

# The Effect of Accounting Software and E-Commerce on Medium-Sized Enterprise Performance in Badung Regency

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**Abstract:** This study aims to obtain empirical evidence regarding the effect of accounting software and e-commerce on the performance of medium-sized enterprises in Badung Regency. This study focuses on the effect of accounting software and e-commerce on company performance. Software is one of the components of an accounting information system. Software is a program or collection of programs that enables hardware to process data. E-commerce is the process of buying, selling, transferring, or exchanging products, services, or information through computer networks including the internet. The method of determining the sample using purposive sampling technique. The data analysis technique used is multiple linear regression analysis. The results showed that accounting software and e-commerce had a significant positive effect on company performance.

**Keywords:** Accounting Software, E-commerce, Medium Enterprise Performance.

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## I. INTRODUCTION

During the economic crisis in Indonesia, medium-sized enterprises were the economic sector that had the best resilience. The ability of small-scale businesses needs to be empowered and developed continuously by trying to reduce the obstacles experienced by medium-sized businesses, so that they are able to make a maximum contribution to improving the welfare of the community (Sutaryo, 2004). The main role of medium-sized enterprises in the national economy is to create jobs, drive the economy, increase output growth, and provide affordable needs for low-income groups. Strengthening medium-sized enterprises can be an effective program in overcoming unemployment and poverty (Malano, 2011). The development of information technology in the business world is very helpful for entrepreneurs in running their business, information technology provides information accurately, quickly and precisely so as to provide convenience in transactions (Pramiswari, 2014).

Utilization of information technology (IT) can provide support for administrative services, as well as to assist decision making (Anwar, 2009) in research (Dewi, 2017). IT is actually present as a savior for medium-sized businesses because IT provides the tools needed for operations and management (Maksoud, 2003). One form is the Accounting Information System (AIS). SIA is a branch of science from Management System Information. One component of AIS is software. Software is a program or collection of programs that allows hardware to process data (Rainer and Cegielski, 2011). Accurate and reliable financial reporting will improve the company's financial performance (Purnata, 2019). Therefore, medium-sized businesses need accounting software to support their development. The software will minimize the constraints found in manual recording, one of which is the reduction of human error.

Besides AIS, e-commerce is also a form of information system. Rainer and Cegielski (2011) suggest that electronic commerce (e-commerce) describes the process of buying, selling, transferring, or exchanging products, services, or information through computer networks, including the internet. E-commerce also allows companies to expand their business reach. One of the main benefits of e-commerce is access to and from global markets. E-commerce removes the geographic barriers of some companies wishing to conduct global trade. In terms of exploiting opportunities, at least until now e-commerce is an effective solution for entrepreneurs, especially small and medium entrepreneurs to penetrate the

global market which will ultimately increase the competitiveness of the national economy (Sarastyarini, 2018). The Internet makes communication of information easier. Finally, interactive media and database technologies from the internet also allow an opportunity for a company to promote its products and services (Senn, 2000). This increases the company's ability to attract new customers, thereby increasing their market and overall profitability (Khan and Motiwalla, 2016).

This study focuses on the effect of accounting software and e-commerce on company performance. Research on the effect of AIS on company performance has been widely carried out, but research on accounting software on performance is still small. Kharrudin, Ashhari, and Nassir (2016) conducted a study on the effect of information systems on company performance in Micro, Small and Medium Enterprises (MSMEs) in Malaysia. The form of information system they studied was accounting software. They use panel data to analyze company performance. The results of the research are MSMEs that use accounting software show significant progress in their performance compared to MSMEs that do not use accounting software. Research on e-commerce and company performance was put forward by Kraemer, Gibbs & Dedrick (2017). They conclude that there is a positive relationship between e-commerce and firm performance. Another study on the relationship between e-commerce and company performance was conducted by Khan and Motiwalla (2016) who conducted a study to assess how e-commerce influences the company's financial performance. This study analyzes the financial statements of 45 public companies in the United States that implement e-commerce. The result of this study is that most of the sample companies experienced an increase in financial performance after implementing e-commerce in their business processes.

In Indonesia, similar research is still rarely carried out, therefore researchers are interested in conducting research to determine whether or not there will be an effect of using accounting software and e-commerce on the performance of medium-sized businesses. In this study, the researcher refers to the research that has been done by Kharrudin, Ashhari and Nassir (2016) regarding the influence of information systems on company performance on MSMEs in Malaysia.

This study focuses on the effect of accounting software and e-commerce on the performance of medium-sized enterprises in Badung Regency. Performance measurement is the qualification and efficiency of the company or segment or effectiveness in business operations during the accounting period, thus the notion of performance is a formal effort carried out by the company to evaluate the efficiency and effectiveness of company activities that have been carried out in a certain period of time (Hanafi, 2003).

Kharrudin et., al (2010) conducted a study on the effect of information systems on company performance in MSMEs. The form of information system they studied was accounting software. They use panel data to analyze company performance. The results of the research are MSMEs that use accounting software show significant progress in their performance compared to MSMEs that do not use accounting software. Sari (2012) stated the results of the study that accounting software had an effect on the performance of MSME companies, the results of this study were different from Wahyuni's (2016) research. The results of this study have no effect on the performance of MSME companies, while research on e-commerce conducted by Sarastyarini (2007) results of hypothesis testing stating that e-commerce has a positive effect on company performance. In contrast to Sari's research (2012) entitled "The Influence of Accounting Software and E-commerce on Company Performance in Micro, Small and Medium Enterprises" states that the e-commerce variable has a negative effect on performance in MSMEs. The inconsistency of the results of previous studies makes research on accounting software and e-commerce for medium-sized businesses still considered an interesting problem to study.

The Unified Theory of Acceptance and Use of Technology (UTAUT) was proposed by Venkatesh et al. (2003) because it has become the most commonly used model by IT researchers in examining usage intentions and behavior (Lee et al., 2013). Venkatesh et al. (2003) identified four dimensions as direct determinants of behavioral intention to use technology. The four dimensions are performance expectancy, effort expectancy, social influence and facilitating conditions. Over the years, additional dimensions were added to the UTAUT model such as voluntary use (Anderson & Schwager, 2004), anxiety and attitudes (Carlsson et al., 2006); and self-efficacy and anxiety (Marchewka et al., 2007). However, there are studies that maintain the original dimensions of the UTAUT model (Hennington & Janz, 2007), but there are also other studies that include respondent demographics such as gender, age, experience, voluntary use, and education level (Wu et al., 2007; Lie'bana-Cabanillas et al., 2013). Due to its exploratory nature, this study retains the use of the original four UTAUT dimensions to predict behavioral intention, which is defined in this study as user intention rather than use of accounting software and e-commerce. Goodwill measures such as the use of accounting software and e-commerce, especially when data on actual usage are difficult to obtain. For the purpose of this study, behavioral intentions were operationalized in terms of the intention to use accounting software and e-commerce to improve their business

performance and whether it was the respondent's first experience in using accounting software and e-commerce among their friends and fellow medium-sized businesses.

## II. CONCEPTUAL MODEL AND HYPOTHESES

The main goal of a company is to maximize its profits, both large companies and medium businesses. To achieve this goal, companies must be responsive to environmental changes, especially with the information technology revolution. Today, information technology is a must in many companies. It is difficult to gain competitive advantage and survive without the adoption or implementation of information technology. Studies have shown that the most widely used information system is accounting information system, especially in the aspect of financial reporting.

The main advantages of optimal use of accounting software in medium-sized enterprises are better adaptation to environmental changes and increased competitiveness (Grande et al., 2011). In the context of medium-sized enterprises, accounting software has traditionally been regarded as a means of conveying financial information to firms (Mia, 1993). It has been proven that in medium-sized businesses, financial accounting remains the main source of information for managers.

Software is used as a tool to improve company performance and business strategy also has the same role to help make decisions to improve company performance. Accounting software can be used as a tool to support the company's performance to be efficient and to provide accounting information for all users in making decisions. Then, the company will achieve its goals and become successful, this will improve operational efficiency, reduce costs, add value to the business itself, reduce operating budgets, increase revenue, improve customer service, and achieve customer targets.

### H<sub>1</sub>: Accounting software has a significant positive effect on company performance

E-commerce allows companies to expand their business reach. One of the main benefits of e-commerce is access to and from global markets (Efraim, 2000). E-commerce removes the geographic barriers of some companies wishing to conduct global trade. Finally, interactive media and database technologies from the internet also allow an opportunity for a company to promote its products and services (Senn, 2000). This increases the company's ability to attract new customers, thereby increasing their market and overall profitability (Khan, 2002).

Kraemer et al., (2002) found a positive and significant relationship between e-commerce on company performance, increasing company performance in e-commerce development. Sutikno et al (2012) show that the application of e-commerce has a positive and significant influence on individual performance in expanding business marketing, so that the company's performance develops and gets buyers from within and outside the country. In addition, the benefits obtained by the implementation of e-commerce can reach the cost of communication between business owners and consumers faster, cheaper and can play an important role in improving company performance. E-commerce can also increase the speed and accuracy of information and can help save operational costs.

### H<sub>2</sub>: E-commerce has a significant positive effect on company performance

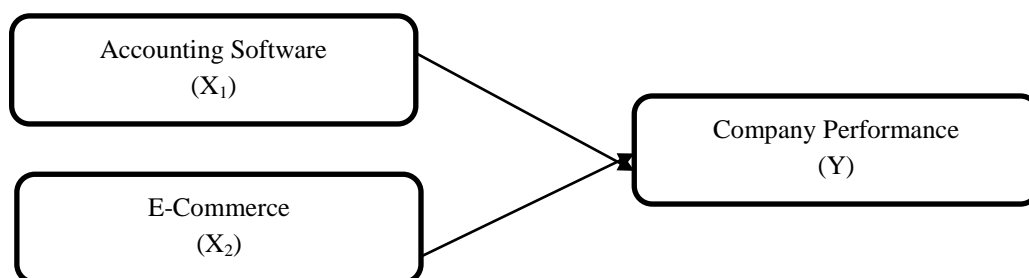


Figure 1: Conceptual Model

## III. RESEARCH METHODS

In this study, the research location is a medium-sized business engaged in various fields/industry, both trading companies and service companies, which are located in Badung Regency. The population in this study are medium-sized businesses in Badung Regency, with a total of 1,324 medium-sized businesses. In this study, the number of samples was determined by the slovin formula.

The results of the calculation of the number of samples are as follows:

$$n = \frac{1.324}{1 + 1.324 (0,1)^2}$$

$$n = 92,97 = 93 \text{ (rounded up)}$$

So the number of medium-sized businesses in Badung Regency that will be sampled in this study are 93 companies with an error rate of 10%. The sampling method used in this research is purposive sampling. The primary data in this study were obtained by means of field studies. The tool in this primary data collection is a survey. The form of the survey used in this research is a questionnaire. Secondary data obtained by literature study (library study). The data analysis technique used in this research is multiple linear regression analysis.

#### IV. RESULTS AND DISCUSSION

The questionnaire was distributed to medium-sized businesses in Badung Regency by directly visiting several medium-sized businesses in Badung Regency who were willing to fill out the questionnaire directly. The questionnaires distributed to the respondents were 93 copies of the questionnaire with a percentage rate of return of 100 percent or the questionnaire returned to the researcher, namely 93 copies of the questionnaire. So that the questionnaires that were processed were 93 questionnaires. The characteristics of the respondents in this study were reviewed based on age, gender and education level. The characteristics of the respondents are shown in Table 1 below.

**TABLE 1: RESPONDENT CHARACTERISTIC**

No	Respondent Characteristic	Total	Percentage (%)
1	<b>Based on Gender</b>		
	Male	52	55,91
	Female	41	44,09
	<b>Total</b>	<b>93</b>	<b>100</b>
2	<b>Based on Age</b>		
	21-30 years old	7	7,53
	31-40 years old	29	31,18
	41-50 years old	38	40,86
	>50 years old	19	20,43
	<b>Total</b>	<b>93</b>	<b>100</b>
3	<b>Based on Education</b>		
	Junior High School	0	0
	Senior High School	2	2,15
	Diploma	17	18,28
	Bachelor	74	79,57
	<b>Total</b>	<b>93</b>	<b>100</b>

Source: *Primary data processed, 2021*

Based on table 1, respondents who are male as many as 52 people or 55.91% and female respondents as many as 41 people or 44.09%. This shows that medium-sized business owners in Badung Regency are dominated by male employees. The highest number of respondents based on age for medium-sized business owners in Badung Regency was in the age category of 21-30 years, namely 7 people or 7.53%. The number of respondents in the age category 31-40 years is 29 people or 31.18%, the age category 41-50 years is 38 people or 40.86%, the age category > 50 years is 19 people or 20.43%. This shows that the majority of medium-sized business owners in Badung Regency are in the age of 40-50 years. The number of respondents who have completed their last education in Senior High School is 2 people or 2.15%, DI/II/III (Diploma) is 17 people or 18.28%, bachelor degree is 74 people or 79.57%. This shows that medium-sized business owners in Badung Regency have a fairly adequate level of education, because they have had the last 12 years of compulsory education, namely high school and above.

**TABLE 2: RESULTS OF MULTIPLE LINEAR REGRESSION ANALYSIS**

Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error		
1	(Constant)	-2.362	.888		.009
	X <sub>1</sub>	.070	.020	.129	.001
	X <sub>2</sub>	.817	.034	.873	.000

Source: *Primary data processed, 2021*

Based on table 2, the regression equation in this study as follows:

$$Y = -2,632 + 0,129X_1 + 0,873X_2 + e$$

### **The Effect of Accounting Software on Company Performance (X<sub>1</sub>)**

The significance value (t) for the accounting software variable (X<sub>1</sub>) in Table 2 is 0.001 < 0.05, greater than the significance level of = 5%. This shows that accounting software (X<sub>1</sub>) has an effect on performance. This proves that the first hypothesis (H<sub>1</sub>) in this study is accepted, namely accounting software (X<sub>1</sub>) has a positive effect on company performance (Y).

This research has shown that the accounting information system, which is used specifically in the aspect of financial reporting, has an impact on the company's financial performance. In medium-sized businesses, financial accounting remains the main source of information for business owners. Accounting software can be used as a tool to support the company's performance to be efficient and to provide accounting information for all users in making decisions. Then, the business will achieve its goals and become successful, this will improve operational efficiency, reduce costs, add value to the business itself, reduce operating budgets, increase revenue, improve customer service, and achieve customer targets.

This research is in line with previous research, namely research conducted by Kharrudin et al (2010) and Sari (2012), which revealed that MSMEs using accounting software showed significant progress in their performance compared to MSMEs that did not use accounting software. This means that the use of accounting software will improve company performance in MSMEs. The use of accounting software in recording MSMEs can minimize human errors such as miscalculation, loss or damage to recording documents, and duplication in recording. If using accounting software, these things will be minimized, so that the financial data presented becomes more reliable and accurate.

### **The Effect of E-Commerce on Company Performance (X<sub>2</sub>)**

The e-commerce variable has a significance value (t) of 0.000 < 0.05. This shows that e-commerce (X<sub>2</sub>) has an effect on performance (Y). Based on these results the second hypothesis (H<sub>2</sub>) in this study is accepted, e-commerce has a positive effect on company performance (Y). E-commerce allows companies to expand their business reach. One of the main benefits of e-commerce is access to and from global markets. E-commerce removes the geographic barriers of some companies wishing to conduct global trade. Finally, the interactive media and database technology of the internet also allows an opportunity for a company to promote its products and services. This increases the company's ability to attract new customers, thereby increasing their market and overall profitability.

The application of e-commerce has a positive and significant impact on business performance in expanding business marketing, so that business performance develops and reaches consumers from within and outside the country. In addition, the benefits obtained by the implementation of e-commerce can reach the cost of communication between business owners and consumers faster, cheaper and can play an important role in improving company performance. E-commerce can also increase the speed and accuracy of information and can help save office operational costs.

This is in line with the results of research conducted by Kraemer et al., (2002) and Sarastyarini (2017) which concluded that there is a positive relationship between e-commerce and the performance of MSME companies. This means that e-commerce can reach a wider market so that consumers are easier to get so that with increasing consumers the company's performance in MSMEs also increases. E-commerce can also increase the speed and accuracy of information and can help save operational costs.



## V. CONCLUSION AND SUGGESTIONS

There is empirical evidence obtained from this study that accounting software has a positive effect on the performance of medium-sized businesses in Badung Regency. This is supported by the theory of Unified Theory of Acceptance and Use of Technology (UTAUT) regarding one of the core determinants of a person's intention to use a technology is the effort expectancy. Effort expectancy is the performance of a business that can be maximized by using accounting software and utilizing e-commerce in running its business. The results of this study are expected to contribute to business actors in providing an overview of the influence of accounting software and e-commerce on the performance of medium-sized businesses in Badung Regency.

Accounting software has a significant positive effect on business performance. Therefore, business actors should consider the use of accounting software in running their business. The use of accounting software can make medium-sized businesses more efficient in using their assets to generate profits and more efficiently in obtaining profits from their sales. This study proves that e-commerce can have a positive effect on business performance. Therefore, business actors should use e-commerce in running their business because in running a business, sales are number one. If they use e-commerce, their market can be wider so that they can increase their sales.

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