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Impact of e-Commerce Adoption on Marketing Performance

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Abstract

This review plans to examine the impact of relative advantage, perceived ease of use, and perceived usefulness on the marketing performance of SMEs mediated by the adoption of e-commerce studies on SMEs in Sleman Regency. This study uses a sample of 100 respondents from Prima Village SMEs who have used e-commerce. The sampling technique utilized in this examination is purposive sampling, and the information investigation technique utilized is Partial Least Square (PLS). The results of this study indicate that relative advantage, perceived ease of use, and perceived usefulness have a positive impact on e-commerce adoption. The relative advantage and adoption of e-commerce have an effect on marketing performance.

Keywords: *E-commerce adoption and SME marketing performance*

INTRODUCTION

The rapid development of digital technology in Indonesia has not realized that it has brought many changes to human civilization, where almost everyone uses or utilizes digital technology in every aspect of their lives because technology provides the convenience of service and unlimited coverage. This should be used by business people to create new business opportunities, namely by marketing and business transactions that can be done electronically or called electronic commerce (E-Commerce). Digital marketing modes, such as commercial websites, substantially replace or complement physical marketing modes in various industries (Tolstoy et al., 2021). However, there are still many companies in Indonesia, especially SMEs, that find it difficult to transform to digital because of their various limitations. SMEs face many challenges, namely market globalization, economic changes, increased competition, declining product life cycles, changing consumer needs, and rapid technological developments (Abed 2020). SMEs in developing countries generally have not utilized the power of the Internet properly to expand their business. Even though the benefits they will get by using e-commerce for their company will be much greater because the Internet can reach broad and targeted marketing (Effendi, 2020). According to (Sugandini et al. 2019), SMEs are currently in a very complex global competitive situation, namely with the rapid development of technology and extensive business networks. SMEs of different sizes, different types of industries, or specific regions must better adapt to technology through digital alignment. At the point when the computerized arrangement is largely driven by external factors (e.g., consumer expectations and regulatory pressures), SMEs must determine the supporting elements. On the other hand, while digital alignment is largely driven by the mindset and enthusiasm of managers, SMEs must implement transformative strategies regarding their business technology (Canhoto et al., 2021).

The reason for this failure was because SMEs did not have the ability to influence market prices, had relatively small market share, could not enforce entry barriers in their industry, found it difficult to raise

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prices, and depended heavily on a small number of customers. According to Rahayu and Day (2015), the competitive map of SMEs in the digital market or e-commerce, technology readiness is the main element that encourages SMEs to adopt the system. So, in adopting technology, SMEs usually always consider various things considering the limitations of SMEs. Starting from the relative advantages that will be obtained when SMEs adopt e-commerce (Rahayu and Day 2015).

Perceived Usefulness and Perceived Ease of Use are elements that influence the adoption of E-Commerce (Sin et al. 2016). The adoption of e-commerce for product marketing in SMEs can be used as one of the developments of new business strategies, which, if used properly, will have an impact on good marketing performance (Dahbi and Benmoussa 2019). E-Commerce also allows SME businesses to expand their business reach to penetrate the global market and will increase the competitiveness of the national economy. The acknowledgment and execution of e-commerce as e-marketing in SMEs have an influence on the marketing performance of SMEs (Qashou and Saleh 2018). The purpose of this study is to examine the performance model of SMEs that are influenced by e-commerce adoption. In addition, the performance of SMEs is also influenced by Relative Advantage, perceived convenience, and perceived benefits.

LITERATURE REVIEW

State Relative Advantage and Marketing Performance

Relative advantage is characterized as how much innovation is perceived to provide more benefits than its predecessor (Rogers 1962). The results of research conducted by (Ariansyah et al. 2021) show that e-commerce offers few relative advantages over traditional exchange; for example, empowering adopters to set aside time and cash (Punj 2012). E-commerce permits people to have more extensive admittance to item and price data. The results of research from (Sheikh, Marketing, and Abdullah 2017) also show that relative advantage has a positive relationship with the performance of a company. Thus, relative advantage assumes a significant part in influencing the marketing performance of an organization in adopting innovation.

H1: Relative Advantage affects e-commerce adoption
H2: Relative Advantage affects Marketing Performance

Perceived Ease of Use and Adoption e-commerce

Perceived Ease of Use is the degree to which people believe that using the technology or system will be easy to understand and easy to use. PEOU and PU have an impact on performance, effectiveness, risk, and trust because PEU includes beliefs about the ease of using technology (Chatterjee and Kumar Kar 2020). In addition, other exogenous PEOU variables include technological simplicity and self-efficacy. A study conducted by (Chatterjee et al. 2021) with regards to the arising Industry 4.0 shows that the integrated TOE-TAM model had an effect on competitive advantage (Muller et al., 2018). The TAMs studied include PEOU and PU. Research conducted by (Kumar and Kalse 2021) shows that PEOU and PU can improve organizational performance. Based on the results of Kumar and Kalse's research, it shows that the adoption of artificial intelligence could help SMEs in all sectors, especially in the condition of SMEs during the COVID-19 pandemic. However, the adoption of this innovation is not easy. The key factors for adopting artificial intelligence derived from TOE theory, TAM theory, DOI theory, and UTAUT theory as a whole show that PEOU and PU have an effect on innovation adoption and can improve the performance of SMEs

H3: Perceived Ease of Use affects e-commerce adoption.

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H4: Perceived usefulness has a positive effect on e-commerce adoption

E-Commerce and Marketing Performance

Research on the effect of e-commerce adoption on marketing performance has been carried out by (Gregory, Ngo, and Karavdic 2019). The results show that e-commerce marketing is very important in reaching marketing efficiency. This means that companies that develop the ability to utilize e-commerce resources could improve distribution and communication efficiency, which thusly essentially significantly improves e-commerce-related performance. E-commerce can increase loyalty and other marketing performance in the hospitality sector. The findings of the research Hua et al. (2019) conducted illustrate that the impact of marketing programs is influenced by e-commerce costs. Hua (2016), e-commerce strategies can likewise target explicit customer segments with customized product offerings.
H5: E-Commerce adoption affects marketing performance

RESEARCH METHOD

This study uses a quantitative research type with a survey approach (Hair, Howard, and Nitzl 2020). Collecting data using a questionnaire. Respondents in this study were UKM Desa Prima in Sleman, DIY. The total of samples in this research was 100 SMEs. The data analysis of this examination procedure is a structural model utilizing SEM-PLS.

FINDING AND DISCUSSION

Descriptive Analysis of Respondents

The primary data that has been effectively gathered by the researcher was analyzed to decide the characteristics of the respondents, including gender, age of the respondent, position in the company, type of business sector, and the e-commerce platform used. The results of the descriptive analysis are shown in table 1.

Table 1. Characteristics of Respondents

Characteristics		Frequency	%
Gender	Male	36	36%
	Female	64	64%
Length of operation of SMEs	< 1 Year	18	18%
	1 – 3 Years	37	37%
	> 3 Years	45	45%
Position	Owner	42	42%
	Manager	7	7%
	Owner and Manager	29	29%
	Others	22	22%
Type of Business	Fashion	36	36%
	Culinary	13	13%
	Craft	36	36%

	Others	15	15%

Quantitative Analysis

Hypothesis testing will be carried out utilizing the Structural Equation Modeling (SEM) method be based Partial Least Square (PLS) with the Smart PLS Version 3.2.9 program, which is carried out in 2 stages. (Hair et al., 2020) said that reporting the results of the PLS analysis uses two steps called the two-step approach. The first is focused on the results of the measurement (Outer Model). The outer model or measurement model is a measurement model that relates indicators to other variables, and the second is focused on the results of the structural model (Inner Model). An inner model or structural model is a structural model that links between latent variables. The following is a schematic of the PLS program model tested.

Measurement Model Test Results (Outer Model)

The outer model is used to test the validity and reliability of each indicator on the latent variable. In the appraisal of this outer model, average variance extracted (AVE), convergent validity, discriminant validity, composite reliability, and Cronbach alpha tests will be carried out.

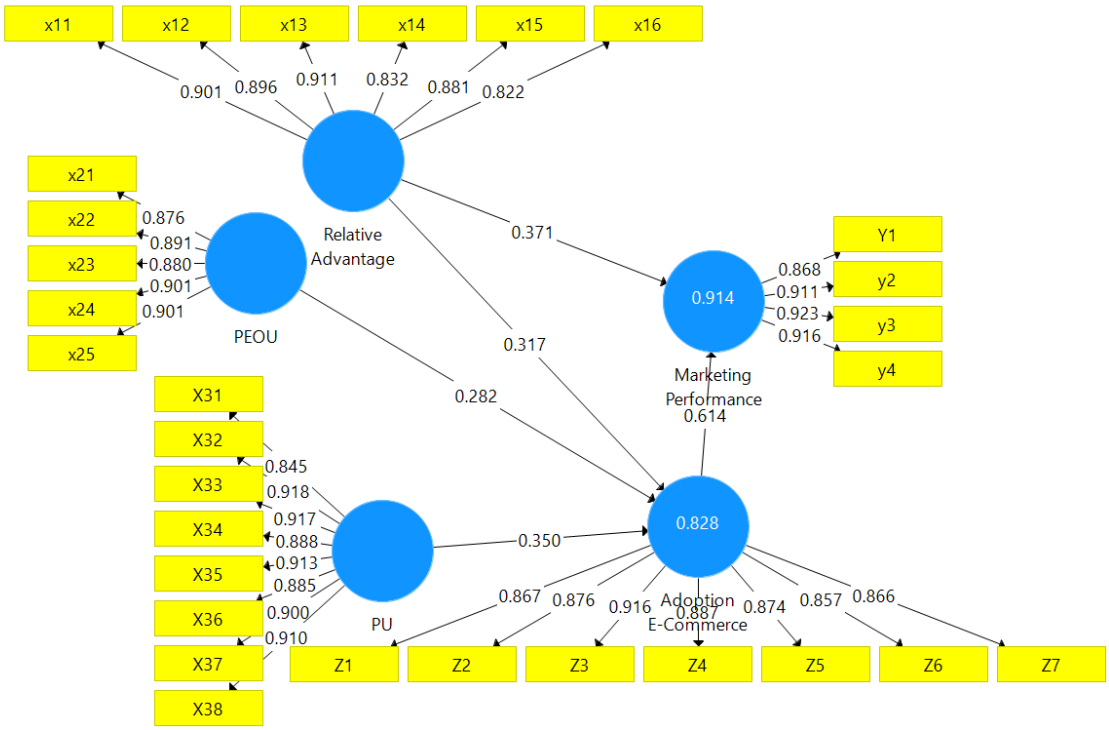

Figure 1. Testing Results of E-Commerce Adoption Model

The principle finishes of the review might be introduced in a short Conclusions area, which might remain solitary or structure a subsection of a Discussion or Results and Discussion segment. The end area should lead the peruser to the significant matter of the paper. It additionally can be trailed by suggestions or recommendations identified with additional exploration. The limitation and contributions of research should be addressed in this section.

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Validity test results

The test results can be concluded that all items in the research variables have a loading factor > 0.7. Each variable has an AVE value > 0.5. For that, all variables can be said to have good validity.

Reliability test results

From the results of the Composite Reliability test above, it could be deduced that the Composite Reliability value of each variable is > 0.7. It could be deduced that all variables had a high level of reliability.

Goodness-of-Fit Test

The goodness-fit test of the model is one of the methods of testing the structural model by looking at the value of the coefficient of determination (R2). The value of the coefficient of determination (R2) is seen by selecting R Square in the PLS Algorithm. The test results found that the value of R12 = 0.828. R22 = 0.914. Predictive Relevance (Q-Square) value Q2 = 0.985208. The goodness of Fit (GoF) = 0.8296. So that the model proposed in this study has a good model fit test and the model is acceptable.

Hypothesis testing

In testing the hypothesis, there are several criteria that must be met, namely the original sample, t-statistics, and p-value. The original sample value is utilized to see the direction of hypothesis testing; if the original sample indicates a positive value, it means the direction is positive, and the original sample value is negative, it means the direction is negative. Then t-statistics and p-values are utilized to test the significance of the relationship between variables.

Table 2. Path Analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P-Values	Hypothesis
Adoption E-Commerce→ Marketing Performance	0.614	0.611	0.083	7.427	0.000	Supported
PEOU→Adoption E-Commerce	0.282	0.278	0.092	3.070	0.002	Supported
PU→Adoption E-Commerce	0.350	0.360	0.092	3.790	0.000	Supported
Relative Advantage→Adoption E-Commerce	0.317	0.309	0.115	2.755	0.006	Supported
Relative_Advantage →Marketing_Performance	0.371	0.373	0.083	4.487	0.000	Supported

CONCLUSION AND FUTURE RESEARCH

Conclusion

Based on the data analysis and discussion conducted regarding the Effect of Relative Advantage, Perceived Ease of Use, and Perceived Usefulness on SME Marketing Performance Mediated by E-Commerce Adoption, the following conclusions can be obtained: 1) Relative Advantage has a positive effect on e-commerce adoption. Thus, hypothesis 1 is supported. Relative advantage has a positive effect on marketing performance. Thus hypothesis 2 is supported. 2) Perception of Ease of Use has a positive effect on e-commerce adoption. Thus hypothesis 3 is supported. 3) Perception of usefulness has a positive effect on e-commerce adoption. Thus hypothesis 4 is supported. E-Commerce adoption has a positive effect on Marketing performance. Thus, hypothesis 5 is supported. It can be deduced that the e-commerce adoption model is acceptable and all the hypotheses proposed are supported.

Further Research

Based on the results of the discussion, conclusions, and various limitations in this study, the authors can provide the following suggestions: for SMEs, it is recommended to increase the use of e-commerce for marketing SME products so that it is more optimal to improve the marketing performance of SMEs. For SMEs that have not yet adopted e-commerce in their marketing, it is advisable to immediately adopt e-commerce and realize that there will be many benefits when adopting e-commerce, and realize that there is the ease of use that can improve the performance of their workers, and finally the adoption of e-commerce. -commerce will have an impact on improving the marketing performance of SMEs. Because the results of the study indicated that the indirect effect between relative advantage and perceived ease of use on marketing performance has a greater impact if by adopting e-commerce in its business. However, the impact of perceived usefulness on marketing performance had a greater influence value when not adopting e-commerce. This indicates that the perceived usefulness felt by SMEs when adopting e-commerce has not been felt to improve the performance of their workers, for that it is recommended for SMEs to continue to increase the use of e-commerce so that it can benefit both the performance of their workers so that it will also have an impact. On the marketing performance of SMEs. For further researchers, this research is limited to certain areas, namely SMEs in Sleman Regency, it is recommended for further research to be able to increase the number of samples, and research can be carried out on SMEs in other areas outside Sleman Regency.by different respondents to prevent bias of the same source.

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