

THE INFLUENCE OF MANAGEMENT ACCOUNTING INFORMATION SYSTEM CHARACTERISTICS ON MANAGERIAL PERFORMANCE IN BANDUNG CITY MSMEs IN 2023

Andry Arifian Rachman^{*1}, Syafrizal Ikram², Achmad Fadjar³

Universitas Widyatama, Indonesia^{*123}

andry.arifian@widyatama.ac.id^{*1}, syafrizal.ikram@widyatrama.ac.id²,

achmad.fadjar@widyatrama.ac.id³

Abstract : A country can develop with the support of various parties (government and stakeholders) and the business sector. The government makes rules and supports to protect and ensure the development of the business sector in the midst of an open business climate. Companies from abroad can operate in the country and will certainly be a challenge for entrepreneurs. So that business competition will be tighter, including competition for Micro, Small and Medium Enterprises (MSMEs). This study aims to examine the effect of Management Accounting Information System Characteristics on Managerial Performance in MSMEs in Bandung City in 2023. The research population is MSMEs in Bandung City with a research sample of 35 MSMEs. The results of the study prove that the characteristics of the Management Accounting Information System have a positive effect on Managerial Performance.

Keywords: MSMEs, Management Accounting Information System, Characteristics Managerial Performance

INTRODUCTION

The only way to reduce poverty in a sustainable manner is to encourage economic growth, through wealth and job creation. In developing countries, SMEs are the main source of income, seeding land for entrepreneurs and providing employment opportunities (Kotelnikov, 2007). In Indonesia, Micro, Small and Medium Enterprises (MSMEs) have an important role in development. This strategic role is in the form of, its position as a major player in economic activities in various sectors, the largest provider of employment opportunities, an important player in the development of local economic activities and community empowerment, the creator of new markets and sources of innovation, and its contribution in maintaining the balance of payments through export activities (Hanim & Noorman, 2018).

As stated by President Joko Widodo, the absorption of MSME labor is greater, namely 97% of the workforce in Indonesia is not absorbed by large companies. Apart from the workforce, MSMEs also contribute 61% to Indonesia's Gross Domestic Product (GDP) (Hidayat, 2022). The resilience of MSMEs during an economic crisis has been proven when compared to large businesses. However, when the Covid-19 pandemic occurred, MSME businesses were greatly affected, especially for MSMEs whose business activities were still carried out traditionally (not utilizing information technology) (Aprilianti, 2023). MSME players in West Java Province tend to increase from 2016 to 2016. 2021 as can be seen in graph 1 below.

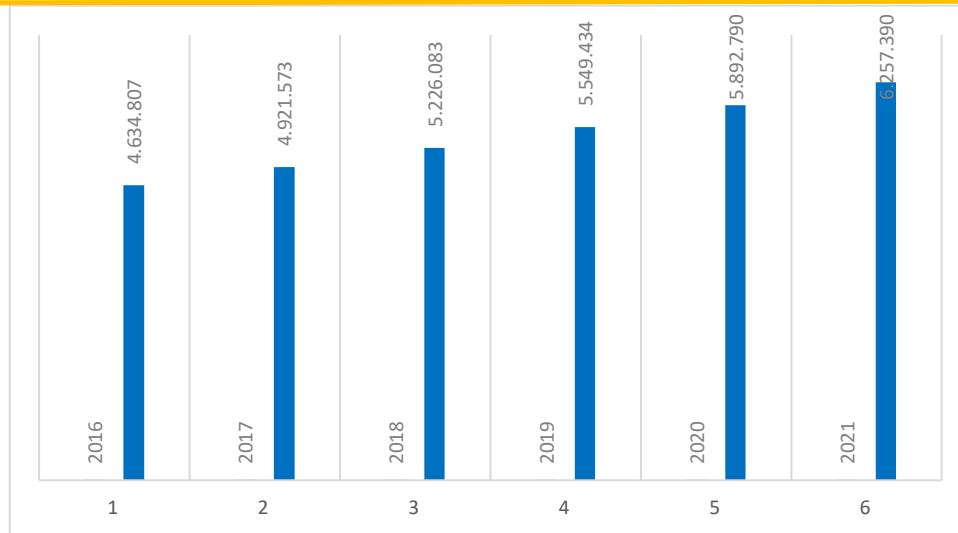


Figure 1. Number of MSMEs in West Java Province 2016 – 2021

Source: opendata.jabarprov.go.id (2023)

There was an increase in MSME actors from 2016 – 2017 as many as 286,766, from 2017 – 2018 as many as 304,510, from 2018 – 2019 as many as 323,351, from 2019 – 2020 as many as 343,356, and from 2020 – 2021 as many as 364,600. If we look at the percentage increase each year, it is around 6%. The distribution of MSME actors based on business type can be seen in table 1 below.

Table 1. Distribution of MSME Actors Based on Type of Business in West Java Province

Type of Business	2016	2017	2018	2019	2020	2021
Accessories	10.789	11.457	12.166	12.919	13.718	14.567
Batik	10.789	11.457	12.166	12.919	13.718	14.567
Embroidery	1.541	1.637	1.738	1.846	1.960	2.081
Craft	385.335	409.176	434.493	461.376	489.923	520.235
Fashion	376.087	399.356	424.065	450.303	478.164	507.750
Convection	229.660	243.869	258.958	274.980	291.994	310.060
Culinary	1.658.481	1.761.095	1.870.058	1.985.763	2.108.627	2.239.092
Food	1.213.034	1.288.087	1.367.784	1.452.412	1.542.276	1.637.701
Drink	225.036	238.959	253.744	269.444	286.115	303.817
Services/Others	524.055	556.480	590.911	627.472	666.295	707.520
Amount	4.634.807	4.921.573	5.226.083	5.549.434	5.892.790	6.257.390

Source: opendata.jabarprov.go.id (2023)

Table 1 shows that the development of MSME players based on business type has experienced an increasing trend from year to year. The city of Bandung as the center of the West Java Province government can be said to be a trend setter for various types of activities, including of course MSME activities. The great potential of MSMEs in the city of

Bandung can be seen in table 2. Table 2 shows that the development trend of MSMEs in the city of Bandung, both in total and per type of business, is increasing from year to year.

Table 2. Distribution of MSME Actors Based on Business Type in Bandung City 2017 – 2021

Type of Business	2017	2018	2019	2020	2021
Accessories	850	903	959	1.018	1.081
Batik	850	903	959	1.018	1.081
Embroidery	121	129	137	145	154
Craft	30.364	32.243	34.238	36.356	38.605
Fashion	29.635	31.469	33.416	35.483	37.679
Convection	18.097	19.217	20.406	21.668	23.009
Culinary	130.687	138.773	147.359	156.476	166.158
Food	95.586	101.500	107.780	114.449	121.530
Drink	17.733	18.830	19.995	21.232	22.546
Services/Others	41.295	43.850	46.563	49.444	52.503
Amount	365.218	387.817	411.812	437.289	464.346

Source: opendata.jabarprov.go.id (2023)

These potential actors, MSMEs, must of course be followed by good business management. Apart from financial accounting, to prepare financial reports as a form of accountability for business managers, management accounting is also needed as a basis for business managers to make business decisions, both strategic and operational. The results show that management accounting studies have identified a number of differences that occur between small businesses and large businesses. Research shows that management accounting and other information systems in small businesses are often informal or very simple and do not use sophisticated management accounting techniques (Harrison, & Akroyd, 2013).

Management accounting practices that can be used by MSMEs include cost systems, budgeting systems, performance appraisal systems, decision support systems, and strategic management accounting (Alliyah & Maslichan, 2022). The study from Tanjung et al. (2021) highlights the adoption of management accounting practices and its relationship with SMEs performance. Dlamini & Schutte (2021) also explores the usage of management accounting practices among SMEs in Zimbabwe and found that MSMEs often use cost and budgeting system as well as strategic management accounting system. According to Nartey & van der Poll (2021), innovative management accounting practices is also found to influence sustainability of manufacturing small and medium enterprises. Similarly, Alvarez et al. (2021; Ahmad & Zabri, 2016; Ruiz & Collazzo, 2021) found that management accounting practice positively affects MSMEs performance.

These management accounting practices must of course be implemented effectively. If not, it will affect the performance and continuity of the business. The effectiveness of implementing a management accounting system can be seen from the dimensions of scope, timeliness, aggregation and integration (Pedroso & Gomes, 2020). The most effective aggregation dimension is followed by the integration, timeliness and scope dimensions (Pedroso & Gomes, 2020).

Apart from being supported by an effective management accounting information system, MSMEs need to be managed well through the skills of MSME managers or leaders in carrying out managerial activities including: planning, investigation, coordination, supervision, staffing, negotiation and representation (Mahoney, 1963). Much research has been conducted regarding the influence of Management Accounting Information System Characteristics on Managerial Performance. However, there are still relatively few MSME research subjects. Apart from that, there are inconsistent research results as can be seen in table 3 below.

Table 3 Inconsistencies in Research Results

No.	Researcher	Findings
1.	Manossoh, Alexander, and Kalalo (2022) Jusriadi (2022); Fiktoriya and Solovida (2021); Meiryani, Gilberta, Arshanty, Lindawati, and Liawatimena (2021); Kamal, Mahfudnurnajamuddin, and Junaid (2020); Oktavia and Nauli (2020); Afandi and Mubarak (2020); Fuadah et al. (2020); Ayu and Dahren (2014); Gurendrawati, Murdayanti, and Putri (2014); dan Chuang (2008)	Characteristics of management accounting information systems have a positive influence on managerial performance.
2.	Lubis and Syafira (2021); Sustyorini and Zuliyatin (2021); Vita, Winarko, and Nurdiwaty (2021); Irti, Irfan, and Sari (2021); Christina and Sopyansyah (2020); Agustin (2019); Gandari (2018); Prasasti (2017); Ghasemi, Azmi Mohamad, Karami, Hafiz Bajuri, and Asgharizade (2016); Handayani and Hariyati (2014); Etemudi, Dilami, Bazaz, and Parameswaran (2009); Chia (1995); dan Gul and Chia (1994)	Characteristics of management accounting information systems influence managerial performance.
3.	Hani and Ananda (2023) and Tsui (2001)	Characteristics of management accounting information systems have a negative influence on managerial performance
4.	Efendi and Kusuma (2021) and Chung and Su (2012)	Characteristics of management accounting information systems do not have a negative influence on managerial performance

Source: Processed data from journals (2023)

The findings of previous studies in Table 3 shows that there are still different findings regarding the influence of characteristics of management accounting information system on managerial performance. Because of these inconsistencies in the research findings, this study aim to analyze and test the influence of Management Accounting Information System Characteristics on Managerial Performance in MSMEs in Bandung City in 2023.

METHODS

This research is a type of quantitative research. Quantitative research is a research method based on positivism, which emphasizes testing theories used to research certain

populations or samples, collecting data using research instruments, quantitative/statistical data analysis with the aim of testing hypotheses that have been determined through measuring research variables using number (Sugiyono, 2013). The population of this research is MSMEs in Bandung City based on 2021 data of 464,346 businesses. However, because it is difficult to identify the service/other business category, the population is 411,843 businesses. The sampling technique uses proportional probability sampling according to the type of business. The number of samples is determined using the Slovin formula, as follows:

$$n = \frac{N}{1+N(e)^2} \quad (1)$$
$$n = \frac{411.843}{1 + 411.843(0,10)^2} = 99,98 = 100$$

This research variable consists of the independent variable (X), namely the characteristics of the management accounting information system which consists of the dimensions: breadth of scope, timeliness, levels of aggregation, and integrative nature and the dependent variable (Y) namely managerial performance which consists of the dimensions: planning, investigation, coordination, evaluation, supervision, staffing, negotiation, and representing using an interval measurement scale. Data was collected using a questionnaire adopted from research Pedroso and Gomes (2020).

Validity test is a test used to measure whether a questionnaire is valid or not. It can be said that a questionnaire is valid if the questions regarding the questionnaire are able to state something that will be measured by the questionnaire. Meanwhile, validity is the accuracy of the research results which reflect the truth, even though the respondents used in the test are different. Validity is tested by the magnitude of the correlation between variables, the technique used is Corrected Item Total Correlation. Meanwhile, the significance test is carried out by comparing the calculated r value with the r table for degree of freedom (df) = n-2, n is the number of samples. The validity requirement is if r count \geq r table (Syafina & Harahap, 2019).

Reliability testing is a measuring tool in measuring a questionnaire. A questionnaire can be said to be reliable or reliable if a person's answer to the statement is consistent and stable. This test can only be carried out on questions that are valid or valid. This test uses statistical techniques with the Cronbach's alpha coefficient after measuring using SPSS. A questionnaire is said to be reliable if Cronbach's Alpha is > 0.60 (Syafina & Harahap, 2019).

When testing multiple linear regression analysis, you are required to first fulfill several classic assumption tests, namely the normality test. According to Syafina and Harahap (2019) The normality test is a test that aims to find out if a good regression model has a normal distribution or tends to be normal. In the test, the normality test with a statistical test is the Kolmogorov-Smirnov test with the criterion that if the significant value or probability is more than 0.05 then the data is normally distributed, whereas if it is less than 0.05 then vice versa, the resulting data is not normally distributed.

Descriptive analysis was used in this research. According to Sugiyono (2013) is as follows the method used to analyze data by describing or illustrating the data that has been collected as it is without intending to make general conclusions or generalizations. In its implementation, this research uses descriptive research which is carried out through data collection in the field. Descriptive research is a type of research that describes what is done in the field based on existing facts which will then be processed into data. The data is then analyzed to obtain a conclusion. Next, regression analysis is used to determine the

relationship between the dependent variable and the independent variable and test the research hypothesis with criteria, if:

- If $t \text{ count} < t \text{ table}$ then H_0 is accepted H_a is rejected or if the sig value is > 0.05 it means: Management Accounting Information System Characteristics do not have a positive effect on Managerial Performance
- If $t \text{ count} > t \text{ table}$ then H_0 is rejected H_a is accepted or if the sig value < 0.05 it means: Management Accounting Information System Characteristics have a positive effect on Managerial Performance

RESULTS AND DISCUSSION

In this section the researcher will present the research results and discussions that have been obtained regarding the influence of the characteristics of management accounting information on managerial performance in MSMEs in Bandung City. Data collection in this research was obtained by distributing questionnaires to respondents via Google Form. The response rate was only 35% of the target respondents of 100 MSME business actors.

Based on the gender of the respondents, information was obtained. The majority of MSME entrepreneurs in this study were 19 men (54.3%) while 16 were women (45.7%). Based on the respondents' educational background, information was obtained. The majority of MSME business actors in this study had a bachelor's level (S1) educational background, 16 people (45.7%); masters (S2) as many as 9 people (25.7%); High School/Equivalent as many as 5 people (14.3%); others as many as 3 people (8.6%); and Diploma 3 as many as 2 people (5.7%).

Based on the type of MSME business, information was obtained. The majority of MSME business types in this study were engaged in the trading business sector, 17 MSMEs (48.6%); in the service business sector there were 12 MSMEs (34.4%); and in the manufacturing business sector there were 6 MSMEs (17.1%). Based on the length of the MSME business, information was obtained. The majority of the length of the MSME business in the research was 1 to 10 years. 5 years as many as 15 MSMEs (42.9%); more than 15 years as many as 10 MSMEs (28.6%); for 6 to 10 years as many as 6 MSMEs (17.1%); and for 11 to 15 years as many as 4 MSMEs (11.4%).

Based on the sales turnover of MSMEs for one year, information was obtained. The majority of MSMEs' annual sales turnover was up to a maximum of IDR 2,000,000,000, as many as 28 MSMEs (80.0%); MSMEs' annual sales turnover is more than IDR 2,000,000,000 to IDR 2,000,000,000. IDR 15,000,000,000 for 6 MSMEs (17.1%); and the annual sales turnover of MSMEs is more than IDR 15,000,000,000 to IDR 15,000,000,000. IDR 50,000,000,000 for 1 MSME (2.9%).

In table 4 below, the results of data processing of respondents' responses regarding the Characteristics of Management Accounting Information Systems are presented.

Table 4. Respondents' Responses-Characteristics of Management Accounting Information Systems

No.	Statement	STS 1	TS 2	CS 3	S 4	SS 5	Actual Score	Shoes Ideal	Shoes Total	Explanation
1	I receive information relating to possible future events (e.g. a project/order)	3	2	4	15	11	134	175	76,57%	Good
2	I receive information that contains non-economic information (e.g. customer desires, employee attitudes, labor relations, government attitudes, competitor threats, etc.)	0	5	4	20	6	132	175	75,43%	Good
3	I receive information that contains factors outside the company (e.g. economic conditions, population growth, technological developments, etc.)	0	3	7	17	8	135	175	77,14%	Good
4	I receive non-financial information related to production and markets such as productivity, employee absenteeism, business growth, etc.	0	4	6	19	6	132	175	75,43%	Good
5	The information I request/need can be obtained immediately	1	2	7	14	11	137	175	78,29%	Good
6	Information that I receive automatically as a result of data processing	0	6	10	11	8	126	175	72,00%	Good
7	Reports that I receive systematically and regularly (e.g. daily reports, weekly reports, etc.)	0	3	7	13	12	139	175	79,43%	Good
8	Information is provided on different sections or functional areas within the company (e.g. marketing and production, sales, etc.)	0	6	11	15	3	120	175	68,57%	Good
9	I receive information that contains information on a specific time period (e.g. monthly/quarterly/annual summaries, trends, comparisons, etc.)	0	4	9	17	5	128	175	73,14%	Good

10	Processed information shows the impact of events on different functions (e.g. marketing or production related to a particular activity or task)	0	3	14	14	4	124	175	70,86%	Good
11	I receive information in the form of summary reports (e.g. sales reports, purchasing reports, production reports, etc.) for certain sections and for the entire company	2	3	5	17	8	131	175	74,86%	Good
12	I receive information for decision making (e.g. sales results analysis, inventory/stock analysis, credit policy analysis, etc.)	0	5	5	19	6	131	175	74,86%	Good
13	Costs can be separated into fixed cost and variable cost components	1	1	9	18	6	132	175	75,43%	Good
14	I receive information from the results of my decisions and those of other parties in the company in accordance with their respective responsibilities	0	3	9	16	7	132	175	75,43%	Good
15	I received the right activity targets according to my section	0	4	7	16	8	133	175	76,00%	Good
16	I receive information relating to performance on my part	0	3	9	15	8	133	175	76,00%	Good
								Average	74,96%	Good

Source: Processed data (2023)

On average, respondents' responses to the 16 statement items were 74.96% in the good category. However, there are still respondents' responses which are worth 68.57%, although they are still in the good category, they still need attention regarding the information provided in accordance with their respective fields of work.

Broad scope characteristics (statements no. 1 to 4) have an average value of 76.14%; timeliness characteristics (statements no. 5 to 7) have an average value of 76.57%; aggregation characteristics (statements no. 8 to 13) have an average value of 72.95%; and integrative characteristics (statements no. 14 to 16) have an average value of 75.81%. Based on the average value for each characteristic of the Management Accounting Information System, the largest to smallest average values can be identified respectively; timeliness characteristics of 76.57%; broad scope characteristics of 76.14%; integrative characteristics of 75.81%; and aggregation characteristics of 72.95%.

In table 5 below, the results of data processing of respondents' responses regarding Managerial performance are presented.

Table 5. Respondent Responses - Managerial Performance

No.	Statement	STS 1	TS 2	CS 3	S 4	SS 5	Actual Score	Skor Ideal	Shoes Total	Explanation
1	I make plans: determine goals, policies and work programs (for example making a budget, making a work schedule, making a work program, etc.)	1	2	7	12	13	139	175	79,43%	Good
2	I received the right activity targets according to my section	1	3	7	16	8	132	175	75,43%	Good
3	I carry out coordination: exchange information with people in the company	1	2	5	17	10	138	175	78,86%	Good
4	I carry out evaluations: assessments of proposals or reported/observed performance (e.g. assessing employees, assessing financial performance, etc.)	1	3	10	13	8	129	175	73,71%	Good
5	I carry out supervision: directing, leading and developing my subordinates	3	1	6	14	11	134	175	76,57%	Good
6	I carry out personnel functions: retain my employees according to their area of responsibility (for example selecting and promoting my subordinates)	2	3	5	15	10	133	175	76,00%	Good
7	I negotiate: purchases, sales, or contracts for products or services (e.g. contracts with suppliers)	3	2	5	14	11	133	175	76,00%	Good

	I represent the company: promote the company (e.g. participate in exhibitions, interact with the public/customers via social media, etc.)	2	4	5	14	10	131	175	74,86%	Good	
8											
9	Overall, my performance?	0	2	6	15	12	142	175	81,14%	Good	
									Average	76,70%	Good

Source: Processed Data (2023)

On average, respondents' responses to the 9 statement items were 76.70% in the good category. However, there are still respondents' responses which are worth 73.71%, although they are still in the good category, they still need attention regarding the evaluation dimensions.

Overall, respondents' perception of their performance was 81.14%. Meanwhile, based on the dimensions of Managerial Performance, respectively, from the largest value to the smallest, they are; the planning ability dimension was 79.43%; the dimension of ability to coordinate was 78.86%; the dimension of ability to carry out supervision was 76.57%; the ability to organize staff and negotiate has the same value, namely 76%; ability to carry out investigations of 75.43%; ability to perform represents 74.86%; and the ability to carry out evaluations was 73.71%.

Based on the validity test using SPSS version 24 for the Management Information System Characteristics and Managerial Performance variables, all statement items obtained a significance value of less than 5% ($\text{sig} < 0.05$). So it can be concluded that it is valid. Based on the data normality test using SPSS version 24 for the Management Information System Characteristics and Managerial Performance variable data, it can be concluded that it is normally distributed because the Asymp value. Sig.= 0.200 is greater than the value $\alpha = 0.05$. The results of research hypothesis testing show that the Sig. 0.000 < 0.05 , thus it can be concluded that the Characteristics of Management Accounting Information Systems influence Managerial Performance.

Hypothesis testing proves that the characteristics of Management Accounting Information Systems consisting of broadscope, timeliness, aggregation, and integrative have a positive effect on Managerial Performance, namely management's ability to carry out the functions of planning, investigating, coordinating, evaluating, supervising, staffing, negotiating, and representing. This means that with the characteristics of a good Management Accounting Information System it can improve Managerial Performance.

In the era of increasingly massive development of information technology, in order to be able to compete with competitors, management requires management accounting information that supports making the right business decisions. Management requires information collected not only from within the company but also from other sources outside the company. The existence of a good management accounting information system will certainly encourage the acceptance of reports as a basis for timely decision making and this information is available whenever needed.

As a unified whole, the organization is supported by the parts within the organization itself. These sections must of course be supported by information in the form of reports that are relevant to the section concerned and can be a means for exchanging information

and coordinating.

All of these things will of course be an important part of supporting the implementation of management activities related to planning, investigating, coordinating, evaluating, supervising, staffing, negotiating and representing. Although from the results of respondents' responses there are still obstacles in sharing information between departments within the company, overall it is still in the good category.

This research supports or is in line with research conducted by Manossoh et al. (2022), Jusriadi (2022), Fiktoriya and Solovida (2021), Meiryani et al. (2021), Kamal et al. (2020), Oktavia and Nauli (2020), Afandi and Mubarak (2020), Fuadah et al. (2020), Ayu and Dahen (2014), Gurendrawati et al. (2014), and Chuang (2008) that the characteristics of the Management Accounting Information System have a positive effect on managerial performance.

CONCLUSION

Based on statistical testing, it can be concluded that the characteristics of the Management Accounting Information System have a positive effect on Managerial Performance. Suggestions that can be conveyed, firstly, are that the Characteristics of the Management Accounting Information System has the lowest average response value from respondents, so it is recommended that the reports required by management can be optimized. Ways that can be done include reports tailored to existing departments in the company, for example reports from the warehouse department. This report is used to analyze stock/inventory availability and can also be used as a basis for calculating Economic Order Quantity (EOQ). Sales reports can be used to analyze what products are sold the most and analyze consumers' ability to pay off their obligations. Second, the dimension of management's ability to evaluate has the lowest value among the other dimensions. For example, weak evaluation of financial performance. So it is recommended that company management learn techniques for evaluating financial performance independently, take part in training organized by the Department of Cooperatives and MSMEs, or apply for assistance to the campus as a form of Community Service by lecturers. Third, this research still has shortcomings, namely the lack of research samples. Therefore, future researchers are advised to increase the research sample because there is concern that non-response bias will occur.

REFERENCES

- Afandi, A. A., & Mubarak, A. (2020). Pengaruh Karakteristik Sistem Informasi Akuntansi Manajemen (Broad Scope, Timeliness, Aggregation, dan Integration) terhadap Kinerja Manajerial UMKM. *JABKO: Jurnal Akuntansi dan Bisnis Kontemporer*, 1(1), 1-11.
- Agustin, P. N. (2019). Pengaruh Budaya Organisasi dan Karakteristik Sistem Informasi Akuntansi Manajemen terhadap Kinerja Manajerial. *JASA (Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi)*, 3(3), 407-423.
- Ahmad, K., & Zabri, S. M. (2016). *Management accounting practices among small and medium enterprises*. Paper presented at the Proceedings of the 28th International Business Information Management Association Conference.

-
- Aprilianti, N., Surtiani, A., & Johan, A. (2023). Kinerja Bisnis UMKM Kota Bandung: Peran Strategi Bauran Pemasaran Dan Kualitas Pelayanan (Studi Pada Rumah Makan Sambel Mitoha Bandung). *Management Studies and Entrepreneurship Journal (MSEJ)*, 4(6), 8450-8461.
- Alliyah, S., & Maslichan, M. (2022). Penggunaan Praktek Akuntansi Manajemen (PAM) Pada Ukm Di Kabupaten Rembang. *Fokus Ekonomi: Jurnal Ilmiah Ekonomi*, 17(1), 101-114.
- Alvarez, T., Sensini, L., Bello, C., & Vazquez, M. (2021). Management accounting practices and performance of SMEs in the Hotel industry: Evidence from an emerging economy. *International Journal of Business and Social Science*, 12(2), 24-35.
- Ayu, G., & Dahen, L. D. (2014). Pengaruh Karakteristik Informasi Sistem Akuntansi Manajemen Terhadap Kinerja Manajerial Studi Empiris pada PT Bank Perkreditan Rakyat di Kabupaten Tanah Datar. *Journal of Economic and Economic Education*, 3(1), 89-94.
- Chia, Y. M. (1995). Decentralization, management accounting system (MAS) information characteristics and their interaction effects on managerial performance: a Singapore study. *Journal of Business Finance & Accounting*, 22(6), 811-830.
- Christina, V., & Sopyansyah, M. A. B. (2020). Management accounting systems and managerial performance: Locus of control as a moderator. *Solid State Technology*, 63(3), 5076-5083.
- Chuang, Y.-K. (2008). The Effect Of Management Accounting Systems And Organizational Commitment on Managerial Performance. *Tajen University, Pingtung, Taiwan*.
- Chung, S.-H., & Su, Y.-F. (2012). Broad scope management accounting system and managerial performance: The impact of role ambiguity and functional difference. *African Journal of Business Management*, 6(30), 8873.
- Dlamini, B., & Schutte, D. P. (2021). An exploratory study on the usage of Management Accounting Practices among Small and Medium Enterprises in Zimbabwe. *The Journal of Accounting and Management*, 11(2).
- Efendi, D., & Kusuma, E. A. (2021). The role of the management accounting system and decision-making style on managerial performance. *Jurnal keuangan dan Perbankan*, 25(1), 144-161.
- Etemadi, H., Dilami, Z. D., Bazaz, M. S., & Parameswaran, R. (2009). Culture, management accounting and managerial performance: Focus Iran. *Advances in accounting*, 25(2), 216-225.
- Fiktoriya, A., & Solovida, G. T. (2021). *Pengaruh teknologi terhadap kinerja manajerial dengan karakteristik sistem akuntansi manajemen (sam) sebagai variabel mediasi*. Paper presented at the FORUM EKONOMI.
- Fuadah, L. L., Safitri, R. H., Yuliani, Y., & Arisman, A. (2020). Determinant factors' impact on managerial performance through management accounting systems in Indonesia. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 7(10), 109-117.
- Gandari, H. Y. (2018). Pengaruh Teknologi Informasi terhadap Kualitas Sistem Informasi Akuntansi Manajemen yang Berdampak terhadap Kinerja Manajerial. *JASA (Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi)*, 2(1), 16-32.
- Ghasemi, R., Azmi Mohamad, N., Karami, M., Hafiz Bajuri, N., & Asgharizade, E. (2016). The mediating effect of management accounting system on the relationship between competition and managerial performance. *International Journal of Accounting and Information Management*, 24(3), 272-295.

-
- Gul, F. A., & Chia, Y. M. (1994). The effects of management accounting systems, perceived environmental uncertainty and decentralization on managerial performance: a test of three-way interaction. *Accounting, organizations and society*, 19(4-5), 413-426.
- Gurendrawati, E., Murdayanti, Y., & Putri, A. G. (2014). The Impact Of Information Technology, Management Accounting System Characteristics, and Locus Of Control To The Managerial Performance In The Telecommunication Service Companies. *Integrative Business Economic*, 3(3), 357-366.
- Handayani, S., & Hariyati, H. (2014). Pengaruh Karakteristik Sistem Informasi Akuntansi Manajemen: Broad Scope, Timeliness, Aggregated, Dan Integrated Terhadap Kinerja Manajerial Umkm.(Studi Pada Umkm Di Desa Wedoro, Kab. Sidoarjo). *AKRUAL: Jurnal Akuntansi*, 5(2), 184-204.
- Hani, S., & Ananda, S. (2023). *Effect of Characteristics of Management Accounting Information Systems on Managerial Performance at PT Humbahas Bumi Energi (HBE) Medan*. Paper presented at the Proceeding Medan International Conference on Economic and Business.
- Hanim, L., & Noorman, M. (2018). UMKM (Usaha Mikro, Kecil, & Menengah) & Bentuk-Bentuk Usaha. *Hak Cipta Dilindungi Undang-Undang All Rights Reserved*.
- Hidayat, K. (2022, September 24). Menko Ekonomi: UMKM Menyumbang 61% PDB Nasional. *Nasional.kontan.co.id*. <https://nasional.kontan.co.id/news/menko-ekonomi-umkm-menyumbang-61-pdb-nasional>
- Irti, I. K., Irfan, I., & Sari, M. (2021). The Influence of Management Accounting Information Systems on Managerial Performance with Decentralization as Moderating Variables in PT. Perkebunan Nusantara II (Persero) Tanjung Morawa. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4), 8204-8214.
- Jusriadi, E. (2022). Moderation of Leadership Style: Management Accounting Information Systems and Management Control Systems on Managerial Performance. *ATESTASI: Jurnal Ilmiah Akuntansi*, 5(1), 16-32.
- Kamal, N. A. A., Mahfudnurnajamuddin, M., & Junaid, A. (2020). Pengaruh Karakteristik Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial UMKM. *Journal of Accounting and Finance (JAF)*, 1(1), 115-129.
- Kotelnikov, V. (2007). *Small and medium enterprises and ICT: UN-APCICT/ESCAP*.
- Lubis, H. Z., & Syafira, A. (2021). *Determinan Karakteristik Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial*. Paper presented at the Prosiding Seminar Nasional Kewirausahaan.
- Mahoney, T. A. (1963). *Development of managerial performance: A research approach*. South-western Publishing Company.
- Manossoh, S. M., Alexander, S., & Kalalo, M. (2022). Pengaruh Karakteristik Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial Pada PT. Bank SulutGo Cabang Tahuna. *Jurnal LPPM Bidang EkoSosBudKum (Ekonomi, Sosial, Budaya, dan Hukum)*, 6(1), 315-324.
- Meiryani, M., Gilberta, G., Arshanty, R., Lindawati, A., & Liawatimena, S. (2021). *The Effect of Management Accounting Information Systems and Decision Making on Managerial Performance*. Paper presented at the Proceedings of the 2021 5th International Conference on Software and e-Business.
- Najera Ruiz, T., & Collazzo, P. (2021). Management accounting use in micro and small enterprises. *Qualitative Research in Accounting & Management*, 18(1), 84-101.

-
- Nartey, S. N., & van der Poll, H. M. (2021). Innovative management accounting practices for sustainability of manufacturing small and medium enterprises. *Environment, Development and Sustainability*, 23(12), 18008-18039.
- Ng, F., A. Harrison, J., & Akroyd, C. (2013). A revenue management perspective of management accounting practice in small businesses. *Meditari Accountancy Research*, 21(2), 92-116.
- Oktavia, R., & Nauli, P. (2020). Pengaruh Karakteristik Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial Pada Bpr Di Kota Bandar Lampung. *Jurnal Akuntansi dan Keuangan (JAK)*, 25(2), 187-198.
- Pedroso, E., & Gomes, C. F. (2020). The effectiveness of management accounting systems in SMEs: a multidimensional measurement approach. *Journal of Applied Accounting Research*, 21(3), 497-515.
- Prasasti, L. (2017). Pengaruh Karakteristik Sistem Informasi Akuntansi Terhadap Kinerja Manajerial (Studi Kasus Pada Pt Bank Pembangunan Daerah Jambi). *Jurnal Manajemen Terapan dan Keuangan*, 6(3), 208-219.
- Rufino, H. (2014). Management accounting practices (MAPs) of small and medium-sized manufacturing enterprises in the city of Tarlac. *Rev. Integr. Bus. Econ. Res*, 4(1).
- Sugiyono, D. (2013). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D.
- Sustiyorini, E. N., & Zuliyatin, R. (2021). Pengaruh Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial Pada BUMD Lamongan (The Influence Of Management Accounting Information Systems On Managerial Performance In Bumd Lamongan). *JEKMA*, 2(6).
- Syafina, L., & Harahap, N. (2019). Metode Penelitian Akuntansi Pendekatan Kuantitatif. In: Medan: Febi UIN-SU Press.
- Tanjung, H., Rusmana, O., & Lestari, P. (2021). Adopsi Praktik-Praktik Akuntansi Manajemen Dan Hubungannya Dengan Kinerja Ukm. *Media Bina Ilmiah*, 15(8), 5019-5040.
- Tsui, J. S. (2001). The impact of culture on the relationship between budgetary participation, management accounting systems, and managerial performance: An analysis of Chinese and Western managers. *The international journal of accounting*, 36(2), 125-146.
- Vita, N. T. C., Winarko, S. P., & Nurdiwaty, D. (2021). *Determinasi Sistem Informasi Akuntansi Manajemen Dan Sistem Pengendalian Manajemen Terhadap Kinerja Manajerial Pada Ud. Tunggal Jaya*. Paper presented at the Seminar Nasional Manajemen, Ekonomi dan Akuntansi.