas within the reviewed literature.



Figure 1.
Visualization of Findings Based on the Reviewed Literature



Figure 2.
Proportion of Finding Categories

From the visualization, it can be seen that the *Pentuple Bottom Line (PBL)* category holds the largest portion, approximately 23.3%. This indicates that many recent studies emphasize the importance of a holistic ecosystem that not only focuses on profit but also considers social aspects (people), environmental concerns (planet), spirituality (prophet), and technology (phenotechnology). The significant proportion in this category reflects a growing trend in the literature toward a more comprehensive desire model in the context of MSME development. Next, the *financial literacy* category accounts for about 20% of the total reviewed references. This finding suggests that MSME actors' understanding of financial management is considered crucial in supporting effective and efficient business decision-making. Meanwhile, the *MSME business sustainability* and *financial inclusion* categories each represent around 16.7%, indicating that most studies view business continuity as the main objective and financial inclusion as a critical means to achieve it.

The *mediation and moderation relationship* category, which includes the role of variables such as PBL aspects in strengthening the relationships between key variables, comprises 13.3%. This shows that some studies have begun to adopt more advanced statistical approaches to explain inter-variable relationships. Finally, the *digital technology and fintech* category makes up about 10% of the total references. Although it has a smaller

portion, this category highlights that digital transformation remains an essential aspect in supporting financial literacy and inclusion, particularly in the era of MSME digitalization. Overall, the diagram illustrates that the literature reviewed in this study adopts a balanced approach between economic, social, technological, and ethical values, all of which contribute comprehensively to MSME success.

CONCLUSION

The literature review indicates that financial literacy and financial inclusion are key factors that positively influence the sustainability of MSME businesses. In addition, the *Pentuple Bottom Line (PBL)* approach which encompasses the aspects of profit, people, planet, prophet, and phenotechnology offers a more holistic framework for assessing business sustainability. However, most previous studies still separate technical approaches from value-based ones and have not fully examined the interrelationships of these variables within an integrated model. This gap presents an opportunity to develop research that simultaneously integrates financial literacy, financial inclusion, and PBL in order to comprehensively, contextually, and sustainably strengthen the resilience of MSMEs.

Recommendations

Based on the results of the literature review, it is recommended that future research further integrate technical approaches such as financial literacy and financial inclusion with value-based approaches embedded in the *Pentuple Bottom Line (PBL)* framework in a comprehensive manner. Researchers are encouraged to develop instruments that can practically measure the five dimensions of PBL, particularly the aspects of *prophet* (spirituality) and *phenotechnology* (technology), to ensure relevance to the real conditions of MSMEs. Governments and MSME support institutions are also advised to design empowerment programs that not only focus on financial training and access to capital but also include the strengthening of social values, business ethics, and the utilization of digital technology. In this way, MSME development strategies can be directed not only toward economic sustainability but also toward more inclusive and resilient social and environmental sustainability.

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