

HUMAN RESOURCE COMPETENCY MODERATION IN DIGITAL PAYMENT SYSTEMS AND INTERNAL CONTROL SYSTEMS ON THE PREPARATION OF FINANCIAL REPORTS FOR BATIK SMEs IN TEGAL REGENCY

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ABSTRACT

Introduction/Main Objectives: Digital payment systems are increasingly advanced along with the many *marketplaces* and *digital platforms* that provide convenience in trade transactions, including the use of *Shopee Pay*, *Go-Pay*, and *Quick Response Code Indonesian Standard (QRIS)*. This study aims to determine the moderation of human resource competencies in digital payment systems and internal control systems for the preparation of financial reports for Batik MSMEs in Tegal Regency.

Background Problems: The problem of using digital payments in financial reporting in Tegal Regency is greatly influenced by the competence of human resources in managing digital payment systems and integrating them with existing accounting systems. If HR competencies in the use of information technology and financial recording are inadequate, this can lead to problems with the accuracy and reliability of financial reports. Therefore, improving training and understanding of technology for HR is key to optimizing the use of digital payments and producing accurate and standardized financial reports.

Research Methods: This study uses primary data from questionnaires. The sampling technique uses *purposive sampling* . Data collection techniques consist of observation, interviews, literature studies, and documentation. While data analysis techniques consist of descriptive statistics, validity tests, reliability tests, and normality tests .

Findings/Results: The results The simultaneous ANOVA test of $0.000 < 0.005$ shows that HR competency moderates the digital payment variable and internal control has an effect on the Financial Report Preparation variable.

Conclusion: Based on the results of the simultaneous test of equation 1 of $0.000 < 0.005$, it states that the variables of digital payments and internal control have an effect on the variables of financial report preparation and the results of the simultaneous test of equation 2 of $0.000 < 0.005$ indicate that HR competence moderates the variables of digital payments and internal control on the influence of the variables of financial report preparation.



Implementation Potential : MSMEs have begun widely using QRIS as a cashless payment system that is more efficient. One of the advantages of QRIS is gaining switching from various types of merchants.

Keywords : Digital Payment System, Internal Control System, Financial Report Preparation, HR Competence.

JEL Classification: (list the relevant JEL codes separated by commas, refer to <https://www.aeaweb.org/jel/guide/jel.php>)

1. INTRODUCTION

In today's era of globalization, technological advancements are developing rapidly. The use of electronic media is a familiar technological advancement. All activities carried out through electronic media are made easier Kartika et al (2025) This includes receiving information, processing data from input, output, and results, and making decisions based on the results of data processing, one of which is the creation of financial reports. If small businesses want to grow, they must use accounting software to create financial reports. Herawati dan Rusli (2017).

Single-user and multi-user information systems are two different types of information systems. Single-user information systems are designed to meet the personal information needs of a single user Kartika et al (2022). In contrast, multi-user information systems are created to meet the information needs of an office, department, division, section, or organization as a whole. To build an information system that works for one or more users, it is important to combine the following information system components: Human Resources: Humans are part of the accounting information system, and they are responsible for running the system, making decisions, and managing it. An accounting information system can only function if it has the resources. The steps taken to complete a task, job, or activity are called procedures. Usually, they consist of several people working together in one or more departments to ensure that different business transactions are handled in the same way. Every event that occurs in an organization is recorded (documented) in books and, sometimes, included in documents. So, data is the part of the accounting information system that is related to the company's operations. Forms, the main component of data, are used to record each transaction.

Software is a computerized tool used to automatically process company data to generate reports and information. Preparing financial reports is crucial because it provides information

about a company's financial position, financial performance, and changes in capital made by the company's owners.

Information in financial reports must comply with applicable regulations so that users can understand it. To meet the required reporting quality, reports must be relevant, credible, comparable, and understandable Putri dan Endiana (2010).

MSMEs are increasingly encouraged to adapt to technology, leading to the development of non-cash payments. This convenience is offered to help MSMEs manage their finances without difficulty. QRIS allows MSMEs to accept payments using various digital wallets through a single QR code, simplifying the transaction process for consumers and entrepreneurs. This is expected to reduce dependence on cash, accelerate cash flow, and increase transparency and efficiency in financial management.

Digital payment systems are advancing with the rise of numerous marketplaces and digital platforms that facilitate trade transactions, including Shopee Pay, Go-Pay, and the Indonesian Standard Quick Response Code (QRIS). Currently, MSMEs are beginning to widely use QRIS as a more effective cashless payment system. One of the advantages of QRIS is that it attracts a wide range of merchants Wahyuni (2021). QRIS has become increasingly popular since 2020, as the latest innovation in payment systems has become relevant during the Covid-19 pandemic.

QRIS is a QR code standard for payment systems developed by Bank Indonesia to facilitate digital payment transactions. Using QRIS, people can conduct transactions using various payment applications, further streamlining the payment process in various sectors, including businesses and organizations. The implementation of this digital payment technology significantly impacts accounting and financial reporting systems, which must be able to record and report transactions accurately and efficiently.

According to Sukoco (2020) digital payment technology such as QRIS will simplify payment transactions, however, this also requires adjustments in the accounting system that can adapt to transactions that occur in digital format. The use of QRIS can impact how transactions are recorded in financial reports. Transaction recording through QRIS requires careful attention to ensure the data recorded in financial reports remains accurate and complies with applicable

accounting standards. QRIS allows for more transparent and real-time transactions, but requires more careful data management.

According to Hendro (2021) the application of technology such as QRIS in payment transactions can improve the quality of financial reports, but there are challenges related to data management that requires a good system to prevent recording errors that can be detrimental to the company. Undeniably, QRIS also has several weaknesses that need to be considered, one of which is the transaction nominal limit of up to two million rupiah per transaction.

A structure that facilitates and empowers internal control to be effective in producing a good level of financial independence is described by an internal control system. According to Ayem dan Nugroho (2020). a strong internal control system can ensure accurate financial reporting, increase compliance with relevant laws, and reduce the possibility of errors, losses, and other irregularities. The quality of financial reports is closely related to the effectiveness of the internal control system, namely the more effective the internal control, the more accurate the financial reports.

Highly competent human resources are essential for managing the use of QRIS in accounting and financial reporting systems. Without adequate competency, QRIS utilization in financial transactions may be suboptimal. Human resources involved in financial reporting management must understand how to record and verify transactions conducted through QRIS to prevent errors.

According to Hasibuan (2016) HR competencies include the knowledge, skills, and attitudes that individuals in an organization must possess to perform their work well. In this context, HR competencies in accounting and finance that understand payment technologies such as QRIS will be able to manage financial reports better.

Human resource competency acts as a moderating factor influencing the relationship between QRIS usage and financial reporting quality. Human resources competent in digital transaction management and an understanding of accounting will be better able to manage QRIS usage and prepare accurate financial reports. Conversely, without adequate competency, QRIS use can risk recording errors in financial reports.

According to Widodo (2020) good competency in information technology and accounting can be a determining factor in the successful implementation of digital technology in an organization. Therefore, training and developing HR competency in digital payment technology is very important to improve the quality of the resulting financial reports.

The adoption of digital payments in payment transactions has a significant impact on an organization's financial statements. However, to ensure this positive impact, human resource competency is a crucial moderating factor. MSMEs need to ensure that the human resources involved have sufficient skills and knowledge in utilizing this technology to ensure accurate financial reports and align with applicable standards.

This study is a development of previous research Kahmidatunissa et al (2022) by adding human resource competency variables as moderating variables. Another difference between this study and the previous one is the location of the study where the previous study examined MSMEs in Purwokerto while this study examines Batik MSMEs in Tegal Regency. Previous research has not included HR Competence in improving the quality of financial reports. By improving the quality of financial reports, a higher level of transparency and accountability will be created regarding the use of human resources. This supports the principle of good governance in MSMEs.

QRIS is a digital payment system that uses QR codes to facilitate transactions. Based on the phenomenon that occurs, public or business actors' understanding of QRIS is still low, This will affect how transactions are recorded properly in financial reports, Human resource competency plays an important role in managing the use of QRIS in financial transactions, without adequate training, HR involved in financial recording and reporting may have difficulty understanding how to record and manage digital transactions, which leads to financial reports that do not correspond to reality, suboptimal technological infrastructure can be an obstacle in the implementation of QRIS. Limited internet networks or inadequate hardware can cause disruptions in the transaction process, which ultimately affects the quality of the financial reports produced.

The challenges of using digital payments in financial reporting in Tegal Regency are heavily influenced by the competence of human resources in managing digital payment systems and integrating them with existing accounting systems. Lack of human resource competency in information technology and financial record-keeping can lead to problems with the accuracy and

reliability of financial reports. Therefore, improving human resource training and technological understanding is key to optimizing the use of digital payments and producing accurate and standardized financial reports.

2. LITERATURE REVIEW

TAM theory was introduced by Davis in 1989 to explain individual reactions to technology and one's intention in using technology Gyamera (2023) It also describes how individuals or users can accept technology in the context of information systems Putri dan Endiana (2010). Perceived ease of use and perceived usefulness are two primary theoretical concepts that play a major role in the acquisition of users of an information system. These two perceptions greatly influence the desire or intention to behave (behavior intention). If users perceive a technological system as easy to use and has benefits, they will really like using it.

Definition of Micro, Small, and Medium Enterprises: According to the Indonesian Institute of Accountants, micro, small, and medium enterprises do not have significant public accountability. According to the Financial Accounting Standards for Micro, Small, and Medium Entities (SAK EMKM), these entities must meet the definition and criteria of micro, small, and medium enterprises stipulated in Indonesian laws and regulations for at least two consecutive years. Micro, Small, and Medium Business.

A company's financial report for an accounting period contains information that describes its performance and is useful for bankers, creditors, owners and other interested parties to see and understand the company's financial condition and performance. The purpose of financial statements is to provide information about an entity's financial position and performance to a wide range of users involved in economic decision-making. These users include resource providers to the entity, such as creditors and investors. Financial statements also demonstrate management's accountability for the resources provided to it in meeting its objectives.

Single user and multi-user information systems are two types of information systems. Single user information systems are designed to meet the personal information needs of a single user Kartika et al (2023). Multi-user information systems, on the other hand, are designed to meet the information needs of an office, department, division, or section, or the organization as a whole.

Digital payment systems are a new means of exchanging value that customers can use. Comparable to traditional forms of payment, but largely dependent on the development of smartphone features and user financial authorization Fauzi et al (2023) Perceptions of usefulness and ease of use of digital payment systems can be related to the quality of financial reports. TAM can be used to measure user readiness to adopt digital payment systems and perceptions of the benefits of using the system Qris

According to Hasan (2021) QRIS has great potential in increasing the contribution of the digital financial sector to the Indonesian economy. QRIS supports the achievement of Bank Indonesia's goals in expanding financial inclusion and increasing the efficiency of the payment system. QRIS not only speeds up transactions but also helps digitize the economy, which is expected to increase the country's GDP and reduce dependence on cash.

Internal control is a series of steps and actions taken by management and employees to ensure the success and efficiency of their actions, as well as the accuracy of financial information Putri dan Endiana (2010). When internal control is implemented properly, it can improve operational success and accuracy, compliance with relevant regulations. The perceived benefits and ease of use of the internal control system can be related to the quality of the resulting financial reports Ayem dan Nugroho (2020).

Human resource competency in financial reporting and QRIS utilization is crucial for supporting efficiency and accuracy in financial reporting and the successful implementation of digital payment systems. Therefore, competency development through comprehensive and ongoing training is crucial for improving human resource quality in both areas.

3. METHOD

The research will be conducted at Batik MSMEs in Tegal Regency and has been ongoing from May to August 2025 in the villages of Bengle, Langgen, Dukuhsalam, Tegalwangi, Kaladawa and Pacar. This type of research is descriptive research with questionnaire survey methods, interviews and focused discussions with the community using qualitative and quantitative approaches.

According to Sugiyono (2018) the data collection method known as observation involves human behavior, work processes, natural phenomena, and when the number of respondents observed is not too large. Researchers conduct observations, interviews, literature studies and documentation.

The population of this study was 287 batik MSMEs in Tegal Regency, spread across the villages of Benge, Langgen, Dukuhsalam, Tegalwangi, Kaladawa, and Pacar. The data was obtained from the Tegal Regency Trade, Cooperatives, and MSMEs Office in 2025.

This research sample uses purposive sampling, the criteria are:

- a. MSMEs registered with the Tegal Regency Trade, Cooperatives and MSMEs Service: 287 MSMEs
- b. MSMEs whose business was established more than 10 years ago: 276 MSMEs
- c. Batik MSMEs that have used digital payment systems: 41 MSMEs

So the research sample is 41 respondents

4. RESULTS AND DISCUSSION

Tegal Regency is known for its significant creative economic potential, particularly in the micro, small, and medium enterprises (MSMEs) sector specializing in batik. Several villages, including Benge, Langgen, Dukuhsalam, Tegalwangi, Kaladawa, and Pacar, are centers of traditional batik production, serving as the backbone of the local economy. Batik businesses in these villages are generally run by MSMEs, local artisans with inherited skills.

In today's digital era, digital payment systems such as QRIS, bank transfers, and digital wallets are beginning to be introduced, but adoption is uneven. This challenge is exacerbated by limited human resource (HR) competency in information technology and basic accounting, which impacts the accuracy and reliability of MSME financial reports.

Preparing sound financial reports is crucial for maintaining business sustainability, gaining access to capital, and meeting reporting requirements from the government and financial institutions. However, MSMEs still lack understanding of accounting principles and the importance of internal control systems.

Table 1. Sample Details

No.	Criteria	Amount
1.	Distributed questionnaires	41
2.	Completed questionnaire	31
3.	Questionnaires used in the research	31

Source: Processed data, 2025

Descriptive statistical analysis provides a description or overview of observable data from the standard deviation, mean, maximum, and maximum showing how data and behavior are collected in research. Suliyanto (2011) The results of the descriptive statistical analysis are presented in the table below:

Table 2. Description of Research Variables

	N	Min	Max	Mean	Std. Deviation
Gender	31	1	2	1.19	0.401
Business Results	31	1	3	1.52	0.626
Scale	31	1	2	1.96	0.179

Source: Processed data, 2025

From the results of the Descriptive Statistical Analysis of the SPSS output above, it shows that the lowest number for gender is 1 and the highest number is 2 that the lowest gender is male and the highest gender is female, the mean is 1.19 and the standard deviation is 0.401 while the lowest number for business results is 1 and the highest number is 3 that the lowest business results are the textile clothing industry and the highest business results are the production of stamped and written batik cloth, the mean is 1.52 and the standard deviation is 0.626, the lowest number scale is 1 and the highest number is 2 that the lowest scale is medium and the highest scale is small, the mean is 1.96 and the standard deviation is 0.179.

According to Suliyanto (2011) validity tests are used to measure the validity of a questionnaire. A questionnaire is said to be valid if the questions in the questionnaire are able to reveal something that will be measured by the questionnaire.

This validity test uses Pearson Correlation, which is done by calculating the correlation between the values obtained from the questions. A question is considered valid if its significance level is below 0.05 Suliyanto (2011) The results of the validity test are presented in the table below:

According to Suliyanto (2011) a normally distributed model is used to test whether the residual values are normally distributed or not Suliyanto (2011) In the regression model, it is said that there are no confounding variables or that they are normally distributed. If the results exceed significance, the Kolmogorov- Smirnov test is considered normal with a significance of 0.05 or 5%. The results of the normality test are presented in the table below:

Table 3. Hypothesis Test 1

Model	Coefficient	t	Sig.
(constant)	3,582	1,973	0.058
Digital payments	2,956	5,487	0,000
Internal Control	0.236	1,848	0.075
<i>R Square</i>			0.799
<i>Adjusted R Square</i>			0.785
F			55,785
Sig.			0,000

Source: Processed data, 2025

In the table, the Adjusted R² value is 0.785 or 78.5%, meaning that the digital payment and Internal Control variables have an influence on the Financial Report Preparation variable of up to 78.5% and the other 78.5% is influenced by other variables not mentioned in this study. From the results of the t-test (partial) it shows that the results of the digital payment variable are 0.000 < 0.05. This shows that digital payments have an effect on the preparation of financial reports and

the internal control variable is $0.075 > 0.05$. This shows that digital payments do not have an effect on the preparation of financial reports.

Regression equation 1: $Y = a + b_1X_1 + b_2X_2 + e$ means $Y = 3.582 + 2.956$ (Digital payment) + 0.236 (Internal control) + error.

Simultaneous ANOVA test $0.000 < 0.005$ digital payment and internal control variables have an effect on the financial report preparation variable.

Table 4. Hypothesis Test 2

Model	Coefficient	t	Sig.
(constant)	3,700	2,725	0.011
Digital payments	1,562	3,147	0.004
Internal Control	0.058	0.563	0.578
Digital Payment *HR Comp	2,250	4,801	0,000
Internal Control *HR Comp	2,240	4,892	0.070
<i>R Square</i>			0.892
<i>Adjusted R Square</i>			0.880
F			74,161
Sig.			0,000

Source: Processed data, 2025

In the table, the Adjusted R² value is 0.892 or 89.2%, meaning that the Digital Payment and Internal Control variables have an influence on the Financial Report Preparation variable of up to 0.892% and the other 89.2% is influenced by other variables not mentioned in this study.

From the results of the t-test (partial) shows the results of the digital payment variable $0.004 < 0.05$ This shows that digital payments have an effect on the preparation of financial reports and the internal control variable $0.578 > 0.05$ This shows that digital payments have no effect on the preparation of financial reports, and the moderating variable of HR competency $0.000 < 0.005$ shows that HR competency moderates the digital payment variable and internal control has an effect on the variable of Preparation of Financial Reports.

Regression equation 2: $Y = a + b_1X_1 + b_2X_2 + b_3X_1Z + b_4X_2Z + e$ means $Y = 3,700 + 1,562$ (Digital payment) + 0,058 (Internal Control) + 2,250 (Digital payment * HR Competence) + 2,240 (Internal control * HR Competence) + error

The simultaneous ANOVA test of $0.000 < 0.005$ shows that HR competency moderates the digital payment variable and internal control has an effect on the Financial Report Preparation variable.

Discussion

In Batik MSMEs in Tegal Regency, the results of data analysis show that the digital payment system has an effect on the preparation of financial reports of Batik MSMEs in Tegal Regency, Hypothesis (H₁) in this study is accepted. This shows that the results of this study are in line with research Widodo (2020) which states that digital payments have an effect on the quality of financial reports. The results of this study are in line with the TAM theory that this digital payment system makes it easier for MSMEs to conduct transactions and record them for accounting purposes. The use of a digital payment system can simplify transaction recording and increase the transparency of financial reports.

Hypothesis (H₂) in this study was rejected. This indicates that although the existence of an internal control system is considered important in supporting financial management, the quality of internal control may not be optimal in its implementation, one possibility being the lack of adequate supervision of each financial transaction.

At the Batik MSME in Tegal Regency

The hypothesis (H₃) in this study is accepted. This shows that HR competency in financial management is very important for producing accurate financial reports Nurmiati (2021) which means that mastery of accounting skills and the ability to operate digital applications greatly influences the quality of MSME financial reports Setiawan (2021).

The hypothesis (H₄) in this study is rejected. This shows that Lestari et al (2022) Every human resource is considered important in supporting financial management. These human resources may not be optimal in their application, because the better the competence of human resources, the more human resources will adapt to technological advances in the field of

accounting, so that they can produce high-quality and timely financial information and reports. This research is in line with research Ramadhani (2022).

5. CONCLUSION

Based on the research analysis that has been carried out, it can be concluded as follows: Based on the results of the simultaneous test of equation 1 of $0.000 < 0.005$, it states that the variables of digital payments and internal control have an effect on the variables of financial report preparation and the results of the simultaneous test of equation 2 of $0.000 < 0.005$ state that HR competency moderates the variables of digital payments and internal control on the influence of the variables of financial report preparation.

6. IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

Here are suggestions that can be given to future researchers, namely: There needs to be further research related to human resource competencies moderating the variables of digital payment and internal control on the influence of financial report preparation variables and considering other variables, Broaden the research subjects to obtain more optimal test results.

REFERENCES

- Ayem, S., & Nugroho, MM (2020). The Influence of Cooperative Accounting Understanding Based on Financial Accounting Standards for Entities without Public Accountability, Competency Level, and Internal Control System on the Quality of Financial Reports at the Republic of Indonesia Employee Cooperatives. *Permana: Journal of Taxation, Management, and Accounting*, 12(1), 27–40.
- Fauzi, A., Salwa, SA, Safitri, A., Agustusanti, EAC, & Fazriyah, SN (2023). Analysis of the Influence of the Use of Digital Payment Systems and Digital Marketing on Purchasing Decisions. *Journal of Economics and Management*, 2(1), 11–17.
- Gyamera, E., Abayaawien Atuilik, W., Eklemet, I., Adu-Twumwaah, D., Baba Issah, A., Alexander Tetteh, L., & Gagakuma, L. (2023). Examining the effect of financial

- accounting services on the financial performance of SMEs: The function of information technology as a moderator. *Cogent Business & Management*, 10(2), 2207880.
- Hendro, A. (2021). "The Effect of QRIS Use on the Quality of Financial Reports in Micro Enterprises". *Journal of Accounting and Finance*.
- Hasan, Z. (2021). *QRIS in the Indonesian Economy: Impact and Prospects*. *Indonesian Journal of Macroeconomics*, 22(4), 78-85.
- Kartika, Dewi. et al. (2023). *Analysis of the Application of Android Based Financial Applications in the Preparation of Financial Statements of Batik MSMEs in Talang, Tegal District*. Tegal International Conference on Applied Social Science & Humanities (TICASSH 2022) atlantis-press
- Khotmi, Herawati. and Amrul, Rusli (2017). Implementation of the *Accurate Application* in the Preparation of SME Financial Reports (Study on SME PT Tri Utami Jaya Mataram). *Valid Journal. Vol. 14 No. 1 : 61 - 70*
- Kartika, Dewi. et al. (2025). *Implementasi Sistem Akuntansi Accuratedalam Penyusunan Laporankeuangan (Studi Kasus Pada Umkmcah Angon Brebes) In The Preparation of Financial Statements of Batik MSMEs in Talang, Journal of Economic, Public, and Accounting (JEPA) ISSN Online 2623-2472Vol. 7 No. 2 April 2025, hlmn. 128-138*
- Lestari, NKD, Kusumawati, NPA, & Nuratama, IP (2022). The Role of Human Resource Competence in Moderating the Relationship between the Utilization of Information Technology and Internal Control Systems on the Quality of LPD Financial Reports in Penebel District. *Hita Accounting and Finance*, 3(1), 268–284.
- Nurmiati, S. (2021). "The Effect of Mastery of Accounting Skills and Accounting Software on the Quality of MSME Financial Reports." *Journal of Accounting and Finance* , 13(1), 34-45.
- Putri, PAY, & Endiana, IDM (2020). The influence of accounting information systems and internal control systems on company performance (case study of cooperatives in Payangan sub-district). *KRISNA: Accounting Research Collection*, 11(2), 179–189.
- Ramadhani, MN, Mawardi, MC, & Sari, AFK (2022). The Influence of Digital Accounting Fintech on MSME Reporting in Malang Regency. *E_Journal of Accounting Research*, 11(04).
- Sugiyono. (2018). *Quantitative, Qualitative and R&D Research Methods* . PT Alfabet.



- Sukoco, A., & Kurniawati, N. (2020). "Digital Payment System and Its Implementation in the Financial Sector". *Journal of Digital Economy*.
- Utilization of Accounting Information Systems on the Quality of Financial Reports with Human Resource Competence as a Moderating Variable (Empirical Study of the Kuantan Singingi Regency Government). *Juhanperak*, 2(1), 505–517.
- Widodo, S. (2020). "The Role of Information Technology in Accounting: Challenges and Opportunities". *Journal of Technology and Management*.