

Analysis Of Digital Economic Transformation In Improving nta The Economy Of Home Industries In Kota Pari Village

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***Abstract.** The purpose of this study was to analyze digital economic transformation towards increasing the income of household entrepreneurs (Case Study: Kota Pari Village, Pantai Cermin District). The specific target in this research is to analyze digital economic transformation towards increasing the income of household business actors in Kota Pari Village, Pantai Cermin District). The hypothesis in this study is E-commerce, E-Money, E-Wallet (Electronic Wallet) simultaneously and partially affect the income of household business actors in Kota Pari Village, Pantai Cermin District. Method which will be used in this study are: Quantitative, where the Quantitative Method in this study relates to data that describes digital economic estimates for increasing the income of home industry entrepreneurs in Kota Pari Village, Pantai Cermin District). The data analysis used is: Quantitative Analysis consisting of Multiple Linear Regression. The results of the study stated that E-commerce significantly affected income, while e-money and e-wallet did not significantly affect the income of business people in Kota Pari Village.*

Keywords: E-commerce, E-Money, E-wallet (Electronic Wallet), Income

INTRODUCTION

Entering the industrial revolution 4.0, digital technology is one of the main capital needed by industry players to develop their business lines. The presence of industry 4.0 is also proof that currently industrial development cannot be separated from technological developments. The development of the industrial sector along with technological developments can certainly have a positive impact on a country, one of which is a positive impact on improving the country's economy. With the existence of digital technology, a country can push its economy towards a digital economy. Along with technological

developments, the old digital economy era has finally entered the new digital economy era, marked by the existence of mobile technology, unlimited internet access, (Van Ark, 2016).

The digital economy sectors that are experiencing rapid growth are e-commerce and financial technology (fintech). E-commerce is a way of buying and offering or trading an item, doing administration, processing data online via the internet (Deshmukh, 2019); (Khan, Abdul Gaffar.,, 2016). While fintech complied (Leong, K., Sung, A., , 2018) is a combination of financial, technology, management and innovation disciplines that can improve financial services using technology. Currently the world including Indonesia is still facing the COVID-19 Pandemic. The impact of the COVID-19 Pandemic has resulted in many companies closing in various business sectors. The digital economy plays a central role during the COVID-19 Pandemic, especially in economic activities. The digital economy has resilience, so that it can survive and avoid economic contraction and face heavy economic pressures during a recession and can continue to move forward making a real contribution to economic growth. The following is data on the development of E-Commerce in North Sumatra Province:

Table 1. Comparison of the Percentage of E-Commerce Businesses in North Sumatra Province Year 2020 and 2021

Province	Dec 2020	June 2021
North Sumatra	19,14	19.89

Source: BPS 2022

Likewise with Kota Pari Village, Pantai Cermin District, which is one of the villages directly adjacent to the Malacca Strait, making Kota Pari Village a marine tourism destination, besides serving a beautiful beach atmosphere, it also serves seafood and seafood. In addition to the beach tourism object, Kota Pari Village also offers ecotourism in the form of honey guava plantations and coconut pandan nurseries which have a distinctive taste and distinctive pandan fragrance. Kota Pari Village has several marine tourism objects such as Pondok Indah Beach, Woong Rame Beach, Mutiara 88 Beach, Kuala Dewi Indah Beach, Woong Pulo Beach, Perjuangan Beach and Dua Rasa Beach, where each beach offers a different natural atmosphere.

Based on the geographical conditions of Kota Pari Village, this research relates to digital economic transformation towards increasing people's income in Kota Pari Village,

Pantai Cermin District. This is because the culture, tourism, and creative economy sector is one of the sectors that makes a lot of use of digital technology in product innovation. Through *e-commerce platforms* many products of local Indonesian culture and creativity are being traded. Not only that, digital technology is also used to build a digital platform that can be used to promote Indonesian tourism. E-commerce applications are an example of innovation and development in the cultural, tourism and creative economy sectors in the current digital economy era..

LITERATURE REVIEWS

Digital Economy

The digital economy was first introduced (Tapscott, Don., 1997). According to him, the digital economy is a social phenomenon that affects the economic system, where this phenomenon has the characteristics of an intelligence space, including information, various access to information instruments, information capacity and information processing. The components of the digital economy that were identified for the first time were the ICT industry, e-commerce activities, digital distribution of goods and services.

Meanwhile, the concept of the digital economy according to (Zimmermann, Hans-Dieter., 2000), is a concept that is often used to explain the global impact on the rapid development of Information and Communication Technology which has an impact on socio-economic conditions. This concept becomes a view of the interaction between the development of innovation and technological progress that has an impact on the macro and micro economy. Affected sectors include goods and services when developing, producing, selling or supplying them depending on the extent to which digital technology can reach.

In the digital economy, companies offer their services according to certain services according to certain specific requests or special offers, offers have been characterized as personal and individual or private offers. (Bloch, M., Pigneur, Y and Sergev, A., 2006). In order for the digital economy to provide benefits to society and business actors, an appropriate regulatory framework is needed to create a competitive and balanced market climate in developing ideas to create products and innovations. The feature of the digital economy is conducting global trade and cutting many intermediary chains. It is hoped that there will be no barrier to entry so as to provide flexibility for market participation.

Financial Technology (Fintech)

The development of digital technology is something that inevitably happens and cannot be avoided. The industrial revolution in the 18th century in England always led to changes in the industrial order that affected almost every field, both negatively and positively. The next industry to be disrupted is the financial services industry, which is known as Financial Technology (Fintech) or financial technology (Fintech). (Abdul Hadi Ilman, et al, 2019) Fintech itself is a global momentum in many countries, including Indonesia. This is not surprising considering that Indonesia is expected to become one of the largest digital economy markets in Southeast Asia by 2025. With a growing middle income group, potential demographic factors (a large portion of the productive age population), technology user population increasingly digital, and the number of internet users which is expected to reach 200 million in 2020, makes the opportunity for the growth of the Fintech industry in Indonesia to become increasingly prospective (OJK, 2020).

Fintech emerged because the community could not be served by the traditional financial industry where banks were bound by strict rules and the limitations of the banking industry in serving people in certain areas. Communities are looking for funding alternatives to traditional financial industry services. The community needs a more democratic and transparent financing alternative where financial service costs are efficient and reach the wider community (Sianturi Tygor Franky D, 2018).

The current development of fintech has produced its own industry, some of whose products even intersect directly with the commodities of various conventional financial institutions that have been known to the public so far. In addition, there are also fintech products that collaborate with products from conventional financial institutions, such as banking, investment and insurance companies. Fintech has become a phenomenon that affects the world's legal system, because fintech relies on the internet of things that is able to operate across existing jurisdictional boundaries. (Nuzul Rahmayani, 2018).

Income of Household Entrepreneurs

Income is the amount that farmers receive from their hard work (Soekartawi, 1990). The net income of an industrial business is the compensation received by the craftsmen's family from the use of production factors in the form of capital, labor wages and the selling price of the product itself (Mariani, 2013). In the production of home industry products, physical production is influenced by several factors of production such as labor and capital. If one of the factors of production is still more than the other factors of production, it means that the highest efficiency has not been achieved, then farmers can increase the use of production factors that are still rational.

Income (income) is the total receipt of a person or a household during a certain period. According to classical economists, income is determined by the ability of the factors of production to produce goods and services. The greater the ability of the factors of production to produce goods and services, the greater the income created by Yustiawati (2014). According to Hadi and Hastuti (2015) stated that: "Revenue is an increase in an organization's assets or a decrease in liabilities during an accounting period, mainly derived from operating assets. Revenue is also said to be income arising from the company which is known by different names such as sales, fees, interest, dividends, royalties and rent.

RESEARCH METHOD(S)

Quantitative research method is a research method using research data in the form of numbers and analysis using statistics. In collecting data using research instruments, data analysis is quantitative in nature with the aim of testing the established hypotheses. In quantitative research, it is experimental/survey when the problem is clear. The sequence in the quantitative research process begins rather than building hypotheses from theory, collecting facts or data, using data to test hypotheses and finally drawing conclusions from the results of data processing (Kurniawan, 2014).

The concept of this research can be seen in the following scheme:

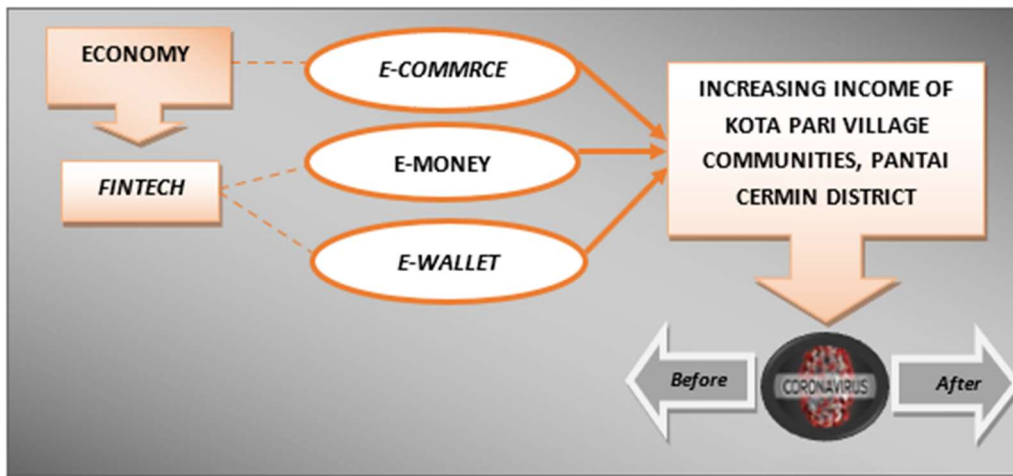


Figure 1. Research Concept Image

Multiple Linear Regression Data Analysis Methods

Hypothesis testing was carried out using multiple regression models, to see how much influence the independent variables had on the dependent variable. In multiple regression there is one dependent variable and more than one independent variable. The following is the multiple linear regression formula:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Information:

- Y = Clothing Merchant Income
- a = Constant
- b₁, b₂, b₃ = Regression coefficient
- x₁ = E-Commerce
- x₂ = E-Money
- x₃ = E-Wallet
- e = Error Term

The hypothesis in this study was tested using the t test and F test.

1. Partial Significant Test

According to Ghozali (2001:98) "t tester is used to show how far the influence of one independent variable on the dependent variable. This test is used to test the effect of the independent variables, namely Clothing Traders' Capital and Clothing Traders' Business Credit on the dependent variable, namely Clothing Traders' Income. How to do the t test (Ghozali, 2005:85) is as follows:

If the t-count probability value is $< 5\%$, then the hypothesis H_a is accepted.

If the t-count probability value is $> 5\%$, then the hypothesis H_o is accepted.

2. Simultaneous Significant Test (F-test)

According to Ghozali (2011: 98) "The F statistical test basically shows whether all the independent variables referred to in the model have a joint effect on the dependent variable. The F test is carried out by using a significant level and hypothesis analysis.

3. Determination Test (R²- test)

The coefficient of determination (R² or Adjusted R Square) is performed to detect how far the model's ability to explain the variation of the dependent variable. R² or the determination test is an important measure in regression, because it can inform whether or not the estimated regression model is good or in other words the number can measure how close the estimated regression line is to the actual data. The value of the coefficient of determination (R²) reflects how much the variation of the dependent variable Y can be explained by the independent variable X. If the value of the coefficient of determination is 0 (R²=0), it means that the variation of Y cannot be explained by X at all. Meanwhile, if R² = 1, it means that the variation of Y as a whole can be explained by X. In other words, if R² = 1, then all observation points are right on the regression line. Thus the good or bad of a regression equation is determined by its R² which has a value between zero and one.

The conceptual framework of the research using multiple linear regression analysis can be shown in the figure below.

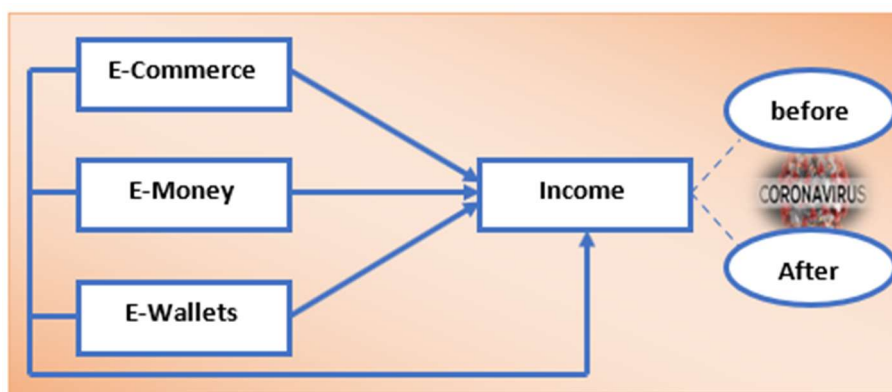


Figure 2. Multiple Linear Regression Analysis Conceptual Framework

FINDINGS AND DUSCUSSION

Multiple Linear Regression Research Results

1. Classical Assumption Testing

The classical assumption test aims to find out whether the results of the regression estimation carried out are truly feasible or not. The data obtained from the results of the questionnaire will then be tested with the classic assumption test as follows:

a. Data Normality Test

The normality test aims to find out if the confounding or residual variables have a normal distribution.

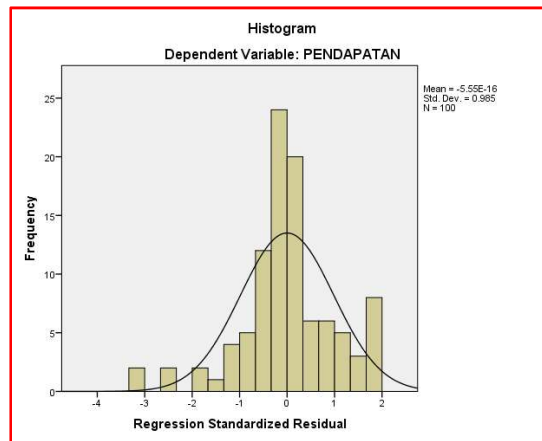


Figure 3. Histogram Normality Test

The results of the data normality test show that the data is normally distributed, where the histogram has lines forming a bell and has a balanced convexity in the middle.

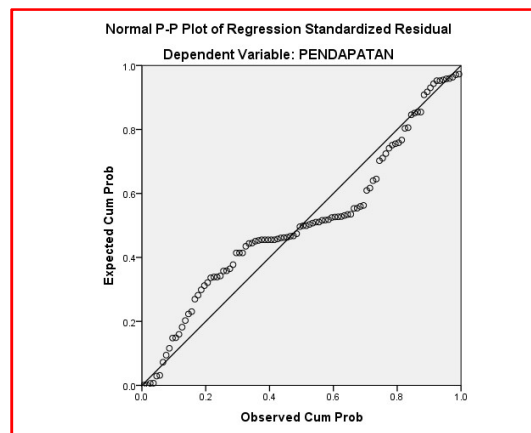


Figure 4. PP Plot Normality Test

Then for the results of testing the normality of the data using the PP Plot picture, it can be seen that the data points for the price, promotion and consumer satisfaction variables are spread around the diagonal line so that the data is normally distributed. From the two pictures above, it can be concluded that after the data normality test was carried out, the data for the variables of product quality, service quality and purchasing decisions were normally distributed.

b. Multicollinearity Test

The multicollinearity test aims to test whether in the regression model a correlation is found between the independent (independent) variables. This test was carried out by looking at the tolerance value and variance inflation factor (VIF) from the results of the analysis using SPSS. If the tolerance value is > 0.10 or $VIF < 10$, it is concluded that there is no multicollinearity.

The multicollinearity test of the questionnaire results that have been distributed to the respondents can be seen in the following table:

Table 2. Multicollinearity Test

Model		Collinearity Statistics	
		tolerance	VIF
1	(Constant)		
	E-COMMERCE	.663	1,508
	E-MONEY	.979	1,022
	E-WALLET	.656	1,525
a. Dependent Variable: INCOME			

The results of the multicollinearity test show that the tolerance and VIF values in the table above indicate that all variables in this study do not experience multicollinearity. This is indicated by the tolerance value which far exceeds 0.1 and the VIF of the variable which is less than 10.

c. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from one residual observation to another. A good regression model is one that does not have heteroscedasticity. In this study the method used to detect heteroscedasticity symptoms is by looking at the plot graph

between the predicted value of the dependent variable (ZPRED) and its residual (SRESID).

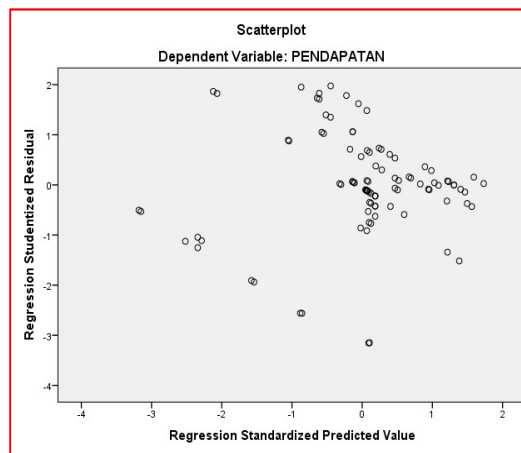


Figure 5. Scatterplot Heteroscedasticity Test

The scatterplot image shows that the resulting points spread randomly and do not form a particular pattern or trend line. The picture above also shows that the distribution of data is around the zero point. The results of this test indicate that the regression model is free from heteroscedasticity problems, in other words: the variables to be tested in this study are homoscedastic in nature.

d. Results of Multiple Linear Regression Analysis

The data analysis technique used in this study is multiple linear regression with the equation formula:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \hat{\epsilon}$$

From processing the questionnaire data using the SPSS 23 Software application tool, the results are obtained as in the table below:

Table 3. Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	std. Error	Betas		
1 (Constant)	1,452	5,085		.286	.776
E-COMMERCE	.880	.126	.657	6,996	.000
E-MONEY	-.087	.151	-.044	-.576	.566
E-WALLET	.028	.173	.015	.160	.873

Source: SPSS Processing Results 23

Multiple linear regression equations obtained results as follows :

$$Y = 1.452 + 0.880X1 - 0.087X2 + 0.028X3 + \hat{\epsilon}$$

1. If everything in the independent variables is considered constant then the value of income (Y) increases 1.452%.
2. If e-commerce (X1) increases by 1% then revenue will increase by 0.880%
3. If e-money (X2) increases by 1% then revenue will decrease by 0.087%
4. If e-wallet (X3) increases by 1% then revenue will increase by 0.028%.

e. Fitment Test (Test Goodness Of Fit)

1) Simultaneous Significant Test (F Test)

The F test examines the simultaneous effect of the independent variables on the dependent variable. Testing using (confidence interval) or hypothesis testing level of 5%. The hypothesis for simultaneous testing is:

1. Ho = means that there is no significant effect simultaneously between the independent variables and the dependent variable.
2. Ha = means that there is a significant effect simultaneously between the independent variable and the dependent variable.

The test criteria are:

- Accept Ho (reject Hi), if Fcount < Ftable or sig F > α5%
- Reject Ho (accept Hi), if Fcount > Ftable or sig F < α5%

From processing the questionnaire data using the SPSS 23 Software application tool, the results are obtained as in the table below:

Table 4. Simultaneous Significant Test (F-test)

ANOVA^a

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	1902.104	3	634,035	25,048	.000 ^b
	residual	2430056	96	25,313		
	Total	4332.160	99			

a. Dependent Variable: INCOME

b. Predictors: (Constant), E-WALLET, E-MONEY, E-COMMERCE

Based on the table above, it is known that the probability value is sig 0.000 < α0.05, then Ha is accepted and H0 is rejected. F test results show e-commerce, e-money and e-wallets jointly significant influence income.

2) Partial Significance Test (t test)

The t-test basically shows how far the influence of one independent variable individually explains the variation in the related variables with a significant level of 5%. The hypothesis for partial testing is:

1. Ho = means that there is no significant effect partially between the independent variables and the dependent variable.
2. Ha = means that there is a significant influence partially between the independent variable and the dependent variable.

The test criteria are:

- Accept Ho (reject Hi), if $F_{count} < F_{table}$ or $sig F > \alpha 5\%$
- Reject Ho (accept Hi), when $F_{count} > F_{table}$ or $sig F < \alpha 5\%$

From processing the questionnaire data using the SPSS 23 Software application tool, the results are obtained as in the table below:

Table 5. Partial Significance Test (t-test)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	std. Error	Betas		
1 (Constant)	1,452	5,085		.286	.776
E-COMMERCE	.880	.126	.657	6,996	.000
E-MONEY	-.087	.151	-.044	-.576	.566
E-WALLET	.028	.173	.015	.160	.873

Source: SPSS Processing Results 23

Partially known results of the t test:

1. The tcount value of e-commerce is $6.996 > 1.660$ ($n-2 = 100 - 3 = 97\alpha 5\%$) then the sig value is $0.000 < 0.05$ so that Ha is accepted and H0 is rejected, meaning that e-commerce significantly affects income.
2. The e-money tcount value is $0.044 < 1.660$ ($n-2 = 100 - 3 = 97\alpha 5\%$) then the sig value is $0.566 > 0.05$ so that H0 is accepted and Ha is rejected, meaning that e-money does not significantly affect income.
3. The e-wallet tcount value is $0.044 < 1.660$ ($n-2 = 100 - 3 = 97\alpha 5\%$) then the sig value is $0.160 > 0.05$ so that H0 is accepted and Ha is rejected, meaning that e-wallets do not significantly affect income.

3) Determination Coefficient Test (R²)

Analysis of the coefficient of determination is used to determine the percentage of the variation in the influence of the independent variable on the dependent variable. From processing the questionnaire data using the SPSS 23 Software application tool, the results are obtained as in the table below:

Table 6. Determination Coefficient Test (R²)

Summary model b										
Model	R	R Square	Adjusted R Square	std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	FChange	df ₁	df ₂	Sig. FChange	
1	.663a	.439	.422	5.03121	.439	25,048	3	96	.000	1824

a. Predictors: (Constant), E-WALLET, E-MONEY, E-COMMERCE

b. Dependent Variable: INCOME

In multiple linear regression the determination test is more precise by using the value in the Adjusted R Square column of 0.422. To see the influence of the independent variable on the dependent variable by calculating the coefficient of determination = $R^2 \times 100\%$ so that the coefficient of determination is 42.2%. This means that variations in income can be explained by 42.2% by e-commerce, e-money, and e-wallets, while the remaining 57.8% is influenced by other variables not examined in this study.

f. Discussion of Multiple Linear Regression

This study shows that the results of the t test (partial test) are for e-commerce t-count values of $6.996 > 1.660$ ($n-3 = 100 - 3 = 97$ α5%) then the sig value is $0.000 < 0.05$ so that H_a is accepted and H_0 is rejected, meaning that e-commerce significantly affects income. It can be interpreted that the higher the influence of the use of e-commerce in business activities, the higher the income generated by business actors in Kota Pari Village. In this case it is supported by previous research according to (Joseph., 2022) that the application of e-commerce has a significant positive effect on increasing the income of Micro, Small and Medium Enterprises in North Bekasi District. Likewise according (Leni., 2022) that the e-commerce variable (X) has a significant effect on the income variable (Y) of Medium Enterprises assisted by RKB BNI Padang City. Also supported by research (Martha., 2021) the use of e-commerce

during the pandemic has been proven to be able to increase Medium Enterprises income during the covid pandemic. By promoting and selling products on the internet, everyone can see the products they have, making it easier to introduce products to potential customers. It is possible that business actors can sell their products to the global market. Ordering via online makes it easy for consumers to find information about the products they have. The use of e-commerce also provides other benefits, namely it can increase business efficiency because businesses are no longer limited by space and time. In addition, e-commerce causes costs to be controlled and can ultimately increase the income of business actors, especially in Kota Pari Village.

Meanwhile the test results e-money of $0.044 < 1.660$ ($n-2 = 100 - 3 = 97 \alpha 5\%$) then a sig value of $0.566 > 0.05$ so that H_0 is accepted and H_a is rejected, meaning that e-money does not significantly affect income and e-wallet is $0.044 < 1.660$ ($n-2 = 100 - 3 = 97 \alpha 5\%$) then the sig value is $0.160 > 0.05$ so that H_0 is accepted and H_a is rejected, meaning that e-wallets do not significantly affect income. Based on the results of the t-test which stated that the e-money and e-wallet variables did not significantly affect the income of business actors in Kota Pari Village, this was supported by the results of researchers' observations. Government Commercial Banks, Private Commercial Banks, and Rural Banks (BPR) do not exist, making it difficult for consumers to top-up. This is what makes business people not interested in making payments using e-money or e-wallet.

CONCLUSION

Based on the results of the Multiple Linear Regression Method, it can be concluded that: E-commerce significantly influences income, while e-money and e-wallet do not significantly affect the income of business actors in Kota Pari Village and the results of the determination/relationship of income to the variables studied are low.

RECOMMENDATIONS

1. The next researchers, in order to add other variables to improve the relationship to the determination of the income variable, so that the results can be more effective.
2. Readers can make this research a reference material so that it will increase the researchers' citations.

3. The local government can propose adding the nearest bank facilities and infrastructure so that the community will make it easier to run the digitalized payment system.

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REFERENCES

- Abdul Hadi Iman, et al. (2019). The Role of Financial Technology for Developing Country Economies. JEBI Journal, Vol 4 Number 1. Faculty of Economics and Business UTS.
- Bloch, M., Pigneur, Y and Sergev, A. (2006). On the road of electronic-Commerce- A Business Value Framework, gaining competitive advantage and some research issues. University of Laussane working papers. Laussane Switzerland.
- Deshmukh, US (2019). Impact of E-Business on Business Association. International Journal of Engineering and Management Research, Volume- 9, Issue- 6 (December 2019) <https://doi.org/10.31033/ijemr.9.6.2>.
- Khan, Abdul Gafar., (2016). Electronic Commerce: A Study on Benefits and Challenges in an Emerging Economy. Global Journal of Management and Business Research: B Economics and Commerce, volume 16 Issue 1 Version 1.0 Year 2016, Global Journals Inc. (USA). .

- Leni., GW (2022). The Effect of E-Commerce on Increasing Income of Micro, Small and Medium Enterprises in Padang City. *Journal of Technology and Business Information Systems*, Vol. 4 No. January 1 .
- Leong, K., Sung, A., . (2018). FinTech (Financial Technology): What is It and How to Use Technologies to Create Business Value in the Fintech Way?. . *International Journal of Innovation, Management and Technology*, Vol. 9, No. 2, Apr. 2018.
- Martha., RP (2021). The Influence of E-Commerce on the Income of MSMEs Partnering with Gojek During the Covid-19 Pandemic. *Accounting and Management*, Vol. 16 No. 2.
- Nuzul Rahmayani. (2018). Review of Consumer Protection Law Regarding Financial Technology-Based Companies in Indonesia. *Pagaruyuang Law Journal*, Vol 2 No 1, page 25.
- OJK.* (2020, June 10). Retrieved from <https://konsumen.ojk.go.id/MinisiteDPLK/images/upload/201807131451262.%20Fintech.pdf>,
- Van Ark, BE (2016). *Navigating the new digital economy: driving digital growth and productivity from installation to deployment.*
- Yusuf., M. (2022). Effect of Electronic Commerce (E-Commerce) on Increasing Income in MSMEs in North Bekasi District. *STEI Journal of Accounting*, Vol.05 No.01.
- Sianturi Tygor Franky D. (2018). *Financial Technology: issue of Strategy, Implication, Policy and Review of ICT Law and Regulations.* page 2.
- Tapscott, Don. (1997). *The digital economy : promise and peril in the age of networked intelligence.* New York: McGraw-Hill. ISBN 0-07-063342-8.
- Zimmermann, Hans-Dieter. (2000). *Understanding the Digital Economy: Challengers for New Business Models.* AMCIS 2000 Proceedings., (p. Paper 402).