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The Influence of Financial Technology on the Performance of MSMEs in Alang-Alang Lebar District with E-Commerce as a Moderating Variable

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ABSTRACT
This research aims to analyze the influence of Financial Technology (Fintech) on the performance of MSMEs with E-Commerce as a Moderating Variable. This study examines the impact of Fintech on MSMEs in Alang-Alang Lebar District, using quantitative methods to collect questionnaires. The test utilized a purposive sampling strategy to select 100 MSME actors who had previously used digital payment systems, utilizing surveys and the t-statistic, ensuring the validity of freely dispersed data without large sample sizes or normal distribution assumptions. Data were analyzed using statistical techniques to evaluate the relationships between Fintech adoption, MSME performance, and the moderating effect of E-Commerce. The results indicate that Fintech significantly influences MSME performance, as evidenced by a statistical T value of 15.772 at a significance level of 5%. The P value of 0.000, which is less than 0.05, supports this conclusion, demonstrating that Fintech adoption enhances MSME efficiency, financial management, and operational productivity. However, when testing the moderating effect of E-Commerce on the relationship between Fintech and MSME performance, the findings reveal an insignificant effect. The statistical T value of 0.909, smaller than the threshold of 1.96, and a P value of 0.363, greater than 0.05, indicate that E-Commerce does not strengthen or significantly alter the relationship between Fintech and MSME performance. The research explores the impact of Fintech adoption on MSME growth, highlighting the limited role of E-Commerce, offering valuable insights for optimizing business performance and competitiveness.

Keywords: E-Commerce, Financial Technology, MSME Performance, Moderating Variable

Introduction

Technological advances have changed the financial sector in Indonesia, with the emergence of a variety of new financial services that reflect the dynamics of modern business. Financial sector, Fintech in particular, denotes collaboration between the financial and technology industries, creating new products and services. MSMEs play an important role in Indonesia's economic development, including job creation. According to Law no. 20 of 2008, MSMEs have a contribution large in labor absorption [1]. Together with a number of national and local government initiatives that promote their sustainability, MSMEs promote economic growth, equitable income distribution, and the creation of informal jobs. Accounting is the exchange of financial information about a business. Accounting uses symbols, just like a common language, to communicate information. There are rules governing how these symbols are used [2].

In 2021, the number of MSMEs in Indonesia will reach 64.2 million with a contribution of 61.7% to GDP or IDR 8,573.89 trillion. MSMEs absorb 97% of the workforce, around 117 million workers, and remain resilient when the global economy is sluggish. They help level the people's economy and increase the country's foreign exchange through national and international markets. Fintech makes it easier financing and financial arrangements for MSMEs. Fintech enhances business and commerce via the internet, helping MSMEs overcome capital limitations [3]. South Sumatra has great potential in developing MSMEs with products such as woven cloth and regional specialties. In 2023, the number of MSMEs in South Sumatra increased significantly to 860,000

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units. Alang-Alang Lebar District too experienced an increase in MSMEs from 1,771 in 2021 to 19,800 in 2023 (Office Survey Cooperatives and MSMEs, 2023). The MSME industry in South Sumatra Province has a lot of room to grow. This is evident from the range of goods produced by MSMEs in this province, including batik, songket fabric, weaved cloth, and regional specialties. The city of Palembang has a lot of economic potential, including the MSME sector which is an important sector in driving economic growth. This region has potential natural resources such as fishery, agricultural and mining products which can be used as raw materials for MSME production. Including in Alang-Alang Lebar District, MSMEs experience an increase every year. In 2021 the number of MSMEs in this sub-district will be 1,771, in 2022 it will increase to 2,685 units, and in 2023 it will again increase rapidly to 19,800. The following is a table of the number of MSMEs in Palembang City in the last three years.

Table 1. Number of MSMEs in Alang-Alang Lebar District

Year	Number of MSMEs
2021	1,771
2022	2,685
2023	19,800

One proof of technological developments that have succeeded in changing a running market system has influenced behavior in accessing various information and electronic service functions, namely Financial Technology (fintech). In recent years, fintech has become one of the fastest growing industries in Indonesia. Based on OJK data on the Fintech sector in Indonesia, fintech companies in Indonesia are divided into several sectors, namely: Payment, Peer to Peer Lending, Aggregator, Crowdfunding, Personal Financial Planning and others (others). Of the six sectors available, data was obtained that 42.22% was dominated by the Payment sector, 17.78% from the Peer to Peer Lending (P2P) sector, 12.59% from the Aggregator sector, 8.15% from the Crowdfunding and Personal Financial sectors Planning, and the remaining 11.11% from other fintech sectors. There are two types of fintech that are currently widely used by MSME players, namely Payment Getaway and Peer to Peer Lending (P2P). According to Bank Indonesia, the existence of Payment Getaway fintech can help MSMEs become more productive and increase sales. Likewise, the Peer to Peer Lending (P2P) type of fintech is able to offer effective funding solutions for MSMEs to obtain funding with simple and fast lending procedures. The following profile of fintech developments is presented in the image below.

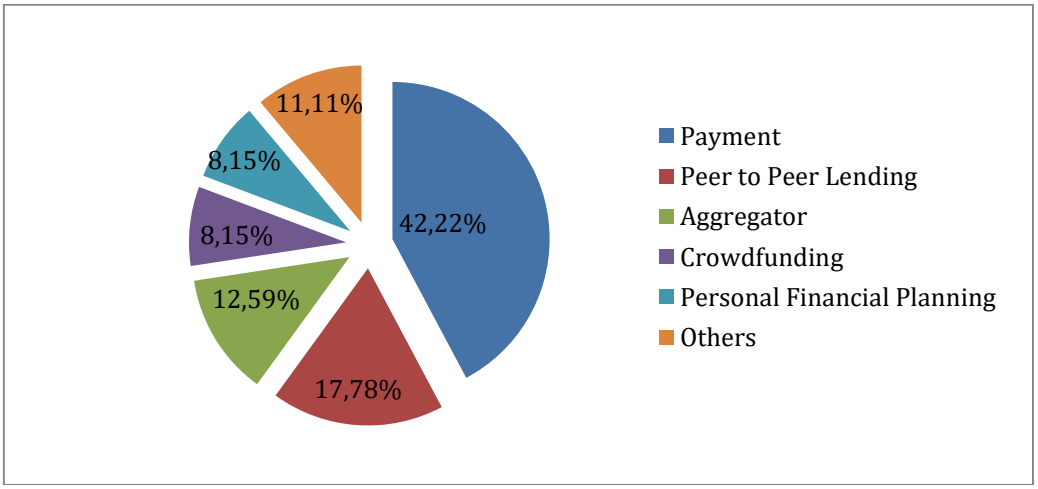

Figure 1. Profile of Fintech Development in Indonesia

The Fintech phenomenon in Indonesia is currently a warning for traditional institutions in the financial sector in fulfilling their duties and job prospects in the future. It can be seen that the ease of service and costs provided by Financial Technology are more economical compared to existing institutional services. This is also accompanied by the millennial era which is quick to accept existing changes and is supported by regulations that are difficult to change from traditional financial institutions which are able to encourage fintech. Furthermore, fintech is a new business model that genuinely benefits society rather than a financial service. The four essential elements of the business plan—goals, operational procedures, conditions, and measurements—must be eliminated in order to construct the business strategy model [4].

Due to recent technology advancements, producers of mobile applications have been forced to innovate by producing a variety of fintech products. Beginning with the various forms of fintech used in the finance industry, including peer-to-peer lending, supply chain finance, and crowdfunding [5]. Peer to Peer Lending (P2P) is a financial technology platform that can facilitate businesspeople's ability to borrow funds and generate business capital in the age of technology 4.0. The lending and borrowing industry, often known as peer-to-peer lending, is one of the many fintech business models that are now operating in Indonesia, and it is expanding quickly. Peer-to-peer lending, or P2P lending, offers basic loan services, including the ability to submit loan conditions and procedures. Since loan applications are submitted online using the internet, borrowers can do so from any location without needing to visit a P2P lending facility [6].

E-Commerce has also become a growing global trend in Indonesia, including in Alang-Alang Lebar District. E-Commerce is believed to be able to increase MSME sales because consumers currently tend to choose a more convenient transaction process and reduce community activities through online shopping and transactions. Moreover, with adequate information technology, it is certain that MSME actors will find it easier to implement digital marketing at a lower cost [6]. E-Commerce, an abbreviation of Electronic Commerce, refers to trading activities carried out online via the internet. E-Commerce has experienced rapid development in recent years, and has changed the way people buy and sell their service products. E-Commerce can expand the reach and accessibility of MSMEs, thereby improving their business performance and growth. In addition, E-Commerce can also help MSMEs face increasingly fierce competition in the market [7]. Through this study, it can be seen that the phenomenon of technology can make it easier for people to carry out marketing with any support from the internet. Therefore, the world recognizes a new concept in the business world, namely online. One of the advantages that can be felt by using the internet is being able to communicate with consumers and being able to send data and information quickly between the parties involved. Additionally, because the growth of MSMEs in Palembang City as a whole continues to face a number of issues and falls short of expectations, this study takes the MSMEs in Alang-Alang Lebar District as its object. Fintech and e-commerce services provided by MSME actors in the Alang-Alang Lebar District are currently being used to solve these issues. According to the aforementioned description, the question posed by this study is if Fintech has an impact on MSMEs' performance in the Alang-Alang Lebar District. Does e-commerce get impacted by fintech? Does Alang-Alang Lebar District's MSMEs' performance get impacted by e-commerce? Does Fintech have an impact on MSMEs' performance when used as a moderator in e-commerce?

With the help of technology and the internet, people can undertake any kind of marketing more easily. As a result, a new idea in the commercial sector—online—is acknowledged by everyone. The ability to engage with customers and swiftly transfer data and information between the parties is one advantage of making use of the internet. Aside from that, this study uses MSME items in the Alang-Alang Lebar District because Palembang City MSMEs' overall development is still beset by a number of issues and is not yet entirely up to par. The problem that is still an obstacle

in developing MSME businesses is that they are still hampered by the use of technology with Fintech and E-Commerce services carried out by MSME players in Alang-Alang Lebar District.

Service Dominant Logic (S-D Logic) is a theory that occurs due to economic and marketing activities which is the view that a service is a fundamental goal. A Service Dominant Logic implies value defined as co-created by consumers who have become one unit in the output [8]. In this theory, money, goods, organizations and business services are intermediaries or additional institutions in the process of exchanging services/services and services are exchanged with other services. If associated with the performance of MSMEs, this theory is a business model that provides services to consumers with a fundamental goal where if the service to consumers is supported by ease in transaction activities, it can lead to productivity of the performance of the MSME. If associated with the performance of MSMEs, this theory is a business model that provides services to consumers with a fundamental goal where if the service to consumers is supported by ease in transaction activities, it can lead to productivity of the performance of the MSME.

Productive companies that are held by individuals or individual business entities and that satisfy the requirements for micro enterprises set forth in this law—namely, having a maximum worth of Rp50 million or yearly sales of Rp300 million—are known as micro enterprises. Additionally, the author's research on this criterion revealed that the Alang-Alang Lebar District had the highest number of MSMEs. The process of creating something with intrinsic value through time, effort, financial, psychological, and social risks in order to achieve personal fulfillment and earn a living is the essence of entrepreneurship [9].

Table 2. Criteria for MSMEs in Alang-Alang Lebar District

No.	Business	Asset Criteria	Turnover Criteria
1	Micro Business	Max. 50 Million	Max. 300 Million
2	Small Business	> 50 – 100 Million	> 300 Million – 2.5 Billion
3	Medium Business	100 Million – 1 Billion	> 2.5 – 50 Billion

Law Number 20 of 2008 is the law in Indonesia that addresses MSMEs. According to this regulation, MSMEs are defined as small businesses that are owned and run by a single person or a small group of persons who have a specific level of wealth and income. In order to create a national economy founded on an equitable economic democracy, MSMEs seek to expand and improve their companies. Growing the technological knowledge of Micro, Small, and Medium-Sized Enterprises (MSMEs) is crucial and critical for predicting the future of the economy, particularly for fortifying the framework of the national economy. A national economic crisis like the one we are currently experiencing has a significant impact on political, economic, and national stability. This has an effect on large business operations, which are becoming more and more depressed, while MSMEs and cooperatives are still able to continue operating comparatively.

Performance is what influences how much they contribute to the organization. Improving performance for both individuals and groups is the focus of attention in efforts to improve organizational performance, as stated by [10]. Performance is the outcome of efforts that are directly tied to the organization's strategic goals, customer happiness, and financial contribution. Performance is a key factor in determining whether a firm is successful or fails [11]. MSME performance refers to the ability of Micro, Small and Medium Enterprises to achieve their business goals and generate profits. Basically, in running a business that is starting to develop, a large business must of course have a high level of profit, where at the formation or establishment stage, a business is very likely not to make high profits, because of the investment and costs used to establish or start a business. However, various ways that can be done to produce and improve good

MSME performance are by providing training and assistance for MSME actors in various aspects, such as management, marketing, and technology. In addition, by developing various funding programs to help MSMEs gain access to adequate funding sources.

The National Digital Research Center (NDRC) in Dublin, Ireland, USA, defines fintech as a financial services innovation or financial services innovation coupled with contemporary technology. Fintech, then, is a financial technology breakthrough that can support the expansion of new companies, according to the Financial Stability Board. Fintech, then, is a step of financial sector innovation coupled with technology to create a financial service that eliminates middlemen and can support business expansion. According to Bank Indonesia, Article 1 Number 1 of Bank Indonesia Regulation Number 19/12/PBI/2017 also regulates the use of Fintech, which is an innovation in financial services that makes use of information technology. It is envisaged that Indonesia's robust Fintech development will spur economic growth at the national level. The Financial Technology (fintech) industry is considered more flexible and less rigid than traditional financial businesses because this industry is less regulated. This is evident in the loan application process, with traditional financial services many administrative files must be prepared and filled in. In the fintech business, on the other hand, only a few files are needed that only need to be uploaded online. Therefore, Fintech is the right medium for micro, small and medium enterprises (MSMEs) and small businesses that are developing to request business capital to develop their businesses [12].

In the payment system and financial services system in Indonesia, these regulations have determined activities related to technology-based financial services that are regulated, including:

1. Peer-to-peer (P2P) lending is a sort of financial service media management that links borrowers and lenders so that borrowers can fulfill loan agreements directly. It is governed by the Data Protection Regulations and Technology-Based Money Lending and Borrowing Services by utilizing a computerized system (application) to access the internet.
2. Payment gateways are an electronic medium that enables organizers to handle payments utilizing channels, electronic money, and cards. They have a legal foundation in line with PBI No. 18/40/PBI/2016 concerning Implementation of Payment Transaction Processing.
3. Crowdfunding, is the best choice for influencers to develop their respective businesses, certain influencers can provide superior personal branding to competitors through the Crowdfunding approach. Apart from that, the credibility of the influencer can increase the credibility of the platform which can attract viewers to take part in selling goods or services [13].
4. E-Aggregator, Utilize e-aggregators because they can process data and help them make choices. These startups can evaluate costs, benefits, and product features. For example, the Financial Stability Board (FSB) (www.cnbcindonesia.com) lists Cekaja, Cermati, KreditGogo, and Tunaiku.

Electronic Commerce or commonly called (E-Commerce) is a business activity carried out digitally by utilizing faster and more flexible information technology in providing sales services for its business products. E-Commerce is the implementation of buying and selling transaction activities by utilizing electronic technology online [6]. E-Commerce, an abbreviation of Electronic Commerce, refers to trading activities carried out online via the internet. Law No. 11 of 2008 on Information and Electronic Transactions states in Article 1 Paragraph 2 that electronic transactions are legitimate operations conducted over computer networks or other electronic channels.

Indonesia also experienced physical distancing which required people to stay at home and carry out all activities at home. Because this causes changes in transaction patterns in society, previously people were used to making direct transactions and had to switch to internet-based transactions. E-Commerce also plays a very important role for Indonesia, including [14].

The role of E-Commerce for business people as a marketing medium used by business people, E-Commerce has several roles, namely [14]:

1. Increasing marketing reach. The impact of using the right technology, especially for MSMEs who are smart in using technology, will definitely be very helpful. E-Commerce can help business owners to introduce the products they offer to a wider range, so that it will also bring many benefits to the business owners themselves.
2. Makes it easier to evaluate and measure sales effectiveness. By utilizing the E-Commerce platform, it makes it easier for MSMEs to evaluate sales. Because every shop on the online sales platform provides a comments column for customers who have shopped to provide reviews of the shop. So this will make it easier for MSMEs to take action.

Based on previous research, it shows that Financial Technology (Fintech), E-Commerce has an influence on the performance of MSMEs in Palembang City. Therefore, the framework of this study is as follows:

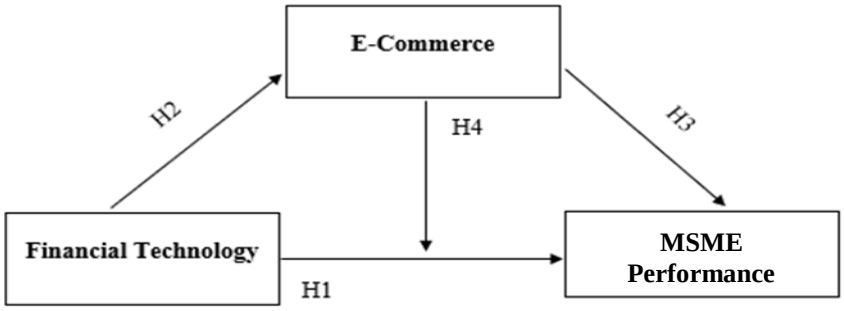

Figure 2. Framework of Thinking

Hypothesis:
H1: Fintech has a positive and significant influence on MSME Performance
H2: Fintech has a positive influence on E-Commerce
H3: E-Commerce has a positive and significant influence on MSME Performance
H4: Fintech influences MSME performance with E-Commerce as a moderating variable

Method

The impact of e-commerce and fintech on MSMEs' performance in the Alang-Alang Lebar District is examined in this study. Based on data from 2023, the study's research population consists of 19,800 MSMEs in the region [14]. A purposive sampling strategy was utilized to select 100 MSME actors who had previously used the digital payment system. Primary data was gathered by means of surveys that were distributed to respondents directly or via social media.

MSME performance is the dependent variable, e-commerce is a moderating variable, and fintech and e-commerce are independent factors. This study employs a quantitative methodology, and a questionnaire that produces numerical data serves as the main data collection tool. The strength of the relationship between the dependent and independent variables is measured quantitatively, and the feasibility of the observation model is tested using the Partial Least Squares (PLS) algorithm.

To test hypotheses comparing constructs, specifically exogenous constructions versus endogenous constructs and endogenous constructs versus endogenous constructs, Geisser developed the bootstrap resampling technique [15]. The test statistic used is the t-statistic, also referred to as the t test. The validity of freely dispersed data is allowed by the resampling approach, which does not necessitate a large sample size or the assumption of a normal distribution.

Primary data is the type of information utilized, and the method is to distribute questionnaires via social media or in person to respondents from a number of MSME actors in the Alang-Alang Lebar District.

From the answers to the list of questions asked to respondents via a questionnaire, they will then be processed using a Likert scale, which is a scale used to measure the attitudes, opinions and perceptions of MSME actors towards social phenomena or the questions asked. This Likert scale contains five levels of answer preferences with the following choices:

Table 3. Criteria for evaluating respondents' answers

Classification	Score
Strongly Disagree	1
Don't Agree	2
Neutral	3
Agree	4
Strongly Agree	5

The link between the independent and dependent variables is influenced by moderating variables, which can either enhance or weaken it. Another name for these variables is variables second independent. E-commerce serves as the moderating variable in this study. E-commerce is a business activity that is conducted digitally via the use of information technology. It offers sales services for company products more quickly and flexibly.

Research approach to obtain almost all the data for this research, questionnaires were used as the main data collection tool, both sent directly to respondents and available online. The information used in this research is quantitative, or information that can be expressed in numerical form.

This research method uses quantitative research to measure the strength of the relationship between the dependent variable and the independent variable in the research population. The observation model was created based on research operating parameters, and the feasibility of the processed model was tested using the PLS algorithm application. The use of Smart PLS is due to the limited number of samples, namely still under 200, so the sample is still in the small category, so it is more appropriate to use Smart PLS. External measurement references or external models are used to test the validity of the model, namely the relationship between indicators and their components.

PLS is a useful analytic method since it works with all data scales and doesn't require accurate sample sizes or a lot of assumptions.

1. The external model is examined on reflexive indicators using convergent and discriminant validity of the indicators forming the latent design, composite reliability, and Cronbach's Alpha for the block of indicators in order to assess the validity or rehabilitation of the model, whereas the formative indicators are assessed by comparing the relative weights and figuring out the significance of the construct indicators.

Table 4. Summary of Evaluation of the Rule of Thumb-Reflex Measurement Model

Validity and Reliability	Criteria	Rule of Thumb
Convergent Validity	● Loading Factor	● 0.70 for confirmatory reasearch ● > 0.60 for explanatory research
	● Average Variance Extracted (AVE)	● > 0.50 for confirmatory and explanatory research
	● Communallity	● > 0.50 for confirmatory and explanatory research
	● Cross Loading	● > 0.70 for every variables

Validity and Reliability	Criteria	Rule of Thumb
Discriminant Validity	● Square root of AVE and correlation between latent constructs	● Square root of AVE > correlation between latent constructs
Reliability	● Cronbach's Alpha	● > 0.70 for confirmatory research ● > 0.60 for explanatory research
	● Composite Reliability	● > 0.70 for confirmatory research ● > 0.60 for explanatory research

2. Inner model analysis looks at the percentage of variation explained, especially with the R-Square value for the internal latent construct with the aim of predicting the relationship between latent variables. The Stone-Geisser test [16] was used to evaluate predictive validity and the mean variance was taken for predictivity using jackknifing and bootstrapping resampling techniques.

Table 5. Summary of Evaluation of the Rule of Thumb Structural Model

Criteria	Rule of Thumb
R^2	● 0.67, 0.33 and 0.19 shows strong, moderate and weak models [17] ● 0.75, 0.15 and 0.35 shows strong, moderate and weak models [18]
Effect Size	0.22, 0.15, and 0.35 (small, medium and large)
Q2 Predictive Revelance	● Q2 > 0 indicates the model has predictive relevance ● Q2 < 0 shows that the model lacks predictive relevance
Sig. (One Tailed)	t-value (sig. lv. = 10%), 1.65 (sig. lv. = 5%) dan 2.33 (sig. lv. 1%)
Sig. (Two Tailed)	Sig. lv. = 10%, 1.96 (sig. lv. = 5%) dan 2.58 (sig. lv. 1%)

The bootstrap resampling technique, created by Geisser, is used to test hypotheses comparing constructs, specifically exogenous constructs versus endogenous constructs and endogenous constructs against endogenous constructs [15]. The t statistic, also known as the t test, is the test statistic that is employed. The resampling technique does not necessitate a large sample size or the assumption of a normal distribution, and thus permits the use of freely dispersed data.

Full Structural Equation Modeling (SEM) model analysis using SmartPLS is used for hypothesis testing. In addition to forecasting the model, PLS in the full SEM model also clarifies whether or not latent variables are related. The following is the relationship derived from path analysis of all latent variables in PLS in the study:

1. An outer model that outlines how indicators and latent variables relate to one another.
2. The link between latent variables is specified by the inner model.
3. A weight relationship that allows for the estimation of the latent variable's case value.

Financial data is transformed into the financial information required for managerial decision-making and external stakeholders by the combined physical and non-physical components of IS [19]. IS is used by many firms to get more data that helps owners make decisions. In the end, this improves the startup's overall performance, profitability, and efficacy [20]. All financial transactions pertaining to loan and savings operations are intended to be recorded by the system. Its growth requires meticulous preparation and supervision of each collaborative endeavor. Making the right decisions can contribute to a company's success. For startups to achieve commercial success, one of the most important roles of financial reports is to provide account information [21]. The t-table one tail test result found in this study was 1.645 for a significance of 0.05, which was taken into consideration when deciding whether to accept the hypothesis. Demand is the desire of prospective

customers to purchase a good. It determines the market size of an item and the segmented composition of its customers. Demand analysis is essential to a firm since it determines its sales, profitability, and staff salaries [22]. Next, the table values are used as cut-off values for acceptance or rejection of the proposed hypothesis:

a. Each indicator's significance rating and outer weight value. For $\alpha = 0.05$ in the one-tailed test, the t-statistic and the suggested weight value are both above the t-table value of 1.645.
c. Analyzing the inner weight value of the latent variable relationship. The weight value of this link must be positive and the t-statistic value must be higher than the t-table value of 1.645 for $\alpha = 0.05$ in the one-tailed test.
c. The study hypothesis is accepted if the weight value of the link between latent variables points in a direction with a t-statistic value higher than the t-table value of 1.645 for $\alpha = 0.05$.
d. The study hypothesis is rejected if the weight value of the link between variables shows a t-statistic value below the t value-table for $\alpha=0.05$.

Results and Discussion

Data Analysis Plan

According to the Cooperatives and SMEs Service in a study by [14], the total number of UMKM in Alang-Alang Lebar District reached 19,800 in 2023. Researchers collected data using a survey method where they distributed questionnaires to respondents directly or online using Google Form. So as many as 100 respondents filled out the questionnaire which was distributed directly or online via Google Form. This questionnaire will then be processed and examined to draw conclusions. Based on the respondent profile provided, the majority of respondents were male, with a total of 61 people or 58.10% of the total respondents, while female respondents numbered 44 people or 41.90%. In terms of age, most respondents were in the 23-30 year age range, which was 72 people or 69% of the total respondents. Respondents under the age of 22 were 11 people or 10%, while respondents over the age of 30 were 22 people or 21%. These data show that the majority of respondents are men aged between 23 and 30 years from MSME actors in Alang-Alang Lebar District, Palembang City. As in the following table:

Table 6. Respondent Profile

Description	Number of People	Percentage
Gender		
Female	44	41.90%
Male	61	58.10%
Age		
< 22 Years	11	10%
23-30 Years	72	69%
>30 Years	22	21%

Data Analysis

A. Outer Model

Analysis of Measurement Models The relationship between latent variables and their indicators is described by an outer model, also known as an outer measurement model. The PLS Algorithm technique is used to perform the outer model test. The validity and reliability of the indicators utilized in this study are evaluated through the examination of the measurement model, also known as the outer model. The following Figure 2 shows the results of the Outer Model analysis with the SmartPLS4 application by the researcher and Convergent validity shows that all indicators have an

outer loading of more than 0.70, indicating good validity and high correlation with the measured construct.

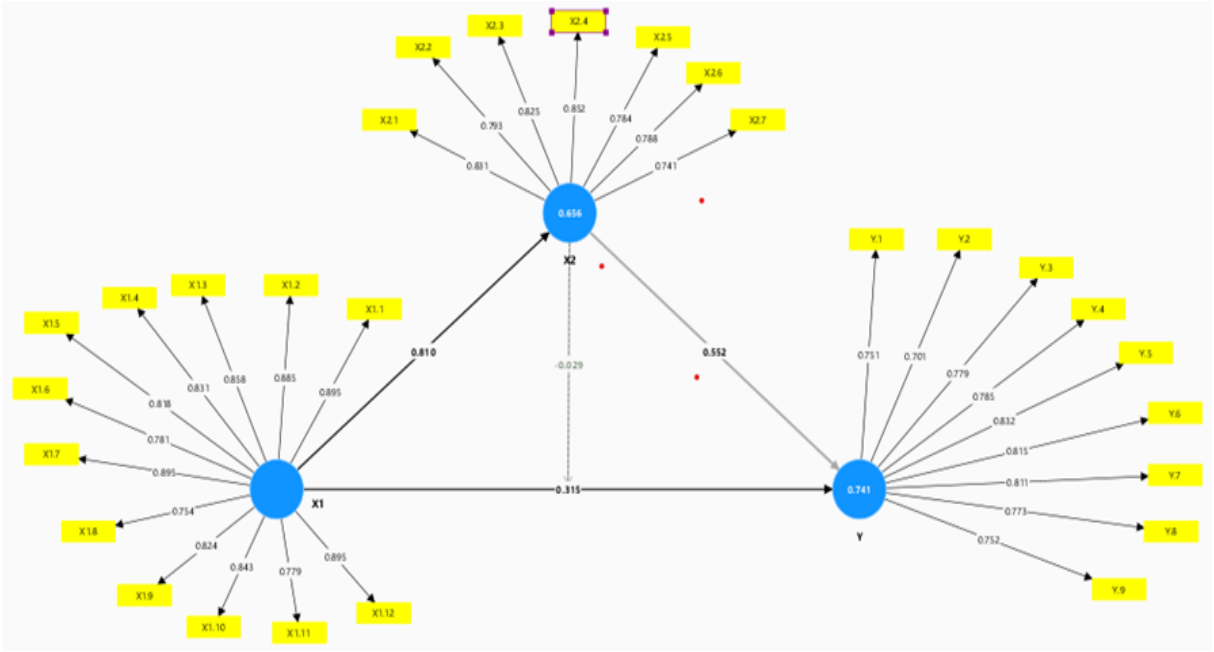

Figure 3. Outer Model Results

Figure 3 shows the SEM-PLS results of the relationship between three latent variables: X1, X2, and Y, and their indicators. Latent variable X1 is measured by 19 indicators, X2 by 7 indicators, and Y by 9 indicators, with loading factors that are mostly high, indicating a strong relationship between latent variables and their indicators. Structurally, X1 has a significant positive effect on X2 (path coefficient 0.810) and Y (0.315), while X2 also has a positive effect on Y (0.552). The R^2 value on X2 (0.656) indicates that 65.6% of the variation in X2 is explained by X1, while the R^2 on Y (0.741) indicates that 74.1% of the variation in Y is explained by X1 and X2. There is a negative path from X2 to X1 (-0.29), but this path appears insignificant. Overall, the model shows that X1 and X2 have a large influence on Y, with most relationships being positive and significant.

B. Discriminant Validity Test

Next, there is Discriminant validity which is tested by comparing the cross loading value which shows that the indicators have a higher loading value on the intended construct compared to other constructs, thus meeting the discriminant validity criteria. As in table 4 below.

Table 7. Discriminant Validity

	X1	X2	Y	X2 x X1
X1				
X2	0.862			
Y	0.837	0.912		
X2 x X1	0.533	0.523	0.523	

C. Average Variance Extracted Test

A construct can account for more than half of the variation of its indicators if its Average variation Extracted (AVE) is greater than 0.50. Cronbach's Alpha is used to measure reliability, and

all constructs have values more than 0.60, which suggests a high degree of internal consistency. As shown in table 5 below.

Table 8. Construct Reliability and Validity

	Cronbach's Alpha	Composite Realibility (rho_a)	Composite Realibility (rho_c)	Average Variance Extracted
X1	0.962	0.963	0.966	0.705
X2	0.908	0.910	0.927	0.644
Y	0.918	0.920	0.932	0.606

D. Inner Model

Structural model or inner model analysis is used to assess the relationship between exogenous and endogenous latent variables.

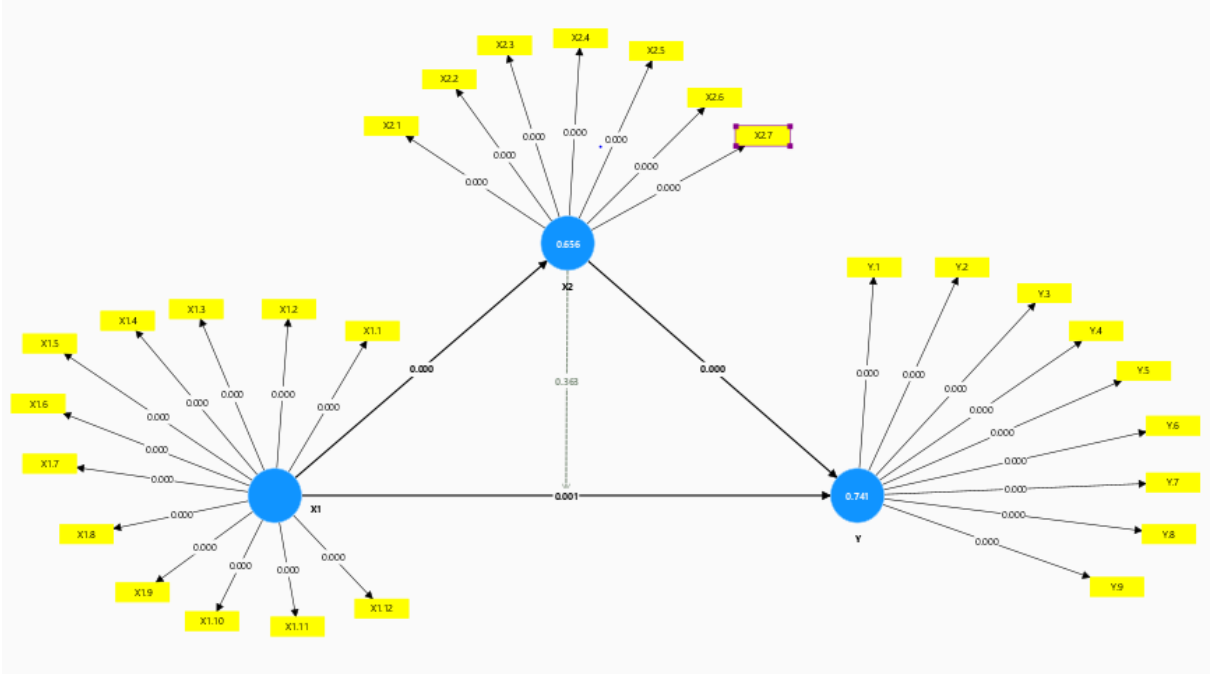

Figure 4. Inner Model Results

E. R-Square Test

The R-Square value indicates how much variability of the dependent variable can be explained by the independent variables, with values varying from strong, moderate, to weak depending on the model being tested. Path coefficients measure the strength and direction of the relationship between latent variables, with results showing varying effects from small to large at the structural level. Overall, the structural model shows a significant relationship between the latent variables studied.

Table 9. R-Square

	R-Square	R-Square Adjusted
X2	0.656	0.652
Y	0.741	0.733

F. Hypothesis Testing Results

Based on the data collected, the findings can be utilized to address the study's hypothesis. The T-Statistic and P-Value values were examined in order to conduct the hypothesis test. If the P-value is less than 0.05, the study hypothesis can be deemed accepted. The findings of the hypothesis test used in this investigation are as follows:

Table 10. Result of Path Coefficients

	Original Sample (0)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
X1 > X2	0.810	0.807	0.051	15.772	0.000
X1 > Y	0.315	0.311	0.094	3.368	0.001
X2 > Y	0.552	0.559	0.091	6.074	0.000
X2 x X1 -> Y	-0.029	-0.022	0.031	0.909	0.363

Discussion

A. The Influence of Fintech on MSME Performance

The results of hypothesis testing 1 indicate that the hypothesis can be accepted. Fintech can be confirmed or accepted or also has a positive and significant influence on MSME performance. The T statistic value of 3.368 is much greater than the critical value of 1.96 at a significance level of 5%. The p value of 0.001 which is less than 0.05 also supports the conclusion that the influence of Fintech on MSME Performance is significant. The use of Fintech makes it easier for MSMEs to conduct financial transactions, obtain access to financing, and manage finances more efficiently [23]. These findings indicate that Fintech has a significant influence on MSME performance because Fintech is a financial system technology that produces products, services, which indirectly Fintech provides new opportunities for economic development in Indonesia, especially in Alang-Alang Lebar District, to increase its economic activities more efficiently and effectively [24]. Fintech has helped finance small and medium enterprises that have less access to banking. With mature regulations, it encourages MSMEs to develop their businesses by making easy transaction loans through Fintech.

B. The Influence of Fintech on E-Commerce

The hypothesis is accepted based on the findings of the second test. E-commerce is positively impacted by fintech. Testing hypotheses demonstrates that Fintech is validated, endorsed, or positively impacts e-commerce. The significance of Fintech's impact on e-commerce is demonstrated by the T statistic value of 3.368, which is higher than 1.96, and the P value of 0.000, which is lower than 0.05. E-Commerce simplifies the transaction process between sellers and buyers, reduces gaps or fraud in transactions, and increases payment security [16]. stated that Fintech functions as an efficient and secure legal payment instrument, which drives the growth of E-Commerce [13].

C. The Influence of E-Commerce on MSME Performance

The third test's findings show that the hypothesis is accepted. E-commerce significantly and favorably affects MSME performance. E-commerce has a considerable impact on MSME performance, as evidenced by the T statistic value of 6.074, which is higher than 1.96, and the P value of 0.000. The idea that X2 influences Y in a good way is accepted. E-Commerce makes the

market wider and can also reduce unemployment that occurs and also helps in the buying and selling process that is carried out, sometimes there are obstacles to ordering, for example, it does not match the picture or the goods that arrive are not in accordance but with things like this, a statement can be submitted so that our goods are returned or replaced with new ones because this also affects MSME performance. Research by [6] also confirmed that E-Commerce has a positive and significant effect on MSME performance, especially in increasing market access and cost efficiency.

D. The Influence of Fintech on MSME Performance with E-Commerce as Moderation

The results of this last test found that the hypothesis could not be accepted. Fintech has no effect or negative effect on MSME performance with E-Commerce as a moderating variable. E-Commerce does not strengthen or weaken the relationship between Fintech and MSME performance with a T statistic value of 0.909 which is smaller than 1.96 and a P value of 0.363 which is greater than 0.05 indicating that this effect is not significant. Thus, the hypothesis stating that the interaction between Fintech and E-Commerce has an effect on MSME Performance is rejected. According to some opinions of the Community, E-Commerce does help in the buying and selling process that is carried out. However, sometimes they feel disappointed when what is ordered does not match the picture, for online lending is still doubtful. Still prefer local traders because buying online cannot see the quality of the goods being marketed. Less agree with the existence of fintech such as online lending because the risk is greater [13]. E-commerce also often involves risks, such as online fraud or data security issues. If MSMEs feel insecure in using e-commerce platforms, they may be reluctant to take full advantage of fintech, which in turn can negatively affect their performance. Also, not all MSMEs have good access or sufficient knowledge about using e-commerce and fintech. These limitations can hinder them from utilizing both technologies effectively, reducing the potential for performance improvement.

Conclusion

The use of Fintech and E-Commerce has been proven to positively impact MSME performance in Alang-Alang Lebar District. Fintech facilitates efficient financial transactions, access to financing, and better financial management. E-Commerce, on the other hand, allows MSMEs to sell products online, expand market reach, and reduce operational costs. However, the use of Fintech and E-Commerce can also have a negative effect on MSME performance. Some Alang-Alang Lebar District residents find E-Commerce helpful in buying and selling, but may feel disappointed when the product does not match the picture. Additionally, not all MSME players have sufficient knowledge about e-commerce and fintech, which may hinder their effective use. The study's limitations include a small sample size, time limitations, and data collection methods. The study's results may not be generalizable to the entire MSME population due to time, energy, and data collection limitations. Future research can be conducted by expanding the study area and increasing the number of samples so that the results are more representative. In addition, the research could focus on specific business sectors to see the impact of Fintech and E-Commerce more specifically. It is also important to examine the relationship between digital literacy of MSME players and their success in using this technology. Research on product quality and customer satisfaction through E-Commerce could also provide new insights. In addition, analyzing the barriers faced by MSMEs as well as the social, cultural and integration impacts of other technologies such as social media or AI can enrich the research results. Long-term or pandemic-related research also has the potential to provide more insight.

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