The Effect of Accounting Information Systems and e-Commerce Utilization on The Performance of SME's in Rembang

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ABSTRACT

The high number of MSEs in Indonesia is inextricably linked to the existing difficulties. Another effect of this pandemic is a shift in consumption patterns of products and services from offline to online, with a 15-20% increase in internet traffic. With the world's fourth biggest population and internet penetration of 196.7 million people, the potential of Indonesia's digital economy remains enormous. In fact, by using financial reports as a method of communicating accounting information, business owners can learn about their financial condition and performance, not to mention that financial statements are a source of data for computing taxes. The purpose of this research is to investigate the impact of accounting information systems and e-commerce on the performance of SMEs in Rembang. This study's population consists of Rembang SMEs. The sample technique employed in this study was purposive sampling, and the data analysis approach was Multiple Linear Regression. The findings reveal that SMEs in Rembang have used accounting information systems in their operational activities, as well as E-Commerce. According to the findings of the study, SME business players in Rembang Regency have a beneficial influence on the usage of accounting information systems and e-commerce. This shows that the use of Accounting Information System and the use of e-commerce have an effect on the performance of SMEs in Rembang.

Keywords: Accounting; e-Commerce; SME's

1. INTRODUCTION

During the pandemic, it has an impact on the level of public consumption, and the low level of public consumption has resulted in a fall in real national revenue, causing Indonesia's current economic growth rate to decline. MSMEs have proved their ability to thrive under adverse economic conditions thus far. Most MSMEs have had no direct contact with the domestic financial sector, let alone the global financial sector; as a result, MSMEs have been able to endure the global financial crisis. According to the Coordinating Ministry for Economic Affairs, there are several impacts, including: First, a decrease in demand and a decrease in sales. The shift in people's consumption patterns has led to a decline in sales, because nowadays people prefer to prioritize food needs related to maintaining body stability rather than buying other necessities that are considered less important and are not the main needs to deal with current conditions. MSMEs are the most important economic pillars in Indonesia. According to data from the Ministry of Cooperatives and SMEs, the number of MSMEs in 2021 will be 64.2 million, with a GDP contribution of 61.07 percent or 8,573.89 trillion rupiah. MSMEs contribute to the Indonesian economy by absorbing 97 percent of the total labour and collecting up to 60.4 percent of total investment. Then in terms of investment in the MSME sector as a whole it can reach around 60.42 percent. However, in the midst of this large contribution, MSMEs still need to be encouraged. This is because non-oil and gas exports are still quite low at only 14.37 percent. In addition, only 16 percent of those who have entered E-commerce have entered.

The huge number of MSMEs in Indonesia is also inextricably linked to the current issues. Another effect of this epidemic is that it encourages a shift in consumption patterns of products and services from offline to online, with a 15-20% increase in internet traffic. This is a trend that will hasten digital transformation. With the world's fourth biggest population and internet connectivity of 196.7 million

people (https://ekon.go.id), Indonesia's digital economic potential remains untapped. Accounting information is typically regarded as unimportant by small business owners because it is difficult to execute and a waste of time and money. The most important thing for small business owners is to figure out how to produce a lot of money without having to deal with accounting. Thus, it may be stated that SME entrepreneurs are unaware of the presence and significance of accounting. In fact, by using financial reports as a method of conveying accounting information, business owners can learn about their financial condition and performance, as well as make tax calculations easier, because financial statements are a source of data for computing taxes [1].

Improving business performance is an effort that must be made by business actors or the economy in order to continue to exist in carrying out their activities and to increase the competitiveness of their businesses. However, this term is a big problem for economic actors, especially SMEs. They consider that improving performance requires "fundamental changes and specific strategies". In Indonesia, SMEs continue to face a variety of issues, both traditional and advanced. These issues may differ from one region to the next, or between industries or companies within the same industry. The most common issue is low productivity. This condition is created by internal SMEs challenges, such as low-quality human resources in management, organization, technology mastery, and marketing, SMEs' weak entrepreneurship, and SMEs' limited access to knowledge, technology, and markets, among other production factors. Meanwhile, SMEs confront external challenges such as high transaction costs as a result of an unfavourable business climate and a scarcity of raw materials [1]. In a survey conducted by the Asian Development Bank (ADB, Asian Development Bank), it was found that various problems caused SMEs difficult to develop. The basic problems faced by SMEs are the limited presentation of information and access to markets, difficulties in capital, financial management, and marketing of finished goods. Whereas as is known, the presentation of information will affect how the organization makes decisions, plans and manages all parts of the organization. The presentation of systemized information on the company will affect the performance of the company, either directly or indirectly. In addition, other problems exist in financial presentations that have not implemented information systems. This is not effective and efficient and will make it difficult for companies to search for transaction data and find out the amount of expenses and income. Therefore, SMEs need an information system to support their development. The system will minimize the obstacles that exist in manual recording, one of which is the reduction in human error. However, there are still many SMEs who are reluctant to implement information systems for various reasons, one

of which is due to limitations and lack of resource capabilities [2].

With the development of technology, business operations also need to be accompanied by the use of adequate and capable technology. Researchers who study information systems have found that perceived usefulness and perceived ease of use have an influence on Intentions to use information technology systems [3]. Not all technology created can be accepted, the technology created can sometimes be accepted or rejected for several reasons. The Technology Acceptance Model (TAM), first suggested by [4], forecasts the likelihood of new technology adoption in groups of individuals or organizations. There are two reasons why individuals accept or reject the application of information technology. First, people tend to use or not utilize information technology because they believe it can help (complicate) carrying out activities better; this variable is known as perceived usefulness (PU). Second, although potential users agree that this technology is valuable, they also believe that it is too difficult to use; this characteristic is known as perceived ease of use (PEU).

The use of accounting information systems and the use of e-commerce is expected to bring a positive relationship to improving the performance of a business. SME entities in Rembang Regency have great potential to develop by improving their performance if they are able to implement information systems in the process of recording income and expenses and take advantage of available technological facilities. In conclusion, the researcher emphasizes the importance of examining the technological acceptance model in determining the influence of accounting information systems and the usage of e-commerce on the performance of SMEs in Rembang Regency in this study.

2. METHOD

2.1. Variable Operational Definition

Small Business is defined as a stand-alone productive economic business carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or become part of either directly or indirectly from medium or large businesses that meet the criteria for Small Businesses under Law Number 20 of 2008. Meanwhile, Medium Enterprises are defined as productive economic businesses that stand alone, carried out by individuals or business entities that are not subsidiaries or branches of companies, and that are owned, controlled, or become part of either directly or indirectly with small or large businesses with total assets sales proceeds in accordance with the Act's criteria.

2.2. Utilization of E-commerce

Maskuod [5] Information Technology (IT) is actually present as a saviour for SMEs because Information Technology (IT) provides the equipment needed for operations and management. One form of trading through Information Technology (IT) is e-commerce with just one click the customer can get the goods what you want, can find out what you want and can make transactions with anyone without being limited by time and distance. The indications of the superiority of e-commerce in fact have not been fully utilized by most SMEs in Rembang Regency for various reasons. In general, e-commerce is a familiar phenomenon in today's business activities. There have been many movements of goods and services that have been carried out more easily, more and of course quickly through this virtual world network. Activities in e-commerce actually do not require suppliers, agents and manufacturers to create and build websites. However, there are many ways that can be done to find and offer goods and services other than the website, among others, by using friendship sites, blogs and other sites.

According to the Big Indonesian Dictionary, utilization is a process, method, or act of utilizing. Utilization here means being able to utilize technology in business processes to seize the market through ways that can attract consumers, for example, customer service with advanced technology via Shopee, Instagram, Web, or WhatsApp. There are many cases where business people assume that using e-commerce is just a waste of time, effort, and money. Utilization of e-commerce or what we often call buying and selling online for SMEs will actually provide flexibility in production because it can provide faster delivery information to customers, send and receive offers quickly, and can support electronic payment transactions (e-money).

The use of accounting information systems, the use of e-commerce and the effectiveness of user work for SMEs, the most obvious thing is that all work will be faster and more accurate. Accounting information systems and effective use of e-commerce and SME performance will reduce unexpected costs and increase flexibility and accuracy in decision making. Accounting

information systems, E-commerce and SME performance can be applied to all types of businesses and have become a basic need from small companies to large companies. So, it is time for every company to use an accounting information system and start utilizing e-commerce so that the performance of SMEs is good so that they can compete with other SMEs. The selection of small and medium-sized businesses that utilize e-commerce is carried out from information sources through the Department of Industry and Trade and SMEs in Rembang Regency. This is a quantitative study with primary data. A questionnaire survey was utilized to obtain data for this study. The population in this study is SMEs in Rembang Regency. With up to 100 SMEs observed in Rembang Regency. The purposive sampling strategy was used in this investigation.

Multiple linear regression analysis was utilized in this study to get an overview of the effect of the independent factors on the dependent variable using the Statistical Package for Social Science (SPSS) for Windows 25. This investigation was conducted to determine the impact of accounting information systems and the use of e-commerce on the performance of SMEs in the Rembang Regency. The following is the formulation of this multiple linear regression model:

$$Y = a + \beta 1 X 1 + \beta 2 X 2 + \varepsilon \qquad (1)$$

Description:
Y	: Performance of SMEs
a	: Constant Value
X1	: Accounting Information System
X2	: Utilization of e-commerce
β1, β2,	: Regression Coefficient
ε	: Error

2.3. Research Model Framework

This research framework is used to facilitate the way of thinking on the problems discussed, related to the influence of accounting information systems and the use of e-commerce on the performance of MSEs in Rembang Regency. The theoretical framework is shown in the Figure 1:
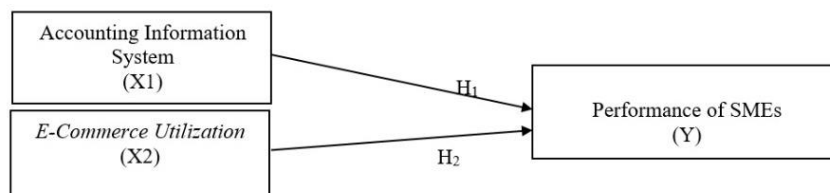

Figure 3 Research Model

3. RESULT AND DISCUSSION

3.1. Validity Test

Validity test is a test that can be done before the data is analysed further. These two tests were conducted with the aim of ensuring that the research instrument items can

be said to be valid. This test is done the results of this study were collected, then transformed into test data in the form of intervals. The test is done by calculating the Pearson correlation value. Pearson correlation is used to measure the accuracy of an item in the questionnaire, where the statement item is considered valid if the Pearson correlation value of the statement item with a

total score is above 0.30 [10]. The table below presents the results of the validity of the research instrument in Table 1. Based on Table 1, it can be seen that all the instruments used to measure the research variables, namely accounting information systems, e-commerce and SMEs performance are valid. This can be seen from the value of each question item which has a person correlation value greater than 0.30

Table 1 Validity Test Result

Variable	Instrument	r count	r table	Description
Accounting Information System (X1)	X1.1	0.382	0.179	Valid
	X1.2	0.545	0.179	Valid
	X1.3	0.615	0.179	Valid
	X1.4	0.678	0.179	Valid
	X1.5	0.521	0.179	Valid
	X1.6	0.673	0.179	Valid
	X1.7	0.829	0.179	Valid
	X1.8	1.718	0.179	Valid
	X1.9	0.697	0.179	Valid
	X1.10	0.535	0.179	Valid
E-Commerce Utilization (X2)	X2.1	0.855	0.179	Valid
	X2.2	0.796	0.179	Valid
	X2.3	0.596	0.179	Valid
	X2.4	0.878	0.179	Valid
	X2.5	0.707	0.179	Valid
	X2.6	0.832	0.179	Valid
	X2.7	0.864	0.179	Valid
	X2.8	0.791	0.179	Valid
	X2.9	0.774	0.179	Valid
Performance of SMEs (Y)	Y.1	0.531	0.179	Valid
	Y.2	0.457	0.179	Valid
	Y.3	0.632	0.179	Valid
	Y.4	0.415	0.179	Valid
	Y.5	0.620	0.179	Valid
	Y.6	0.743	0.179	Valid
	Y.7	0.561	0.179	Valid
	Y.8	0.495	0.179	Valid

Table 2. Reliability Test Result

Variable	Cronbach's Alpha
Accounting Information System	0.822
E-Commerce Utilization	0.923
Performance of SMEs	0.712

3.2. Reliability Test

Reliability is a tool to measure a questionnaire which is an indicator of the variable or construct to be studied [11]. Reliability test is the level of stability or constancy of a measuring instrument in measuring a symptom or event. A construct or variable is said to be reliable if it gives a value of > 0.70 or 70% [12]. The table below presents the results of the research instrument reliability test in Table 2. From the test results, it shows that the value of Cronbach's Alpha is greater than 0.70 so that it shows that all variables are feasible to be used as measuring instruments for the questionnaire instrument in this study.

3.3. Classical Assumption Test

3.3.1. Multicollinearity test

The multicollinearity test is designed to determine whether the regression model discovered a relationship between the independent variables [11]. The tolerance value and variance inflation factor can be used to detect the existence or absence of multicollinearity in the regression model. The tolerance value 0.10 or equal to the VIF value 10 is typically used to indicate the presence of multicollinearity. Table 3 shows the results of the multicollinearity test.

Table 3. Reliability Test Result

Variable	Tolerance	VIF	Description
AIS	0.994	1.006	Multicollinearity does not occur
E-Commerce	0.994	1.006	Multicollinearity does not occur

The VIF value for all Accounting Information System and E-Commerce variables shows greater than the tolerance value, so the analysed data is free from multicollinearity.

Autocorrelation Test

In this study to test the presence or absence of autocorrelation using durbin watson. The condition if there is no autocorrelation in Durbin Watson is if the value of dU<dW<4-dU. The results of the autocorrelation test can be seen in Table 4:

Table 4. Autocorrelation Test Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.438	0.192	0.175	6.00480	0.838

3.3.2. Heteroscedasticity Test

In this study using the glejser test. If the significant value of the independent variable <0.05, heteroscedasticity occurs. If the significance value of the independent variable is > 0.05, there is no heteroscedasticity. The results of the heteroscedasticity test can be seen in Table 5.

Table 5. Heteroscedasticity Test Result

Variable	Sig	Description
AIS	0.10	Heteroscedasticity does not occur
E-Commerce	0.154	Heteroscedasticity does not occur
Performance of SMEs	0.404	Heteroscedasticity does not occur

The significance value for all variables is more than 0.05. The classical assumption of heteroscedasticity in this model is fulfilled, which is free from heteroscedasticity.

3.3.3. Normality test

In this study, to detect the residuals were normally distributed or not, the Kolmogorov-Smirnov (K-S) non-parametric statistical test was used to detect the residuals were normally distributed. If the value of Asymp Sig. (2-tailed) > 0.05 then the regression model is normally distributed. The results of normality testing in this research can be seen in the Table 6.

3.4. Hypothesis Test Results

The results of hypothesis testing indicate whether or not the influence of the independent variable is significant on the dependent variable and how much the independent variable affects the dependent variable partially. In this study, the number of observations was 100, the t table value was obtained from degree of freedom (df) = n-(k+1), where n is the number of samples and k is the number of independent variables. So that the value of df=100-(2+1) the value of df=97, based on the t table with a significance of 5%, the t table value is 1.6607. The results of hypothesis testing can be seen in the Table 7.

Table 6. Normality Test Result

	Unstandardized Residual
Test Statistic	0.087
Asymp. Sig. (2-tailed)	0.061

Table 7. Hypothesis Test Results

Variable	B	t_{table}	T_{count}	Sig	Discription
(Constant)	28.801				
AIS	0.483	1.6607	4.196	0.000	Accepted
E-Commerce	0.372	1.6607	2.636	0.010	Accepted

Table 8. Hypothesis Test Results

Model	Adjusted R Square
1	0.191

From the results of data processing in the table above, the equation model formed is:

SMEs Performance = 28.801+0.483+0.372+e

From the regression equation above, it can be explained that:
1. The constant of 28.801 states that if the independent variable is considered constant, then the average performance of SMEs is 28.801.

2. The SIA regression coefficient of 0.483 states that every time there is an increase in the value of the accounting information system by one unit, the performance of SMEs will increase by 0.483.
3. The regression coefficient for e-commerce utilization is 0.372 which states that every time there is an increase in the value of e-commerce utilization by one unit, the performance of SMEs will increase by 0.372.

3.5. Coefficient of Determination Test Results (R²)

The coefficient of determination (R²) is used to measure how far the model's ability to explain the variation of the dependent variable [11]. The results of the determination test can be seen in Table 8.

The results of the determination test show the Adjusted R Square value of 0.191. This means that the ability of the independent variable in this model to explain the dependent variable is 19.1% while the remaining 80.9% is explained by other factors outside the model.

3.6. Discussion of Hypothesis Results

The results of the first hypothesis test indicate that the accounting information system has a significant positive effect on the performance of SMEs in Rembang Regency. Business activities in an SMEs must have an impact on the performance of SMEs. SMEs that implement or use good information systems in the business they run, the resulting impact is also large, both the impact on business continuity and the performance of SMEs. So that SMEs must show the form of the use of accounting information systems due to the impact it has on business sustainability and the performance of SMEs, the goal is for the survival of the company. This means that the better the use of accounting information systems in carrying out businesses or businesses run by SMEs, the better the performance of these SMEs will be. The results of this study are in line with the results of research that has been carried out by [13] with the results of research that accounting information systems have a significant positive effect on the performance of tile craftsmen SMEs

The results of the second hypothesis test indicate that the use of e-commerce has a significant positive effect on the performance of SMEs in Rembang Regency. Business activities in an SME must have an impact on the performance of SMEs. SMEs that utilize e-commerce technology can reach market promotions not only the local market but the national market, so this will have an impact on increasing sales of these SMEs. Company performance in SMEs will increase if business actors use e-commerce in running and developing their business. The development of e-commerce is achieved to increase net income, this happens because e-commerce reduces costs in the sales process, for example marketing costs. The internet-based economic model experienced more efficient growth at the transaction cost level [14]. Other efficiencies come from marketing and advertising [15]. An increase in the effectiveness of the performance of SMEs in the use of e-commerce will also be followed by an increase in the performance of SMEs using e-commerce in Rembang Regency. The results of this study are supported by the results of research conducted by [16] which proves that the use of e-commerce in business transactions causes a reaction to the user or the wearer, namely in the form of acceptance or rejection. The success of the implementation of e-commerce is very dependent on the acceptance by the user as an e-commerce user. This is reinforced by the results of research conducted by This means that the more effective the user's work, the better the performance that E-commerce has a positive effect on company performance. The increasing development of e-commerce in SMEs, the company's performance in SMEs will grow. The effectiveness of the user's work has a positive effect on company performance. The more the value of the effectiveness of the user's work in SMEs, the company's performance in SMEs will grow.

4. CONCLUSION

Based on the results of the research above, it can be concluded that accounting information systems and the use of e-commerce have a significant positive effect on the performance of SMEs in Rembang Regency. From the test results and the discussion above, it was found that the use of accounting information systems examines influence and with the direction of the positive relationship. This means that in the business process, SMEs understand and understand the importance of an accounting information system that will make an impact in decision making that can cause development marketing from SMEs, this is different from the use of e-commerce that does not provide influence on performance SMEs in Rembang Regency. It can happen because of the understanding that is still less and not yet use maximized, so that not yet make a positive impact to the sales turnover obtained by SMEs in Rembang Regency.

Suggestions for researchers who will conduct further research, should add or replace the independent variables studied, because apart from these variables there are still many variables that can be used to conduct research. In addition, it can also use other research objects such as in companies other than SMEs.

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