

## ***Smart Local Wisdom Finance: Culturally Based Financial Literacy Innovation to Increase the Competitiveness and Sustainability of MSMEs in Parepare City***

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### **Abstract**

This study aims to analyze the financial literacy of Micro, Small, and Medium Enterprises (MSMEs) in Parepare City, integrate the values of local wisdom of pangadereng into financial management practices, and design a Smart Local Wisdom Finance model based on culture and digital technology. The study used a mixed methods approach with an explanatory sequential design. Quantitative data were obtained through a survey of 100 active MSMEs, while qualitative data were collected through in-depth interviews, observations, and Focus Group Discussions (FGDs). The results showed that the level of financial literacy of MSMEs was in the low-moderate category. 68% of respondents had not separated personal and business finances, 74% had not prepared cash flow reports, and 58% had not accessed formal financing. The results of the linear regression showed that financial literacy had a positive and significant effect on MSME performance with a coefficient of 0.648 and an R<sup>2</sup> value of 0.42. The integration of the values of lempu', ade', bicara, and resopa strengthens financial discipline, transparency, and ethics. The developed model integrates technical literacy, internalization of cultural values, and support for simple digital applications to increase the competitiveness and sustainability of MSMEs.

**Keywords:** *Financial Literacy, MSMEs, Local Wisdom, Financial Digitalization, Business Sustainability.*

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## **INTRODUCTION**

MSMEs are the backbone of the regional economy, playing a crucial role in job creation, strengthening local supply chains, and ensuring income equality. In Parepare City, MSMEs thrive in the retail, culinary, home services, and cottage industries sectors. Despite the growing number of businesses, business sustainability still faces challenges, particularly in financial management.

Various studies confirm that low financial literacy contributes directly to business failure, because MSMEs have difficulty controlling cash flow, are unable to calculate costs accurately, and do not prepare reserve funds when economic shocks occur. Common problems found in MSMEs in Parepare include: (1) no separation of personal and business money, (2) sporadic transaction recording or simply relying on memory, (3) inability to prepare simple reports (cash flow, profit and loss), and (4) minimal access to formal financing due to unmet administrative requirements.

On the other hand, the Bugis-Makassar community has a strong socio-cultural value system known as pangadereng. Pangadereng values represent moral and social guidelines that govern community behavior, including ethical transactions and economic responsibility. The values of honesty (*lempu'*), propriety/justice (*ade'*), adherence to agreements and rules (*bicara*), and work ethic/perseverance (*resopa*) can form the foundation of character in financial management.

Financial literacy approaches that emphasize only technical aspects are often ineffective because they ignore the attitudes and values that shape behavior. Therefore, contextual financial literacy innovations are needed—those that link financial skills with the cultural values understood and lived by business actors. These innovations also need to be synergized with digitalization, given that the use of simple record-keeping applications can accelerate the adoption of orderly financial practices.

This study proposes the concept of Smart Local Wisdom Finance, a financial literacy model that combines (a) basic financial skills training, (b) internalization of pangadereng values as an ethical tool, and (c) the use of simple digital technology as a practical tool. The objectives of the study are: (1) to capture the condition of financial literacy of MSMEs in Parepare, (2) to test the influence of financial literacy on MSME performance, (3) to explain how pangadereng values can be integrated into financial practices, and (4) to develop a Smart Local Wisdom Finance model design and its implementation strategy.

The benefits of this research are both theoretical and practical. Theoretically, the research enriches financial literacy studies with a local culture-based approach. Practically, the research provides a reference for local governments, financial institutions, and MSME mentors to design more effective, relevant, and sustainable development programs.

## METHODOLOGY

This research employed a mixed methods approach with an explanatory sequential design, where the first phase involved quantitative data collection and analysis to identify the level of financial literacy and examine its influence on the performance of Micro, Small, and Medium Enterprises (MSMEs). The second phase involved qualitative data collection aimed at providing deeper explanations of the quantitative findings, particularly in identifying barriers in financial practices and exploring opportunities for integrating *pangadereng* values. The population of this study consisted of active MSMEs in Parepare City, with a sample of 100 MSMEs selected using purposive sampling based on several criteria: (1) the business has been operating for at least one year, (2) the owner is willing to complete a questionnaire and participate in interviews, and (3) the business conducts daily or weekly transaction activities. Respondent characteristics varied across business sectors such as culinary, trade, and services, as well as turnover levels and business duration, to provide a representative overview of MSME conditions. Data were collected using survey instruments measuring financial literacy indicators—including financial knowledge, record-keeping skills, planning ability, and financial behavior—and MSME performance indicators such as turnover growth, cash flow stability, the ability to meet financial obligations, and business sustainability. Qualitative data were obtained through in-depth interviews with selected business owners, observations of financial record-keeping practices, and focus group discussions (FGDs) with MSME actors and relevant facilitators or officials to identify needs and support the development of an appropriate model. Quantitative data were analyzed using descriptive statistics to map financial literacy conditions and simple linear regression to examine the influence of financial literacy on MSME performance, while qualitative data were analyzed using thematic analysis through a coding process to identify patterns of barriers, financial habits, dominant cultural values, and recommendations for model implementation.

## RESULTS AND DISCUSSION

### A. Research result

#### 1. Overview of MSME Financial Literacy

Survey results indicate that the financial literacy of MSMEs in Parepare City is in the low-moderate category. The most prominent finding is weak basic financial management practices. As many as 68% of respondents do not separate personal and business finances. This situation makes it difficult for business owners to determine net profit, as capital and business income are often mixed with household expenses.

Furthermore, 74% of respondents had not prepared a cash flow statement. Many business owners only record sales but fail to record small expenses (raw materials, shipping, electricity, phone credit, and daily operating costs). This creates a perception bias: businesses appear "busy," but money often runs out without any recognition of the expense items.

In terms of financial access, 58% of respondents have not accessed formal financing (banks/official financial institutions). The main barriers were the lack of financial reports and unprepared documents. Some respondents also indicated a preference for informal loans due to the faster process, albeit with higher costs.

**Table 1. Linear Regression Results of Financial Literacy on MSME Performance**

Variables	Coefficient	Significance
Constant	1,215	0.001
Financial Literacy	0.648	0,000
R <sup>2</sup>	0.42	-

Source: Processed Primary Data (2026)

#### 2. The Influence of Financial Literacy on MSME Performance

Linear regression results indicate that financial literacy has a positive and significant effect on MSME performance. A coefficient of 0.648 indicates that increased financial literacy will be followed by improved performance, assuming other factors remain constant. An R<sup>2</sup> value of 0.42 indicates that financial literacy explains 42% of the variation in MSME performance, while the remaining 58% is influenced by other factors such as market access, product quality, innovation, networks, and policy support.

Practically speaking, MSMEs with better financial literacy tend to have more stable cash flows, are able to set aside profits for working capital, and are more disciplined in managing receivables. They are also quicker to make decisions such as raising prices when costs rise, discontinuing loss-making products, or delaying asset purchases when cash is not yet secure.

#### 1. Interpretation of Quantitative Findings: Why Financial Literacy Affects Performance

The finding that financial literacy significantly impacts MSME performance aligns with business management logic: production, pricing, inventory, and investment decisions are essentially financial decisions. Financial literacy serves as a "navigation tool" that helps business owners understand business conditions through numbers. Without it, MSMEs tend to rely on intuition, which can be misleading when transaction scale increases or input prices change.

The R<sup>2</sup> value of 0.42 can be understood as a significant contribution to the behavior/competence variable. This means that financial literacy interventions have the potential to significantly impact MSME performance, especially when accompanied by practical mentoring, rather than just one-off training. Furthermore, this value also serves as a reminder that mentoring programs must be comprehensive, as MSME performance is influenced by many other dimensions.

#### 2. The Problem of Separating Personal and Business Finances: Roots, Impacts, and Practical Solutions

The 68% of respondents who have not separated personal and business finances indicate that most MSMEs are still in the “family-based microbusiness” phase, where business cash is treated as household cash. The root of the problem includes: (1) business owners do not yet have a concept of owner salary, (2) household needs are urgent and take over business cash, and (3) there is no bookkeeping system that creates clear boundaries.

The impacts are multi-layered. First, it's difficult for business owners to calculate net profit because personal expenses are mixed with business expenses. Second, business capital is secretly reduced, leading to low inventory or production disruptions. Third, when applying for financing, business owners cannot demonstrate valid business performance. Fourth, family conflicts can escalate due to a lack of cash flow transparency.

A practical solution that can be applied to micro MSMEs is a gradual separation: (a) creating two wallets/accounts (physical or digital), (b) setting a fixed daily/weekly “owner’s wage,” (c) setting up a household emergency fund to avoid taking business cash, and (d) recording every personal withdrawal as “private.” In the initial stages, separation does not have to involve using a bank account; even two separate cash boxes can be an effective transitional step.

### **3. The Weakness of Cash Flow Preparation: Changing the Habit from “Remember-Remember” to “Record-Summarize”**

As many as 74% of respondents have not prepared a cash flow statement, indicating a weak record-keeping culture. Many business owners find record-keeping cumbersome or assume that small businesses don't need reports. Yet, cash flow is the lifeblood of a business. A business can appear profitable in terms of sales but still fail because cash isn't available to purchase raw materials or pay liabilities.

Changing habits can be achieved through a very simple approach. First, focus on daily recording using two columns: cash inflow and cash outflow. Second, create a weekly summary: total sales, total costs, and the difference (estimated profit). Third, conduct a monthly evaluation to identify patterns of the largest costs and the highest sales days. Fourth, train business owners to differentiate between variable costs (raw materials) and fixed costs (rent, electricity), for more accurate planning.

Mentoring needs to emphasize that record-keeping is not for “creating complicated reports,” but rather to help with day-to-day decisions: how much stock is safe, when to restock, whether discounts are still profitable, and whether to raise prices.

### **4. Access to Formal Financing: Issues of Administration, Trust, and Document Readiness**

The finding that 58% of respondents had not yet accessed formal financing indicates a gap between capital needs and administrative readiness. Common obstacles that emerged from the interviews were: (1) the absence of financial and cash flow reports, (2) a lack of understanding of financing products (microcredit, KUR, etc.), (3) the perception that bank loans are “complicated and take a long time,” and (4) negative experiences or stories from those around them.

In this context, financial literacy serves as a prerequisite for financial inclusion. When MSMEs maintain transaction records and financial summaries, the verification process by financial institutions becomes easier. Furthermore, business owners can calculate their ability to repay, thereby avoiding over-leverage (debt exceeding their means).

The coaching program should include a practical “financing readiness” module: how to prepare documents, create simple cash flow projections, and installment simulations. Mentoring should also strengthen risk literacy, namely understanding the consequences of late payments, interest charges, and the importance of maintaining a good credit score/payment reputation.

### **5. Integration of Pangadereng in Financial Practice: Operationalizing Values into Behavior**

The uniqueness of this research lies in its connection between financial literacy and the values of pangadereng. To ensure that the integration of values doesn't stop at slogans, operationalization of these values into measurable behaviors is necessary.

- 1) Honesty in finances can be demonstrated through honest record-keeping, not covering up expenses, and not altering numbers to look "good." Lemp'u also means being honest with yourself: admitting when your business is losing money and finding the root of the problem, rather than covering it up with new debt.
- 2) Ade' (fairness/justice) relates to profit-sharing decisions and fair pricing. In practice, Ade' encourages MSMEs to calculate their cost of goods sold correctly so that prices are not detrimental to the business but remain fair to consumers. Ade' also encourages business owners to pay employee wages/commissions on time, thus fostering healthy working relationships.
- 3) Compliance strengthens commitment to agreements: paying debts on time, adhering to supplier agreements, and adhering to business regulations. Compliance can be a gateway to building awareness of licensing requirements, simplified tax records, and clear sales contracts.
- 4) Resopa (work ethic/perseverance) emphasizes consistency. In finance, resopa is translated as the discipline of recording every transaction, regularly creating weekly summaries, and consistently saving for capital. Resopa is also related to perseverance in evaluation and improvement, not just fleeting enthusiasm.

FGD results revealed that MSMEs tend to be more receptive to financial literacy materials when they are linked to these values, as they feel close, down-to-earth, and familiar. Thus, pangadereng serves as a "bridge" between modern financial concepts and the everyday practices of MSMEs.

## 6. Smart Local Wisdom Finance Model Design: Pillars, Stages, and Digital Features

The Smart Local Wisdom Finance model is designed as a development model oriented toward behavior change. This model has three main pillars.

**Pillar 1 – Technical Literacy:** The material taught includes financial segregation, daily transaction recording, cash flow preparation, simple profit and loss calculations, costing, and working capital planning. The material is presented through examples of local businesses (culinary, kiosks, services) to ensure relevance.

**Pillar 2 – Internalization of Pangadereng Values:** each technical material is paired with a related cultural value. For example, the record-keeping module is paired with lemp'u (honesty in numbers); the debt repayment module is paired with bicara (adherence to agreements); the profit-sharing module is paired with ade' (fairness); and the savings discipline module is paired with resopa (diligence).

**Pillar 3 – Simple Digital Support:** a digital application or template (Android/simple spreadsheet) serves to facilitate practice. Minimum recommended features: (a) fast transaction input (sales/expenses), (b) automatic daily-weekly-monthly summaries, (c) expense categories so that business owners know the largest items, (d) reminders to record and pay obligations, (e) value-based short messages (e.g., "lempu': record what happened today"). The application focuses on ease, not complexity.

The stages of model implementation consist of: (1) initial assessment of financial literacy and business needs, (2) short practice-based training (workshop), (3) 4–8 weeks of mentoring to build recording habits, (4) evaluation through checking cash summaries and behavioral changes, and (5) strengthening access to formal financing for MSMEs that have ready documents.

## 7. Implementation Strategy and Success Indicators

For the model to be effective, a realistic implementation strategy is required. First, use a community/cluster approach based on sectors or regions to make mentoring more efficient. Second, involve local actors: relevant agencies, MSME mentors, community leaders, and financial institutions. Third, adopt the "easy first" principle: start with simple daily records, then gradually move to monthly reports. Fourth, implement a simple monitoring system such as weekly cash book photos or app summary exports.

The success indicators of the model can be divided into three levels:

- 1) Short-term outputs: increased basic knowledge, ownership of cash books/applications, and consistent recording at least 5 days per week.
- 2) Medium-term outcomes: separation of business and personal cash, preparation of monthly cash flow summaries, and increased ability to calculate profits.
- 3) Long-term impacts: increased cash flow stability, increased turnover/profit, access to formal financing, and increased business sustainability (survival and growth).

The evaluation approach can also incorporate ethical indicators: timely fulfillment of payment commitments, transparency in profit sharing, and financial management that does not harm others. These indicators align with the values of pangadereng and strengthen the social quality of the business.

## **8. Policy Implications: Cultural and Digital-Based MSME Development**

The research findings have important policy implications. MSME financial literacy programs in the regions should not consist solely of seminars, but rather a package of interventions that combine training, mentoring, and practical tools. Integrating local culture can increase participation, strengthen program ownership, and accelerate behavioral change.

Local governments can adopt this model as part of their MSME training curriculum, developing modules and materials based on local cases. Financial institutions can use the training results to create a pipeline of more prepared and lower-risk borrowers. Meanwhile, universities can act as research and mentoring partners through community service programs.

## **9. Research Limitations**

This study has limitations, including: (1) the sample size of 100 MSMEs represents general conditions, but does not necessarily cover all subsector variations; (2) the measurement of MSME performance still relies heavily on perceptions and data reported by respondents; and (3) the model design has not been tested in an experimental field trial comparing intervention and control groups. These limitations open up opportunities for further research to test the model's effectiveness more robustly and develop application features that best suit the needs of MSMEs.

## **CONCLUSION**

Based on the research results, it was concluded that the financial literacy of MSMEs in Parepare City is still in the low-moderate category, characterized by the lack of separation of personal and business finances, weak cash flow recording, and low access to formal financing. Financial literacy has been proven to have a positive and significant impact on MSME performance with an  $R^2$  value of 0.42. The integration of pangadereng values (lempu', ade', bicara, resopa) strengthens the ethical and disciplined dimensions in financial management. The Smart Local Wisdom Finance model that combines technical literacy, internalization of cultural values, and simple digital support has the potential to increase the competitiveness and sustainability of MSMEs in the era of digital transformation.

## **Acknowledgement**

The author would like to thank LPPM UM Parepare (Institute for Research and Community Service of Muhammadiyah University of Parepare) and the Higher Education Research and Development Council (Diktilitbang) of the Central Leadership of Muhammadiyah for the ResearchMuh grant funds which are aimed atIncrease the quantity and quality of research, publications, and community service within the PTMA environment.

## References :

<https://Djpb.Kemenkeu.Go.Id/> Accessed on September 22, 2025

<https://Ojk.Go.Id/Id/> Accessed on September 22, 2025

Yadi Arodhiskara, M., Hasdiana, I., & Andi, A. R. The Influence of Financial Literacy on MSME Financial Management in Soreang District, Parepare City. *Parepare City*.

Arfianty, Y. Arodhiskara, and I. Rosadi. "MSMEs Towards Well Literate." *NEM Publisher* (2023).

Mattulada, (1995). *Latoa Satu Painting: Political Anthropological Analysis of the Bugis People*. Ujung View: Hasanuddin University Press

Sellina, S., & Zed, E. Z. (2023). The Effect Of Financial Literacy, Financial Inclusion And Information Technology On The Financial Performance Of Smes, Bekasi Regency. *Journal Economy*, 12(3), 1838-1849.

Lubis, KS, & Irawati, L. (2022). The Effect Of Financial Literacy And Capital Management On Msme Performance. *ASEAN International Journal Of Business*, 1(1), 77-85.

Rahayu, FS, Risman, A., Firdaus, I., & Haningsih, L. (2023). The behavioral finance of MSMEs in Indonesia: financial literacy, financial technology (fintech), and financial attitudes. *International Journal of Digital Entrepreneurship and Business*, 4(2), 95-107.