

The Influence of Management Accounting Information Systems and Organizational Culture on Firm Performance: Survey of Start-Ups in the Java Island Region, Indonesia



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ABSTRACT: The phenomena of the digital era are being discussed. The cultural change that is felt and carried out throughout the world is the transformation from conventional to digital. Newly established businesses, startups themselves mostly focus on IT and IT business. The use of management accounting information systems by start-up employees must be able to provide the entity concerned with a competitive advantage. Therefore, this research aims to see how management accounting information systems and organizational culture influence company performance. This research also looks at how this system can be applied to start-ups in Indonesia. Hypotheses are used in quantitative research designs. The type of data used is quantitative data obtained from the results of an e-survey involving start-ups on the island of Java, Indonesia. The results of this research show that management accounting information systems and organizational culture influence the firm performance of start-ups.

KEYWORDS: Management Accounting Information System, Organizational Culture, Firm Performance, Start-Up.

I. INTRODUCTION

The digital era has become a hotly discussed phenomenon. The transition from conventional to digital is a cultural change that is felt and carried out globally. In connection with the increasing number of internet users in the world, Indonesia ranks 6th with the most internet use in the world (Nugraha and Wahyuhastuti, 2017). This has caused more and more business activists to start businesses in the digital sector. Nugraha and Wahyuhastuti (2017) explained that start-ups are the embodiment of a digital business. Start-ups themselves are businesses that have just been established, are at the development and research stage in seeking market potential, and the majority of their businesses are classified as technology and information businesses. In Indonesia, many start-ups have developed, including Tokopedia, Gojek and Bukalapak which have become one of the largest business unicorns in Indonesia. The culture that exists in start-ups can also be said to be very different compared to non-start-up companies. According to Kwiatkowski (2016), in organizational culture the issues or things of interest are usually related to internal communication, idea management, employee approaches to change, business ethics and social responsibility. Furthermore, in the employee approach to change, Kwiatkowski (2016) states that in non-start-up environments, often employees with certain skills such as technicians cannot do things outside their expertise such as carrying out sales activities to consumers. Meanwhile, in a start-up environment, a Leaders play a role in encouraging members to change in the sense of developing so that vision and goals can be achieved efficiently. To support Kwiatkowski's (2016) argument, Kerrigan (2018) explains that start-up culture is at a fast work rhythm which demands optimal creativity and communication. The processes that occur in management information systems can be different from those practiced in non-start-up companies. The management accounting information system concept is specifically used as an integrated framework for companies to use their resources to provide relevant information to managers and other employees in the organization, both financially and non-financially (Napitupulu, 2018). Because the management accounting information system is a big concept, the implementation that occurs between one entity and another is different. This is due to the need for appropriate integration between business modeling, required processes, and supporting elements such as software, hardware and networks.

Le et al. (2020) say that the management accounting system in MSMEs has a positive influence on firm performance. The firm performance that will be tested is divided into two things, namely financial and non-financial performance (Le et al. 2020; Taouab & Issor, 2019). Apart from the management accounting system in MSMEs, there is another aspect, namely the influence of organizational culture on firm performance which can be said to have a positive and significant influence based on research by

The Influence of Management Accounting Information Systems and Organizational Culture on Firm Performance: Survey of Start-Ups in the Java Island Region, Indonesia

Aboramadan et al. (2019) and Nguyen et al. (2021). The relationship between the management accounting information system and organizational culture and firm performance is that, with the availability of a management accounting information system, this system provides and serves the needs of the organization which consists of organizational structure, business processes, organizational goals, organizational culture and the politics that occur within it. Therefore, the quality of implementation can be seen from the relevance of the output, namely the firm performance produced to the needs of the organization (Napitupulu, 2018). Then, the organizational culture variable explains that this culture needs to be managed by leaders and managers according to their relationship with employees and firm performance. The goal is to achieve the company's adaptability to know and understand what customers want and the extent to which the company can respond to what external parties want. Managers must build a culture of adaptation to increase satisfaction and firm performance. (Nguyen et al., 2021)

II. LITERATURE REVIEW

A. Resource-Based View Theory (RBV)

According to Dasuki (2021), the RBV principle is based on the theory of competitive advantage. Excellence in this theory can be seen from the characteristics of human resources which have unique advantages, are difficult to imitate, and are not easy to obtain substitute goods. Human resources can also be said to be a collection of productive resources such as managers' thoughts and decisions resulting from these thoughts. In relation to management accounting information systems and organizational culture, RBV describes that humans as part of a start-up entity are human resources who produce thoughts and decisions. Therefore, the use of management accounting information systems operated by start-up employees must be able to provide competitive advantage for the entity concerned (Le et al., 2020, Aboramadan et al., 2019). Apart from that, organizational culture also determines firm performance because culture determines the mindset and style of making decisions, both from the results of discussions with managers and final decisions regarding a policy (Nguyen et al., 2021).

B. Management Accounting Information System (SIAM)

Management accounting information system or SIAM (management accounting information system) is a concept that is specifically used as an integrated framework for companies to use their resources to provide relevant information to managers and other employees in the organization, both financially and non-financially (Napitupulu, 2018). According to Dobroszek et al. (2019), SIAM is part of the information management system because management accounting analyzes the effectiveness of management's use of information, so that performance becomes efficient. This is a success model that influences managers so that all decisions can benefit the company. The majority of those who use management accounting information systems are developing countries, even though management accounting information systems are actually an important element in a business. Management accounting information systems provide information regarding management performance as well as taking interests. Therefore, the link between management accounting information systems and firm performance is the availability of technology that is able to provide and serve the needs of the organization so as to produce the desired output. (Aboramadan et al., 2019)

C. Organizational culture (OC)

Organizational Culture is a guide for all activities in an organization that reflects the organization's goals, vision, mission and development plans (Ha, 2019). Apart from that, organizational culture is also a pattern of basic assumptions that a group learns to solve problems of external adaptation and internal integration where this works well and is valid. Organizational culture has a main role related to company habits and performance based on the overall performance of members so that functionally, organizational culture is seen as social control where habits and beliefs are formed and explained (Joseph and Kibera, 2019). Therefore, for every new member who joins, they must learn this (Napitupulu, 2018). With an organizational culture, work enthusiasm and the foundation for communication between members in the organization can be maintained. (Ha, 2020). The relationship between organizational culture and firm performance is one of the determinants of results because culture is included in the production process of an entity (Nguyen et al., 2021).

D. Performance (FP)

Firm performance (Le et al., 2020, Taoaub and Issor, 2019) or can be called operational performance (Ha, 2020) and organizational performance (Trabulsi, 2018) are measures used by companies or organizations in order to increase profits, reduce investment risk and measure competition. with competitors (Ha, 2020). According to Le et al., (2020), firm performance is divided into two categories, namely financial and non-financial.

The Influence of Management Accounting Information Systems and Organizational Culture on Firm Performance: Survey of Start-Ups in the Java Island Region, Indonesia

III. RESEARCH METHOD

The research design uses a quantitative approach. Hypothesis testing was carried out to see the influence between management accounting information systems and firm performance. Apart from that, the influence between organizational culture and firm performance was carried out using the t test. Furthermore, the two dependent variables, namely the management accounting information system and organizational culture, will also be tested simultaneously for their influence on firm performance. Using multiple regression analysis, sampling was also carried out using the e-survey method using Google Form, with 60 respondents being C-level from start-up. up which is located on the island of Java, Indonesia.

The sampling technique uses convenience sampling which makes it easier for researchers to collect the right data because they know the respondents well. Then also use the Google form which is shared via WhatsApp media in the period May-October 2022.

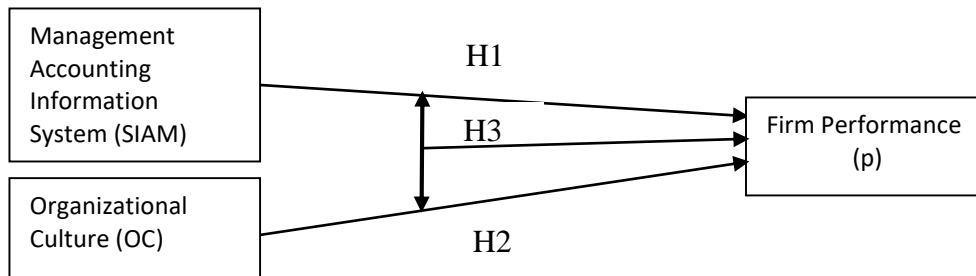


Figure 1. Research Framework

IV. RESULTS AND DISCUSSION

Based on data from 60 respondents who filled out the questionnaire, it can be seen that the start-ups that participated in this research were dominated by those with 6-75 employees at a percentage of 53% and 47% with start-ups having less than 5 employees. .It takes 5-10 years for a company to be established and the rest is followed by start-ups that are less than 5 years old. The majority of start-ups have an average annual income of 1-10 billion rupiah, for the types of industry that were respondents to this research are engaged in the digital economy, digital health, while The majority of respondents who answered or were representatives had ownership in the capital structure of the start-up they represented, 47% of respondents were directors of the relevant start-up and the next 33% were senior managers. The majority of respondents' education levels are Bachelor's/Diploma 3 graduates and the remaining 35% are Master's degree graduates.

Next, a multiple regression analysis test was carried out on the variables Management Information System and Organizational Culture so that it was known how much influence the independent variable had on the dependent variable. The next test was carried out by partially testing the independent variable against the dependent variable with the t test.

Table 1 Multiple Regression Analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8,019	2,330		,008	,000
	Total_SIAM	,585	,085	,717	6,871	,000
	Total_OC	,118	,070	,327	6,260	,000

a. Dependent Variable: total_P

Based on table 1, the following regression equation is obtained:

$$P = 8.019 + 0.585 \times \text{SIAM} + 0.118 \times \text{OC} + e$$

The results of the regression analysis test in table 1 show that . variable management accounting Information system (SIAM) and variable Organizational Culture (OC) simultaneously has an effect regarding Firm Performance, the test results show that the significance value is 0.000. This is in accordance with the criteria where Sig (0.000) < 0.05 then the hypothesis which states that the variable Management Accounting Information System (SIAM) and variable Organizational Culture (OC) has an effect on Firm Performance accepted.

The Influence of Management Accounting Information Systems and Organizational Culture on Firm Performance: Survey of Start-Ups in the Java Island Region, Indonesia

Table 2. T test

Variable	Sig	Alpha	Information
SIAM	0,000	0.05	Influential
O.C	0,000	0.05	influential

Source: Processed primary data

The result data using the t test in table 2 shows that . The SIAM variable influences Firm Performance, the significance value obtained is 0.000. This is in accordance with the criteria where Sig (0.000) < 0.05, so the first hypothesis is accepted. Variable Organizational Culture (OC) is influential regarding Firm Performance, the test results show that the significance value is 0.000. This is in accordance with the criteria where Sig (0.000) < 0.05, so the second hypothesis is accepted.

DISCUSSION

Management Accounting Information Systems have a positive effect on Firm Performance

The first hypothesis proposed relates to the positive influence of management accounting information systems on firm performance, Le et al. (2020) said something that is in line with this research. This means that with the existence of a management accounting information system, company performance will be better. By improving adequate management accounting information system facilities, performance will be better. There are good benefits from providing a management accounting information system. With these benefits, the use of management accounting information systems in start-ups is supported by the RBV theory, which is centered on the competitive-advantage obtained from the existence of a management accounting system. A management accounting system that is tailored to the start-up's needs has unique advantages, is difficult to imitate (if it is adapted to the start-up's needs) and can meet the start-up's needs in its operational process. Apart from that, it is also supported by human resources who make decisions on the results of the management accounting information system process.

This can be related to the pandemic period, where a system that has been designed to suit the needs of start-ups can help exchange information in a structured and beneficial manner for decision making in the same place or online, where each individual employee is in a different place. and remain systematic and accessible.

Organizational Culture has a positive effect on Firm Performance

The second hypothesis proposed relates to the positive influence of organizational culture on firm performance. In accordance with research by Nguyen et al. (2021), organizational culture is one aspect that is needed and influences company entities in the process of producing services or goods because it comes from the thoughts and attitudes of managers and employees who work in the company concerned. As stated by Kwiatkowski (2016) and Kerrigan (2018), the start-up culture is at a fast work rhythm, demanding optimal creativity and communication, therefore seen from the work rhythm during the pandemic which requires employees to work from home and Even though we communicate face to face online, this agile and creative environment is able to adapt quickly. Thus, this 'fast work rhythm' culture has a positive impact on start-up performance in general. The RBV theory can also be linked to this point, that with a culture that has been formed in such a way, it can provide a competitive advantage to start-ups even though there are significant changes in work rhythm. Therefore, organizational culture has a positive influence on firm performance.

SIAM and OC have a positive effect on Firm Performance

As a gap in this research, SIAM and OC are proven to have a positive influence on firm performance, in this case start-ups. This is proven by the t test in the previous chapter which supports previous research by Aboramadan et al. (2019), Le et al. (2019), and Nguyen et al. (2021) who say that the presence of two variables, namely accounting information systems and organizational culture, has an influence on firm performance. The RBV theory can also be related to this, that when SIAM and OC are both used and included in the start-up structure, it will provide a competitive advantage for the start-up. With an integrated system coupled with a fast culture, start-up performance will be better.

CONCLUSION

Based on the previous discussion, it can be said that the first hypothesis linking Management Accounting Information Systems (SIAM) with company performance is correct. Research conducted by Le et al. (2020). The results show that the existence of SIAM can improve business performance, especially with adequate facilities. The Resource-Based View (RBV) theory emphasizes that implementing SIAM tailored to the needs of start-ups can provide a competitive advantage. The benefits derived from using SIAM, especially in a start-up context, are in line with this theory. Furthermore, research by Nguyen et al. (2021) supports the second

The Influence of Management Accounting Information Systems and Organizational Culture on Firm Performance: Survey of Start-Ups in the Java Island Region, Indonesia

hypothesis that organizational culture (OC) has a positive impact on company performance. In general, start-up performance is enhanced by company culture, especially in start-up contexts that require creativity, effective communication and fast working hours. A “fast work rhythm” culture can provide a competitive advantage, according to successful adaptation to change, such as working from home during the pandemic. The research results also show that the presence of SIAM and OC improves start-up performance. As reinforced by RBV theory, these two components can provide competitive advantages if combined in a start-up structure. Thus, it can be concluded that investment and attention to the implementation of SIAM and the formation of an appropriate organizational culture can help start-up performance, especially in facing challenges and changes such as those that occurred during the pandemic.

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