

## The effect of financial technology–digital payment systems on business profitability of MSMEs in Ternate City

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Received 18 August 2025  
Revised 17 February 2026  
Accepted 19 February 2022  
Published online 8 March 2026

DOI: 10.58784/cfabr.371

### ABSTRACT

The rapid development of financial technology has transformed business transaction systems, particularly through the adoption of digital payment platforms. For micro, small, and medium enterprises (MSMEs), digital payment systems are expected to enhance operational efficiency, expand market access, and ultimately improve business profitability. However, empirical evidence regarding the effectiveness of digital payment adoption in improving MSME performance, especially in geographically constrained regions, remains limited. This study aims to examine the effect of digital payment systems on the profitability of culinary MSMEs in Ternate City, Indonesia. A quantitative research approach was employed using primary data collected through questionnaires from 97 MSME owners selected using purposive sampling. Data were analyzed using simple linear regression with the assistance of SPSS version 27. The results indicate that digital payment systems have a positive and statistically significant effect on MSME profits, with a significance value of 0.009 ( $p < 0.05$ ). Nevertheless, the coefficient of determination ( $R^2 = 0.069$ ) suggests that digital payment adoption explains only a small proportion of profit variation, indicating that other factors also contribute to MSME financial performance. These findings support the perspectives of behavioral accounting and transaction cost theory, which highlight the role of technology adoption in improving transaction efficiency and business outcomes. The study contributes to the growing literature on fintech adoption in MSMEs and provides empirical evidence from an island-based regional economy.

Keywords: financial technology; digital payment system; MSMEs profit; MSME profitability; fintech adoption  
JEL Classification: E42; G21

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## 1. Introduction

The rapid advancement of technology has significantly transformed the financial sector through the emergence of financial technology (fintech), which integrates financial services with digital innovations to enhance accessibility and efficiency. According to the National Digital Research Centre (NDRC), fintech represents a new form of innovation that combines non-bank financial services with information technology to reach consumers. One of the most widely used types of fintech is the digital payment system, including QRIS, OVO, GoPay, Dana, ShopeePay, and other payment applications registered with the Financial Services Authority (OJK), accounting for 42.22% of total fintech usage compared to other types (Ningrum & Furqani, 2025).

For Micro, Small, and Medium Enterprises (MSMEs), profit serves as the primary indicator of business success, enabling them to finance operations, purchase raw materials, and expand market reach. However, intense competition and the growing shift in consumer behavior toward digital transactions pose challenges for MSMEs to sustain and improve profitability. The Covid-19 pandemic further accelerated the adoption of digital payment systems among MSMEs, including those in Ternate City, North Maluku, as a survival strategy amid reduced capital, distribution barriers, and profit declines of up to 50% (Yetty et al., 2022). Despite the potential benefits,

challenges such as low technological literacy, limited internet infrastructure, unstable connectivity during peak hours, and high access costs hinder the optimal use of digital payment features.

Data from Bank Indonesia's North Maluku office (2023) shows that while 68% of MSMEs in Ternate have adopted digital payment systems, only 42% utilize the automatic bookkeeping feature, resulting in suboptimal financial record management. This disparity indicates that adoption alone may not necessarily translate into improved profitability. Previous studies have shown mixed results: some found a positive and significant effect of digital payments on MSME profits (Tarigan et al., 2025; Nurjanah dan Dewi, 2023), while others reported no significant relationship (Sukayana dan Sinarwati, 2022).

Given Ternate's unique geographical context as an island-based region with limited infrastructure, the applicability of findings from large urban centers remains uncertain. Therefore, this study aims to examine the impact of digital payment systems, including QRIS and digital wallets, on the profitability of MSMEs in Ternate City. By focusing on local data and conditions, this research seeks to provide a more contextualized understanding of the relationship between digital payment adoption and the profitability of MSMEs in Eastern Indonesia, with a particular emphasis on Ternate City.

**Table 1. Number of Micro, Small, and Medium Enterprises in Ternate City as of December 2024**

| Num.         | District          | Number of Micro Enterprises | Number of Small Enterprises | Number of Medium Enterprises | Total         |
|--------------|-------------------|-----------------------------|-----------------------------|------------------------------|---------------|
| 1            | North Ternate     | 3.301                       | 1057                        | 280                          | 4.638         |
| 2            | Central Ternate   | 4.375                       | 1169                        | 228                          | 5.772         |
| 3            | South Ternate     | 4.409                       | 1045                        | 297                          | 5.751         |
| 4            | West Ternate      | 654                         | -                           | -                            | 654           |
| 5            | Moti Island       | 492                         | 5                           | -                            | 497           |
| 6            | Batang Dua Island | 422                         | 108                         | -                            | 530           |
| 7            | Ternate Island    | 401                         | 150                         | 2                            | 553           |
| 8            | Hiri Island       | 569                         | -                           | -                            | 569           |
| <b>Total</b> |                   | <b>14.623</b>               | <b>3.534</b>                | <b>807</b>                   | <b>18.964</b> |

Source: Dinas UMKM dan Koperasi Ternate City, 2025

Therefore, this study aims to examine the effect of digital payment systems on the profitability of culinary MSMEs in Ternate City. By focusing on MSMEs operating in an island-based regional economy, this research seeks to provide empirical evidence on the role of digital payment adoption in supporting MSME financial performance. The findings are expected to contribute to the literature on fintech adoption and MSME development, while also offering practical insights for policymakers and business actors in promoting digital financial inclusion in emerging regional economies.

## 2. Literature review

### *Behavioral accounting*

Behavioral accounting examines the reciprocal relationship between human behavior and accounting systems. This theory integrates behavioral science within the accounting context, emphasizing the influence of psychological factors, motivation, perception, social pressures, and organizational culture on decision-making, performance, and the effectiveness of internal control systems (Rusdianti dan Adnyana, 2025; Nurasik et al., 2023). Flamholtz dan Cherry (1976) asserts that behavioral accounting

investigates how behavior is shaped by accounting systems, and vice versa. Beyond focusing solely on numerical data, behavioral accounting also considers non-quantitative information to enhance the quality of financial reporting and organizational effectiveness.

In the context of MSMEs, behavioral factors such as risk perception, technological readiness, and managerial attitudes play an important role in determining the adoption of financial technologies. Business owners may adopt digital payment systems not only based on economic considerations but also due to perceived convenience, trust in technology, and social influences from customers or competitors. Therefore, behavioral accounting provides a useful perspective for understanding how MSME operators respond to technological innovations such as digital payment platforms and how these responses may influence financial performance.

### *Transaction cost theory*

Transaction cost theory, introduced by Coase (1937) and further developed by Williamson in the 1980s, posits that every economic activity incurs transaction costs, such as the search for information, contract

negotiation, and the monitoring of implementation. While these costs cannot be entirely eliminated, they can be minimized to enhance efficiency and profitability (Li and Fang, 2022; Williamson, 1981) and reduced transaction risk (Yuntika et al., 2025)

In the context of micro, small, and medium enterprises (MSMEs), conventional payment systems tend to generate high transaction costs, whereas the adoption of financial technologies such as digital payment systems can:

1. Accelerate payment processes (reducing search and negotiation costs),
2. Lower the risk of loss and recording errors (reducing monitoring costs), and
3. Improve data reliability and financial control (facilitating contract enforcement)

The utilization of digital payment systems mitigates uncertainty, reduces opportunistic behavior, and enables a more efficient allocation of resources, thereby enhancing MSME profitability (Zhang et al., 2025; Purba et al., 2024).

#### *Financial technology*

The financial services sector is increasingly computerized through financial technology, an innovation that integrates financial services and technology into a unified system to facilitate transactions (Jeandry et al., 2024). According to Bank Indonesia Regulation No. 19/12/PBI/2017, fintech is defined as a combination of financial services and technology that transforms conventional business models into fast, efficient, and secure non-cash remote services, thereby supporting sustainable economic growth. The Financial Services Authority (OJK) classifies fintech into five categories: peer-to-peer lending, crowdfunding, market aggregator, InsurTech, and digital payment systems. Overall, fintech emerges as an innovative

solution to meet the modern society's demand for fast and secure transactions.

#### *Digital payment system*

Digital payment systems are electronic payment mechanisms that enable financial transactions without the use of physical cash. These systems include technologies such as Quick Response Code Indonesian Standard (QRIS) and various digital wallets that facilitate online and offline transactions through mobile applications. According to the World Bank (2022), digital payments refer to the transfer of value using electronic devices and digital channels supported by payment infrastructure, regulatory frameworks, and financial networks.

For businesses, digital payment systems offer several advantages, including faster transaction processing, improved financial transparency, and better financial record management. For consumers, these systems provide convenience, flexibility, and security in conducting transactions. Previous studies suggest that the adoption of digital payment technologies can enhance business performance by improving operational efficiency and supporting better financial management practices among MSMEs.

#### *Business profits*

Every individual or organization engages in business activities with the primary objective of generating profit, which constitutes one of the fundamental components of financial statements and serves as an indicator of long-term success and growth (Chaniago & Siregar, 2022). Profit plays a critical role in determining taxation, dividend policy, investment guidelines, decision-making, and future planning (Utari et al., 2025). Profit represents the positive difference between revenue and expenses. According to PSAK No. 23 (Revised 2010), revenue is defined as an increase in assets arising from an

entity's ordinary activities that enhances equity and does not originate from owner contributions, whereas PSAK No. 1 defines expenses as decreases in economic benefits that reduce equity, unrelated to distributions to owners. Therefore, business profit refers to the positive difference between revenues generated from the entity's core business activities and the total costs incurred to produce those revenues, prior to accounting for income and expenses arising from non-operational activities. In simple terms, business profit reflects the pure gains derived from the entity's main business

operations. In the income statement, business profit (operating profit) is calculated as follows: Operating Profit = Operating Revenue – Cost of Goods Sold – Operating Expenses.

*MSMEs*

Micro, Small, and Medium Enterprises (MSMEs), as stipulated in Law of the Republic of Indonesia No. 20 of 2008, are productive economic activities conducted in the form of individual enterprises or business entities, with categorical distinctions determined by total assets and annual turnover.

**Table 2. Criteria for MSMEs**

| Type of Enterprises | Criteria                           |                                       |
|---------------------|------------------------------------|---------------------------------------|
|                     | Assets                             | Sales Revenue                         |
| Micro Enterprises   | Maksimal Rp50.000.00               | Maksimal Rp300.000.000                |
| Small Enterprises   | >Rp50.000.000-<br>Rp500.000.00     | >Rp300.000.000-<br>Rp2.500.000.000    |
| Medium Enterprises  | >Rp500.000.00-<br>Rp10.000.000.000 | >Rp2.500.000.000-<br>Rp50.000.000.000 |

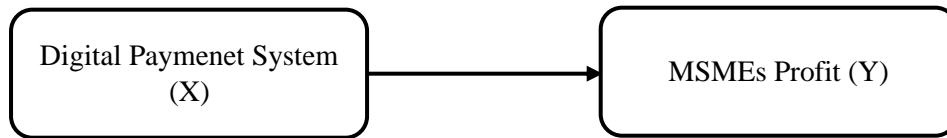
*Source: UU No. 20 Tahun 2008*

The financial recording of Micro, Small, and Medium Enterprises (MSMEs) is conducted in accordance with the Financial Accounting Standards for Micro, Small, and Medium Entities (SAK EMKM), which has been in effect since January 1, 2018. These standards encompass the preparation of income statements, statements of financial position, and notes to the financial statements. Proper financial recording is essential for understanding the business's condition, facilitating access to financing,

controlling financial resources, and setting performance targets. Sound financial management enhances productivity, efficiency, and business sustainability. MSMEs that maintain records in compliance with these standards tend to be better equipped to manage profits and costs effectively, thereby supporting informed business decision-making.

The conceptual framework for this study is as follows:

**Figure 1. Conceptual Framework**



It is hypothesized that the digital payment system has a significant effect on the profits of MSMEs in Ternate City.

### **3. Research method**

This study employs a descriptive quantitative approach to objectively measure the effect of digital payment system on the profits of culinary MSMEs in Ternate City. The study involves one independent variable and one dependent variable; therefore, the data analysis technique applied is regression analysis using a simple linear regression model. Data processing and statistical testing in this research were conducted using the Statistical Package for the Social Sciences (SPSS) software, version 27.

The population of this research comprises all culinary MSMEs in Ternate City that have adopted digital payment systems. The sampling technique used was purposive sampling, with the following criteria:

1. Culinary MSME operators in Ternate City,

2. Adoption of a digital payment system,
3. Implementation of basic financial record-keeping.

Since the exact population size was unknown, the Lemeshow formula was applied with a 95% confidence level and a 10% margin of error, yielding a minimum sample size of 97 respondents.

The data sources in this research consist of primary data, information obtained directly from respondents through questionnaires. Secondary data, supplementary data obtained indirectly from official documents and reports, including:

- 1) Previous studies and scholarly journals relevant to the research topic,
- 2) Publications from Bank Indonesia concerning digital payment systems,
- 3) Reports and datasets from the Office of Cooperatives and MSMEs of Ternate City.

### **4. Result and discussion**

*Result*

Validity Test

**Table 3. Validity Test Results**

| Variable               | Item | Pearson Correlation<br>(calculated r value) | Symbol | critical value<br>(table) | r (r-) | Description |
|------------------------|------|---|--------|---------------------------|--------|-------------|
| Digital Payment System | X1   | 0,676                                       | >      | 0,199                     | Valid  |             |
|                        | X2   | 0,711                                       | >      | 0,199                     |        |             |
|                        | X3   | 0,740                                       | >      | 0,199                     |        |             |
|                        | X4   | 0,734                                       | >      | 0,199                     |        |             |
|                        | X5   | 0,822                                       | >      | 0,199                     |        |             |
|                        | X6   | 0,724                                       | >      | 0,199                     |        |             |
|                        | X7   | 0,508                                       | >      | 0,199                     |        |             |
|                        | X8   | 0,591                                       | >      | 0,199                     |        |             |
|                        | X9   | 0,641                                       | >      | 0,199                     |        |             |
|                        | X10  | 0,695                                       | >      | 0,199                     |        |             |
| MSMEs Profit           | Y1   | 0,710                                       | >      | 0,199                     |        |             |
|                        | Y2   | 0,724                                       | >      | 0,199                     |        |             |
|                        | Y3   | 0,687                                       | >      | 0,199                     |        |             |
|                        | Y4   | 0,709                                       | >      | 0,199                     |        |             |
|                        | Y5   | 0,683                                       | >      | 0,199                     |        |             |
|                        | Y6   | 0,637                                       | >      | 0,199                     |        |             |
|                        | Y7   | 0,705                                       | >      | 0,199                     |        |             |

Table 3 shows that all statement items in the Digital Payment System variable (X) and MSMEs Profit variable (Y) have

calculated r values greater than the critical r value. Therefore, it can be concluded that all statement items are valid.

Reliability Test

**Table 4. Reliability test result**

| Variable               | Cronbach's Alpha | Symbol | Realibel Standard | Description |
|------------------------|------------------|--------|-------------------|-------------|
| Digital Payment System | 0,872            | >      | 0,7               | Realibel    |
| MSMEs Profit           | 0,818            | >      | 0,7               |             |

Table 4 shows that the variables Digital Payment System (X) and MSMEs Profit (Y) have Cronbach's alpha values greater than 0.7. Therefore, the alpha values of 0,872 and 0,818 fall into the high

or reliable category, indicating that all statement items within these variables demonstrate excellent internal consistency in measuring the intended constructs.

Normality Test

**Table 5. Normality test result**

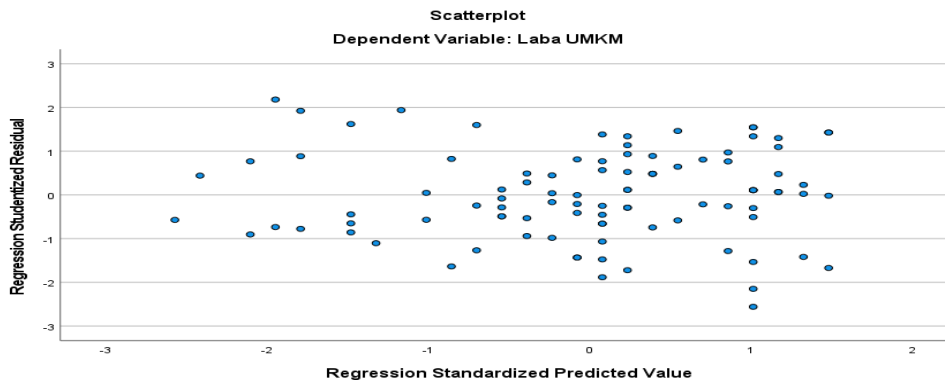
| <b>One-Sample Kolmogorov-Smirnov Test</b> |                | <b>Unstandardized Residual</b> |
|---|----------------|--------------------------------|
| N   |                | 97                             |
| Normal Parameters <sup>a,b</sup>          | Mean           | 0,0000000                      |
|   | Std. Deviation | 4,89455851                     |
| Most Extreme Differences                  | Absolute       | 0,059                          |
|   | Positive       | 0,059                          |
|   | Negative       | -0,046                         |
| Test Statistic                            |                | 0,059                          |
| Asymp. Sig. (2-tailed) <sup>c</sup>       |                | 0,200 <sup>d</sup>             |

Based on the results of the normality test presented in Table 5, the Asymp. Sig. (2-tailed) value is 0,200. This significance

value is greater than the 0,05 significance level, indicating that the residuals of the regression model are normally distributed.

Heteroscedasticity Test

**Figure 2. Heteroscedasticity Test Result**



As shown in Figure 2, the scatterplot results indicate that the distribution of residuals forms a random pattern and does

not cluster at a single point. This suggests that there's no heteroskedasticity present in the data of this study.

Linearity Test

**Table 6. Linearity test result**

|  |                |                          | ANOVA Table    |    |             |       |       |
|--|----------------|--------------------------|----------------|----|-------------|-------|-------|
|  |                |                          | Sum of Squares | df | Mean Square | F     | Sig.  |
| MSMEs Profit<br>* Digital Payment System | Between Groups | (Combined)               | 558,936        | 24 | 23,289      | 0,878 | 0,629 |
|  |                | Linearity                | 169,909        | 1  | 169,909     | 6,402 | 0,014 |
|  |                | Deviation from Linearity | 389,027        | 23 | 16,914      | 0,637 | 0,887 |
|  | Within Groups  |                          | 1910,816       | 72 | 26,539      |       |       |
| Total                                    |                |                          | 2469,753       | 96 |             |       |       |

Based on Table 6, the significance value in the Deviation from Linearity column is 0,887. This value is greater than

0,05, indicating that there is no significant deviation from linearity, meaning the relationship is truly linear.

Simple Linear Regression Test

**Table 7. Simple linear regression test result**

|       |                        | Coefficients <sup>a</sup>   |            |                           |
|-------|------------------------|-----------------------------|------------|---------------------------|
|       |                        | Unstandardized Coefficients |            | Standardized Coefficients |
| Model |                        | B                           | Std. Error | Beta                      |
| 1     | (Constant)             | 17,721                      | 3,207      | -                         |
|       | Digital Payment System | 0,207                       | 0,078      | 0,262                     |

a. Dependent Variable: MSMEs Profit

Based on the test results in the table above, the obtained regression equation is:

$$Y = \alpha + \beta X + \varepsilon$$

$$Y = 17,721 + 0,207X + \varepsilon$$

1) The obtained constant value of 17,721 indicates that when the Digital

Payment System variable is zero (constant), the MSME Profit is 17,721.  
 2) The regression coefficient for the Digital Payment System variable is positive at 0,207, indicating that each one-unit increase in the use of the Digital Payment System will increase MSMEs Profit by 0,207.

t-Test

**Table 8. t-Test Result**

| Model | Coefficients <sup>a</sup> |                           | t     | Sig.  |
|-------|---------------------------|---------------------------|-------|-------|
|       | Beta                      | Standardized Coefficients |       |       |
| 1     | (Constant)                |                           | 5,526 | 0,000 |
|       | Digital Payment System    | 0,262                     | 2,649 | 0,009 |

a. Dependent Variable: Laba UMKM

Table 8 shows that the Digital Payment System variable has a significance value of 0,009, which is less than 0,05. Therefore,

it can be concluded that the Digital Payment System (X) has a significant effect on MSMEs Profit (Y).

Coefficient of Determination Test (R-Square)

**Table 9. R-Square Test Result**

| Model Summary <sup>b</sup> |                    |          |                   |                            |
|----------------------------|--------------------|----------|-------------------|----------------------------|
| Model                      | R                  | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1                          | 0,262 <sup>a</sup> | 0,069    | 0,059             | 4,920                      |

a. Predictors: (Constant), Digital Payment System  
 b. Dependent Variable: MSMEs Profit

Based on table 9, the R-Square value of 0.069 indicates that the Digital Payment System variable accounts for 6.9% of the variance in the MSMEs Profit variable, while the remaining 93.1% is influenced by other factors not included in this research model.

*Discussion*

The results of this study indicate that the adoption of digital payment systems has a positive and statistically significant effect on the profitability of culinary MSMEs in Ternate City. The positive regression coefficient suggests that increased utilization of digital payment platforms contributes to higher business profits. This finding indicates that digital payment systems can improve transaction efficiency, facilitate faster payment processes, and provide more flexible payment options for customers.

These findings are consistent with previous studies that highlight the role of

financial technology in improving MSME performance by enhancing operational efficiency and expanding market accessibility. Digital payment systems allow businesses to reduce cash-handling risks, simplify transaction recording, and improve financial transparency, which may support better financial management practices among MSMEs.

These findings align with behavioral accounting theory, which posits that technology adoption decisions such as employing digital payment systems are influenced not solely by economic logic but also by psychological and behavioral factors of business owners, including risk perception, habitual practices, comfort, and prior experience with technology (Rusdianti & Adnyana, 2025:91).

Additionally, according to Williamson's transaction cost theory, digital payment systems have the potential to reduce transaction costs and improve efficiency. However, if their implementation is suboptimal or not fully

integrated into MSME operational activities, the positive effects on profit may not reach their full potential. Consequently, a low  $R^2$  value alongside a statistically significant effect is plausible.

However, the relatively low coefficient of determination ( $R^2 = 0.069$ ) indicates that digital payment systems explain only a small portion of the variation in MSME profitability. This suggests that other factors—such as digital literacy, managerial capability, marketing strategies, and access to financial resources—may also significantly influence business performance. In the context of Ternate City, limitations in digital infrastructure and technological familiarity among MSME operators may further constrain the optimal utilization of digital payment systems.

Therefore, while digital payment adoption contributes positively to MSME profitability, its effectiveness depends on broader supporting factors, including digital literacy, infrastructure availability, and managerial capability. Strengthening these aspects may enhance the overall impact of financial technology adoption on MSME performance.

## 5. Conclusion

This study investigates the effect of digital payment systems on the profitability of culinary MSMEs in Ternate City. The findings reveal that digital payment adoption has a positive and statistically significant impact on MSME profits. The use of digital payment platforms contributes to improved transaction efficiency and facilitates faster and more flexible payment processes for customers.

However, the relatively low coefficient of determination ( $R^2 = 0.069$ ) indicates that digital payment systems explain only a small portion of the variation in MSME profitability. This suggests that other factors, such as managerial capability,

digital literacy, and market conditions, may also influence business performance.

The findings support behavioral accounting and transaction cost theory, which highlight that technology adoption can improve efficiency and reduce transaction costs. Practically, the results emphasize the importance of strengthening digital literacy and encouraging MSMEs to utilize digital payment features more effectively. Future research is recommended to include additional variables and broader samples to provide a more comprehensive understanding of MSME profitability in the digital economy.

## References

- Chaniago, S., & Siregar, S. (2022). Laba akuntansi sebagai sumber informasi pengembangan usaha. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 4(5), 1380–1389.  
<https://journal.laaroiba.com/index.php/alkharaj/article/view/955>
- Coase, R. H. (1937). The Nature of the firm. *Economica N. S.*, 4, 386-405. Reprinted in G.J. Stigler and K.E. Boulding (eds.), *Readings in Price Theory*, Homewood, IL, Richard D. Irwin.
- Flamholtz, E. & Cherry, A. (1976). *Human resource accounting and personnel management in real estate firms*. Graduate School of Management, University of California, Los Angeles.
- Jeandry, G., Dara, A., & Zainuddin, Z. (2024). Memajukan UMKM di Ternate: Eksplorasi peran inklusi keuangan dalam menggabungkan literasi dan teknologi finansial. *Owner*, 8(3), 2328–2346.  
<https://doi.org/10.33395/owner.v8i3.2185>
- Chia-Ying Li, C. Y., & Fang, Y. H. (2022). The more we get together, the more we can save? A

- transaction cost perspective. *International Journal of Information Management*, 62, 1-19.  
<https://doi.org/10.1016/j.ijinfomgt.2021.102434>
- , A. E., & Furqani, A. (2025). Peran digital payment terhadap kinerja UMKM (Studi pada pelaku UMKM Keris di Sumenep). *Journal of Management and Innovation Entrepreneurship (JMIE)*, 2(2), 1847-1857.  
<https://doi.org/10.70248/jmie.v2i2.1906>
- Nurasik, Abidin, F. I. N., & Dewi, S. R. (2023). Determinan yang mempengaruhi laba UMKM. *ARMADA: Jurnal Penelitian Multidisiplin*, 1(2), 61-76  
<https://doi.org/10.55681/armada.v1i2.359>
- Nurjanah, Y., & Dewi, K. (2023). Pengaruh financial technology terhadap pendapatan UKM di Bogor. *Jurnal Ilmiah Akuntansi Kesatuan*, 11(1).  
<https://jurnal.ibik.ac.id/index.php/jiakes/article/view/1657>
- Purba, F. A., Nasution, H. M., Siregar, N. H., Lubis, S. N. T., & Wulandari, S. (2024). Peran Sistem Pembayaran Digital Dalam Meningkatkan Produktivitas Usaha Mikro, Kecil, Dan Menengah (UMKM) Di Kecamatan Medan Perjuangan. *Jurnal Ekonomi Dan Bisnis (EK&BI)*, 7(2), 425-431.  
<https://jurnal.murnisadar.ac.id/index.php?journal=EKBI&page=article&op=view&path%5B%5D=1879>
- Rusdianti, I. S., & Adnyana, I. D. (2025). *Akuntansi keperilakuan: Pendekatan teori dan inovasi era digital*. Edisi 1.. EUREKA Media Aksara.
- Sukayana, K., & Sinarwati, N. K. (2022). Analisis pengaruh financial behaviour dan actual use digital payment system terhadap pendapatan usaha sektor UMKM di Bali. *Explore*, 12(1), 87-93.  
<https://doi.org/10.35200/ex.v12i1.93>
- Tarigan, M. S. (2025). Pengaruh digital marketing dan transaksi online terhadap peningkatan laba UMKM di Kota Medan. (2025). *Manajemen Retail*, 1(1), 10-20.  
<https://ojs.univ-bd.ac.id/index.php/jmr/article/view/2>
- Utari, S. F., Tara, M. D., & Amdanir, R. (2025). Konsep laba dan pengakuan pendapatan merupakan suatu kajian. *Jurnal Akuntansi, Keuangan, Perpajakan Dan Tata Kelola Perusahaan (JAKPT)*, 2(3), 853-864.  
<https://doi.org/10.70248/jakpt.v2i3.1605>
- Williamson, O. E. (1981). The Economics of Organization: The Transaction Cost Approach. *American Journal of Sociology*, 87(3), 548-577.  
<https://doi.org/10.1086/227496>
- Yetty, Y., Senuk, A., & Pratama, R. (2022). Strategi Digitalisasi UMKM Kota Ternate dalam Menghadapi Pandemi COVID-19. *Jurnal Abdi Masyarakat Indonesia*, 2(6), 1815-1822.  
<https://doi.org/10.54082/jamsi.524>
- Yuntika, L., Kesuma, S. A., Muda, I., & Syarif, F. (2025). Transaction cost theory in contemporary accounting and governance research: A systematic literature review (2020-2025). *Indonesia Economic Journal*, 1(2), 1815-1820.  
<https://ojs.indopublishing.or.id/index.php/iej/article/view/520>
- Zhang, W. (2025). The impact of fintech on financing constraints of technology SMEs. *Frontiers in Business, Economics and Management*, 18(1), 190-196.  
<https://doi.org/10.54097/9jzvka27>