

# Implementation of the SME Accounting Information System During the Preparation Period for Changes in the Business Environment

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## ABSTRACT

This study analyzes the implementation of accounting information systems (AIS) in MSMEs (Micro, Small, and Medium Enterprises). Changes in the business environment that will occur in the future require AIS as a strategic sector that will assist MSMEs in achieving growth in their performance. The implementation of AIS in MSMEs may affect their performance growth. However, not a few MSMEs in Indonesia implement AIS in their business. Therefore, this study distributed questionnaires to MSMEs in Banyumas and tested them using regression test. The finding of this study is that the implementation of accounting information systems in MSMEs is influenced by the adaptability of MSMEs owners. Therefore, high quantity and quality of assistance are necessary for AIS implementation in MSMEs' business in order to prepare them for the changes in the business environment that will occur in the future.

**Keywords:** *Accounting Information System, MSMEs, Adaptability.*

## 1. Introduction

Micro, Small, and Medium Enterprises are one of the wheels of the economy of Indonesia, where MSMEs can remain standing even in the midst of the monetary crisis. This is due to several things, such as: (1) most of the products sold by MSMEs fall into the category of consumer goods, which are not durable, (2) the use of cash or non-banking, and (3) they generally produce certain goods. The emergence of a large number of new MSME practitioners is caused by layoffs during the monetary crisis. In addition to the monetary crisis, MSMEs can also survive in the midst of the Covid-19 pandemic, where many sectors are starting to lose even. According to the Central Statistics Agency, in 2019, the percentage of the number of MSMEs to the total MSMEs in Central Java was 5.19%. According to Akumindo records, the contribution of MSMEs to Gross Domestic Product (GDP) of 2020 fell to 37.30 percent, or equivalent to IDR 4,235 trillion. While in the previous year, the contribution of MSMEs was able to reach 60.3 percent of GDP or Rp. 8.4000 trillion.

One of the MSMEs' problems is that they do not have structured financial records and have not used an Accounting Information System. While using a good system will give some advantages for MSME practitioners, one of which may improve their business by borrowing funds from the bank to overcome the difficulty of doing bookkeeping manually. Researchers are trying to design

an accounting information system, manually or digitally, that is designed as simple as possible so that MSMEs can operate the system easily and properly. According to Bodnar and Hopwood (2003:23), accounting information systems are various resources, such as equipment and human resources, that are arranged to convert data into information. The accounting information system is a subsystem of the MIS (Management Information System) that provides financial information, as well as other information obtained during the routine process of accounting transactions (Jones & Rama, 2006).

An accounting information system is a part of an organization that collects, categorizes, processes, analyzes and communicates financial information for decision making to the parties outside the company (government, tax authorities, and prospective shareholders) and parties within the company, in this case the shareholders (Baridwan, 2010). 2004:4).

Accounting information systems are very important for company operations because accounting information systems are systems that collect, record, store, and process data so as to produce information for decision makers. TMBooks (2017:6). Accounting information systems produce information that can be used to support routine activities, support decisions, and also planning and control. Implementing internal control—which includes policies, procedures, and information systems that are used to protect company assets from loss or embezzlement—is useful for maintaining the accuracy of financial data. The use of computer-based accounting information systems is expected to assist MSMEs in recording financial transactions to ease the compilation of financial reports. It will make it easier for MSMEs to fulfill one of the requirements for obtaining capital from financial institutions.

In Indonesia, the information problem in MSMEs is still significant for MSME practitioners to make decisions, especially information on accounting. The information generated from accounting is inadequate to make decisions, constrained by weaknesses in the aspect of existing resources. Problems related to accounting information systems are also expressed by Nasution (2011). He stated that financial statements could not be used as a guide to identify, anticipate situations, and become the basis for decision making. Companies must design an integrated information system so that the resulting output can meet their information needs. Another factor that becomes an obstacle to establishing an accounting information system is environmental factors (Salehi & Abdipour, 2011), such as the company's internal environment—in this case is the organizational culture. Factors that affect the internal culture of an organization include the organization's mission, consistency, and adaptability.

The mission aims to provide clear direction and goals that determine appropriate actions for the organization and its members. A mission is a series of actions to achieve organizational goals. The main goal of MSMEs is to make a profit, so MSMEs should have a mission for the sustainability of their business, which assisted by the implementation of AIS.

Denison (2016) explains that “consistency is associated with the degree to which beliefs, values, and expectations are held consistently by organizational members”. Every MSME must at least have manual financial records, so that MSMEs also still have to carry out their financial records continuously and then switch to using AIS in order to be able to produce fast, precise, and reliable information.

According to Roharjo (2014), “Adaptability shows the readiness and ability of individuals, groups of individuals or organizations to follow the changes that occur”. It has been proven that the resilience of MSMEs in facing the monetary crisis and pandemic reflects that MSMEs have strong adaptability. So, that strong adaptability should be able to help MSMEs implement the AIS. Due to technological advances and developments that are currently occurring, they are used to shift traditional accounting/finance records, which have many weaknesses in data processing speed, the accuracy of information produced, and the reliability of data and information.

## **2. Literature Review**

### *2.1 Accounting Information System*

Philosophically, the function of financial accounting is very important in a company organization, both informally and formally. The development and variety of increasingly complex business models at present make the existence of financial accounting increasingly necessary. Dyer and McHugh (1975) stated that the timeliness of the submission of financial statements is one of the important characteristics of financial statements, which are the main products of financial accounting. To guarantee the fairness of the information presented in the financial statements, the preparation of financial statements must comply with the provisions of the Financial Accounting Standards (SAK). An accounting information system is a system that processes accounting data to provide the information needed by internal and external users of the company. The current growth and development of the company's organization are greatly influenced by every change in information and telecommunications technology. The rapid development of information technology has greatly influenced the company's information system. To deal with these changes, many companies have given serious and considerable attention to the realization of corporate information systems, especially accounting information systems, which are believed to be the main information providers for management information systems for decision making (Apriani et al., 2021).

### *2.2 Mission*

According to Fey and Danisin, the mission aims to provide clear direction and goals that determine appropriate actions for the organization and its members. Successful organizations also have clear goals and directions in determining organizational goals and strategies and expressing a vision of how the organization wants to be seen in the future. Based on the characteristics of the four organizational cultures, the authors use these four characteristics of organizational culture to measure the organizational culture. The author assumes that an organization is called cultured if it has those four characteristics. Thus, the existing organizational culture will play a proper role in improving organizational performance.

### *2.3 Adaptation Ability*

According to Stephen P. Robin (2008), "ability is the capacity of an individual to do various tasks in a job". Adaptation is the ability of living beings to adapt to their environment. There are several ways of self-adjustment that can be done, namely by adjusting the shape of the body's organs, adjusting the work of the body's organs, adjusting the organs of the body, and adjusting the

behavior in response to environmental changes. Adaptability is a very complex behavior because it involves a number of functions and intellects. For example: reasoning, working memory, and learning skills are getting higher. According to Widodo and Triwanggono (2018), adaptation theory lays its emphasis on the ability of organizations to accept, interpret, and translate disturbances from the external environment into internal norms that lead to survival or success. The three key aspects of adaptability are perception and response to the external environment, the ability to respond to internal customers, and quick reactions to both internal and external customers.

#### *2.4 Consistency*

Consistency is the level of agreement among members of the organization on the basic assumptions and core values of the organization. Consistency emphasizes the system of beliefs, values, and symbols that are understood and shared by members of the organization and the implementation of coordinated activities. The existence of consistency in an organization is characterized by the staff's feeling of attachment; there are key values such as clarity about what actions can and cannot be taken. The Consistency of a person's attitude affects their behavior. This is in line with Gea in the journal of Leonard (2015: 99), "consistency can be understood as a match between words and actions." This means that someone who is consistent has a fixed attitude, and always trying to harmonize his words, attitudes, and behavior.

#### *2.5 Hypothesis Development*

##### *2.5.1 Mission and Accounting Information System*

Provide clear direction and goals that determine appropriate actions for the organization and its members. Successful organizations also have clear goals and directions in determining organizational goals and strategies and expressing a vision of how the organization wants to be seen in the future, including the implementation of an accounting information system as a tool that can facilitate the work of an organization.

**H1: Mission has a positive effect on the implementation of the Accounting Information System.**

##### *2.5.2 Adaptability and Accounting Information System*

Adaptability is the capacity of the organization to change in response to external conditions. Ironically, well-integrated organizations are the hardest to change. Internal integration and external adaptation are often at odds with each other. Adaptive organizations are driven by their customers, take risks, learn from their mistakes, and have the skills and experience to create change. According to Sadati (2011), they continue to change the system to improve the collective ability of the organization to provide value to customers, including the change from traditional accounting to systematic accounting.

## **H2: Adaptability has a positive effect on the implementation of Accounting Information Systems**

### *2.5.3. Consistency and accounting information system*

Consistency concerning beliefs, values, symbols, habits, and regulations have an influence on organizational effectiveness related to how to do things, how to behave, and others. The implementation of core values, agreement, coordination, and integration in an organization requires a stable or fixed internal focus. The desire to improve organizational performance more effectively should encourage organizations to implement accounting information systems. High consistency tends to indicate the effectiveness of organizations and organizations with a strong culture.

## **H3: Consistency has a positive effect on the implementation of accounting information systems**

### **3. Research Methodology**

#### *3.1 Population and Sample*

This type of research uses a quantitative approach. The data in this study are primary data. The population of this study is MSMEs in Banyumas Regency. The sample of this study was taken from a population determined from calculations using the Slovin formula. Then, the sampling is done by using purposive sampling with predetermined criteria. Out of 80 questionnaires distributed, 59 were returned. Respondents in this study consisted of 40 respondents from micro-enterprises, 9 respondents from small businesses, and 10 medium-sized enterprises. The analytical tool used is *Structural Equation Modeling* (SEM) using Moment Structure Analysis.

### **4. Results**

#### *4.1 Data Quality Test Results*

The validity and reliability of the questionnaire were tested by including 30 MSMEs owners and financial officers before the questionnaire was distributed to the respondents. Traditional assumption tests were also performed to test the normality, multicollinearity and heteroscedasticity. The results showed that the residual data is normally distributed, and no multicollinearity and heteroscedasticity issues are observed.

#### *4.2 Model Fit Test*

The model Fit test aims to determine whether the Y Accounting System information model built already fits on Smart PLS or not, which will be seen in the value of the loading factor of each indicator a by looking at the outer loading. The value of the loading factor in this study was above 0.7.

#### *4.3 Hypotheses Testing Result*

The result of R square in this research is 0,537. This means that in regards to Y accounting information system *a* from the model accounting information system built on the YY dependent variable accounting information system used, 53.7% of it is able to explain Accounting Information System, while the other 36.3% is influenced by other variables.

Table 1. The relationship between variables

Variable s	T Statistics	P Values	
X1 -> Y	0,419	0,675	Fail to Support H <sub>1</sub>
X2 -> Y	2,515	0,012	Support H <sub>2</sub>
X3 -> Y	0,210	0,083	Fail to Support H <sub>3</sub>

The relationship between X1 Mission to Y Accounting Information System is not significant because the P Value is  $0.675 > 0.05$ . X2 Adaptation Ability to Y Accounting Information System has a significant effect on Y accounting information system with the P value of  $0.012 < 0.05$ . And the relationship of X3 Consistency to Y Accounting Information System does not have a significant effect, with the p value of Y accounting information system being  $0.834 > 0.05$ .

## 5. Discussion

This study shows that good adaptability in MSMEs has a significant effect on the implementation of accounting information systems in MSMEs. The decision of MSMEs to utilize accounting information systems can be based on their ability to adapt to technology. This study shows results that are in line with what has happened in Indonesia during the monetary crisis and pandemic where MSMEs are one of the business lines that can survive through them. The results of this study are in line with Amiroh (2013) and Jackson (2011), which state that the application of accounting information systems is significantly influenced by the adaptability of MSMEs.

Meanwhile, this study does not show the effect of mission and consistency on the application of accounting information systems in MSMEs. The mission implemented by MSMEs has no effect on the implementation of AIS. MSMEs do not apply a clear vision in running their business because the uniqueness of MSMEs is based on the profits obtained from the results of their business. MSME owners have a simple perspective, most of them assume that as long as the capital they have is still sufficient for MSME operational activities, they do not really care about other things.

The consistency of MSMEs also does not affect the implementation of AIS in their business. MSMEs do not have good consistency in their business due to fluctuating business situations. Due to the ever-changing business situation, MSMEs only rely on their resilience in sustainability to survive and generate profits in their business.

This may be because most of the samples of this research are micro-scale businesses, where the accounting system used is a simple system with unstructured human resources. This finding contradicts the results of Puspaningtyas (2011), Mihardjo et al. (2019), and Helming et al. (2019).

## 6. Conclusion

Based on the tests conducted on the adaptability, consistency, mission, and implementation of accounting information systems, it is known that the implementation of a computerized accounting information system is influenced by one element of organizational culture, namely adaptation ability. Therefore, MSME management needs to form a good organizational culture and support the implementation of computerized accounting information systems within MSMEs. The management needs to prevent the development of negative phenomena of organizational culture that can hinder the implementation of computerized accounting information systems on MSMEs.

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