

# Accounting Information System Analysis of Micro to Medium Enterprises

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## Abstract

This study aims to analyze the use Accounting Information System (AIS) on Micro to Medium Enterprises (MSMEs) of industry sectors in Manokwari. The analytical review is based on operational aspects of AIS (business size, business type, firm age, owner's educational level and accounting knowledge) in managing MSMEs. The data of this descriptive study was collected from questionnaires and interviews given to 35 MSMEs. The result shows that the majority of MSMEs use accounting information system in its operational activities. Further, based on the operational aspects it is shown that medium enterprises, handy craft industry, business that have been operating for more than 20 years, owner's with bachelor degree and owner's with accounting knowledge use accounting information system more intensively. This paper can be used as a material consideration in improving the business of MSMEs in Manokwari, particularly in industry sectors.

**Keywords:** Accounting Information Systems, the Use of Accounting Information System, Micro to Medium Enterprises, Operational Aspects

## 1. Introduction

Micro to Medium Enterprises (MSMEs) is one of economic activities conducted by most people in Indonesia. Based on International Finance Corporation (IFC) MSME Country Indicator data in 2010, Indonesia was among five countries in the world that had the highest density of MSMEs (Hermanus, 2016). MSMEs activities cover almost all business fields therefore it gives high contribution to generate people's income, particularly those with low income. Therefore, its existence should be supported and encouraged in order to keep MSMEs developing and operating as well as to expand business opportunities and employment.

However, MSMEs also face problems such as lack of education and technology, lack of human resources and also limited capital investment. Moreover, MSMEs owners often face difficulties in providing financial report of its business activities. Thus, potential MSMEs cannot optimally develop. Whereas, financial report can give them information in order to help them make economic decisions, evaluate their business development and help them to obtain financial assistance from financial institution such as Bank.

In Manokwari West Papua Province, the growth of MSMEs based on data from Department of Industry, Trade and Cooperatives has increases by the year. In order to help the development of MSMEs in Manokwari, Bank Indonesia as the central bank of Indonesia has been involved in giving Training of Trainers (TOT) related to the use of financial recording system or in other words Accounting Information System (AIS) (Rizaldy, 2016). Nowadays, AIS is needed in many businesses. Without some adoption or implementation of this advancement in technological products it is difficult to gain competitive advantage and survive (Harash et al. 2014). With the use of AIS, management can formulate various decisions in solving problems faced by the company (Fitriyah, 2006). Further, AIS help to provide financial data in the form of financial report that gives beneficial information to its users (Martani et al. 2012).

Prior studies on the use of AIS by Siyami (2016) shows that majority of Small and Medium Enterprises (SMEs) in Purworejo does not use AIS in its operational activities. The majority of SMEs owners in Purowrejo in

manufacturing, trading and service companies from the perspective of age, area of business and business income turnover have not been able to maximize their AIS.

However, based on the fact that the use of AIS played an important role that contributes to company's value added by providing internally generated input i.e. financial statement, therefore the aim of this study is to analyse the use of AIS on MSMEs in Manokwari, particularly in industry sectors. The analytical review is based on operation aspects of AIS (business size, business type, firm age, owner's educational level and accounting knowledge) in managing MSMEs.

## 2. Methods

Data were collected through means of questionnaires by taking into consideration a sample size of owner-managers of Micro to Medium Enterprises (MSMEs) in Manokwari that operated in industry sectors. Apart from the latter, MSMEs targeted also had to adhere to the following delineation criteria:

1. MSMEs should have been registered at the Cooperatives Office and SMEs Manokwari
2. MSMEs should have been in existence for at least 1 year
3. MSMEs is using AIS either computerized or manually

Based on the criteria, a total sample size of 35 MSMEs was chosen for this study. The questionnaires used to collect the data consisted mostly of close-ended questions and likert scale questions. Observation and interviews were also used in order to glean rich data for data analysis purposes.

## 3. Result and Discussion

### 3.1. The Use of AIS in MSMEs

Based on research data analysis, there are 29 percent of MSMEs of industry sector in Manokwari that use Accounting Information System (AIS) manually in its operational activities, and 40 percent that use both manually and computerized and 31 percent that use computerized AIS (Figure 1).

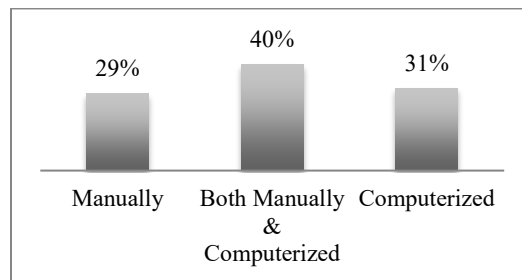


Figure 1. The Use of Accounting Information System in Micro to Medium Enterprises Industry Sectors in Manokwari

### 3.2. The Use of AIS in MSMEs from Business Size Perspective

From business size perspective, medium enterprise of industry sectors in Manokwari has the highest percentage compare to micro and small enterprises. Medium enterprises use 76 percent of AIS in its operational activities (Figure 2). Meanwhile, small enterprise only use AIS for 69 percent in its operational activities, this is mostly in identifying cost of goods sold of their products. Further, micro enterprise is only 64 percent since they only use AIS to record daily sales, debts and receivables.

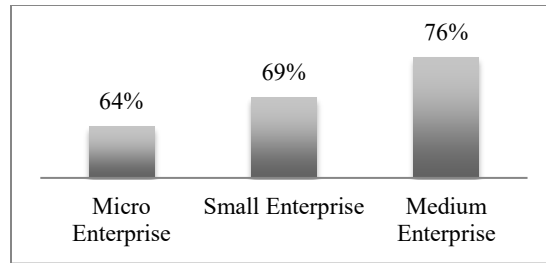


Figure 2. The Use of Accounting Information System in Micro to Medium Enterprises Industry Sectors in Manokwari is seen from Business Size Perspective

### 3.3. The Use of AIS in MSMEs from Business Type Perspective

There are 9 business types of micro to medium enterprise industry sectors in Manokwari, that is bakery, noodles and meatballs, drinking water depot, handy craft, chips, pastry, mebel, tofu and tempe industry. However, based on the research data shown in Figure 3, it is shown that handy craft uses 91 percent of AIS in its operational activities intensively compare to other types of industries. It uses AIS not only to record daily sales, debts, receivable but also to identify cost of good sold of the product, inventory and cash on hand. Second position is chips industry with 87 percent. It also uses AIS in its operational activities almost the same as handy craft industry, except it doesn't record its inventories. Meanwhile other industry mainly uses AIS to only record daily sales, debt, receivables. Overall, only handy craft industry that produces financial report even only in the form of income statement.

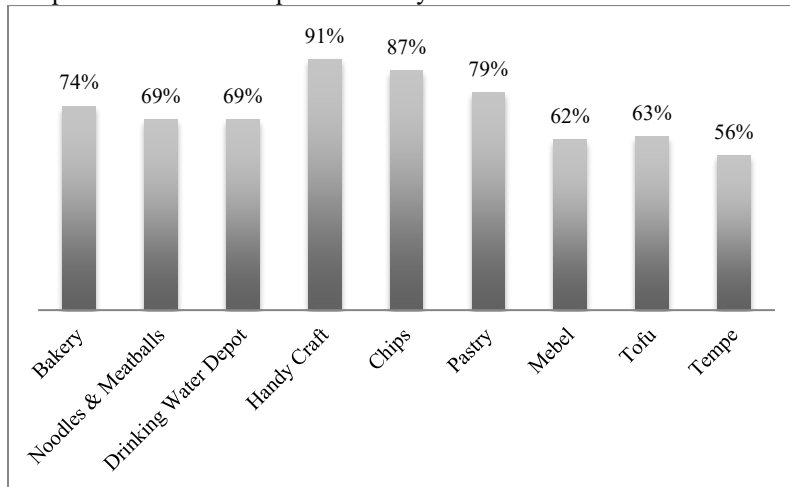


Figure 3. The Use of Accounting Information System in Micro to Medium Enterprises Industry Sectors in Manokwari is seen from Business Type Perspective

### 3.4. The Use of AIS in MSMEs from Firm Age Perspective

From the firm age perspective shown in Figure 4 below, it indicates that micro to medium enterprises that have been operating more than 20 years uses AIS in its operational activities more intensively compare to the ones that operates between 10 to 20 years and below 10 years. This is due to increasing of knowledge on the importance of using AIS in operational activities, how it helps owners in providing important financial information that is useful as a consideration in making economic decisions for their business development.

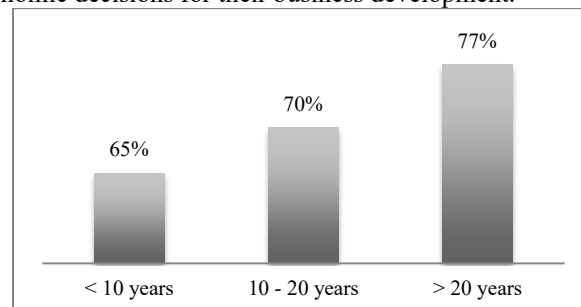


Figure 4. The Use of Accounting Information System in Micro to Medium Enterprises Industry Sectors in Manokwari seen from Firm Age Perspective

### 3.5. The Use of AIS in MSMEs from Owner’s Educational Level Perspective

The use of AIS in MSMEs from owner’s educational level perspective is as follows:

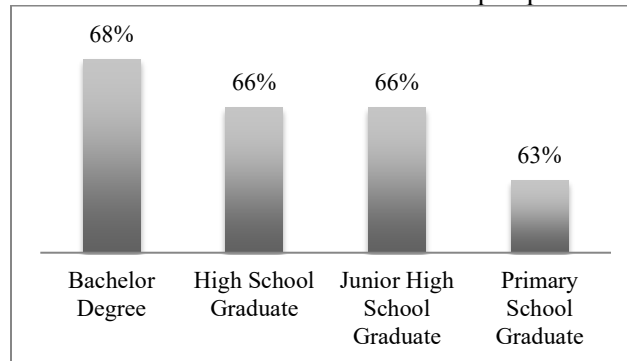


Figure 5. The Use of Accounting Information System in Micro to Medium Enterprises Industry Sectors in Manokwari seen from Owner’s Educational Level Perspective

Figure 5 shows that owner’s educational level of bachelor degree has the highest percentage compare to other educational level. However, the difference among the four types of educational level is not significant. The use of AIS in MSMEs operational activities is not based on the owner’s educational level since in the educational level of primary school have also been using 63 percent of AIS in its operational activities. Only 5 percent lower compare to owners with bachelor degree.

### 3.6. The Use of AIS in MSMEs from Accounting Knowledge Perspective

Perspective of accounting knowledge is measured using likert scale questionnaires that obtained statements about accounting knowledge. In Figure 6, it is shown that as the accounting knowledge increases, the use of AIS in MSMEs in its operational activities also increases. This means the use of AIS in MSMEs industry sectors is related to the understanding of owner about accounting. The better understanding of MSMEs owners about accounting knowledge, the better application of AIS in the company compare to owners with low understanding of accounting knowledge.

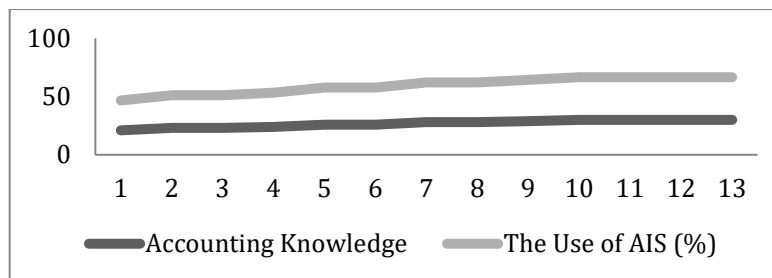


Figure 6. The Use of Accounting Information System in Micro to Medium Enterprises Industry Sectors in Manokwari is seen Accounting Knowledge Perspective

## 4. Conclusions

The result shows that the majority of MSMEs use AIS in its operational activities. Further, based on the operational aspects it is shown that medium enterprises, handy craft industry, business that have been operating for more than 20 years, owner’s with bachelor degree and owner’s with accounting knowledge use accounting information system more intensively.

This study was limited to micro to medium enterprises in industry sector in Manokwari and also has high subjectivity since it is a descriptive study. Furthermore, this study only analyzes the use of AIS based on the

operational aspects of AIS (business size, business type, firm age, owner's educational level and accounting knowledge). Therefore, future study can examine the use of AIS from other perspectives.

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