The Role of Accounting Information Systems in Supporting Sustainable Business (Study In Wonosobo Cut Flower MSMEs)

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Abstract
The purpose of this study was to examine the business strategy of Micro, Small and Medium Enterprises (MSMEs), the role of accounting information systems in supporting sustainable business, and the constraints on the use of accounting information systems. This type of research was a case study on Cut Flower SMEs in Wonosobo Regency. The sampling technique used purposive sampling with five informants of SMEs, cut flowers of chrysanthemum and kalili. Data collection techniques used documentation studies and in-depth interviews. The collected data was then analyzed by using data analysis developed by Miles and Huberman. Accounting information systems had a role for business decision making so that investors could include their capital and customer trust. The obstacle to the implementation of the accounting information system was that there was no clear division of tasks between employees and owners so that all business activities were carried out together. This research contributed to the development of sustainable business theory in order to obtain a model of the existence of SMEs during the pandemic that could be used as material for business decision making.

How to Cite
INTRODUCTION

At the beginning of 2020, the Covid-19 outbreak occurred globally, almost all over the world, including Indonesia, thus triggering negative sentiment in Micro, Small and Medium Enterprises (MSMEs) businesses. The government regulates Financing for MSMEs in Article 11 of Perppu Number 1 of 2020, for the implementation of the state financial adjustment program and economic stability. One of them is the National Economic Recovery (PEN) program where support for MSMEs has reached Rp90.42 trillion or 73.23% and the realization of business incentives is Rp28.32 trillion or 23.48%. One of the problems that are still being faced in the National Economic Recovery program is the concern of business actors regarding the verification of their business data, and the reluctance to apply for an incentive program for the business world.

A sustainable business is a business that is able to produce better production, no less production, meeting different consumer needs, no less consumer needs, and sustainable growth, and unlimited growth. Sustainable business growth is the company’s ability to increase the size of the company which requires the activity and proactive attitude of business actors in anticipating consumer needs and tastes continuously from time to time. (Caska & Indrawati, 2019). Measuring business growth can be done in several ways, such as using absolute or relative measures, changes in sales, assets, employment, productivity or profits earned by a business. (Tamandeh, 2016). Business owners should consider these three strategies when planning their business growth.

There are two main prerequisites for business growth, namely the company’s ability to maintain long-term viability (business sustainability), and the ability of managers to overcome management barriers (business independence). (Caska & Indrawati, 2019). Business continuity in MSMEs is seen from the success of the company’s innovation, management of employees and customers and the return of initial capital. This shows the company has an orientation to develop and see opportunities for continuous innovation. MSME actors have low knowledge and skills in preparing financial statements, making it difficult to get incentives or additional capital from banks (Julita, 2016).

Furthermore, the capital owned by MSMEs is very limited both in terms of amount and source. In addition, the lack of managerial skills, and the lack of operating skills in organizing and limited marketing are fundamental things that are always faced by all MSMEs in pioneering a business venture to be able to develop (Suci, 2017). One of the determinants of business success is by implementing the right business strategy. Business strategy can indirectly determine the performance of SMEs. Meanwhile, innovation and accounting information systems mediate the relationship between business strategy and performance (Harash et al., 2014; Latifah, 2020).

Accounting information systems are often considered less useful in making entrepreneurial decisions because they focus on the past, unlike innovations related to the future. However, recent research on innovation in MSMEs proves that accounting information is very important for managers of innovative companies. Accounting information currently functions as part of management control, which is a central part of the internal decision-making and strategic steps of managers in innovative companies (Blomkvist, Johansson and Malmström, 2016). Current management control highlights the relevance of accounting and control to innovation and entrepreneurship (Latifah et al., 2020). Contemporary views believe that accounting can enhance innovation. Information can reduce uncertainty and facilitate dialogue among distributed participants in the innovation process. In addition, accounting information can be an instrument for mediation between internal and external parties in relation to expectations and performance (Feeney and Pierce, 2018, Ahmad, 2014, Hutahayan, 2020).

The information system is a tool used
to present information in a relevant way so that it is useful for the recipient, while the accounting information system is a system that can turn a business transaction into financial information that is useful or beneficial to the user (Kusrini and Koniyo, 2007). Information systems can be useful for MSMEs, simplify and improve services, facilitate decision making, strengthen strategies and can provide benefits in terms of promotion and strength of competitiveness. The accounting information system has an effect on improvements in the management of MSME administration regarding accounting and finance. Accounting information systems are used in MSMEs to record transactions to provide internal reporting data, external reporting, financial reports, and trend analysis capabilities.

MSMEs must be responsive in dealing with environmental changes due to the technology and information revolution so that they can compete in the era of globalization. MSME actors who also have a position as managers are faced with many alternative choices related to efficiency, such as material selection, product design, markets, distribution and service to customers. Therefore, MSMEs use an Accounting Information System (AIS) with the aim of gathering more information to help owners make decisions (Harash et al., 2014). It can eventually lead to increased efficiency, profitability and performance (Howell et al., 2005; Esparza-Aguilar et al., 2016).

Business development is a situation or situation where there is an increase in turnover (Chandra, 2000). The benchmark for the level of success and development of a business or business can be seen from the increase in sales turnover (Soleh, 2008). The measure of the success or development of the business policy can be in the form of the size of the income or the profits obtained. The flow of benchmarks for business development in this study is seen from the amount of income, namely there will be an increase in income if business development also increases (Rindrayani and Astihan, 2007). From the above understanding, it can be concluded that business development is a condition where the amount of income or turnover increases, so that increasing turnover can be a benchmark for the development of a business.

One of the MSMEs that has business relations and wide product turnover is the Cut Flower MSME in Wonosobo Regency. Wonosobo is a mountainous area where the majority of the people's livelihood is farming, so there are a lot of agribusiness SMEs in the agricultural sector. Based on initial observations, it was found that the COVID-19 pandemic had an impact on declining sales. Automatically, MSMEs experienced a drastic decrease in income, so they set a policy of reducing the production of cut flowers by 50%.

The purpose of this study was to examine the business strategies carried out by MSMEs to maintain the existence of a sustainable business, the role of accounting information systems in supporting sustainable business, and the obstacles to using accounting information systems. This research contributes to the development of sustainable business theory in order to obtain a model of the existence of SMEs during the pandemic that can be used as material for business decision making.

METHODS

This research was a qualitative research in the form of a case study in cut flower SMEs in Wonosobo Regency. The reason for choosing this type of case study approach was because cut flower MSMEs had unique conditions where cut flowers were the foundation of life for the Wonosobo community and had specific management, namely there were cut flower farmers, workers, and MSME actors or cut flower sellers. Research activities were carried out in a blended form, namely offline and online.

The sampling technique used in this research was purposive sampling. In this study, there were five cut flower MSME actors who used accounting information systems. Two of them were selling chrysanthemums and three
Data collection techniques used were documentation and in-depth interviews. Documentation was used to obtain profile data of Cut Flower MSME actors obtained from the Wonosobo BPS website. In-depth interviews were used to obtain basic and specific data. Researchers conducted in-depth interviews offline by implementing strict health protocols. With the form of unstructured interviews (unstructured interviews or passive interviews) in this study, it was possible to do it in a more personal manner so as to allow the excavation of in-depth information. Interviews conducted by the research team with MSME actors were carried out by implementing strict health protocols.

The data analysis technique used in this research used the Miles and Huberman model which consists of three streams of activities that occur simultaneously, namely data reduction, data presentation, and conclusion drawing or verification. At the data reduction stage, the researcher carried out the transcription of the interviews, coding, categorizing, and determining the emerging themes. The content of the transcript was the content and course of the conversation in the interview, the content and course of the discussions during the interview. Next do the coding by determining words or short phrases that highlight the message content of the interview results. Then, categorization was done by entering the same code into the same category so that researchers can find themes.

Next, the researcher performed the presentation of the data that has been collected and analyzed previously. Presentation of data in this study used narrative text. In this step the researcher compiled the relevant data so that it became information that can be concluded and had meaning. The process was done by displaying data, making connections between phenomena to interpret what actually happened and what needed to be followed up to achieve the research objectives.

The last stage was drawing conclusions based on the findings and verifying the data. The initial conclusions put forward were temporary and would change if evidence was found to support the next stage of data collection. The process of obtaining this evidence was called data verification, so that a credible conclusion was obtained.

RESULTS AND DISCUSSION

Cut Flower MSME business strategy

Based on data from the Central Statistics Agency (BPS) in 2021, the number of Cut Flower MSMEs in Wonosobo Regency was five. However, based on existing data in the field, there were 12 cut flower SMEs. This means that BPS had not updated the data. Of the 12 Cut Flower SMEs, 10 are male and 2 are female. It can be seen that men dominated the cut flower business activities. Likewise with its employees, most of whom were men. The following was the number of data on Cut Flower MSME actors in Wonosobo Regency.

![Figure 1. Number of Cut Flower SMEs and Employees](image)

Furthermore, two MSME actors had a higher education level, namely they graduated from a Diploma in agricultural agribusiness, four people with junior high school education (SMP), and six people with high school education (SMA). They had long developed a cut flower business as the family’s main income.
Armed with the knowledge they got in junior high / high school / and tertiary institutions as well as entrepreneurial experience, they carried out business innovations. As we know, during the pandemic they did not get income so they were looking for solutions to solve the problem. By looking at the challenges and opportunities that existed, a business strategy was set.

Based on the results of the study, the strategy carried out by MSME actors was to apply a differentiation strategy so that it can improve business existence. The business strategy in question was to create a product that was different from the others and had added value for customers. Based on the research results, the business strategy set by MSMEs was to continue to design products according to consumer tastes. So far, many consumers were fond of chrysanthemum and panca-scented flowers. Therefore, it provided more of these two flowers. This was supported by Mr. Edi’s statement during the interview as follows.

“...I mostly provide chrysanthemum and five-scented flowers, because that’s what buyers are interested in. At this time of the rainy season, many are looking for five fragrant flowers, summer is chrysanthemum...”

The results of the study were in accordance with previous research which stated that the era of global competition required companies to create added value for customers by creating uniqueness that distinguished them from their competitors. (Cheng, 2013). This added value makes customers loyal so they will continue to buy at the company(Ahmad, 2014). Furthermore, flower colour can determine consumer tastes (Hayati & Nurmalinda, 2014), colour is the main factor that consumers choose in buying flowers. With the high purchasing power of consumers for certain goods, it will increase the company’s turnover(Sulianta, 2014). In this case, companies compete in their respective market environments and strive to achieve superior performance so as to achieve sustainable business(Jukka, 2021., Fortunato & Alter, 2016).

Furthermore, the business strategy carried out by MSMEs was to provide service satisfaction by selling door to door. Door to door is a sale made by picking up customers/buyers. They went straight to the flower shops (floris). This is in accordance with Mr. Rofik’s statement as follows.

“...I started with door to door to flower shops. The flowers were not immediately sold but I entrusted them. But customers can also buy directly at my place...”

Business continuity can be determined by several aspects, such as aspects of human resources, financial aspects, technical aspects of production such as raw materials and technology, marketing aspects, government policies, socio-cultural and economic aspects, and the role of relevant agencies such as government, private and non-governmental organizations. The business environment also determines the sustainability of UMMK’s business. MSMEs will grow if the regulations or support the policy environment, the macroeconomic environment is well managed, stable and predictable; reliable and accessible information, and the social (family) environment encourages and rewards business success.

Technology is one of the most impor-
tant elements in achieving business success. Companies that use new technologies tend to reach more customers than competitors who have not used competitive technologies. Even though the technology is expensive, the company can recoup the cost of the technology when the company continues to be productive. In third world countries, most MSMEs cannot afford to install new technology because it is relatively more expensive. However, from previous research, this technology has an important role for the success of MSME businesses and has a positive impact on the success and sustainability of established MSME businesses.

One of the efforts to be able to carry out business activities is to pick up customers (Purba et al., 2021). This is where the role of the owner can determine the direction of company policy so that it can continue to exist in the business environment. Door to door sales are often carried out by cut flower actors to local traders at the farm location itself (Raina, V., MS Nain., 2011). In addition, business relations are needed so that it can make it easier to make product offerings (Sangadah and Sukidin, 2016., Malecki, 2018). It also shows that MSMEs have innovation and creativity in the market, so they can attract customers and buyers. The behaviour and broad mind-set of MSME actors can automatically maintain their business during the pandemic.

The Use of Accounting Information Systems in Determining Sustainable Business Performance

Based on the results of the study, cut flower SMEs had used an accounting information system in Excel form. However, during the pandemic they did not use it because the investment from investors stopped. In addition, during this year they experienced a significant decrease in turnover by 50%. Figure 3 is cut flower sales turnover data for early 2021 until September 2021.

Before the pandemic, MSME actors used accounting information systems for business decision making. Examples included expanding, increasing capital, applying for credit at the bank, and being responsible for capital to third parties. The accounting information system referred to in this study was data processing, book records and financial transactions. Administrative records contain the prices of materials, seeds, equipment, as well as records of customer accounts payable. For proof of transactions in the form of notes and receipts used by MSME actors to make decisions. The results of the study indicated that MSME actors had stored financial data so that they can provide detailed and accurate information. So far, what had been done was to record sales using notes. The recording technique was in accordance with the interview with Mr. Farhan.

"... related to recording sales by using notes only, during the pandemic, sales are carried out using WA, then if the customer/buyer has paid, then I will send a photo of the note via WA ..."

The following is a memorandum commonly used by cut flower SMEs as proof of purchase from consumers. The note was very simple like the notes on the market. However, this note provided benefits for both the seller and the buyer as valid proof of the purchase of cut flowers.
Transactions carried out by business actors were very simple, namely using notes that had been written and then sent to customers as proof of sales or purchases. According to research from (Meilantika, 2017) said that the company used an administrative process that was carried out manually, starting from handwritten sales notes, the sales process was not specifically recorded. However, several other MSME actors had recorded accounting information system transactions using Microsoft excel media. This was adjusted to the needs of MSME actors who had the obligation to report transaction activities to investors (external parties). Figure 5 are notes made by MSME actors of Cut Flowers.

**Figure 4.** Proof of Transaction in the form of Note of Sale of Cut Flowers

The simple accounting records contain columns for the date, description, amount of income, expenses, and the amount of cut interest sold. Every sale was written manually in the notebook. Employees of the finance department must be careful so that there were no recording errors. With sufficient experience, mis-recording can be avoided. If there was an inventory of cut flowers that did not match the records, then one by one the physical identification of the goods was carried out so that errors can be found quickly.

Collecting data in an accounting information system can speed up the preparation of financial statements. Financial reports prepared by MSMEs had a period of either weekly, monthly, quarterly, or yearly. The duration of the bookkeeping that had been done so far was in accordance with the interview with Mr. Rofik as follows.

“...Back when there were investors, bookkeeping could be done weekly, monthly, quarterly, or yearly using excel. If it’s weekly, yes, yes, via email, but we still have the manual bookkeeping...”

Financial reports can be done weekly, monthly, quarterly, annually or at any time according to the needs of related parties(Hutahayan, 2020). A good company will do financial reports at least once a month. The opening is done because there are investors who ask for accountability in writing as authentic evidence. During the pandemic, MSME actors used simple bookkeeping for the company’s internal accountability material so that they can still compile financial reports. The successful presentation of financial statements can be used to determine the size of the company’s assets such as the number of current assets (cash on hand, cash in banks, accounts receivable, merchandise inventory, equipment) and non-current assets (vehicles, land, and buildings). Besides that, it can also be seen the amount of debt, owner’s capital, and the amount of net profit(Tamandeh, 2016., Afwa, 2018).

Several previous studies have proven that accounting information and formal controls can determine business performance. In addition, the use of accounting information
systems can basically be used to determine the performance and decision making of managers (Feeney and Pierce, 2018). The results of the study implied that this information provided a system that can be used to consider management decision making (Grande, Estébanez and Colomina, 2011).

The benefits of accounting information systems for MSME actors included providing or presenting accurate and timely information so that companies can carry out main activities in the value chain effectively and efficiently. Second, improve the quality and reduce the cost of producing the products or services produced. Third, improve the efficiency of business performance, both in the financial and other sections. Fourth, improve the ability in decision making. Fifth, increase knowledge sharing (Ahmad, 2014).

With a good accounting information system, MSMEs can carry out operations and information processes more effectively and efficiently because of controls that are able to control these processes so that they can produce goals that are in accordance with what the company wants.

In addition, the accounting information generated on the system can be accounted for to be used later in making decisions regarding company finances or used by external parties of the company to relate to business activities. (Caska & Indrawati, 2019). So that when the company is able to run the accounting information system properly, the benefits and objectives above can be directly felt by the positive impact for the company.

On the other hand, if the company cannot run the financial information system properly, it will hamper business processes and result in business activities not running smoothly. In addition, the resulting financial information is not very accurate, and the objectives of the company’s business activities are ultimately difficult to achieve.

For this reason, a company that runs a business needs to design and run well related to accounting information systems including subsystems by paying attention to several components of the accounting information system. (Guan & Frenkel, 2019). Such as human resources who are able to understand accounting and financial business processes in general, financial and accounting procedures, financial data forms used to record all financial activities, accounting software, and hardware supported by the internet network and other equipment. (Susilowati et al., 2021). So that it will be able to build the company’s business activities to run effectively, efficiently, and have a positive impact on the company’s business development because it is able to maximize the objectives and benefits of the accounting information system.

Cut Flower SMEs required accurate data related to transaction records that had been carried out. The accounting information system division was in charge of recording all data, such as flowcharts for purchasing goods, selling goods, returning goods, and others. Accounting Information System had several sub-systems in the form of accounting cycles. This accounting cycle will show how accounting procedures start from data sources to the accounting processing process.

The accounting cycle is divided into five, including:

1. Revenue cycle (Revenue)
   The Revenue Cycle is a revenue mechanism that includes credit authorization sales, retrieval of goods, receipt of goods, billing to cash receipts.

2. Expenditure cycle
   This cycle includes purchasing activities and payments in cash. This expenditure cycle is intended for companies because it has the following objectives:
   • Ensuring that goods and services ordered are as required.
   • Received goods in good condition.
   • Securing items until needed.

3. Human resources payroll cycle (payroll)
   This cycle includes contracting and paying employees. This Human Resources management cycle involves payroll procedures.

4. Production cycle
   This cycle includes the activity of con-
Obstacles to the Implementation of Accounting Information Systems

Based on the results of the study, the obstacles faced by MSMEs were the lack of understanding of financial data recording storage even though the company had proof of the transaction in the form of a sales note. This is in accordance with the results of an interview with Mr. Bagiyo.

“… there are sales notes, but not many people understand about bookkeeping. Actually the bookkeeping is very important, if we are less than zero, the results are different…”

In addition, MSME actors also experienced problems in processing financial data so that they experienced difficulties in preparing financial reports. This is in accordance with what was conveyed by Mr. Edi that said “… we spend time serving customers, we can only record money. Reports are made according to our interests…”.

The recording and preparation of financial reports carried out by MSME actors was only limited to business reports made in accordance with the understanding and needs of each business business(Ramdani et al., 2018). Business actors understand the importance of bookkeeping, but the lack of knowledge makes them less interested in recording detailed financial reports(Susilowati et al., 2019). In addition, business people have the idea that bookkeeping is considered complicated, so they make simple bookkeeping(Feeney & Pierce, 2018).

Constraints to the implementation of the accounting information system included the lack of employees in the MSME, there was no separation of the wealth of the owner and the MSME manager, the cashier who doubled as an employee of the cut flower coupler, there was no finance department that specialized in bookkeeping, the traditional mind-set of
the owner was what was important to run a business. This means that they did not make any effort to increase capital or find investors. Therefore, it was necessary to understand and apply a simple accounting information system that was easy to understand and implement in cut flower MSMEs.

Figure 6 shows the sustainable business model of Cut Flower MSMEs in Wonosobo. Sustainable business is the ability of MSMEs to achieve business goals and increase long-term value for investors by integrating economic, social and environmental aspects into their business strategies (Rita et al., 2018). In this case, the MSME business continues to grow and run so that it exists in the business world. During the pandemic, the cut flower MSME business experienced suspended animation. They did not get additional capital from banks or investors. In addition, it also experienced a drastic decline in sales.

From March 2020 to March 2021 there really were no buyers, so they started looking for ways to promote their sales. That is, they began to determine the right business strategy in accordance with the conditions in the Wonosobo area. Efforts were being made to develop the cut flower business by improving product quality by making a varied and more attractive appearance than other similar products, cost-oriented pricing, promotion by making brochures in collaboration with the tourism and hospitality services or promoting via the internet, increasing business partnerships with decoration and wedding companies as well as expanding marketing networks using online marketing.

Cut flower display innovations must consider the types of materials and methods to improve product quality and increase competitiveness and be adapted to flower plant safety standards. This will increase the confidence of makers to market their products in a wider area, which is expected to increase sales and improve the people's economy. Expansion of the marketing network can also be done by exploring market areas that may be accessible, providing additional prizes in product packaging, product diversification and product renewal.

MSME cut flowers technically experienced problems in business management. So

![Figure 6. Cut Flower MSME Sustainable Business Model](image-url)
in general, it required an increase in loan assistance (soft credit) that can support the capital aspect of small/household industries; it was necessary to establish a network of cooperation between small/household industries, so that it could strengthen both in terms of capital and the marketing of the products produced; it was necessary to increase the promotion of regional superior products, so that the original regional products can be well known; and need to improve product quality by making packaging that was hygienic, attractive and includes nutritional composition on the packaging to better convince consumers.

Regarding accountability to external parties, detailed financial records were required to be recorded on a weekly, monthly, quarterly and annual basis. This can also be supported by the accounting information system implemented in MSMEs. Although the form was still simple using excel, but the benefits were very large, especially for business decision making.

The established business strategy was by selling directly to consumers and by creating products according to consumer tastes. Consumer tastes include chrysanthemum cut flowers designed for congratulations and condolences. The means of distribution was by using the owner’s private car or it can be taken directly by the buyer at a short distance. Figure 6 is a sustainable business model for Cut Flower MSMEs in Wonosobo Regency during a pandemic and its business environment based on research results.

CONCLUSION

MSME actors set a product differentiation business strategy to increase sales turnover. Product innovations in the form of cut flower arrangements or florists combined with aesthetics according to the interests of the order such as the form of a bouquet, condolences, wedding greetings, congratulations and success, to birthday events. The most popular cut flowers were chrysanthemums and kalili, so almost all orders used these flowers. Furthermore, accounting information systems had a role for business decision making so that investors could include their capital and customer trust. MSME actors did not dare to apply for capital during the pandemic, therefore they relied more on investors’ personal capital. This was done because their income could not meet banking regulations.

This research contributed to the development of sustainable business theory in order to obtain a model of the existence of SMEs during the pandemic that can be used as material for business decision making. Suggestions for further research are to conduct quantitative research related to product differentiation strategies, employee payroll systems, product innovation and creativity related to sustainable business. So that it can provide broad benefits and generalizations can be made.

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