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# IT for E-Commerce, Financial Literacy, Financial Inclusion and Smes Performance: Mediating Role of Spiritual Value

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## Abstract

The aim of this study is that to examine the effect of IT for ecommerce, financial literacy and financial inclusion on the performance of SMEs with spiritual value as a moderating variable. In general, the company faces challenges in maintaining superior business performance over a long period. Furthermore, most companies find it difficult to continuously achieve business performance which suitable to the strategic insight and agility to ensure the business environment. Resource based View and Technology Acceptance Model was the theory which underlay this study. This study used a sample of 180 SMEs in Central Java. In addition, the data analysis method in this study used multiple regression analysis with the SmartPLS version 3 application. The result shows that IT for e-commerce and financial literacy has a significant positive effect on financial inclusion. Meanwhile, IT for e-commerce has no significant positive effect on SMEs performance. Financial literacy and financial inclusion have a significant positive effect on SMEs performance. In addition, spiritual values are able to moderate the relationship between IT for e-commerce, financial literacy and financial inclusion on SMEs performance.

## Keywords

IT for e-commerce, financial literacy, financial inclusion, spiritual value, SMEs performance



# **I. Introduction**

The development of digitalization in the business world significantly affects how business behaves today. Performance will determine whether they will be able to survive in a very dynamic business environment or not, companies should always try to maintain and improve their performance. Furthermore, many companies both in developing and developed countries are always looking for ways to maintain company performance since for them the survival of the company depends on the performance achieved (Arokodare & Asikhia, 2020). Many previous studies have discussed the factors which can affect the performance of SMEs, including IT for e-commerce (Hasan et al., 2021; Lestari et al., 2021; Wirdiyanti, 2019), financial literacy (Kulathunga et al. al., 2020; P Wewengkang et al., 2021; Utami et al., 2021) and financial inclusion (Sanistasya et al., 2019; Uwah et al., 2021). Development is a systematic and continuous effort made to realize something that is aspired. Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired. In addition, development is also very dependent on the availability of natural resource wealth. The availability of natural resources is one of the keys to economic growth in an area. (Shah, M. et al. 2020)

During the pandemic, the trend towards e-commerce is further emphasized, with the country emerging as one of the most aggressive technology users in the region with the

largest e-commerce adoption rate that reach 78% in October 2020 (Deloitte, 2021). Furthermore, several previous studies have reported that determining the success of a business can be seen from the use of digital technology; especially, in the adoption of e-commerce (Lestari et al., 2021; Rumondang et al., 2020), this research is not in line with the research which had conducted by Hariandi et al., (2019) which stated that e-commerce does not have a significant correlation with business performance.

Low levels of financial literacy among people around the world have led to business failure. It is in line with research (Sanistasya et al., 2019; Tuffour et al., 2020) which reveals that financial literacy has a positive effect on performance. However, it is not in line with research which had conducted by Chatterjee & Das (2016) which showed that technical skills appear to have a negative impact on business success.

Access to finance through banking allows cost savings to individuals or organizations. Therefore, it is expected that someone has easy access to the products or services which is provided by banking. The research which had conducted by Sanistasya et al., (2019) stated that financial inclusion has a significant positive effect on company performance. It is not in line with research which had conducted by Bhattacharyya & Khan (2021) which stated that financial inclusion has a negative effect on company performance.

Previous studies have shown inconsistent results so that it causes research gaps. The update in this study is that to test whether the spiritual value variable is able to moderate the relationship between IT for e-commerce, financial literacy and financial inclusion on SMEs performance. Spiritual values which exist in individuals are useful as a basis to become more generally accepted in determining matters related to life. These values lead individuals to behave ethically, rightly and honestly since everything should be guided by Allah's criteria. Moreover, spiritual values become a strong control for individuals to always conform and obey the teachings of Islam which are believed to be the way to achieve glory. Spiritual value is expected to be a moderating variable in order to strengthen the relationship between IT for e-commerce, financial literacy and financial inclusion on SMEs performance. Therefore, the variables in this study are: IT for e-commerce and financial literacy as independent variables, financial inclusion as an intervening variable, spiritual value as a moderating variable, and SMEs performance as the dependent variable.

# **II. Review of Literature**

# 2.1 Resource Based View Theory

Resource Based View Theory explains that tangible and intangible resources owned by a company are very useful for increasing competitive advantage so that they can compete in a very competitive business world. This study is based on the RBV theory which explains that financial inclusion and financial literacy which are the company's internal resources have a value and potential in supporting the running of a business in order to achieve a competitive advantage and sustainable performance growth.

# 2.2 Technology Acceptance Model Theory

This model describes a conceptual model regards to the use of new technology or information technology systems. Initially, it started with a psychological approach aimed at explaining users' beliefs, behaviors, dreams, and attitude correlations. The use of the TAM model in the use of information technology systems is not just knowledge about the attitudes of users towards the use of information technology.

#### **2.3 SMEs Performance**

Company performance refers to the extent to which financial goals have been achieved. It is the process of measuring the results of the company's policies and operations in monetary terms, including profit, sales, growth, and market share (Tuffour et al., 2020). Moreover, companies should use management and measurement systems to face competition in today's information age so that companies can develop and survive. Measurement of performance in this study refers to the theory of Kaplan and Norton in 1996 namely the Balance Scorecard (BSC) that are Profitability, customer satisfaction and employee satisfaction.

#### **2.4 IT for e-commerce**

Products and services which are offered in the digital economy can be delivered through information-based channels so that they reach a larger customer base. Information itself is considered as a source of value and provides an opportunity to develop new relationships with customers at very low cost. E-commerce is the online buying and selling of goods and services; besides, participating in monetary transactions and the sale of services or commodities (Lestari et al., 2021). In addition, measurement of IT for e-commerce in this study refers to (Huang et al., 2009) that are Online marketing, Web usage, Monitoring customer satisfaction and Level of use of digital elements.

#### **2.5 Financial literacy**

Financial literacy as a mixture of knowledge, competence, and practice of economic products, concepts, risks, and regulatory and prison matters in order to make decisions related to finance is the most extraordinary Pandey and Gupta (2018). Furthermore, the Financial Services Authority defines financial literacy as a form of improving quality in making decisions and managing finances to achieve prosperity using knowledge, skills, and beliefs which are applied to individual attitudes and behavior. The measurement of financial literacy in this study refers to and modifies George et al., (2016), that are; Level of use of financial technology, Knowledge, Skills and belief.

#### **2.6 Financial inclusion**

Financial Inclusion refers to having an account with a recognized financial organization which allows people to formally deposit, borrow money, have insurance and use payment services Allen et al. (2016). It allows people to have bank accounts which further encourage them to deposit, borrow, and transfer money legally (Zin & Weill, 2016). In addition, the measurement of financial inclusion in this study refers to the modification of George et al., (2016), that are; Ease of access, quality of service, level of use of financial services and level of service products.

#### 2.7 Spiritual value

Spirituality is the essence of humans as socio-cultural beings that are human goodness, justice, truth, honesty, conscience, honor, patriotism, love of beauty, pleasure, hatred of evil, intention, perseverance and so on A. Erkaev in Esonovich (2021). The measurement of spiritual value in this study refers to (Tri Cahya et al., 2021), that are; Good morals/character, Ability to continue learning and Ability to increase profits.

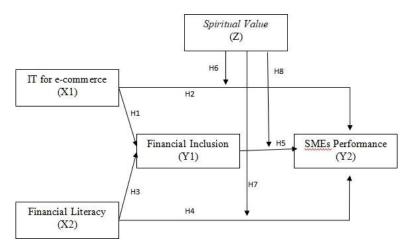


Figure 1. Framework Model

From the description above, it can be concluded that the hypotheses proposed in this study are as follows;

- H1: IT for e-commerce has a positive effect on financial inclusion.
- H2: IT for e-commerce has a positive effect on SMEs performance.
- H3: Financial literacy has a positive effect on financial inclusion.
- H4: Financial literacy has a positive effect on SMEs performance.
- H5: Financial inclusion has a positive effect on SMEs performance.
- H6: Spiritual values moderate the relationship between IT for e-commerce and SMEs performance.
- H7: Spiritual values moderate the relationship between financial literacy and SMEs performance.
- H8: Spiritual values moderate the relationship between financial inclusion and SMEs performance.

## **III. Research Method**

This research method was a quantitative method through hypothesis testing with the help of the SmartPLS program. The research data was obtained by distributing questionnaires through googleform to the small medium enterprise in Central Java. The population and sample used are all SME owners/actors in Central Java Province. In addition, by using the sampling method namely simple random, it took samples or elements randomly. This study had 18 indicators so that it referred to the rules of the theory of Hair et al., (2014) a minimum sample size of 10x18 or 180 respondents was required.

## **IV. Result and Discussion**

Before linear regression analysis was conducted, it is necessary to test the classical assumption which aims to test the quality of the data so that the data which is known to be true can avoid deviations in the regression model.

Table 1. Reliability test table					
Variabel	<b>Composite Reliability</b>	Cronbach's Alpha			
IT for E-commerce	0,865	0,794			
Financial Literacy	0,955	0,937			

Financial Inclusion	0,890	0,836
Spiritual Value	0,902	0,839
SMEs Performance	0,977	0,964

Convergent validity in this study was measured by using the outer loadings and AVE parameters. If the loading factor value is > 0.7 and the AVE is > 0.5, it is said to be ideal. Thus, it can be concluded that this research data is ideal.

Table 2. Convergent validity Table					
Variabel	Indikator	<b>Outer loading</b>	AVE		
	IFE1	0,827			
IT for E-	IFE2	0,706	0,616		
commerce	IFE3	0,790	0,010		
	IFE4	0,812			
	FL1	0,929			
Einensiel Literser	FL2	0,900	0,842		
Financial Literacy	FL3	0,907	0,042		
	FL4	0,934			
	FI1	0,835			
Financial	FI2	0,790	0 670		
Inclusion	FI3	0,811	0,670		
	FI4	0,838			
	NSV1	0,789			
Spiritual Value	NSV2	0,902	0,754		
	NSV3	0,909			
SME	SMSE1	0,942			
SMEs Performance	SMSE2	0,982	0,933		
	SMSE3	0,974			

# Table 3. Result fornell-larcker matrix

	IT for E- commerce	Financial Literacy	Financial Inclusion	Spiritual Value	SMEs Performance
IT for E-commerce	0,785				
Financial Literacy	0,533	0,918			
<b>Financial Inclusion</b>	0,505	0,619	0,819		
Spiritual Value	0,444	0,494	0,494	0,868	
SMEs Performance	0,692	0,731	0,731	0,444	0,966

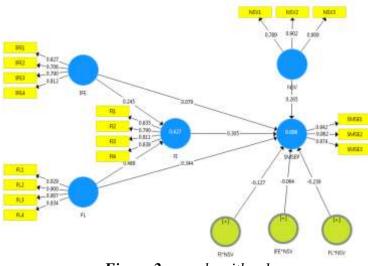


Figure 2. run algorithm 1

The result of the evaluation of the PLS Algorithm run 1 model shows that the outer loading value of all variable indicators have a value > 0.70 and a HTMT value < 1. It proves that all indicators in this study variable are valid.

Table 4. Result R-square					
	R Square	R Square			
	It byuare	Adjusted			
Financial Inclusion	0,427	0,420			
SMEs Performance	0,698	0,686			

It can be said that the influence of IT for e-commerce and financial literacy on financial inclusion gives a value of 0.427. It means that the financial inclusion construct variable which can be explained by the IT for e-commerce and financial literacy construct variable is 42.7%% while the rest is explained by other variables outside this study. Furthermore, the SMEs performance variable shows a moderate ability of 0.698. Thus, it can be said that the IT for e-commerce, financial literacy and financial inclusion variables can explain SMEs performance by 69.8% and the rest is explained by other variables outside the study.

Table 5. Result F-square							
	IT for E- commerce	Financial Literacy	Financial Inclusion	Spiritual Value	SMEs Performance		
IT for E-commerce			0,075		0,013		
Financial Literacy			0,298		0,206		
Financial Inclusion					0,080		
Spiritual Value					0,059		
SMEs Performance					-		

IT for E-commerce has an effect (0.075 = low) on financial inclusion. Furthermore, financial literacy has an effect (0.298 = moderate) on financial inclusion. IT for E-commerce has an influence (0.013 = low) on SMEs performance. Financial literacy has an

effect (0.206 = moderate) on SMEs performance. Meanwhile, spiritual value has an effect (0,059 = low) on the SMEs performance variable.

Table 6. Result Q-square					
Variabel	CV	CV			
v arraber	Communality	Redundancy			
IT for E-commerce	0,364				
Financial Literacy	0,714				
Financial Inclusion	0,444	0,281			
Spiritual Value	0,475				
SMEs Performance	0,803	0,609			

Q-square value of all variables is more than 0 which means the model has predictive relevance. In addition, this study provides the same and appropriate validity predictive model (fit model) since all latent variables have cross-validation (CV) redundancy and positive communality values and it is more than 0.

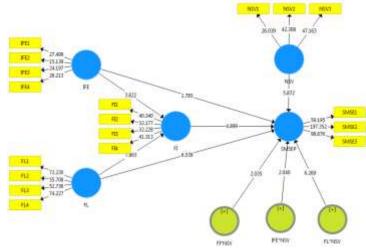


Figure 3. Hypothesis test image

In this study, the significance value of p value < 0.05 and the path coefficient significance value is considered significant if the t-statistic value is > 1.96. In order to determine the effect of the relationship is that by looking at the original sample value, if the path coefficient <0.30 gives a moderate effect. Meanwhile, if the path coefficient value is 0.30-0.60 is considered as strong. In addition, if the path coefficient value > 0.60, it gives a very strong influence.

Table 7. Hypothesis test table						
	Original Sample (O)	Sample Mean (M)	Std Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	
IT for E-commerce $\rightarrow$ Financial Inclusion	0,245	0,251	0,064	3,822	0,000	
IT for E-commerce → SMEs Performance	0,079	0,074	0,044	1,785	0,075	
Financial Literacy $\rightarrow$ Financial Inclusion	0,489	0,489	0,062	7,863	0,000	

Financial Literacy $\rightarrow$ SMEs Performance	0,344	0,340	0,053	6,539	0,000
Financial Inclusion $\rightarrow$ SMEs Performance	0,305	0,311	0,062	4,899	0,000
IT for E-commerce*Spiritual Value $\rightarrow$ SMEs Performance	-0,064	-0,062	0,031	2,040	0,042
Financial Literacy*Spiritual Value → SMEs Performance	-0,239	-0,243	0,038	6,269	0,000
Financial Inclusion*Spiritual Value $\rightarrow$ SMEs Performance	-0,127	-0,131	0,062	2,035	0,042

Based on the results of data processing in the table above, it can be concluded that the research discussion is as follows:

#### Hypothesis test results 1

The test result shows that IT for e-commerce has a positive and significant effect on financial inclusion. With a path coefficient of 0.245, t values of 3.822 > 1.96 and p values of 0.000 < 0.05 so that it is concluded that H0 is rejected and H1 is accepted. In conclusion, if small companies have a high level of IT capability and adopt e-commerce, they will be able to take advantage of the services which are provided by banks that can be used to finance their business activities.

#### Hypothesis test results 2

The test result shows that IT for e-commerce has no significant positive effect on SMEs performance. It shows a path coefficient of 0.079, t values of 1.785 < 1.96 and p values of 0.075 > 0.05. Thus, it is concluded that H0 is accepted and H2 is rejected. Most SMEs have adopted e-commerce in their business activities. However, an increase in e-commerce does not lead to an increase in business performance and a decrease in e-commerce does not lead to a decrease in business performance.

#### Hypothesis test results 3

The test result shows that financial literacy has a positive and significant effect on financial inclusion. It shows that path coefficient is 0.489, t values 7.869 > 1.96 and p values 0.000 < 0.05. Hence, it can be concluded that H0 is rejected and H3 is accepted. Someone who has high financial literacy allows them to easily evaluate financial products; besides, make the right financial decisions and choices.

### Hypothesis test results 4

The test result shows that financial literacy has a positive and significant effect on SMEs performance. With a path coefficient of 0.344, t values of 6.539 > 1.96 and p values of 0.000 < 0.05, it is concluded that H0 is rejected and H4 is accepted. Someone who has knowledge and understanding of finance will tend to perform well, both financially and non-financially. Therefore, the increase in financial literacy that a person has will be in line with the increase in business performance.

## Hypothesis test results 5

The test result shows that financial inclusion has a positive and significant effect on SMEs performance. With path coefficient of 0.305, t values 4.899 > 1.96 and p values 0.000 < 0.05, it is concluded that H0 is rejected and H5 is accepted. The level of financial inclusion which a person has will inhibit financial constraints so that a greater level of financial inclusion will improve business performance.

#### Hypothesis test results 6

The test result shows that the spiritual value moderates the relationship between IT for e-commerce and SMEs performance. With path coefficient -0.064, t values 2.040 > 1.96 and p values 0.042 < 0.05, it can be concluded that H0 is rejected and H6 is accepted. Someone who has a high spirituality value tends to have the intention to continue to learn; besides, improve his ability in order to compete in increasingly competitive business competition, one way is by adopting digitalization.

#### Hypothesis test results 7

The test result shows that spiritual value moderates the relationship between financial literacy and SMEs performance. With path coefficient -0.239, t values 6.269 > 1.96 and p values 0.000 < 0.05, it can be concluded that H0 is rejected and H7 is accepted. Moreover, Islam teaches muslims to learn and expand knowledge including financial knowledge. Thus, the value of spirituality can affect financial literacy with performance.

# Hypothesis test results 8

The test result shows that spiritual values moderate the relationship between financial inclusion and SMEs performance. With path coefficient -0.127, t values 2.035 > 1.96 and p values 0.042 < 0.05, it can be concluded that H0 is rejected and H8 is accepted. SME owners who have spiritual values can influence inclusion which can be useful as a special financing tool; For instance, leasing or bank loans can be useful in facilitating better access to finance so that their performance is improved.

# V. Conclusion

The results of this study are in line with the theory of resource-based view and technology acceptance model. Resource based view is able to explain the resources and capabilities of SME owners so that they can achieve better business performance. RBV theory views individuals or organizations as a collection of resources and capabilities; besides, explains the relationship between internal resources and capabilities of the company. Moreover, RBV in this study is able to explain and encourage financial literacy and financial inclusion which are the company's internal resources that can improve business performance. In addition, the technology acceptance model in this study is able to explain the use of technology and information systems, TAM emerges from a psychological approach which aims to explain digital product users which refers to beliefs, behaviors, dreams and correlations with technology use. SME owners use technology information systems; especially, in the adoption of e-commerce to assist them in marketing and sales.

IT for e-commerce and financial literacy has a significant positive effect on financial inclusion. IT for e-commerce has no significant positive effect on SMEs performance. Meanwhile, financial literacy and financial inclusion have a significant positive effect on SMEs performance. Spiritual values are able to moderate the relationship between IT for e-commerce, financial literacy and financial inclusion on SMEs performance. Furthermore, the independent variables IT for e-commerce and financial literacy in this study are only able to explain financial inclusion of 42.7% and the variables IT for e-commerce, financial literacy, financial inclusion and spiritual value are able to explain SMEs performance of 69.8%. Thus, it is expected that future research will add variables which can improve the performance of SMEs; such as, intellectual capital, cloud service, and innovation.

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