

## DIGITALIZATION OF TRADE IN TRADITIONAL MARKETS: CAUSAL RELATIONSHIP OF DIGITAL SKILLS, ECONOMIC LITERACY, AND FINANCIAL TECHNOLOGY

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### ABSTRACT

*This study aims to examine the causal relationship between digital skills, economic literacy, and financial technology on digital trading in traditional markets. During the COVID-19 pandemic, the role of digital trade is very important, so this has also begun to be applied to traditional markets in various regions, one of the areas that implements digital trade in this traditional market is Malang City. This study uses quantitative methods with the type of explanatory research. The population in this study were 369 traders who are members of the people's market website. Samples were taken using the Slovin technique which resulted in a sample of 192 traders. The results showed that there was a significant positive effect of digital skills, economic literacy, and financial technology to the digitization of trade in traditional markets. The findings of this study indicate that digital trading in traditional markets will be better if traders have good digital skills, economic literacy, and financial technology.*

*Keywords:* digitalization, digital trade, traditional market

### INTRODUCTION

Micro, Small and Medium Enterprises or commonly referred to as MSMEs are one of the pillars of the Indonesian economy. 90 percent of the Indonesian economy is supported by MSMEs (Novita et al., 2020), so that the government must pay more attention to MSME actors so that the business they are involved in can still exist and survive. The Ministry of Cooperatives and SMEs revealed that the number of MSME actors in Indonesia has reached 99.99% of the total business actors, where this has contributed to the economy through employment of 97% and contributed to the national income or GDP of 57.24 % (OJK, 2020). This fact has meant that more than half of state revenue has been contributed by the MSME sector. In carrying out these trading activities, MSME actors certainly need a place to accommodate their business activities.

The market is one of the right objects in accommodating MSME actors to peddle the goods or services they produce. Some types of markets that are often used by the community are traditional markets and modern markets. With the development of the times, now the existence of modern markets is also a threat to traditional markets, so the existence of traditional markets has now begun to shift (Nika et al., 2013). However, traditional markets are still inherent in people's daily lives because the prices offered are more affordable than modern markets. The existence of traditional markets is important from the point of view of various economic actors. For consumers, traditional markets are a place to meet their daily needs, while for producers and small and medium-sized business actors, the market is a place to accommodate their business activities. In addition to being a forum for consumers and also business actors, the existence of traditional markets can also be used as a place for bargaining between sellers and buyers (Widaningsih & Ariyanti, 2018). In addition to being a forum for small and medium business actors, the existence of traditional markets can also increase Regional Original Income, reduce unemployment through employment, and become a source of income for the people in the area (Sutantio, 2016).

The rapid development of technology has in fact brought a new revolution in the world of trade, where digitalization in the trade sector is also growing. The emergence of the COVID-19 pandemic that has hit the world since the beginning of 2020 has indirectly forced business actors to develop their business through digital trading by changing trade transactions that were originally offline to online (Kala'lembang, 2020). The increasing number of cases during the COVID-19 pandemic has finally prompted the government to immediately start implementing online trading, especially for small and medium-sized businesses, including traders in traditional markets. The existence of this program from the government is then followed up to be implemented by the local government, so that the digitalization of trade in traditional markets begins to take effect.

In the face of the new economic era which is currently reflected in digital trade, of course it is not immediately carried out. However, there are various preparations that must be made by various parties, one of which is from the traditional market traders themselves. Referring to Don Tapscott's theory (in a book review conducted by TCI Management Consultant, 2014) has revealed that there are 12 characteristics in shaping the existence of a digital economy, including 1) knowledge, 2) digitization, 3) virtualization, 4) molecularization, 5) integration, 6) disintermediation, 7) convergence, 8) innovation, 9) presumption, 10) immediacy, 11) globalization, and 12) discordance. Based on this, Tapscott (in the review book TCI Management Consultant, 2014) has revealed that knowledge is fundamental in the formation of the digital economy. Where in this case every business actor is required to have knowledge capital before entering the digital trading era. In his book, he also reveals that the knowledge possessed will be able to improve skills. When entering the era of digitalization as it is today, business actors are required to have digital skills in order to enter the era of digital trade.

Digital skills are an ability possessed by a person in operating all digital devices, various applications for communication activities, and using networks to access various information (UNESCO, 2018). This shows that before someone is able to improve their digital skills, that person must at least have digital knowledge or literacy first. In other words, digital literacy is a skill that must be

possessed to be able to survive in the digital era as it is today (Eshet, 2004). Previous research has stated that digital economic literacy is one of the right strategies in encouraging MSMEs in the digital economy era (Erlanitasari et al., 2020). Therefore, this study draws the hypothesis that there is a positive and significant effect of digital skills on digital trading.

Still related to the theory expressed by Tapscott (in a book review conducted by TCI Management Consultant, 2014) who revealed that the basis for the formation of the digital economy is knowledge, then this illustrates that knowledge in the economic field is also needed so that small and medium business actors can carry out digital trading activities. Thus, the existence of economic knowledge possessed by business actors should be able to influence the electronic commerce carried out. It has also been revealed by previous research that economic knowledge or economic literacy has a positive but not significant impact on digitization carried out by MSME actors (Wardani et al., 2020). This shows that the effect of economic literacy on digitalization does not have a significant impact, because based on the research it was found that the economic literacy of small and medium enterprises is still relatively low. This shows a discrepancy with the existing theory, because based on the previously discussed theory, there should be a significant influence of knowledge on digitization. Therefore, this study tries to see whether there is a significant positive effect of knowledge, mainly economic knowledge or economic literacy on digital trade.

Apart from knowledge and skills, it is important for traders to understand modern financial transactions that are now accommodated through financial technology. Bank Indonesia Regulation, (2017) Number 19/12/PBI/2017 defines financial technology as "the use of financial system technology that produces new products, services, technology, and/or business models and can have an impact on monetary stability, financial system stability, efficiency, smoothness, security and system reliability. payment". Financial technology is one form of virtualization that has been revealed by Tapscott, because the payment system offered by financial technology has brought a revolution, where previously transactions could only be done offline and via ATM transfer, but now transactions can be done online. Thus, financial technology is present by bringing convenience to the public in conducting financial transaction activities. In the world of digital commerce, Financial technology has become an integral part of digital trade transactions. Therefore, it is important for traditional market traders to be able to understand the use of financial technology. Previous research has also revealed that the existence of financial technology is able to contribute to the development of Small, Micro, and Medium Enterprises (MSMEs) (Nurcahya & Dewi, 2019). Therefore, this study draws the hypothesis that there is a significant positive effect of financial technology on digital trade.

## **TYPES OF GST**

The purpose of this study was to examine the causal relationship between the independent variable and the dependent variable, in this case the causal relationship between digital skills, economic literacy, and financial technology on digital trade in traditional markets in Malang City. The subjects of this study were traditional market traders in Malang City who participated in the digital trading program of the Malang city government in collaboration with Bank Rakyat Indonesia (BRI) through the people's market website. This study uses quantitative methods with the type of explanatory research. Sources of data used are primary data and secondary data. Primary data is taken directly from respondents through questionnaire data collection. The questionnaire in this study used a Likert scale of 1-5 with a score of 5 strongly agree, score 4 agree, score 3 disagree, score 2 disagree, and score 1 strongly disagree. Meanwhile, secondary data is taken from website data for each market that provides information on traders.

The population in this study consisted of 369 traditional market traders in the city of Malang who are members of the market website. Samples were taken using the Slovin formula to produce a sample of 192 traders. Sampling using probability sampling with proportional random sampling technique. The data analysis technique used is multiple linear regression analysis.

## **RESULTS AND DISCUSSION**

Before conducting the research, the questions in the research instrument have been tested first through validity and reliability tests. From a total of 26 questions in the study, it showed that all questions had a significance value of less than 0.05 ( $<0.05$ ), which means that the 26 questions were declared valid. Furthermore, the reliability test conducted also shows that the Cronbach Alpha value of the four variables has shown a value of more than 0.70 ( $>0.70$ ), meaning that the instrument in this study is reliable. The purpose of conducting validity and reliability tests in this study is to test the accuracy of the instruments used to measure variables in the study. Temporarily,

Classical assumption test is used in research by testing normality, heteroscedasticity, and multicollinearity in research data. From the results of the normality test, it has been shown that the data is normally distributed. This is evidenced by the value of asymptotic significance (2-tailed) in the One-Sample Kolmogorov-Smirnov Test table is greater than 0.05 (Priyatno, 2017) revealed that if the data significance value is greater than 0.05 ( $>0.05$ ), it can be concluded that the data is normally distributed. Based on this, the value of asymptotic significance (2-tailed) in this study showed a value of  $0.200 > 0.05$ , so the data was normally distributed.

**Table 1. Normality Test**

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		192
Normal Parameters, b	mean	.0000000
	Std. Deviation	2.62436367
Most Extreme Differences	Absolute	.043
	Positive	.043
	negative	-.040
Test Statistics		.043
asymp. Sig. (2-tailed)		.200c,d

The heteroscedasticity test in this study aims to see if there is a difference in variance from the observations made. The heteroscedasticity test in this study used the Spearman-Rho test. (Priyatno, 2017) revealed that the problem of heteroscedasticity will not occur if the significance value is more than 0.05 (> 0.05).

**Table 2. Spearman-Rho . Heteroscedasticity Test**

			Correlations			
			Digital Skills	Economic Literacy	Financial Technology	Unstandardized Residual
Spearman's rho	Digital Skills	Correlation Coefficient	1,000	.680**	.690**	-.117
		Sig. (2-tailed)	.	.000	.000	.105
		N	192	192	192	192
	Economic Literacy	Correlation Coefficient	.680**	1,000	.759**	-.067
		Sig. (2-tailed)	.000	.	.000	.356
		N	192	192	192	192
	Financial Technology	Correlation Coefficient	.690**	.759**	1,000	-.093
		Sig. (2-tailed)	.000	.000	.	.200
		N	192	192	192	192
	Unstandardized Residual	Correlation Coefficient	-.117	-.067	-.093	1,000
		Sig. (2-tailed)	.105	.356	.200	.
		N	192	192	192	192

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Based on the table, it can be concluded that there is no heteroscedasticity problem, as evidenced by the significance value of the three variables being more than 0.05 (sig > 0.05). Then the multicollinearity test was also used in this study to see whether there was intercorrelation or collinearity in the independent variables. Multicollinearity does not occur when the tolerance value is greater than 0.10 or the VIF value is less than 10. Based on this, the table below has proven that multicollinearity does not occur.

**Table 3. Multicollinearity Test**

		Coefficients <sup>a</sup>						
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-3.093	2,023		-1,529	.128		
	Digital Skills	.497	.053	.537	9,371	.000	.374	2,676
	Economic Literacy	.115	.104	.063	1.111	.268	.382	2.618
	Financial Technology	.357	.070	.337	5.061	.000	.277	3,611

a. Dependent Variable: Digital Trading

Hypothesis testing is done by using t-test to see the partial effect of the independent variable on the dependent variable. If the significance value shows a number less than 0.05 then the alternative hypothesis (Ha) is accepted and Ho is rejected. Then to see how much influence the independent variable has on the dependent variable, it can be seen through the R-Square value table through the coefficient of determination test. The greater the value of R-Square, the greater the influence of the independent variable on the dependent variable, while the smaller the value of R-Square, the smaller the influence of the independent variable on the dependent variable.

The following table represents how the influence of the digital skills variable on digital trading. Through the following table, it can be concluded that there is a significant positive effect of the digital skill variable on the digital trading variable. This is evidenced by a positive beta value with a significance level of  $0.000 < 0.05$ . Therefore, the hypothesis that digital skills have a significant positive effect on digital trade ( $H_a$ ) is accepted.

**Table 4. Hypothesis Testing 1**

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-4,228	1.309		-3,230	.001
Digital Skills	,781	0.036	,844	21,704	,000

a. Dependent Variable: Digital Trading

**Table 5. Coefficient of Determination Test (R-Square) Hypothesis 1**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,844a	,713	,711	2,935

a. Predictors: (Constant), Digital Skill

The table above shows that the influence of digital skills on digital trading is strong with an R-Square value of 0.713. It can be stated that digital skills have a strong influence of 71.3 percent on electronic commerce. Based on this, before entering digital trading, traditional market traders must have good digital skills first. Good digital skills will have an impact on the better digital trading carried out by traders. Don Tapscott (in a book review by(TCI Management Consultant, 2014)has revealed the characteristics of the digital economy, one of which is knowledge. The knowledge possessed by a person will form a skill, where this skill will later function to face the new economic era. Therefore, the knowledge that forms digital skills is very important to deal with technological developments that are currently increasingly modern. The results of this study are in line with(Erlanitasari et al., 2020)who revealed that one of the strategies that can be used to encourage small and medium enterprises to compete in the digital economy era is by increasing digital economic literacy. With increased knowledge of the digital economy, it is hoped that small and medium business actors, including market traders, will be able to improve their digital skills so that they can compete and run digital trade well.

Furthermore, digital trading can also be measured through the economic literacy of market traders. This is evidenced by the results of research showing that there is a significant positive effect of the economic literacy variable on digital trade. The positive and significant effect is shown in table 6 below, where the beta value is positive while the significance value is  $0.000 < 0.05$ . Thus, it can be concluded that there is a significant positive effect of economic literacy on digital trade, meaning that  $H_a$  is accepted.

**Table 6. Hypothesis Testing 2**

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-7,864	2,417		-3.254	.001
Literacy Economy	1,266	,096	,692	13,195	,000

a. Dependent Variable: Digital Trading

**Table 7. Test the Coefficient of Determination of Hypothesis 2**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,692a	,478	,475	3,955

a. Predictors: (Constant), Literacy Economy

Based on the table above, it can be concluded that the effect of economic literacy on electronic commerce is 47.8 percent. This means that this variable is quite strong in influencing digital trading variables. Besides being able to improve skills, knowledge has also become a driving force in the formation of the digital economy (Tapscott in a book review conducted by ).TCI Management Consultant, 2014). This shows how important knowledge or literacy is to support electronic commerce. Economic literacy or economic knowledge is one of the important things in encouraging digital trade. The existence of good economic literacy will lead to better digital trade. This research contradicts the research conducted by(Wardani et al., 2020)which states that economic literacy has a positive but not significant effect on digitalization in small and medium enterprises. The study revealed that this happened

because the economic literacy of business actors was still relatively low. This research is contrary to research, because this research shows that economic literacy has a significant positive effect on digital trading of traders in traditional markets. This shows that the literacy of traditional market traders is good enough to be able to carry out digital trade. Not only that, the good economic literacy possessed by traders also does not escape the education provided by the local government through training before entering the era of digital trade. This was also expressed by (Wardani et al., 2020) that to improve economic literacy can be done by attending education in formal institutions, through daily experience, or training held by the government. This is in line with (Hamalik, 2000) who revealed that the purpose of the training was to improve skills and knowledge. Therefore, with sufficient training provided by the government, the economic knowledge of traders can increase, so this is what then encourages good digital trade.

The development of technology today also makes innovations in financial institutions that increasingly provide convenience in virtual transaction activities. Don Tapscott (in a book review by TCI Management Consultant, 2014) has also revealed that one of the characteristics of the digital economy is the existence of virtualization, meaning that everything that was originally done by interaction or physical form, now everything can be done only by using software. Therefore, the financial system has also undergone a revolution, which originally used a debit or credit card, now it can be used only by using software or applications. Therefore, the existence of financial technology has become a new color in people's lives.

This study has shown a relationship between financial technology variables and digital trade. This study results that there is a significant positive effect between financial technology on electronic commerce. This is shown by table 8 where the beta value is positive with a significance value of 0.000 < 0.05. This means that financial technology has a positive and significant impact on digital trade, meaning that it is acceptable.

**Table 8. Hypothesis Test 3**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	9,045	,819		11,046	,000
Financial Technology	,853	0.045	,807	18,808	,000

a. Dependent Variable: Digital Trading

**Table 9. Coefficient of Determination Test (R-Square) Hypothesis 3**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,807a	,651	,649	3,237

a. Predictors: (Constant), Financial Technology

The table shows that financial technology has a strong influence on digital trade. It can be seen that financial technology is able to influence digital trade by 65.1 percent, meaning that this variable has an influence greater than 50 percent. Based on the two tables above, it can also be concluded that the better the understanding and knowledge of traditional market traders regarding financial technology, the better their digital trade will be. Financial technology is one form of virtualization characteristics that has been conveyed by Don Tapscott (in a review book conducted by TCI Management Consultant, 2014), this shows that financial technology can be one of the foundations of the formation of the digital economy. This is in line with research conducted by (Nurchahya & Dewi, 2019) who revealed that financial technology also contributes to the development of small and medium enterprises. This shows that the convenience and practicality offered by financial technology can be utilized by traditional market traders who carry out digital trading activities, so that the business they are engaged in can still survive and maintain the continuity of the business. The existence of financial technology also makes market traders able to adapt to new things. This of course must be done by traders, because if traders are not able to adapt or other terms, namely molecularization, then these business actors can disappear by themselves due to changing times (Tapscott in a review book conducted by TCI Management Consultant, 2014).

**CONCLUSION**

Based on the presentation of the results of research that has been carried out to see the causal relationship between digital skills, economic literacy, and financial technology on digital trade in traditional markets in Malang City, it can be concluded that there is a significant positive effect of each variable digital skills, economic literacy, and financial technology on digital trade in traditional markets in Malang City. This means that the better the digital skills possessed by traditional market traders, this will also lead to better digital trading. While the higher the economic literacy possessed by market traders, the better digital trading will be carried out. This research also shows that the economic literacy possessed by market traders is quite good, so that it can have a positive influence on digital trading. Likewise, with the better understanding of market traders about the use of financial technology, this will also encourage better digital trading carried out by traders.

This research has limitations, where the subjects studied are only traditional market traders who follow the people's market website, but in fact there are still a lot of market traders who follow digital trading on a wider scale, namely through the pasar.id website which houses various traditional markets in Indonesia. East Java Province. Therefore, the researcher hopes that further research will examine it on a wider scale. In addition, the use of a combination of methods will also increase the accuracy of the study. Therefore, further researchers can add a combination of methods such as interviews and direct observation.

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