

E-Commerce Adoption, Accounting Knowledge, and Financial Literacy as Determinants of Business Performance in Tulang Bawang

Margaretha Rahayu Trisnaningsih^{1*}, Anita Kusuma Dewi², Eksa Ridwansyah³

Politeknik Negeri Lampung, Bandar Lampung, Indonesia^{1,2,3}

margaretharahayu22@gmail.com^{1*}, anitakusumadewi@polinela.ac.id²,

eksaridwansyah@polinela.ac.id³



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Abstract

Purpose: This study examines the effects of e-commerce adoption, accounting knowledge, and financial literacy on MSME performance in Tulang Bawang Regency. Addressing inconsistent findings in previous studies, this research integrates technological and financial capabilities within the Resource-Based View (RBV) framework to provide empirical evidence on their contribution to business performance.

Methodology: This study employed a quantitative approach using primary data collected through questionnaires from 102 MSME owners in Tulang Bawang Regency. The data were analyzed using multiple linear regression with the assistance of SPSS to examine both partial and simultaneous relationships among variables.

Results: The findings indicate that e-commerce adoption does not significantly affect MSME performance. In contrast, accounting knowledge and financial literacy have positive and significant effects on MSME performance. Simultaneously, the three independent variables significantly influence MSME performance.

Conclusions: The findings highlight that internal financial capabilities remain essential strategic resources for improving MSME performance, while digital technology adoption requires further optimization to generate measurable outcomes.

Limitations: This study is limited to three independent variables and focuses only on MSMEs in Tulang Bawang Regency, which may restrict broader generalization.

Contributions: This study contributes empirical evidence regarding the importance of accounting knowledge and financial literacy as strategic resources for enhancing MSME performance and provides practical implications for MSME development programs.

Keywords: *Accounting Knowledge, E-Commerce, Financial Literacy, MSME Performance, Resource-Based View*

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1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) are businesses operated by individuals or groups with capital to generate profits ([Ichdan, 2024](#); [Novia & Paramita, 2023](#)). MSMEs play a strategic role in national and global economic development by promoting economic growth, creating employment, improving community welfare, and strengthening the national economic structure ([Maya & Husda, 2024](#)). According to the Ministry of Cooperatives and SMEs in 2025, Indonesia has 64.2 million MSMEs, contributing 61.07% to Gross Domestic Product (GDP), equivalent to IDR 8,573.89 trillion. The sector absorbs approximately 117 million workers (97% of the workforce) and contributes 60.4% of total investment. These contributions demonstrate the importance of MSMEs in sustainable economic development, income distribution, and economic resilience ([Fitrah & Yuliati, 2023](#)).

Accordingly, MSME development is a government priority, including in Tulang Bawang Regency through programs such as packaging training, digital marketing, and capital support. The increasing number of MSMEs in this region reflects growing entrepreneurial activity; however, this development also creates challenges related to business competitiveness and sustainability. Data from the Department of Cooperatives, SMEs, and Trade of Tulang Bawang Regency in 2026 show that the number of MSMEs increased from 38,292 units in 2024 to 38,506 in 2025 and 38,606 in 2026. Although this growth indicates positive economic development, the increasing number of business actors also intensifies competition, requiring MSMEs to improve their business performance through effective resource management, technological utilization, and stronger financial capabilities.

Interviews with the Department indicate that this increase was driven by new businesses in fisheries, agriculture, livestock, services, food processing, handicrafts, and other industries. Although MSME growth supports employment, it also intensifies competition, requiring improved business performance to maintain competitiveness ([Anggraini, Irawan, & Endang, 2024](#)). Performance reflects a business's ability to achieve its objectives efficiently and productively ([Padila, Makhsun, & Astuti, 2026](#)). Therefore, periodic performance measurement is necessary to evaluate business conditions, identify improvements, and formulate appropriate strategies ([Anggraini et al., 2024](#); [Puryono & Kurniawan, 2017](#)). Technological development also presents both opportunities and challenges for MSMEs ([Hidayat, Umam, & Tripalupi, 2021](#)).

Internet-based technology facilitates information access, marketing, and online transactions ([Padila et al., 2026](#)). One factor potentially affecting MSME performance is e-commerce adoption, defined as commercial activities conducted through internet-based platforms. Through e-commerce adoption, MSMEs can expand market reach, improve customer interaction, and enhance operational efficiency. However, the adoption of digital technology does not always guarantee improved business performance, as its effectiveness depends on the ability of business owners to utilize digital platforms strategically. Previous studies have produced inconsistent findings [Anggraini et al. \(2024\)](#) found that e-commerce adoption positively and significantly affects MSME performance, whereas ([Natsiruddin, Hasanah, & Armeliza, 2023](#)) reported an insignificant effect due to limited understanding and suboptimal utilization of digital platforms. These inconsistent findings indicate the need for further investigation regarding the actual contribution of e-commerce adoption to MSME performance, particularly in different regional contexts.

Accounting knowledge, defined as the ability to understand financial recording, classification, and reporting for decision-making ([Anggraini et al., 2024](#)), enables MSMEs to manage finances more effectively ([Maya & Husda, 2024](#)). Several studies found a positive and significant effect on performance ([Anggraini et al., 2024](#); [Lestari & Rustiana, 2019](#); [Natsiruddin et al., 2023](#)), while [Maya and Husda \(2024\)](#) found no significant effect because conceptual knowledge was not always applied in practice. Financial literacy refers to the ability to understand and manage financial matters to achieve financial well-being ([Djonn, 2019](#)). It supports effective financial management among MSME owners. [Nusron, Yennisa, and Suharni \(2024\)](#) found a positive and significant effect on MSME performance, whereas [Fitria, Soejono, and Tyra \(2021\)](#) reported no significant effect due to limited understanding of the time value of money and suboptimal capital management.

Based on these inconsistent findings, further investigation is needed to understand how technological and financial capabilities contribute to MSME performance, particularly in regional contexts with growing MSME activities such as Tulang Bawang Regency. Unlike previous studies that mainly examine technological adoption or financial factors separately, this study integrates both aspects by examining e-commerce adoption, accounting knowledge, and financial literacy simultaneously within the Resource-Based View (RBV) perspective. This study differs from previous research in terms of research location, combination of variables, and study period by examining MSMEs in Tulang Bawang Regency in 2026. Therefore, this study aims to provide empirical evidence regarding the extent to which technological adoption and financial capabilities influence MSME performance and contribute to the development of MSME strategies based on effective resource utilization.

2. Literature Review and Hypotheses Development

2.1 Resource-Based View (RBV) Theory

The Resource-Based View (RBV), introduced by [Wernerfelt \(1984\)](#), explains that firms can achieve sustainable competitive advantage through the effective utilization of valuable, rare, inimitable, and non-substitutable resources. According to RBV, organizational performance is not only determined by external market conditions but also by the ability of firms to develop and utilize internal resources and capabilities, including technological, human, and organizational resources ([Juliandi & Meini, 2026](#); [Ridwansyah, Supriyaningsih, & Annisa, 2025](#)). In the context of MSMEs, limited resources often become challenges in improving competitiveness and business sustainability. Therefore, the ability to utilize available resources strategically becomes essential for achieving better performance.

This study applies RBV to explain that e-commerce adoption represents a technological capability that enables MSMEs to expand market access, improve operational efficiency, and strengthen customer relationships. Meanwhile, accounting knowledge represents human capability that supports effective financial management and informed decision-making. Financial literacy reflects individual managerial capability that enables MSME owners to manage financial resources effectively and make appropriate business decisions. Thus, these three capabilities represent strategic resources that may strengthen competitive advantage and improve MSME performance.

2.2 E-Commerce Adoption

E-commerce refers to electronic transactions involving the sale and purchase of goods or services through information technology and the internet ([Ulyasari, Agustina, Wardhani, & Ilhamsyah, 2023](#)). It integrates technology, applications, and business processes to connect businesses and consumers and supports product sales, purchases, and promotion. E-commerce adoption can accelerate transactions and improve MSME performance ([Ambali & Fasa, 2025](#)). In this study, e-commerce adoption refers to using digital platforms, including Shopee, TikTok Shop, Facebook, and WhatsApp Business, for marketing, sales, and purchasing. It enables MSMEs to expand markets, strengthen brands, reduce operating costs, facilitate ordering and payments, and provide accessible product information. Following [Lovita and Susanty \(2021\)](#), the indicators are marketing, sales, service, payment, and managerial activities.

2.3 Accounting Knowledge

Knowledge refers to understanding facts, concepts, and information acquired through learning, while accounting provides financial information for economic decision-making ([Hery & Si, 2009](#); [Rachman, B, Susanto, & Mustika, 2025](#)). Accounting knowledge involves understanding the recording, classification, and summarization of economic transactions to produce useful financial information. In this study, it refers to MSME owners' understanding of accounting processes for financial management and business decision-making. Adequate accounting knowledge supports professional management, financial control, tax calculation, credit applications, policy formulation, and investor confidence ([Andhika & Damayanti, 2017](#); [Anggraini et al., 2024](#)). The indicators are transaction identification, recording, classification, and communication through financial statements.

2.4 Financial Literacy

Financial literacy refers to the knowledge, skills, and confidence that shape financial attitudes and behaviors in managing finances and making decisions for financial well-being by Financial Services Authority (OJK) in 2024. It enables MSME owners to manage finances effectively and understand financial instruments, including savings, investments, loans, and insurance ([Arianti, 2021](#); [Nelson,](#)

[Junaidi, & Sentoso, 2025](#)). Higher financial literacy supports better financial management and MSME performance. Financial literacy aims to improve financial decision-making and promote appropriate use of financial products and services based on individual needs and financial capacity (Financial Services Authority Regulation No. 76/POJK.07/2017). The Indonesian National Strategy for Financial Literacy in 2017 emphasizes planned, measurable, outcome-oriented, sustainable, and collaborative implementation. Its indicators comprise financial knowledge, financial behavior, and financial attitudes by Indonesian National Strategy for Financial Literacy in 2017. These indicators are adopted because they comprehensively represent MSME owners' financial capabilities.

2.5 MSME Performance

Micro, Small, and Medium Enterprises (MSMEs) are productive businesses that contribute to national economic growth and employment ([Lumeno & Yusrin, 2024](#); [Ristikasari & Wafa, 2024](#)). Under Article 1 of Law No. 20 of 2008, MSMEs comprise micro, small, and medium enterprises classified by business scale, ownership, and applicable criteria. They operate across sectors such as culinary, fashion, agribusiness, and services ([Ambali & Fasa, 2025](#)). MSME performance reflects the extent to which business objectives are achieved through effective resource management ([Indahsari, Halim, & Aspirandy, 2023](#)). In this study, it represents business owners' success in achieving objectives, supporting growth, competitiveness, and sustainability ([Budiasih, Tannady, Arum, Laratmase, & Kurniawan, 2023](#)). Performance assessment serves evaluation and development purposes ([Indahsari et al., 2023](#)). The indicators adopted from [Kore and Septarini \(2018\)](#) are sales/turnover growth, capital growth, workforce growth, market growth, and profit growth, as they comprehensively represent MSME growth and performance.

2.6 Hypotheses Development

E-commerce involves online transactions supported by digital technology (Turban, as cited in [Anggraini et al., 2024](#)). From the Resource-Based View (RBV) perspective, e-commerce adoption represents a technological resource that can provide strategic value when effectively utilized by MSMEs. Under RBV theory, e-commerce represents a technological resource that can generate competitive advantage ([Ridwansyah et al., 2025](#)). The ability to integrate digital platforms into business processes allows MSMEs to expand market access, reduce operational costs, improve customer relationships, and increase sales opportunities. However, the contribution of e-commerce adoption to business performance depends on the capability of MSME owners to utilize technology effectively, as technology adoption alone does not guarantee competitive advantage. Previous studies found positive effects on MSME performance ([Anggraini et al., 2024](#)), although [Natsiruddin et al. \(2023\)](#) found no significant effect. Thus, the following hypothesis is proposed:

H₁: E-commerce adoption has a positive and significant effect on MSME performance

Accounting knowledge involves understanding transaction recording, classification, and summarization for financial decision-making. Based on RBV theory, accounting knowledge represents an intangible human resource that enables MSME owners to manage financial resources effectively and develop better managerial capabilities ([Ridwansyah et al., 2025](#)). Adequate accounting knowledge allows business owners to control costs, prepare financial reports, evaluate business conditions, and allocate resources more efficiently, which may contribute to improved business performance. Thus, accounting knowledge becomes a strategic capability that supports competitive advantage through better financial management practices. Previous studies found positive effects ([Anggraini et al., 2024](#); [Lestari & Rustiana, 2019](#); [Natsiruddin et al., 2023](#)), although [Maya and Husda \(2024\)](#) reported no significant effect. Thus, the following hypothesis is proposed:

H₂: Accounting knowledge has a positive and significant effect on MSME performance

Financial literacy is the ability to understand and manage finances for effective decision-making and business success ([Novia & Paramita, 2023](#)). Within the RBV framework, financial literacy represents an individual managerial capability that enables MSME owners to utilize financial resources strategically ([Ridwansyah et al., 2025](#)). MSME owners with higher financial literacy are expected to have better abilities in financial planning, risk management, capital utilization, and investment decisions, thereby improving business sustainability and performance. Therefore, financial literacy is

considered a valuable internal resource that can strengthen competitive advantage. Previous studies found positive effects ([Nusron et al., 2024](#)), whereas [Fitria et al. \(2021\)](#) found no significant effect. Thus, the following hypothesis is proposed:

H₃: Financial literacy has a positive and significant effect on MSME performance

E-commerce adoption, accounting knowledge, and financial literacy represent different but complementary strategic resources within the RBV framework. E-commerce adoption provides technological capability that supports market expansion and operational efficiency, accounting knowledge strengthens financial management capability, and financial literacy improves the ability of MSME owners to make effective financial decisions. When these resources are developed simultaneously, MSMEs are expected to achieve better resource utilization, strengthen competitiveness, and improve business performance. Based on the foregoing discussion, this study assumes that e-commerce adoption, accounting knowledge, and financial literacy simultaneously affect MSME performance. Therefore, the following hypothesis is proposed:

H₄: E-commerce adoption, accounting knowledge, and financial literacy simultaneously affect MSME performance

3. Research Methodology

3.1 Population and Sample Selection Technique

The population is a generalization area comprising objects or subjects with specific characteristics determined for research and conclusion drawing ([Antariksa, 2025](#); [Sugiyono, 2016](#)). This study targets MSME owners in Tulang Bawang Regency registered with the Department of Cooperatives, SMEs, and Trade in 2026, totaling 38,606 MSMEs. The study uses non-probability sampling with purposive sampling based on predetermined criteria: (1) MSME owners operating in Tulang Bawang Regency; (2) MSMEs utilizing e-commerce; and (3) MSMEs operating for at least one year to enable business development assessment. The sample size was determined using the Slovin formula with a 10% margin of error and 90% confidence level [Sugiyono \(2016\)](#), as follows Formula 1:

$$n = \frac{N}{1 + Ne^2} \quad (1)$$

Where:

n= Sample size

N= Population size

e= Sampling error rate (10%)

The sample size was calculated using the Slovin Formula 2 with a 10% sampling error as follows:

$$n = \frac{38.606}{1 + 38.606(0.1)^2} \quad (2)$$

n = 99,6

n = 100 (rounded)

Based on the calculation above, the sample size was rounded to 100 MSME owners in Tulang Bawang Regency.

3.2 Type and Data Collection Method

This study employs a quantitative approach using primary data collected directly from MSME owners in Tulang Bawang Regency who met the predetermined criteria ([Sugiyono, 2016](#)). Data were collected through questionnaires, consisting of written questions administered to respondents

([Sugiyono, 2016](#)). The questionnaires were distributed both offline and online to MSMEs in fisheries, agriculture, livestock, services, other industries, food processing, and handicrafts (Department of Cooperatives, SMEs, and Trade of Tulang Bawang Regency).

3.3 Operationalization of Variables

Variable operationalization defines the scope and measurement of research variables ([Sugiyono, 2016](#)). Variables were measured using indicators developed into research instrument statements. A Likert scale was used to assess respondents' attitudes, opinions, and perceptions of the phenomena studied ([Sugiyono, 2016](#)). The measurement categories are presented in Table 1.

Table 1. Likert-Scale Measurement

Category	Score
Strongly Agree (SA)	5
Agree (A)	4
Undecided (U)	3
Disagree (D)	2
Strongly Disagree (SD)	1

The indicators and questionnaire items used in this study were adopted from previous studies. The e-commerce adoption variable employs indicators proposed by [Lovita and Susanty \(2021\)](#), with questionnaire items. The accounting knowledge variable refers to the indicators developed by [Lestari and Rustiana \(2019\)](#), with questionnaire items adapted from ([Achbianto, 2023](#)). The financial literacy variable employs indicators from the Indonesian National Strategy for Financial Literacy ([Sari & Frijatmi, 2025](#)), with questionnaire items ([Wulandari, 2022](#)). The MSME performance variable uses indicators proposed by [Kore and Septarini \(2018\)](#), with questionnaire items adapted from ([Putrie & Ariani, 2024](#)).

3.3.1 Dependent Variable

Performance is a measure of a business's success in achieving its predetermined objectives, performance also reflects a business's ability to generate increased revenue and achieve organizational objectives ([Indahsari et al., 2023](#); [Opti, 2023](#)). Good performance reflects MSMEs' ability to manage their businesses effectively and improve their competitiveness. The measurement of the MSME performance variable uses the indicators presented in Table 2.

Table 2. Indicators of MSME Performance

No.	Indicator	Item	Statement
1	Sales Growth	1	My business has experienced an increase in sales over the past three months.
		2	My business has experienced an increase in the number of products sold over the past year.
2	Profit Growth	1	My business has experienced an increase in monthly profits.
3	Customer Growth	1	Demand for the products or services I offer has been increasing over time.
4	Capital Growth	1	I use part of the profits earned to increase my business capital.
5	Workforce Growth	1	I have hired additional employees to help fulfill orders more quickly.
6	Market Expansion	1	I have expanded my marketing network to areas outside my city.

3.3.2 Independent Variables

3.3.2.1 E-Commerce Adoption

E-commerce refers to electronic commerce involving the digital buying and selling of products through computer and internet technologies between sellers and buyers ([Ulyasari et al., 2023](#)). In this study, e-commerce

adoption involves the use of marketplace platforms such as Shopee, TikTok Shop, Facebook, and WhatsApp Business. The measurement scale for the e-commerce adoption variable is presented in Table 3.

Table 3. Indicators of E-Commerce Adoption

No.	Indicator	Item	Statement
1	Cost Efficiency	1	The use of e-commerce helps reduce the costs required to start a business.
2	Reputation	1	The use of e-commerce can improve my business's reputation.
3	Marketing	1	I understand how to place advertisements through e-commerce platforms.
3	Marketing	2	The use of e-commerce makes it easier for me to conduct marketing activities.
4	Ease of Online Business Operations	1	The use of e-commerce can expand my business's market reach.
5	Sales	1	The use of e-commerce makes it easier for me to conduct sales activities.
		2	The use of e-commerce helps me create opportunities to sell products globally.
6	Customer Service	1	My online business provides good customer service.
7	Payment	1	I can process payments securely through e-commerce platforms.
8	Management	1	The use of e-commerce contributes to an efficient and effective management system.

3.3.2.2 Accounting Knowledge

Accounting knowledge is defined as an understanding of information related to the recording, classification, and summarization of economic events for decision-making purposes. The measurement scale for the accounting knowledge variable is presented in Table 4.

Table 4. Indicators of Accounting Knowledge

No.	Indicator	Item	Statement
1	Declarative Knowledge	1	Through accounting information, I can control the financial management of my business.
		2	My business expenditures are in accordance with the budget I have prepared.
2	Procedural Knowledge	1	I regularly monitor my business finances on a daily basis.
		2	I regularly prepare financial reports, including cash flow reports.
		3	I regularly assess business performance based on the plans that have been prepared.
		4	I regularly prepare sales budgets, production cost budgets, and operating cost budgets.
3	Identification	1	I am able to identify various types of transaction evidence or receipts based on their respective categories.
4	Recording	1	I know how to record transactions in business records.
5	Communication	1	I can obtain important information about my business finances from business records.

3.3.2.3 Financial Literacy

Financial literacy refers to the knowledge, skills, and confidence that influence individuals' attitudes and behaviors in improving the quality of financial decision-making and financial management to achieve financial well-being by Financial Services Authority (OJK) in 2024. The measurement scale for the financial literacy variable is presented in Table 5.

Table 5. Indicators of Financial Literacy

No.	Indicator	Item	Statement
1	Financial Knowledge	1	I have basic accounting knowledge.
		2	I understand the benefits of financial management.
		3	I understand how to manage finances effectively.
		4	I spend money according to my needs.
2	Financial Behavior	1	I maintain daily records of cash inflows and outflows.
		2	I prepare a budget to support my existing business plans.
		3	I prepare a monthly expenditure budget.
3	Financial Attitude	1	I am willing to take risks when making financial decisions.
		2	I am able to develop strategies to minimize financial risks.
4	Savings and Borrowing	1	I set aside part of my business profits for savings.
		2	I have a dedicated savings account at a bank.
		3	I understand that credit is a financial facility that allows individuals to borrow money and repay it over a specified period.
5	Insurance	1	I understand the basic principles of insurance.
		2	I understand that life insurance, vehicle insurance, and accident insurance are examples of insurance products.
6	Investment	1	I plan to make investments to generate returns.

3.4 Data Analysis and Hypothesis Testing Design

3.4.1 Questionnaire Validity and Reliability Tests

3.4.1.1 Validity Test

The validity test is conducted to assess the accuracy of the research instrument in measuring the variables under investigation and to determine whether the questionnaire is appropriate. The criteria for the validity test are as follows: (1) if the calculated r value is greater than the critical r value, the statement item is considered valid; and (2) if the calculated r value is lower than the critical r value, the statement item is considered invalid.

3.4.1.2 Reliability Test

The reliability test aims to assess the consistency of the research instrument. An instrument is considered reliable if it produces consistent data when applied to the same object under similar conditions (Sugiyono, 2016). The reliability test criteria are as follows: (1) a Cronbach's Alpha value greater than 0.60 indicates that the questionnaire is reliable; and (2) a Cronbach's Alpha value lower than 0.60 indicates that the questionnaire is not reliable.

3.5 Data Analysis Techniques

3.5.1 Multiple Linear Regression Analysis

Multiple linear regression analysis is used to examine the effects of independent variables on a dependent variable. This study aims to examine the effects of e-commerce adoption, accounting knowledge, and financial literacy on MSME performance using SPSS version 26. The regression model used in this study is as follows Formula 3:

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e \quad (3)$$

Where:

Y= MSME performance

α = Constant

$\beta_1, \beta_2, \beta_3$ = Regression coefficients

X_1 = E-commerce adoption

X_2 = Accounting knowledge

X_3 = Financial literacy

e = error

3.5.2 Classical Assumption Tests

Classical assumption tests are conducted to ensure that the regression model meets the requirements for appropriate statistical analysis ([Padila et al., 2026](#)).

3.5.2.1 Normality Test

The normality test aims to determine whether the residuals in the regression model are normally distributed ([Ghozali, 2018](#)). The test is conducted using the Kolmogorov–Smirnov test, with the following criteria: a p-value > 0.05 indicates that the data are normally distributed, whereas a p-value < 0.05 indicates that the data are not normally distributed.

3.5.2.2 Multicollinearity Test

The multicollinearity test aims to identify correlations among the independent variables ([Ghozali, 2018](#)). The test is performed using tolerance and the Variance Inflation Factor (VIF), with the following criteria: (1) a tolerance value < 0.10 or a VIF > 10 indicates the presence of multicollinearity; and (2) a tolerance value > 0.10 or a VIF < 10 indicates the absence of multicollinearity.

3.5.2.3 Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is unequal variance of residuals in the regression model ([Ghozali, 2018](#)). The testing criteria are as follows: a significance value > 0.05 indicates that heteroscedasticity is absent, whereas a significance value < 0.05 indicates the presence of heteroscedasticity.

3.5.3 Hypothesis Testing

Hypothesis testing is conducted through partial and simultaneous tests to determine the effects of the research variables ([Sugiyono, 2016](#)).

3.5.3.1 Partial Test (t-Test)

The t-test is used to determine the partial effect of each independent variable on the dependent variable ([Ghozali, 2018](#)). The testing criteria are as follows: (1) a probability value < 0.05 indicates that the hypothesis is accepted; and (2) a probability value > 0.05 indicates that the hypothesis is rejected.

3.5.3.2 Simultaneous Test (F-Test)

The F-test is used to determine the simultaneous effect of the independent variables on the dependent variable ([Ghozali, 2018](#)). A significance value < 0.05 indicates that the independent variables have a simultaneous effect on the dependent variable, whereas a significance value > 0.05 indicates that the independent variables do not have a simultaneous effect on the dependent variable.

3.5.3.3 Coefficient of Determination Test (R^2)

The coefficient of determination test is used to measure the ability of the regression model to explain variations in the dependent variable ([Ghozali, 2018](#)). An R^2 value close to one indicates that the independent variables explain most of the variation in the dependent variable, whereas a low R^2 value indicates limited explanatory power.

4. Results and Discussions

4.1 Description of the Observation Unit

The research data were collected through questionnaires distributed to MSME owners in Tulang Bawang Regency using both offline and online methods via Google Forms. Data collection was conducted from June 22 to July 8, 2026, involving a total of 102 respondents, comprising 73 offline respondents and 29 online respondents. The questionnaires were distributed across 11 sub-districts, namely Menggala, Banjar Agung, Banjar Margo, Gedung Aji, Meraksa Aji, Penawar Aji, Rawapitu, Rawajitu Selatan, Gedung Aji Baru, Gedung Meneng, and Dente Teladas.

4.1.1 Respondent Demographics

The characteristics of the respondents in this study were described based on several criteria obtained from the processed research data.

1. Respondents Based on the Criterion of MSMEs Using E-Commerce
Based on the data analysis, all respondents in this study were MSME owners who used e-commerce as a medium for marketing or promoting their businesses, comprising a total of 102 respondents.
2. Respondent Characteristics by Gender
In terms of gender, the respondents were predominantly female, accounting for 80% of the total respondents, while male respondents accounted for 20%.
3. Respondent Characteristics by Age, Business Establishment Period, and Educational Attainment
The results of the data analysis indicate that the respondents varied in terms of age, business establishment period, and educational attainment. There were 47 respondents aged 20–30 years, 34 respondents aged 31–40 years, and 21 respondents aged over 41 years. In terms of business establishment period, 37 MSMEs had been operating for 1–2 years, 16 MSMEs for 3–4 years, and 49 MSMEs for more than 5 years. Regarding educational attainment, the respondents were predominantly high school/vocational high school graduates (SMA/SMK), totaling 56 respondents, followed by diploma/bachelor's degree holders (D3/S1) with 27 respondents, junior high school graduates (SMP) with 16 respondents, and elementary school graduates (SD) with 3 respondents.
4. Respondent Characteristics by Business Sector
Based on the results of the data analysis, seven MSME business sectors were represented in this study. The respondents were predominantly engaged in the food processing industry, accounting for 47% (48 respondents), followed by the trading sector at 39% (40 respondents).
5. Respondent Characteristics by Business Location
This study included respondents from 11 sub-districts in Tulang Bawang Regency. The largest proportion of respondents came from Meraksa Aji Sub-district, accounting for 33% (34 respondents), followed by Gedung Aji Sub-district at 22% (22 respondents).
6. Characteristics of Respondents' Responses
The results of the data analysis regarding respondents' responses to the research variables, namely X1 (e-commerce usage), X2 (accounting knowledge), X3 (financial literacy), and Y (MSME performance).

X1 E-commerce Usage

Percentages (%)											
Response	X1.1	X1.2	X1.3	X1.4	X1.5	X1.6	X1.7	X1.8	X1.9	X1.10	Average
5	51.96	66.67	41.18	68.63	73.53	71.57	55.88	55.88	44.12	50.00	57.94
4	41.18	32.35	57.84	30.39	26.47	28.43	42.16	39.22	47.06	47.06	39.22
3	1.96	0.98	0.98	0.98	0.00	0.00	1.96	4.90	4.90	1.96	1.86
2	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.94	0.98	0.88
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.10
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Figure 1. Characteristics of Respondents' Responses to Variable X1: E-Commerce Usage

Based on Figure 1, variable X1 (e-commerce usage) consists of 10 statements. The majority of respondents indicated that they strongly agreed (Likert scale 5), with an average percentage of 57.94%, while 39.22% agreed (Likert scale 4). These findings indicate that MSME owners in Tulang Bawang Regency have a positive perception of e-commerce usage as a means of business development. E-commerce usage is perceived to provide benefits in terms of cost efficiency, reputation enhancement, marketing, market expansion, and interaction with consumers.

X2 Accounting Knowledge

Percentages (%)											
Response	X2.1	X2.2	X2.3	X2.4	X2.5	X2.6	X2.7	X2.8	X2.9	X2.10	Average
5	40.20	41.18	52.94	27.45	32.35	50.00	44.12	39.22	32.35	45.10	40.49
4	57.84	53.92	47.06	50.00	52.94	44.12	48.04	50.98	56.86	42.16	50.39
3	1.96	3.92	0.00	4.90	3.92	1.96	3.92	4.90	4.90	4.90	3.53
2	0.00	0.98	0.00	17.65	10.78	2.94	3.92	4.90	5.88	7.84	5.49
1	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.00	0.10
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Figure 2. Characteristics of Respondents' Responses to Variable X2: Accounting Knowledge

Based on Figure 2, variable X2 (accounting knowledge) consists of 10 statements. The majority of respondents indicated that they agreed (Likert scale 4), with an average percentage of 50.39%, while 40.49% strongly agreed (Likert scale 5). These findings indicate that MSME owners in Tulang Bawang Regency possess a good level of accounting knowledge, particularly in utilizing accounting information for decision-making, preparing budgets, recording transactions, preparing financial statements, and understanding transaction evidence and account classification.

X3 Financial Literacy

Percentages (%)																
Response	X3.1	X3.2	X3.3	X3.4	X3.5	X3.6	X3.7	X3.8	X3.9	X3.10	X3.11	X3.12	X3.13	X3.14	X3.15	Average
5	33.33	44.12	42.16	54.90	45.10	46.08	38.24	50.00	50.00	73.53	53.92	29.41	24.51	30.39	41.18	43.79
4	60.78	55.88	53.92	43.14	40.20	48.04	45.10	47.06	46.08	25.49	35.29	44.12	59.80	58.82	36.27	46.67
3	4.90	0.00	3.92	1.96	5.88	5.88	8.82	2.94	3.92	0.98	1.96	15.69	12.75	6.86	12.75	5.95
2	0.98	0.00	0.00	0.00	8.82	0.00	7.84	0.00	0.00	0.00	8.82	8.82	2.94	3.92	9.80	3.46
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96	0.00	0.00	0.00	0.13
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Figure 3. Characteristics of Respondents' Responses to Variable X3: Financial Literacy

Based on Figure 3, variable X3 (financial literacy) consists of 15 statements. The majority of respondents indicated that they agreed (Likert scale 4), with an average percentage of 46.67%, while 43.79% strongly agreed (Likert scale 5). These findings indicate that MSME owners in Tulang Bawang Regency possess a good level of financial literacy, as reflected in their ability to understand financial management, develop financial plans and budgets, manage income and expenditures, make financial decisions, and maintain business financial records.

Response	MSME Performance (Y)							Average (%)
	Y.1	Y.2	Y.3	Y.4	Y.5	Y.6	Y.7	
5	41.18	50.98	39.22	44.12	54.90	31.37	27.45	41.32
4	49.02	46.08	51.96	46.08	44.12	35.29	28.43	43.00
3	4.90	1.96	8.82	8.82	0.00	6.86	15.69	6.72
2	4.90	0.98	0.00	0.98	0.98	23.53	24.51	7.98
1	0.00	0.00	0.00	0.00	0.00	2.94	3.92	0.98
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Figure 4. Characteristics of Respondents' Responses to Variable Y: MSME Performance

Based on Figure 4, variable Y (MSME performance) consists of 7 statements. The majority of respondents indicated that they agreed (Likert scale 4), with an average percentage of 43.00%, while 41.32% strongly agreed (Likert scale 5). These findings indicate that the performance of MSMEs in Tulang Bawang Regency is relatively good, as reflected in increased sales, the quantity of goods sold, business profits, demand for products or services, and business capital.

4.2 Descriptive Statistics of the Variables

4.2.1 Descriptive Statistics

Descriptive statistics are used to describe the characteristics of the research data based on the variables of e-commerce usage, accounting knowledge, financial literacy, and MSME performance.

Table 6. Results of the Descriptive Statistical Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
E-Commerce Usage	102	36	50	45,40	3,849
Accounting Knowledge	102	28	50	42,57	5,322
Financial Literacy	102	55	75	64,58	5,420
MSME Performance	102	18	35	29,10	4,169
Valid N (listwise)	102				

Based on the results of the descriptive statistical analysis presented in Table 6, the following findings were obtained:

1. X_1 E-Commerce Usage

The e-commerce usage variable has a minimum value of 36, a maximum value of 50, a mean value of 45.40, and a standard deviation of 3.849. The mean value, which is greater than the standard deviation, indicates that the respondents' responses were relatively consistent. Therefore, the mean value can adequately represent the level of e-commerce usage among MSMEs in Tulang Bawang Regency.

2. X_2 Accounting Knowledge

The accounting knowledge variable has a minimum value of 28, a maximum value of 50, a mean value of 42.57, and a standard deviation of 5.322. The mean value, which is greater than the standard deviation, indicates that the respondents had a relatively good level of accounting knowledge, with relatively limited variation in the data.

3. X_3 Financial Literacy

The financial literacy variable has a minimum value of 55, a maximum value of 75, a mean value of 64.58, and a standard deviation of 5.420. These results indicate that the respondents had a relatively good level of financial literacy, with responses that were relatively consistent.

4. Y MSME Performance

The MSME performance variable has a minimum value of 18, a maximum value of 35, a mean value of 29.10, and a standard deviation of 4.169. The mean value, which is greater than the standard deviation, indicates that the performance of the respondents' MSMEs was relatively good, with low variation in responses.

4.2.2 Validity Test

The validity test was conducted to assess the adequacy and validity of the research instrument. The questionnaire items were considered valid if the calculated r -value > was greater than the critical r -value. With 102 respondents, the critical r -value was 0.1946 at a 5% significance level ($df = 100$).

Table 7. Results of the Validity Test

Variables	Indicator	Calculated r -value	Critical r -value	Decision
E-Commerce Usage (X_1)	$X_{1.1}$	0.617	0.1946	Valid
	$X_{1.2}$	0.673	0.1946	Valid
	$X_{1.3}$	0.695	0.1946	Valid
	$X_{1.4}$	0.746	0.1946	Valid
	$X_{1.5}$	0.707	0.1946	Valid
	$X_{1.6}$	0.690	0.1946	Valid
	$X_{1.7}$	0.701	0.1946	Valid
	$X_{1.8}$	0.569	0.1946	Valid
	$X_{1.9}$	0.680	0.1946	Valid
	$X_{1.10}$	0.761	0.1946	Valid
Accounting Knowledge (X_2)	$X_{2.1}$	0.571	0.1946	Valid
	$X_{2.2}$	0.657	0.1946	Valid
	$X_{2.3}$	0.609	0.1946	Valid
	$X_{2.4}$	0.707	0.1946	Valid
	$X_{2.5}$	0.754	0.1946	Valid
	$X_{2.6}$	0.698	0.1946	Valid
	$X_{2.7}$	0.703	0.1946	Valid
	$X_{2.8}$	0.804	0.1946	Valid
	$X_{2.9}$	0.751	0.1946	Valid
	$X_{2.10}$	0.793	0.1946	Valid
Financial Literacy (X_3)	$X_{3.1}$	0.550	0.1946	Valid
	$X_{3.2}$	0.582	0.1946	Valid
	$X_{3.3}$	0.588	0.1946	Valid
	$X_{3.4}$	0.592	0.1946	Valid
	$X_{3.5}$	0.522	0.1946	Valid
	$X_{3.6}$	0.627	0.1946	Valid
	$X_{3.7}$	0.575	0.1946	Valid
	$X_{3.8}$	0.466	0.1946	Valid
	$X_{3.9}$	0.600	0.1946	Valid
	$X_{3.10}$	0.498	0.1946	Valid
	$X_{3.11}$	0.426	0.1946	Valid
	$X_{3.12}$	0.361	0.1946	Valid
	$X_{3.13}$	0.528	0.1946	Valid
	$X_{3.14}$	0.521	0.1946	Valid

Variables	Indicator	Calculated r-value	Critical r-value	Decision
Financial Literacy (X_3)	$X_{3.15}$	0.491	0.1946	Valid
MSME Performance (Y)	Y.1	0.748	0.1946	Valid
	Y.2	0.767	0.1946	Valid
	Y.3	0.683	0.1946	Valid
	Y.4	0.750	0.1946	Valid
	Y.5	0.565	0.1946	Valid
	Y.6	0.800	0.1946	Valid
	Y.7	0.729	0.1946	Valid

Based on Table 7, all statement items for the variables of e-commerce usage, accounting knowledge, financial literacy, and MSME performance were declared valid because the calculated r-values were greater than the critical r-value.

4.2.3 Reliability Test

The reliability test was conducted to assess the consistency of the research instrument. The questionnaire was considered reliable if the Cronbach Alpha value was greater than 0,60.

Table 8. Results of the Reliability Test

Variables	Cronbach Alpha	Required Cronbach Alpha	Decision
E-Commerce Usage (X_1)	0.861	0.60	Reliable
Accounting Knowledge (X_2)	0.885	0.60	Reliable
Financial Literacy (X_3)	0.789	0.60	Reliable
MSME Performance (Y)	0.821	0.60	Reliable

Based on Table 8, the Cronbach Alpha values were 0.861 for e-commerce usage, 0.885 for accounting knowledge, 0.789 for financial literacy, and 0.821 for MSME performance. All variables had Cronbach Alpha values greater than 0.60, indicating that the research instrument was reliable.

4.2.4 Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to examine the effects of the independent variables on the dependent variable.

Table 9. Results of the Multiple Linear Regression Analysis

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,148	3,907		-,294	,770
1	E-Commerce Usage	,030	,104	,027	,286	,775
1	Accounting Knowledge	,425	,077	,543	5,503	,000
1	Financial Literacy	,167	,075	,217	2,238	,027
Dependent Variable: MSME Performance						

Based on Table 9, the following regression equation Formula 4 was obtained:

$$Y = -1,148 + 0,030X_1 + 0,425X_2 + 0,167X_3 + e \quad (4)$$

The equation indicates the following:

- a. The constant coefficient of -1.148 indicates that when the variables of e-commerce usage, accounting knowledge, and financial literacy are assumed to be zero, MSME performance is -1.148 .
- b. The regression coefficient for e-commerce usage (X1) is 0.030 , indicating that a one-unit increase in e-commerce usage is associated with an increase of 0.030 units in MSME performance. Thus, e-commerce usage has a positive effect on MSME performance.
- c. The regression coefficient for accounting knowledge (X2) is 0.425 , indicating that a one-unit increase in accounting knowledge is associated with an increase of 0.425 units in MSME performance. Thus, accounting knowledge has a positive effect on MSME performance.
- d. The regression coefficient for financial literacy (X3) is 0.167 , indicating that a one-unit increase in financial literacy is associated with an increase of 0.167 units in MSME performance. Thus, financial literacy has a positive effect on MSME performance.

4.2.5 Classical Assumption Tests

The classical assumption tests were conducted to ensure that the regression model met the requirements for valid statistical analysis ([Padila et al., 2026](#)). The tests consisted of normality, multicollinearity, and heteroscedasticity tests.

a. Normality Test

The normality test was conducted to determine the distribution of the residuals in the regression model ([Ghozali, 2018](#)). The test employed the Kolmogorov–Smirnov method, with a significance value greater than 0.05 indicating that the data were normally distributed.

Table 10. Results of the One-Sample Kolmogorov–Smirnov Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		102
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	2,88951993
Most Extreme Differences	Absolute	,071
	Positive	,053
	Negative	-,071
Test Statistic	Test Statistic	,071
Asymp. Sig. (2-tailed)	Asymp. Sig. (2-tailed)	,200c,d

Based on Table 10, the Asymp. Sig. value was $0.200 > 0.05$. Therefore, it can be concluded that the research data were normally distributed. The normality test results are also supported by the histogram visualization presented in Figure 5.

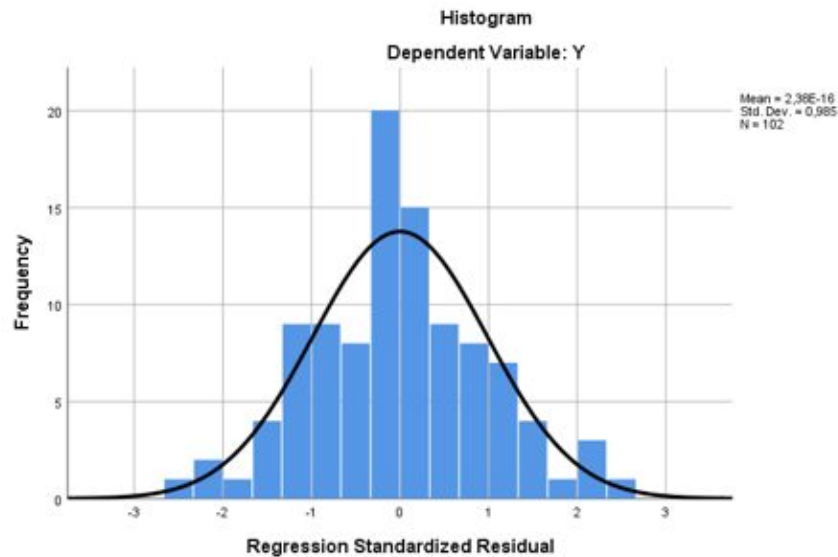


Figure 5. Histogram of the Normality Test Results

As shown in Figure 5, the distribution of residual data follows a pattern that approaches a normal distribution, indicating that the regression model meets the normality assumption. Furthermore, the normality assumption is also examined through the P-P Plot presented in Figure 6.

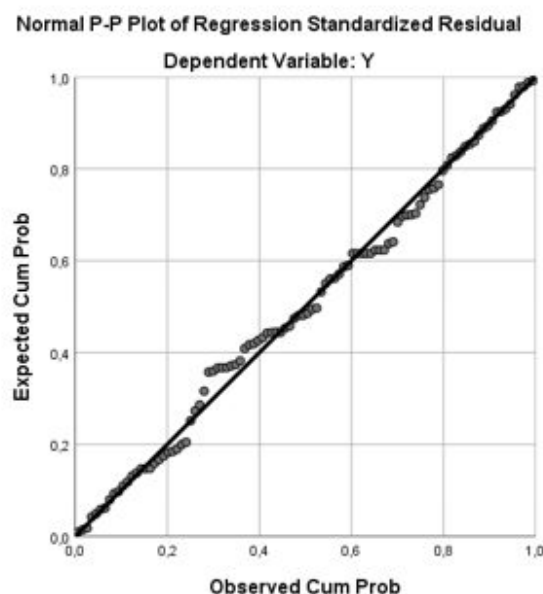


Figure 6. P-P Plot of the Normality Test Results

As shown in Figure 6, the observed residual values are distributed closely around the diagonal line, indicating that the residuals follow an approximately normal distribution and that the regression model satisfies the normality assumption.

b. Multicollinearity Test

The multicollinearity test was conducted to determine whether correlations existed among the independent variables in the regression model (Ghozali, 2018). The test was performed using the tolerance value and Variance Inflation Factor (VIF), with a tolerance threshold of > 0.10 and a VIF threshold of < 10 .

Table 11. Results of the Multicollinearity Test

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
		Std. Error	Beta	t		Tolerance	VIF	
1	(Constant)	-1,148	3,907		-,294	,770		
	E-Commerce Usage	,030	,104	,027	,286	,775	,535	1,869
	Accounting Knowledge	,425	,077	,543	5,503	,000	,503	1,987
	Financial Literacy	,167	,075	,217	2,238	,027	,520	1,922
a. Dependent Variable: MSME Performance								

Based on Table 11, the results of the multicollinearity test show that e-commerce usage has a tolerance value of 0.535 and a VIF of 1.869, accounting knowledge has a tolerance value of 0.503 and a VIF of 1.987, while financial literacy has a tolerance value of 0.520 and a VIF of 1.922. All independent variables have tolerance values greater than 0.10 and VIF values less than 10. Therefore, the regression model is free from multicollinearity.

c. Heteroscedasticity Test

The heteroscedasticity test was conducted to determine whether there was unequal variance of the residuals in the regression model (Ghozali, 2018). If the significance value is greater than 0.05, the model is considered free from heteroscedasticity.

Table 12. Results of the Heteroscedasticity Test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,852	2,403		1,603	,112
	E-Commerce Usage	,039	,064	,083	,605	,546
	Accounting Knowledge	-,002	,048	-,007	-,046	,963
	Financial Literacy	-,050	,046	-,152	-1,097	,275
a. Dependent Variable: ABS_RES						

Based on Table 12, the significance values for e-commerce usage, accounting knowledge, and financial literacy were 0.546, 0.963, and 0.275, respectively. All independent variables had significance values greater than 0.05. Therefore, the regression model did not exhibit heteroscedasticity.

4.2.6 Hypothesis Testing

a. Partial Test (t-Test)

The t-test was conducted to examine the effect of each independent variable on the dependent variable. The test was performed at a significance level of $\alpha = 0.05$, with a critical t-value of 1.98447 (df = 98).

Table 13. Results of the t-Test (Partial Test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,148	3,907		-,294	,770
	E-Commerce Usage	,030	,104	,027	,286	,775
	Accounting Knowledge	,425	,077	,543	5,503	,000
	Financial Literacy	,167	,075	,217	2,238	,027
a. Dependent Variable: MSME Performance						

Based on Table 13, the results of the hypothesis testing are as follows:

1. E-Commerce Usage (X_1) has a calculated t-value of 0.286, which is lower than the critical t-value of 1.98447, with a significance value of $0.775 > 0.05$. Therefore, H_1 is rejected. This indicates that e-commerce usage does not have a statistically significant effect on MSME performance.
2. Accounting Knowledge (X_2) has a calculated t-value of 5.503, which is greater than the critical t-value of 1.98447, with a significance value of $0.000 < 0.05$. Therefore, H_2 is accepted. This indicates that accounting knowledge has a positive and statistically significant effect on MSME performance.
3. Financial Literacy (X_3) has a calculated t-value of 2.238, which is greater than the critical t-value of 1.98447, with a significance value of $0.027 < 0.05$. Therefore, H_3 is accepted. This indicates that financial literacy has a positive and statistically significant effect on MSME performance.

b. F-Test or Simultaneous Test

The F-test was conducted to examine the simultaneous effect of the independent variables on the dependent variable. The test was performed at a significance level of $\alpha = 0.05$ with $df = 99$.

Table 14. Results of the F-Test (Simultaneous Test)

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	911,738	3	303,913	35,318	,000b
	Residual	843,282	98	8,605		
	Total	1755,020	101			
a. Dependent Variable: MSME Performance						
b. Predictors: (Constant), Financial Literacy, E-Commerce Usage, Accounting Knowledge						

Based on the F-test results presented in Table 14, the calculated F-value was 35.318, which was greater than the critical F-value of 2.70, with a significance value of $0.000 < 0.05$. These results indicate that H_0 is rejected and H_a is accepted. Therefore, e-commerce usage (X_1), accounting knowledge (X_2), and financial literacy (X_3) simultaneously have a statistically significant effect on MSME performance (Y).

c. Coefficient of Determination (R^2)

The coefficient of determination (R^2) was used to assess the ability of the regression model to explain the variation in the dependent variable (Ghozali, 2018).

Table 15. Results of the Coefficient of Determination (R^2) Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,721a	,520	,505	2,933
a. Predictors: (Constant), Financial Literacy, E-Commerce Usage, Accounting Knowledge				

Based on Table 15, the adjusted R^2 value of 0.505 indicates that the independent variables explain 50.5% of the variation in MSME performance, while the remaining 49.5% is explained by other variables not included in this study.

4.3 Discussion

The statistical analysis results demonstrate that e-commerce usage, accounting knowledge, and financial literacy have different roles in explaining MSME performance. The findings indicate that technological resources alone do not necessarily improve business outcomes, while internal capabilities related to financial management and decision-making play a more substantial role. From

the Resource-Based View (RBV) perspective, these results suggest that MSME performance is influenced not only by the availability of resources but also by the ability of business owners to effectively utilize and transform those resources into valuable capabilities.

Table 16. Hypothesis Testing Results

Independent Variable (X)	Hypothesis Test Result
X_1 E-Commerce Usage	Rejected
X_2 Accounting Knowledge	Accepted
X_3 Financial Literacy	Accepted

As shown in Table 16 the hypothesis testing results reveal that the effect of each independent variable on MSME performance varies across the proposed relationships. The results indicate that e-commerce usage does not have a significant effect on MSME performance, suggesting that the utilization of digital commerce platforms alone has not been sufficient to directly improve business outcomes among MSMEs in Tulang Bawang Regency. In contrast, accounting knowledge has a significant positive effect on MSME performance, indicating that MSME owners with better understanding of financial recording, reporting, and accounting practices tend to achieve better business performance. Furthermore, financial literacy is also found to have a significant positive effect on MSME performance, demonstrating that the ability of MSME owners to manage finances, make appropriate financial decisions, and apply effective financial practices contributes to improved business performance.

4.3.1 The Effect of E-Commerce Usage on MSME Performance

Based on the data analysis results, the e-commerce use variable has a significance value of $0.775 > 0.05$ and a calculated t-value of $0.286 <$ the t-table value of 1.98447. Therefore, H_1 is rejected and H_0 is accepted. This indicates that e-commerce use does not have a significant effect on MSME performance. The findings of this study are consistent with those of [Natsiruddin et al. \(2023\)](#), who found that e-commerce use does not have a significant effect on MSME performance due to the limited understanding and suboptimal utilization of e-commerce among business owners. However, these findings differ from those of [Anggraini et al. \(2024\)](#), who reported that e-commerce use has a positive and significant effect on MSME performance. Based on the Resource-Based View (RBV) theory, e-commerce use represents the utilization of technological resources that can expand market reach and increase sales ([Ridwansyah et al., 2025](#)). Nevertheless, the findings indicate that e-commerce has not been utilized optimally, and therefore has not been able to significantly improve MSME performance.

4.3.2 The Effect of Accounting Knowledge on MSME Performance

Based on the data analysis results, the accounting knowledge variable has a significance value of $0.000 < 0.05$ and a calculated t-value of $5.503 >$ the t-table value of 1.98447. Therefore, H_2 is accepted and H_0 is rejected. This indicates that accounting knowledge has a positive and significant effect on MSME performance. The findings of this study are consistent with those of ([Anggraini et al., 2024](#); [Lestari & Rustiana, 2019](#); [Natsiruddin et al., 2023](#)), who found that accounting knowledge has a positive and significant effect on MSME performance. The higher the level of accounting knowledge possessed by business owners, the better their business management and performance outcomes. However, these findings differ from those of ([Maya & Husda, 2024](#)), who reported that accounting knowledge does not have a significant effect on MSME performance. The findings support the Resource-Based View (RBV) theory, in which accounting knowledge constitutes a form of human capital that assists business owners in understanding, preparing, and analyzing financial statements, thereby improving business management and MSME performance ([Ridwansyah et al., 2025](#)).

4.3.3 The Effect of Financial Literacy on MSME Performance

Based on the data analysis results, the financial literacy variable has a significance value of $0.027 < 0.05$ and a calculated t-value of $2.238 >$ the t-table value of 1.98447. Therefore, H_3 is accepted and H_0 is rejected. This indicates that financial literacy has a positive and significant effect on MSME performance. The findings of this study are consistent with those of [Nusron et al. \(2024\)](#), who found that financial literacy has a positive and significant effect on MSME performance, as adequate financial knowledge enables business owners to manage capital effectively and make appropriate

business decisions. However, these findings differ from those of [Fitria et al. \(2021\)](#), who reported that financial literacy does not have an effect on MSME performance because financial knowledge has not been optimally applied in business practices. Based on the Resource-Based View (RBV) theory, financial literacy represents a human resource capability that reflects the ability to understand and utilize financial information for making appropriate decisions. As financial literacy improves, MSME performance is also expected to increase ([Ridwansyah et al., 2025](#)).

4.3.4 The Effect of E-Commerce Usage, Accounting Knowledge, and Financial Literacy on MSME Performance

Based on the results of the F-test, the calculated F-value is $35.318 >$ the F-table value of 3.09, with a significance value of $0.000 < 0.05$. These results indicate that e-commerce use, accounting knowledge, and financial literacy simultaneously have a significant effect on MSME performance. The findings are consistent with those of [Anggraini et al. \(2024\)](#), who found that e-commerce use and accounting knowledge jointly have an effect on MSME performance. This indicates that the effective utilization of technology, adequate accounting capabilities, and sound financial understanding can contribute to improved business performance.

5. Conclusions

5.1 Conclusion

This study aims to examine the effect of e-commerce usage, accounting knowledge, and financial literacy on MSME performance. Based on the results of hypothesis testing and analysis presented in the previous section, the following conclusions can be drawn. E-commerce usage does not have a significant effect on MSME performance. This finding indicates that the utilization of e-commerce platforms by MSMEs has not yet become a determining factor in improving business performance. The adoption of e-commerce alone does not guarantee an increase in performance without being supported by adequate managerial capabilities and effective business management practices.

Accounting knowledge has a positive and significant effect on MSME performance. This result demonstrates that MSME owners with better accounting knowledge are more capable of managing financial information, preparing appropriate business decisions, and improving operational effectiveness, which ultimately contributes to enhanced business performance. Financial literacy has a positive and significant effect on MSME performance. This finding confirms that a higher level of financial literacy enables MSME owners to manage financial resources more effectively, make informed financial decisions, and support business sustainability. E-commerce usage, accounting knowledge, and financial literacy simultaneously have a significant effect on MSME performance. These results indicate that the combination of technological utilization, accounting competence, and financial capability plays an important role in improving MSME performance. Therefore, strengthening the managerial and financial capabilities of MSME owners remains essential to support business growth and competitiveness.

5.2 Research Limitations

This study has three main limitations. First, it examines only e-commerce usage, accounting knowledge, and financial literacy, excluding other factors that may affect MSME performance. Second, the limited research population may restrict the generalizability of the findings. Third, questionnaire-based data collection may be subject to respondent bias due to differences in perception and understanding.

5.3 Suggestions and Directions for Future Research

Future studies should expand the sample across business sectors and geographical areas and examine additional factors, such as accounting information systems, financial technology adoption, financial inclusion, innovation capability, and entrepreneurial orientation. Mixed-method or longitudinal approaches are also recommended to provide deeper insights into the determinants of MSME performance.

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Author Contributions

MRT contributed to conceptualization, data collection, analysis, interpretation, and manuscript drafting. AKD contributed to methodology, theoretical framework development, validation, and critical review. ER contributed to supervision, academic evaluation, manuscript revision, and final approval. All authors approved the final manuscript.

References

- Achbianto, D. (2023). Pengaruh pengetahuan akuntansi, pendidikan pemilik, dan pengalaman usaha terhadap penggunaan informasi akuntansi pada pelaku umkm. *Jurnal Stie Semarang (Edisi Elektronik)*, 15(3), 1-11. <https://doi.org/10.33747/stiesmg.v15i3.638>
- Ambali, A. K., & Fasa, M. I. (2025). Analisis peran e-commerce dan media sosial terhadap pengembangan kinerja umkm kota bandar lampung dalam prespektif ekonomi islam. *Jurnal Media Akademik (JMA)*, 3(4). <https://doi.org/10.62281/6v841e70>
- Andhika, Y. H., & Damayanti, T. W. (2017). Niat melakukan pencatatan akuntansi pada usaha kecil menengah: Pengetahuan akuntansi ataukah herding. *Jurnal Ekonomi dan Bisnis*, 20(2), 331. <https://doi.org/10.24914/jeb.v20i2.664>
- Anggraini, E. S., Irawan, I., & Endang, A. (2024). Dampak penggunaan e-commerce, sistem informasi akuntansi dan pengetahuan akuntansi terhadap kinerja usaha kecil menengah di kota Bandar Lampung. *Akuntansi dan Ekonomi Pajak: Perspektif Global*, 1(4), 179-192. <https://doi.org/10.61132/aeppg.v1i4.582>
- Antariksa, S. K. S. (2025). Emotional intelligence, leadership effectiveness, and team performance: Synergies in human resource development. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 6(3), 659-668. <https://doi.org/10.35912/jakman.v6i3.3617>
- Arianti, B. F. (2021). Literasi keuangan (teori dan implementasinya). <https://doi.org/10.31237/osf.io/t9szm>
- Budiasih, Y., Tannady, H., Arum, R. A., Laratmase, P., & Kurniawan, U. (2023). Analisis faktor determinan kinerja keuangan dengan komisaris independen sebagai variabel moderasi. *Journal of Economic, Bussines and Accounting (COSTING)*, 6(2), 1366-1377. <https://doi.org/10.31539/costing.v6i2.5264>
- Djonn, L. (2019). Analisis pengaruh literasi keuangan, sikap keuangan dan kepribadian terhadap perilaku pengelolaan UMKM di Kabupaten Ende. *Jurnal Magisma*, 7(2), 61-72.
- Fitrah, M. N., & Yuliati, Y. (2023). Pengaruh e-commerce dan penggunaan sistem informasi akuntansi terhadap efektivitas kinerja UMKM di kota malang. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, dan Akuntansi)*, 7(2), 91-101. <https://doi.org/10.31955/mea.v7i2.2969>
- Fitria, I., Soejono, F., & Tyra, M. J. (2021). Literasi keuangan, sikap keuangan dan perilaku keuangan dan kinerja UMKM. *Journal of Business and Banking*, 11(1), 1-15. <https://doi.org/10.32524/kkjm.v3i1.1116>
- Ghozali, I. (2018). *Aplikasi analisis multivariate spss 25: Semarang: Universitas Diponegoro*.
- Hery, S., & Si, M. (2009). *Teori akuntansi (edisi pertama)*. Jakarta: Kencana Prenada Media Group.
- Hidayat, R., Umam, R., & Tripalupi, R. I. (2021). Kinerja keuangan perbankan syariah pada masa covid-19 dan strategi peningkatannya. *Finansha: Journal of Sharia Financial Management*, 2(2), 77-91. <https://doi.org/10.15575/fjsfm.v2i2.14207>
- Ichdan, D. A. (2024). Analysis of employee performance through productivity: The role of kaizen culture, motivation, and work discipline in the manufacturing industry. *Annals of Human Resource Management Research*, 4(1), 13-28. <https://doi.org/10.35912/ahrmr.v4i1.2158>
- Indahsari, W. N., Halim, M., & Aspirandy, R. M. (2023). Pengaruh sistem informasi akuntansi dan e-commerce terhadap kinerja umkm di wilayah banyuwangi. *JRAK (Jurnal Riset Akuntansi dan Bisnis)*, 9(1), 80-89. <https://doi.org/10.38204/jrak.v9i1.949>

- Juliandi, D., & Meini, Z. (2026). Peran integritas dan kompetensi SDM dalam kinerja sistem informasi akuntansi: Studi moderasi ancaman eksternal. *AKURASI: Jurnal Riset Akuntansi dan Keuangan*, 8(1), 33-50. <https://doi.org/10.36407/akurasi.v8i1.1541>
- Kore, E. L. R., & Septarini, D. F. (2018). Analisis Kinerja Usaha Mikro Kecil dan Menengah (UMKM)(studi kasus pada umkm sektor industri kecil formal di kabupaten merauke). *Jurnal Ilmu Ekonomi & Sosial Unmus*, 9(1), 22-37. <https://doi.org/10.35724/jies.v9i1.703>
- Lestari, N. A., & Rustiana, S. H. (2019). Pengaruh persepsi owner dan pengetahuan akuntansi dalam penggunaan sistem informasi akuntansi terhadap kinerja usaha mikro, kecil, dan menengah di Pamulang. *Baskara: Journal of Business and Entrepreneurship*, 1(2), 67-80. <https://doi.org/10.54268/baskara.v1i2.5934>
- Lovita, E., & Susanty, F. (2021). Peranan pemahaman e-commerce dan sistem informasi akuntansi bagi kewirausahaan. *Jurnal Akuntansi dan Manajemen*, 18(02), 47-54. <https://doi.org/10.36406/jam.v18i02.437>
- Lumeno, M., & Yusrin, N. A. (2024). Pengaruh viscap brand ambassador dan loyalitas penggemar terhadap brand image scarlett di media sosial tiktok. *Studi Ilmu Manajemen dan Organisasi*, 5(1), 55-76. <https://doi.org/10.35912/simo.v5i1.3087>
- Maya, S., & Husda, A. P. (2024). Pengaruh e-commerce, pengetahuan akuntansi dan sistem informasi akuntansi terhadap kinerja UMKM. *ECo-Buss*, 6(3), 1178-1193. <https://doi.org/10.32877/eb.v6i3.1101>
- Natsiruddin, A., Hasanah, N., & Armeliza, D. (2023). Pengaruh e-commerce, budaya organisasi, dan pengetahuan akuntansi terhadap kinerja usaha mikro, kecil, dan menengah. *Jurnal Akuntansi, Perpajakan dan Auditing*, 4(2), 470-485. <https://doi.org/10.21009/japa.0402.09>
- Nelson, A., Junaidi, J., & Sentoso, A. (2025). The impact of green human resource management to environmental performance. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 6(3), 603-617. <https://doi.org/10.35912/jakman.v6i3.3898>
- Novia, D., & Paramita, R. S. (2023). Pengaruh literasi keuangan, inklusi keuangan, dan e-commerce terhadap kinerja keuangan UMKM (coffee shop) di kabupaten kabupaten jemmer. *Jurnal Ilmiah Wahana Pendidikan*, 9(18), 199-210. <https://doi.org/10.5281/zenodo.8310853>
- Nusron, L., Yennisa, Y., & Suharni, S. (2024). Sistem informasi akuntansi, e-commerce, budaya organisasi dan literasi keuangan: Sebagai peningkat kinerja UMKM. *Jurnal Aplikasi Akuntansi*, 8(2), 346-357. <https://doi.org/10.29303/jaa.v8i2.320>
- Opti, S. (2023). Pengaruh pemanfaatan sistem informasi akuntansi dan penggunaan teknologi informasi terhadap kinerja UMKM. *Jesya*, 6(1), 704-713. <https://doi.org/10.36778/jesya.v6i1.1007>
- Padila, I., Makhsum, A., & Astuti, S. (2026). Pengaruh e-commerce, locus of control, dan literasi keuangan terhadap kinerja keuangan umkm (studi kasus pada umkm di kota Bandar Lampung). *Worksheet: Jurnal Akuntansi*, 5(2), 792-802. <https://doi.org/10.46576/wjs.v5i2.8468>
- Puryono, D. A., & Kurniawan, S. Y. (2017). Pengukuran tingkat efektivitas kinerja umkm batik bakaran secara berkelanjutan menggunakan model green scor. *Jurnal Informatika Upgris*, 3(1). <https://doi.org/10.26877/jiu.v3i1.1604>
- Putrie, A. S., & Ariani, K. R. (2024). Pengaruh penggunaan e-commerce, pemahaman sistem informasi akuntansi dan literasi keuangan pada kinerja perusahaan UMKM. *Jurnal Akuntansi dan Keuangan Kontemporer (JAKK)*, 7(2), 153-166. <https://doi.org/10.30596/jakk.v7i2.20281>
- Rachman, S., B, J. A. S., Susanto, P. C., & Mustika, I. (2025). Determination of employee performance: Analysis of training, work motivation, transformational leadership and organizational culture. *Annals of Human Resource Management Research*, 5(2), 171-184. <https://doi.org/10.35912/ahrmr.v5i2.2998>
- Ridwansyah, R., Supriyaningsih, O., & Annisa, Z. (2025). Pengaruh strategi resource based view dan orientasi kewirausahaan terhadap keunggulan bersaing dalam perspektif bisnis syariah (study pada bigland gallery bandar lampung). *Jurnal Ilmiah Ekonomi dan Manajemen*, 3(6), 76-91. <https://doi.org/10.61722/jiem.v3i6.4964>

- Ristikasari, D., & Wafa, Z. (2024). Penyusunan laporan keuangan umkm berdasarkan standar akuntansi keuangan entitas mikro, kecil dan menengah (sak-emkm) study kasus di umkm kabupaten semarang. *Journal of Human and Education (JAHE)*, 4(4), 519-524. <https://doi.org/10.31004/jh.v4i4.1289>
- Sari, N., & Friyatmi, F. (2025). Pengaruh literasi keuangan terhadap perilaku pengelolaan keuangan melalui mediasi sikap keuangan (mahasiswa fakultas ekonomi dan bisnis universitas negeri padang). *Jurnal Ekonomi Manajemen Sistem Informasi*, 6(5), 3281-3288. <https://doi.org/10.38035/jemsi.v6i5.5071>
- Sugiyono. (2016). Metode penelitian kuantitatif kualitatif dan R&D. *Alfabeta, Bandung*, 83-92.
- Ulyasari, O. R., Agustina, D., Wardhani, R. S., & Ilhamsyah, A. W. (2023). Pengaruh e-commerce dan sistem informasi akuntansi terhadap kinerja umkm terhadap kinerja umkm sektor industri. *Jurnal Ilmiah Global Education*, 4(2), 799-808. <https://doi.org/10.55681/jige.v4i2.642>
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Wulandari, D. (2022). Pengaruh literasi keuangan syariah dan inklusi keuangan syariah terhadap kinerja umkm (studi kasus pada umkm area relokasi alun-alun kejaksan cirebon). *S-2 Ekonomi Syariah*.