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FACTORS AFFECTING E-COMMERCE SUCCESS

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ABSTRACT

E-commerce platforms are more attractive than offline methods. Several website performance factors can influence customers to continue transacting online. SI success (dependent variable) with six dimensions of success (independent variable): increased usage, user satisfaction, personal impact, organizational impact, information quality, and system quality. Three other factors come into play: customer support system (CSS), personalization, and electronic word of mouth (EWOM).
Using the SPSS on survey data from 200 students interviewed in Semarang, from February 2023 to May 2023. The regression analysis results show that all hypothesis are accepted. The study explores the effectiveness of e-commerce systems by examining significant relationships between dependent variables (e-commerce success) and other independent variables: website service quality (WSQ), customer support service (CSS), success (ESS), personalization and electronic word of mouth (EWOM)..

Keywords: e-commerce, website service quality, customer support service, e-commerce success, personalization, electronic word of mouth.

INTRODUCTION

The Indonesian E-Commerce Association (idEA) emphasized that e-commerce in Indonesia will continue to support the Indonesian economy in 2023 when the threat of recession still overshadows the global economy. Indonesia's e-commerce transactions are predicted to reach Rp 700 trillion. E-commerce transactions are worth more than half of the overall digital economy. This year it is estimated that e-commerce [transactions] can reach Rp600 trillion-Rp700 trillion for all types of e-commerce (Indonesian e-Commerce Transactions Predicted to Reach Rp700 Trillion by 2023 (bisnis.com).

One of the reasons why e-commerce platforms are more attractive than offline methods is the additional features offered. These additional features include easy product access, customer reviews, price comparisons, and more. In other words, digital transformation can make customers transact online comfortably and securely (Abdallah & Jaleel, 2015)

Several website performance factors can influence customers to continue transacting online. Customer satisfaction while browsing and shopping online is equally important in increasing e-business sales. So, according to the concept of online marketing, customer satisfaction leads to customer recommendations and intent to buy again. In this study, customer satisfaction considerations, referrals, and buyback intent were considered fundamental factors for the success of e-commerce system success (ESS) (Ali, 2016). DeLone and McLean's Information Systems (SI) success model first popularized ESS (DeLone & McLean, 1992; DeLone & McLean, 2003). This concept explains SI success (dependent variable) with six dimensions of success (independent variable): increased usage, user satisfaction, personal impact, organizational impact, information quality, and system quality. Furthermore, an emerging modification of the e-commerce success model focuses on website service quality (WSQ) as the most important independent variable. Three other factors come into play: customer support system (CSS), personalization, and electronic word of mouth (EWOM) (Ge et al., 2023; German Ruiz-Herrera et al., 2023; Kalelkar et al., 2014).

 CSS refers to periodic online sales services provided by website operators. Personalization refers to the ability of online platforms to offer products/services according to customer preferences (Xu et al., 2015). EWOM can be interpreted as comments made on the Internet by customers and browsers (Baek et al., 2017).

This study used a multiple linear regression analysis approach with ESS bound variables and independent variables WSQ, CSS, personalization and EWOM (Figure 1).

LITERATURE REVIEW

E-commerce system success
The D&M model popularized by DeLone & McLean (1992) was an early study of IS's success. The study explores the relationship between system quality, information quality, usage, user satisfaction, individual impact, and organizational impact.
In addition, the success of an e-commerce system depends largely on the proper response at the system, individual, and organizational levels. Some aspects of the system's success are the quality of the e-commerce system, the quality of the content, trust and support. Of course, the model considers customer satisfaction as an independent component and various success factors as dependent variables ("The DeLone and McLean Model of Information Systems Success: A Ten-Year Update," 2003).
However, for a sustainable system, several factors must be considered, such as increased product choice, access to customer reviews, vendor comparisons, market competition, price transparency and ease of switching to other options. Efforts to meet customer expectations to prevent switching to competitors' websites are critical for e-marketers (DeLone & McLean, 1992). Previous research has shown that online customer satisfaction is an ESS requirement to increase customer loyalty to a website (Molla et al., 2001)

Website service quality (WSQ)

The quality of online services is an essential factor in evaluating the effectiveness of a website and measuring variables related to a website's success. Customer browsing satisfaction is a crucial indicator of website efficiency. Recent research highlights the importance of the quality aspect of a website in shaping a user's online experience. Previous research has shown that service quality directly affects customer satisfaction, leading to purchase intention. Customer satisfaction characteristics commonly used to measure the success of e-commerce are Technology Acceptance Model (TAM), Transaction Cost Analysis, and SERVQUAL (Ge et al., 2023)

TAM plays a vital role in shaping the service quality of e-commerce systems (Thakur & Srivastava, 2013). Website Quality of Service (WSQ) includes quality of information, system, and service quality. Ge et al. (2023) consider aspects such as perceived usability, perceived usability, perceived accessibility, attitude, and navigation. Amin et al. (2014) suggest usability, design, information, trust, and empathy.

The context of speed towards online transactions is relevant to the effectiveness of the website's interface system. Thanks to the 24-hour service, e-commerce websites can always be accessed without downtime. Page load speed refers to the time it takes for a website to update or load search results. Appearance refers to a website's attractiveness and content's readability. Currency means the ability of the Site to provide customers with accurate and timely information regarding products and their availability. Being on time means visitors can learn about the product or service early. "Comprehension" refers to how healthy data is presented on a website. "Accuracy" means providing unbiased and accurate information about products and services. "Security" refers to the Site's ability to assure customers that their personal information will not be compromised during a transaction. "Privacy" refers to the ability of the website to keep customers' personal information confidential and to protect such data from unauthorized use (Alrafi, 2008; Natasia et al., 2022; Shih, 2004)

H1. There is a significant relationship between WSQ and e-commerce success.

Customer support system (CSS)

The success of an online platform depends on the level of support provided to customers during and after purchasing their products and services, as well as their overall ease of use. This factor influences online customers' buying behaviour and conversion and retention decisions. Online shoppers prefer websites that offer seamless payment processing with multiple transaction options, efficient request processing, and the ability to track the status of ordered products and services (Ayo et al., 2016; Xu et al., 2015)

H2. There is a significant relationship between CSS and e-commerce success.

Personalization (PER)

Personalization is a strategy used by online marketers to proactively recommend products and services to browsers based on previous browsing behaviour and voluntarily provided information (Bhati et al., 2017). The concept includes offering customers complementary products and the opportunity to customize their shopping cart. However, some customers are willing to disclose personal information for the company to track their preferences (Choshin & Ghaffari, 2017). Xu et al. (2015) argue that personalization should be used for products and services that are of value to providers and customers, and buyers are actively looking for choices.

There are several methods for analyzing browser data in predicting shopping behaviour. Content-based filtering focuses on individual user preferences, tracking them to provide customers with alternative suggestions. Collaborative filtering involves users assessing objects and returning information deemed helpful by the vendor. Rule-based filtering relies on customers responding to questions and providing honest answers, which form the basis of product or service recommendation policies implemented by website owners (Kumi & Limayem, 2012; Shin et al., 2013)

H3. There is a significant relationship between personalization and e-commerce success

Electronic word-of-mouth (EWOM)

Initially, this concept combined product- or brand-related communications from previous and offline shoppers. However, with the advancement of internet technology, this concept has expanded to online mode. A recent study identified two factors that influence customers' purchasing decisions. The first factor is the influence of previous buyers and their verbal support. The second is the importance of advertising and mass media. However, in previous research, online word of mouth (WOM) was often viewed as a proxy for WOM as a whole, as customers gathered information online and made purchasing decisions offline (Dagustani et al., 2021).

A characteristic of electronic word of mouth (EWOM) is its rapid adoption and scalability. It is an asynchronous exchange of information about a product or service available online and accessible to browsers and loyal shoppers. This communication can take the form of customer comments. As a result, this social communication has a stronger impact on online shoppers because compared to formal communication, it is informal, involves sharing feedback, is personal, and provides valuable information (Belhadi et al., 2023)

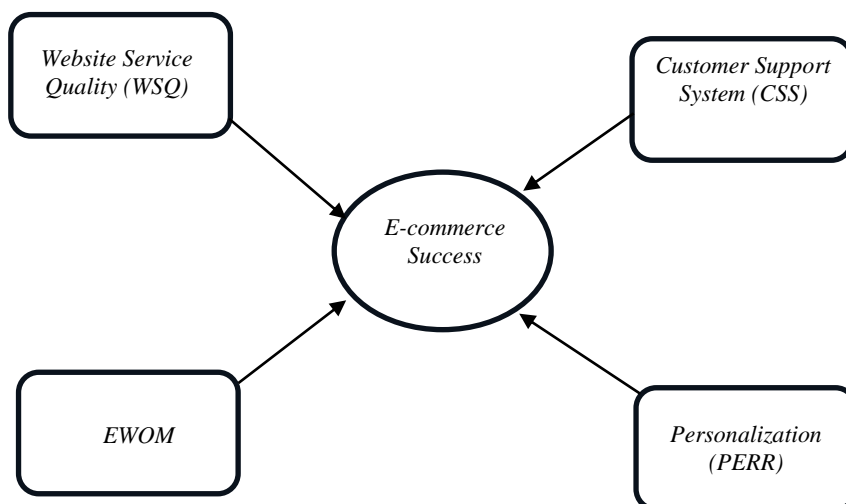H4. There is a significant relationship between EWOM and e-commerce success.

Figure 1. Proposed Model

RESEARCH METHOD

This study explores the determinants of ESS (e-commerce success): WSQ, CSS, personalization, and EWOM. This model was validated using the SPSS on survey data from 200 students interviewed in Semarang. The survey was conducted from February 2023 to May 2023.

The survey involved 200 respondents, especially students, who often carry out through online or e-commerce platforms over the past four months. Semarang is the provincial capital and has many public and private universities, so it is considered suitable for research. Of the total 200 respondents, 45.15 per cent were women, 79.12 per cent of consumers surveyed were 18-40 years old, most respondents were college students (65 percent), and 35 percent were graduate students. In addition, most respondents (51.35 percent) spend less than 6 hours per month.

We propose a model to examine whether there is a significant relationship between ESS and success factors (WSQ, CSS, Personalization, EWOM). Hypothesis testing is carried out by testing the importance of the hypothesis using a multiple regression analysis approach.

RESULTS

Validity tests are needed to ensure the statements from the questionnaire are valid or not if the resulting questionnaire is said to be valid. The results of the study r count are already greater than the r table. Thus, all items meet the criteria.

To measure Reliability use Cronbach Alpha Statistical Test (a). A variable is reliable if it has a Cronbach Alpha value greater than 0.600. The results showed that the Cronbach Alpha value was greater than 0.0600, thus, all items met the criteria. This study used multiple regression analysis (Table 1) to see the effect of the independent variable on the dependent variable. Based on Table 3, it can be concluded that the regression coefficient values of each WSQ, CSS, PERR, and EWOM variable have a positive and significant direction towards the success of e-commerce. it gives a linear equation: Y = 0.266X1 (-0.404) 0.320 0.542. From Table 3 (T-test), we can also conclude that all hypothesized variables turned out to be positive and significant.

Table 1. Regression Analysis

Coefficents^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.187	2.224		2.332	.022
WSQ	.243	.089	.266	2.732	.008
CSS	.253	.171	.404	2.712	.000
PERR	.366	.111	.320	3.310	.001
EWOM	.339	.146	.542	2.320	.022

a. Dependent Variable: e-commerce success

Next fit models are shown Table 2 with test F significance less than 0.05. Therefore, the model can be said to be fit and usable. Figure 1 shows the regression results of the proposed model.

Table 2. F Test

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.698	4	18.925	8.903	.000[b]
	Residual	201.942	95	2.126		
	Total	277.640	99			

a. Dependent Variable: e-commerce success
b. Predictors: WSQ, CSS, PERR, EWOM

DISCUSSION

The regression analysis results show that hypothesis 1 (H1) is accepted. It clarifies that objects play an essential role in shaping these constructs. Overall, the research construct consists of system quality attributes, content quality, and reliability (Abdallah & Jaleel, 2015).

In addition, statistical results show that hypothesis 2 (H2), which examines the relationship between CSS and ESS, is also supported. Previous research suggests that this relationship is a key factor in supporting a successful transaction lifecycle (Ayo et al., 2016)

The H3 attestation demonstrates the importance of personalization for e-business success. Along with the increasing sophistication of internet technology, personalization is becoming increasingly popular (Wang, 2008)

The relationship between Internet products/services and social communication is an essential factor in the success of a website. It was demonstrated by examining the significant relationship between EWOM and e-commerce success (H4). As comments available on websites become more important, they influence buying behaviour and potential buyers (Baek et al., 2017; Hao et al., 2015)

CONCLUSION

With the ever-increasing sophistication of internet technology, e-marketers are faced with a situation that requires immediate adjustment. E-marketers must adapt to changing consumer behaviour and provide dynamic, engaging, and emotionally satisfying shopping experiences that rival offline shopping. The advent of multi-channel e-retailing has allowed customers to access detailed information about products/services and quickly compare products with competitors' products (Pham & Khanh, 2021). The study explores the effectiveness of e-commerce systems by examining significant relationships between dependent variables (e-commerce success) and other independent variables: website service quality (WSQ), customer support service (CSS), success (ESS), personalization and electronic word of mouth (EWOM).

With the advancement of increasingly sophisticated internet technology, electronic marketers face a situation that requires immediate adjustment. E-marketers must adapt to changing consumer behaviour and provide dynamic, engaging, and emotionally satisfying shopping experiences that rival offline shopping. With the advent of multi-channel e-retailing, customers have access to detailed information about products/services and can quickly compare them with their competitors (German Ruiz-Herrera et al., 2023; Natasia et al., 2022). The study explores the effectiveness of e-commerce systems by examining significant relationships between dependent variables (e-commerce success) and other independent variables: website service quality (WSQ), and customer support service (CSS), Success (ESS), personalization and electronic word of mouth (EWOM)

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