

## The Influence of Mobile Banking and Quick Response Code Indonesian Standard (QRIS) on the Financial Performance of Bank BPD DIY



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**ABSTRACT:** This research aims to determine the influence of Mobile Banking and Quick Response Code Indonesia Standard (QRIS) on the Financial Performance of Bank BPD DIY. The data in the research uses secondary data, where the data is data on the number of *mobile banking transactions*, the *Indonesian standard quick response code (QRIS)* and financial report statistics published by Bank BPD DIY for 44 months. The data analysis technique uses multiple linear regression analysis. The results of this research show that Mobile Banking and QRIS have a significant positive influence on the financial performance of Bank BPD DIY.

**KEYWORDS:** Mobile Banking, Quick Response Code Indonesia Standard (QRIS), Financial Performance, Bank BPD DIY.

### I. INTRODUCTION

The development of the banking sector has an important role in the economy, therefore banks continue to innovate in improving quality and services so as to improve financial performance. In general, a bank's financial performance is a description of the achievement of a goal obtained by the bank in the aspects of finance, marketing, and collection, distribution of funds, technology and human resources. The bank's financial performance is analyzed so that it can determine the condition of the company, this condition is reflected by work performance within a certain time. According to Hadiru (2018: 26) in Amali & Selvi (2021) financial performance is an analysis carried out to see the extent to which a company has implemented financial implementation rules properly and correctly.

The bank's financial performance greatly influences management in adopting strategies for the future period. Apart from that, financial performance is used as material for bank evaluation to carry out operational improvement activities in order to compete with other banks. According to Mulyadi (2007:2), financial performance is the periodic determination of the operational effectiveness of an organization and its employees based on previously established targets, standards and criteria.

Jumingan (2011:40) in Imamah & Safira (2021) performance shows something related to the bank's strengths and weaknesses. The existence of financial performance provides positive things for the bank, because it is a measure in determining the bank's success. Bank financial performance is based on customers' sense of trust in the credibility and existence of the bank. Bank financial performance is influenced by digital technology, according to developments, banks continue to innovate in developing digital-based payment systems. This influences people's patterns in using financial technology in banking, apart from that information technology has a positive impact on people in using time effectively and efficiently.

Digitalization of payment systems in banking, namely mobile banking and the Indonesian standard quick response code (QRIS). Mobile banking services and the Indonesian standard quick response code (QRIS) are innovations from advances in digital financial technology implemented by banks. Digital-based payment system innovation becomes a banking asset resource in meeting customer needs.

Mobile banking is a banking service provided to customers using telecommunications devices. Mobile banking provides information services, transfer services and payment services. This service can be accessed by customers using mobile banking 24 hours without having to go to the bank or ATM. This is of course practical and provides convenience to customers. Mobile banking according to Riswandi Budi Agus (2005:83) in (Fadlan & Dewantara, 2018) mobile banking is an innovative service offered by banks that allows users to carry out banking transactions via smartphone.

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## II. LITERATURE REVIEW

Bank financial performance is a description of the achievement of a goal obtained by the bank in the aspects of finance, marketing, collection, distribution of funds, technology and human resources. The bank's financial performance is analyzed so that it can determine the condition of the company, this condition is reflected by work performance within a certain time. According to Irham Fahmi (2011:2) in Faisal et al., (2017) financial performance is an analysis carried out to see the extent to which a company has implemented financial implementation rules properly and correctly.

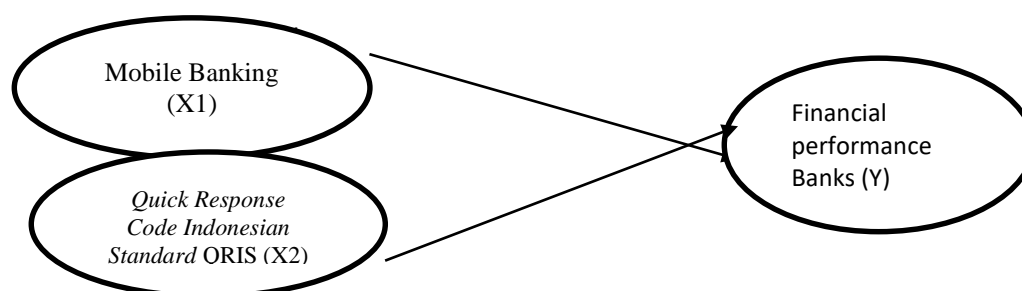
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### 1. Empirical Study

1. Mayasari, Y.M. Hidayat and G.E. Hafitri (2021) conducted research entitled The Effect of Internet Banking and Mobile Banking on Bank Financial Performance
2. Dahayu Bethari Widyandri and Nifsul Laila (2022) conducted research entitled Analysis of the Effect of Mobile Banking and Inclusive Finance on the Financial Performance of Sharia Banks in Indonesia for the 2014-2019 Period.
3. Ketut Tanti Kustina (2020) conducted research entitled The Effect of Implementing Branchless Banking and E-Banking on the Financial Performance of the Banking Sector in Indonesia. This research consists of dependent variables, namely branchless banking and e-banking, while the independent variable is the financial performance of the banking sector.
4. Andi Hasanuddin Samsu, Sutardjo Tui, Iqbal AR (2020) conducted research entitled Analysis of the Use of Internet Banking and Mobile Banking on the Financial Performance of PT Bank Negara Indonesia (PERSERO) TBK.
5. Astri Novianti (2020) conducted research entitled The Effect of Mobile Banking and Inclusive Finance on Financial Performance (Study of Banking Companies listed on the Indonesia Stock Exchange for the 2018-2020 Period).
6. Joshua Caturputra Thio (2021) conducted research entitled The Effect of Mobile Banking on the Financial Performance of Indonesian Banks. Case Study of Conventional Banking Companies Listed on the Indonesia Stock Exchange 2016 -2020.

### 2. Conceptual Framework



## III. RESEARCH METHODS

According to Sugiyono (2016: 7) quantitative methods are called traditional methods because this method has been used for a long time so that it has become a tradition as a method for research. This method is called a positivistic method because it is based on the philosophy of positivism. This method is a scientific or scientific method because it meets scientific principles, namely concrete, empirical, objective, measurable, rational and systematic. This method is also called discovery because with this method various new science and technology can be discovered. This method is called a quantitative method because the research data is in the form of numbers and analysis uses statistics.

The quantitative approach in this research uses a lot of numbers starting from data collection, data interpretation and the appearance of the results. Through this type of research, it is hoped that we can test the influence of mobile banking and the Indonesian standard quick response code (QRIS) on the financial performance of Bank BPD DIY.

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The object that is the place or location of the research is Bank BPD DIY which is located on Jl. Student Army No.7, Bumijo, Jetis District, Yogyakarta City, and Yogyakarta Special Region.

According to Sugiyono (2010:193) secondary data is data that does not directly provide data to data collectors. Secondary data collection techniques from this research are data on the number of mobile banking transactions, the Indonesian standard quick response code (QRIS) and financial report statistics published by Bank BPD DIY to support this research.

In this research, the data collection method used is documentation techniques. Documentation techniques are data collection techniques by studying document notes. In this research, the document in question is a financial report that has been published by Bank BPD DIY, the data used is secondary data, namely the financial report for 2020 - 2023 Bank BPD DIY which was published via its official website, namely (bpddiy.co.id).

Classic Assumption Test, Normality Test, Multicollinearity Test, Heteroscedasticity Test, Auto Correlation Test, Hypothesis Test, T Test, Model Test, Goodness of Fit Test.

## IV. DISCUSSION

In this research, it is known that the Ajusted  $R^2$  value of the mobile banking (X1) and QRIS (X2) variables contributes to Financial Performance (Y) by 52.8% with the remaining 47.2% being influenced by other variables not addressed in this research.

The model in this study meets the requirements for model feasibility, the results in this study show that the Mobile Banking (X1) and QRIS (X2) variables simultaneously influence the Financial Performance (Y1) of Bank BPD DIY.

The results of this study state that the variables Mobile Banking (X1) and QRIS (X2) have an effect on Financial Performance (Y) with significance values of 0.002 and 0.000 < 0.05 respectively and t counts of (3.268) and ( 2.321) > t Table (1.683).

In Hypothesis 1 it is stated that Mobile Banking has an effect on the Financial Performance of Bank BPD DIY. This indicates that the number of registrations and users is increasing, indicating an increase in the number of mobile banking transactions, which also improves financial performance.

In Hypothesis 2 it is stated that QRIS has an effect on the Financial Performance of Bank BPD DIY. This indicates that increasing use of the QRIS payment system will also further improve financial performance.

### Goodness of Fit Test

The model feasibility test in this research uses the F test. According to Ghozali (2011), the goodness of fit test is carried out to measure the accuracy of the sample regression function in estimating the actual value statistically. The F test shows whether all the independent variables included in the regression model have a joint influence on the dependent variable. Testing was carried out by comparing F-count and F-table at a significance level of 5% (0.05). The basis for drawing conclusions on this test is as follows:

a. Based on the significance value (Sig.) of the Anova output.

- 1) If the sig value. < 0.05, then the research model meets the model feasibility requirements
- 2) If the sig value. > 0.05 then the research model does not meet the model feasibility requirements

b. Based on a comparison of the calculated F value with Table F.

- 1) If F-count > F-table then the research model meets the model feasibility requirements.
- 2) If F-count < F-table then the research model is not meet the model eligibility requirements.

The formula for finding f-table = F (k; n-k) = F (2; (44-2=42)) = 19.5

**Table V 9. Goodness of Fit Test Results**

	F	Sig.
Regression	31,779	0,000

**Source:** Data Processing Results with SPSS

Based on the anova output results table above, it can be seen that F Calculation (31.779) > F Table (19.5) and the significance value (0.000) < 0.05 so that this research model meets the model feasibility requirements. The results of this research show that the variables mobile banking (X1) and QRIS (X2) simultaneously influence financial performance (Y).

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### Coefficient of Determination Test (R<sup>2</sup>)

The coefficient of determination essentially measures how far the model's ability to explain variations in the dependent variable. The value of the coefficient of determination is between zero and one. A small R<sup>2</sup> value means that the ability of the independent variables to explain variations in the dependent variable is very limited. A value close to one means the variables independent variables provide almost all the information needed to predict variations in the dependent variable.

**Table V 10. Coefficient of Determination Test Results**

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842 <sup>a</sup>	.630	.518	.08293

a. Predictors: (Constant), Qris, Mobile Banking

b. Dependent Variable: Kinerja Keuangan

Source: Data Processing Results with SPSS

Based on the table of R<sup>2</sup> determination test results above, it can be seen that the Adjusted R Square value is 0.518, which means that the variables Mbanking (X<sub>1</sub>) and Qris (X<sub>2</sub>) contribute to Financial Performance (Y) by 51.8% with the remaining 48.2% being influenced by other variables not raised in this research.

**Table 2 Descriptive Statistics of Financial Performance Variables (Y)**

**Table V 3. Descriptive Statistics of Financial Performance**

#### Financial performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.62	1	2.3	2.3	2.3
	.63	5	11.4	11.4	13.6
	.64	11	25.0	25.0	38.6
	.65	8	18.2	18.2	56.8
	.66	4	9.1	9.1	65.9
	.67	1	2.3	2.3	68.2
	.79	1	2.3	2.3	70.5
	.80	4	9.1	9.1	79.5
	.81	4	9.1	9.1	88.6
	.82	3	6.8	6.8	95.5
	.84	1	2.3	2.3	97.7
	.86	1	2.3	2.3	100.0
	Total	44	100.0	100.0	

Source: Data Processing Results with SPSS

Based on the table of descriptive statistical test results for the financial performance variable (Y) above, it can be seen that the highest ratio frequency occurred at a ratio of 0.64 which occurred 11 times with a percentage of 25%.

### Multiple Linear Regression Analysis

Regression analysis is used to measure the strength of the relationship between two or more variables, and also shows the direction of the relationship between the dependent and independent variables. Multiple linear regression analysis is a linear relationship between two or more independent variables (X) and the dependent variable (Y). The multiple linear regression analysis test was carried out at a significance level of 5% ( $\alpha = 0.05$ ). The test was carried out with the SPSS program and the regression equation was obtained as below:

$$Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2$$

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Where :

$\alpha$	: Constant
$\beta_1, \beta_2, \beta_3$	: Regresion
Y	: Financial Performance
X1	: <i>Mobile banking</i>
X2	: QRIS

**Table V 8 Multiple Linear Regression Test Results**

Variable	B	Sig.
(Constant)	4,144	0,000
<i>Mobile banking</i> (X1)	0,312	0,001
QRIS (X2)	0,254	0,000

Source: SPSS Data Processing Results

Based on the table of linear regression analysis test results above, the following equation can be obtained:

$$Y_1 = 4,144 + 0,312 X1 + 0,254 X2$$

With the following explanation:

### 1. Financial performance (Y) has a constant value ( $\alpha$ ) of 4.144.

Financial performance (Y1) will be a constant value of 4.144, the amount of which is not influenced by the mobile banking (X1) and QRIS (X2) variables.

### 2. Mobile banking (X1) has a positive coefficient of 0.312

at a significance level of  $0.001 < 0.05$ , which means that every increase in the mobile banking variable (X1) will result in an increase in financial performance (Y) of 0.312. Conversely, every decrease in Mobile banking (X1) will result in a decrease in financial performance (Y) of 0.312.

### 3. QRIS (X2) has a positive coefficient of 0.254

at a significance level of  $0.000 < 0.05$ , which means that every increase in the QRIS variable (X2) will result in an increase in financial performance (Y) of 0.254. Conversely, every decrease in the QRIS variable (X2) will result in a decrease in the financial performance variable (Y) of 0.254.

### t test

The t statistic is a test of the influence of an independent variable partially on the dependent variable. In the t test analysis it is carried out at degrees of freedom  $(n-k-1)$  = where n is the number of observations and k is the number of independent variables at a significance level = 5%, so that the t-value is known table with the formula for finding t-table =  $t(\alpha; n-k-1) = (0.05; 44 - 2 - 1) = 0.05; 41 = 1.683$ . Acceptance or rejection of the hypothesis is carried out according to the following criteria:

#### a. Based on Significance Value (Sig.)

1. If the significant value is  $> 0.05$  then partially the independent variable does not have a significant influence on the dependent variable
2. If the significant value is  $< 0.05$  then partially the independent variable has a significant influence on the dependent variable.

#### b. Based on the comparison of the calculated t value with t table

1. If  $t\text{-count} > t\text{-table}$  then the research model meets the model feasibility requirements.
2. If  $t\text{-count} < t\text{-table}$  then the research model does not meet the model feasibility requirements

**Table V 11 Results of the t statistical test**

Variable	T	Sig.
<i>Mobile banking</i> (X1)	3,178	0,001
QRIS (X2)	2,141	0,000

Source: SPSS Data Processing Results

### 1. Hypothesis Test 1

Based on the t test results table above, it can be seen that t Calculate Mbanking (X1) is  $(3.178) > t$  Table  $(1.683)$  with a significance

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value of  $(0.001) < 0.05$ , so the results of this research indicate that the mobile banking variable (X1) has a significant effect partial effect on financial performance (Y) so it can be concluded that Hypothesis 1 (H1) is accepted. Thus, mobile banking (X1) has a significant positive effect on the financial performance (Y) of Bank BPD DIY.

### **2. Hypothesis Test 2**

Based on the t test results table above, it can be seen that t Calculated QRIS (X2) is  $(2.141) > t$  Table  $(1.683)$  with a significance value of  $(0.000) < 0.05$ , so the results of this study indicate that the variable Qris (X2) has a partial effect on Financial Performance (Y) so it can be concluded that Hypothesis 2 (H2) is accepted. Thus, QRIS (X2) influences the financial performance (Y) of Bank BPD DIY.

### **The Influence of Mobile Banking on Financial Performance**

In Hypothesis 1 it is stated that Mobile Banking has an effect on the Financial Performance of Bank BPD DIY. This indicates that the number of registrations and users is increasing, indicating an increase in the number of mobile banking transactions, which also improves financial performance.

### **The Effect of QRIS on Financial Performance**

In Hypothesis 2 it is stated that QRIS has an effect on the Financial Performance of Bank BPD DIY. This indicates that increasing use of the QRIS payment system will also further improve financial performance.

## **CONCLUSIONS**

This research was conducted to see whether mobile banking and QRIS had an effect on the financial performance of Bank BPD DIY. Based on the introduction, theoretical study, and processing and discussion carried out in the previous chapter, the following conclusions can be drawn:

1. Mobile Banking has a significant positive effect on the Financial Performance of Bank BPD DIY.
2. Quick Response Indonesian Standard (QRIS) has a significant positive effect on the Financial Performance of Bank BPD DIY.

## **LIMITATIONS**

Based on the Adjusted R Square value of 0.518, it shows that the Mobile Banking (X1) and QRIS (X2) variables contribute to Financial Performance (Y) of 51.8%. So there are still 48.2% of other variables that influence Financial Performance (Y) which were not examined in this research.

## **SUGGESTIONS**

Based on the research results that have been presented, several suggestions can be given as follows:

1. Company management and related parties, especially Bank BPD DIY, should continue to improve mobile banking and QRIS so that they can further improve financial performance.
2. For future researchers, with this research it is hoped that future researchers can carry out further research related to other variables not raised in this research which influence financial performance.

## **REFERENCES**

- 1) Amali, L. M., & Selvi, S. (2021). The Influence of E-Banking on the Financial Performance of Banks Listed on the Indonesian Stock Exchange. *MANOR: JOURNAL OF MANAGEMENT AND ORGANIZATION REVIEW*, 3(1), 36–47.
- 2) Fadlan, A., & Dewantara, R. Y. (2018). The Influence of Perceived Convenience and Perceived Usefulness on the Use of Mobile Banking (Study of Students Using Mobile Banking at Brawijaya University). *Journal of Business Administration (JAB)*, 62(1), 82–89.
- 3) Faisal, A., Samben, R., & Pattisahusiwa, S. (2017). Financial Performance Analysis. *Performance: Journal of Economics and Management*, 14(1), 6–15.
- 4) Ghozali, I. (2011). *Multivariate Analysis Application with SPSS Program*.
- 5) Gumilang, R., & Azib. (2019). the Effect of Automated Teller Machine (ATM), Internet Banking and Mobile Banking Transactions on Fee Based Income. *Management Proceedings*, 516–521.
- 7) Hafitri, G. E. (2021). *The Influence of Internet Banking and Mobile Banking on Financial Performance*. Indonesian Education University.
- 8) Imamah, N., & Safira, D. A. (2021). The influence of mobile banking on bank profitability on the Indonesian stock exchange. *Profit: Journal of Business Administration*, 15(1), 95–103.

## The Influence of Mobile Banking and Quick Response Code Indonesian Standard (QRIS) on the Financial Performance of Bank BPD DIY

- 9) Jumingan. (2011). Financial Report Analyst. Literary Earth. Jakarta.
- 10) Kustina, K. T., & Sugiarto, Y. W. . (2020). The Effect of Implementing Branchless Banking and E-Banking on the Financial Performance of the Banking Sector. *Scientific Journal of Accounting and Business*, 5(1), 116–128.
- 11) Mayasari, M., Hidayat, Y. ., & Hafitri, G. . (2021). The Influence of Internet Banking and Mobile Banking on Bank Financial Performance. *Strategic: Journal of Business Management Education*, 21(1), 55–72.
- 12) Mulyadi. (2007a). Cost Accounting (5th Edition).
- 13) Mulyadi. (2007b). Balanced Scorecard. Salemba Four. Jakarta.
- 14) Mundhir, M. (2020). Procedures and Use of Mobile Banking in Customer Services at PT Bank Negara Indonesia (Persero) Tbk Krian Sub-Branch Office. (Doctoral dissertation, STIE Perbanas Surabaya).
- 15) Mundhir, M. (2020). Procedures and Use of Mobile Banking in Customer Services at PT Bank Negara Indonesia (Persero) Tbk Krian Sub-Branch Office. (Doctoral dissertation, STIE Perbanas Surabaya).
- 16) Noveratama, D. (2021). Analysis of the Indonesian Standard Quick Response Payment System (QRIS) and the Financial Management Performance of MSMEs in Tarakan City.
- 17) Novianti, A., Apip, M., & Badriah, E. (2022a). The Influence of Mobile Banking and Inclusive Finance on Financial Performance (Study of Banking Companies Listed on the Indonesian Stock Exchange for the 2018-2020 Period).
- 18) Novianti, A., Apip, M., & Badriah, E. (2022b). THE EFFECT OF MOBILE BANKING AND INCLUSIVE FINANCE ON FINANCIAL PERFORMANCE (Study of Banking Companies Listed on the Indonesian Stock Exchange for the 2018-2020 Period).
- 19) Amali, L. M., & Selvi, S. (2021). The Influence of E-Banking on the Financial Performance of Banks Listed on the Indonesian Stock Exchange. *MANOR: JOURNAL OF MANAGEMENT AND ORGANIZATION REVIEW*, 3(1), 36–47.
- 20) Fadlan, A., & Dewantara, R. Y. (2018). The Influence of Perceived Convenience and Perceived Usefulness on the Use of Mobile Banking (Study of Students Using Mobile Banking at Brawijaya University). *Journal of Business Administration (JAB)*, 62(1), 82–89.
- 21) Faisal, A., Samben, R., & Pattisahusiwa, S. (2017). Financial Performance Analysis. *Performance: Journal of Economics and Management*, 14(1), 6–15.
- 22) Ghozali, I. (2011). Multivariate Analysis Application with SPSS Program.
- 23) Gumilang, R., & Azib. (2019). the Effect of Automated Teller Machine (ATM), Internet Banking and Mobile Banking Transactions on Fee Based Income. *Management Proceedings*, 516–521.
- 24) Hafitri, G. E. (2021). The Influence of Internet Banking and Mobile Banking on Financial Performance. Indonesian Education University.
- 25) Imamah, N., & Safira, D. A. (2021). Pengaruh mobile banking terhadap profitabilitas bank di bursa efek Indonesia. *Profit: Jurnal Administrasi Bisnis*, 15(1), 95–103.
- 26) Jumingan. (2011). *Analisis Laporan Keuangan*. Bumi Aksara. Jakarta.



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