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Maintaining cooperative sustainability: The mediation role of performance measurement systems

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Abstract
Purpose: This study aims to identify an ideal information system to support cooperative organizations in enhancing their managerial performance and promoting long-term business sustainability.
Research Methodology: Data were collected through distributed questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the proposed hypotheses.
Results: The findings confirm that Management Accounting Information Systems (MAIS) and Performance Measurement Systems (PMS) significantly and positively affect Managerial Performance (MP). PMS is shown to mediate the relationship between MAIS and MP. These results are expected to offer practical insights for cooperative managers in applying accounting principles and performance tools.
Conclusions: This research reveals that quality and timely MAIS are vital for decision-making in cooperatives and SMEs. PMS plays a critical mediating role by reinforcing the positive impact of MAIS on MP.
Limitations: The study is limited by the narrow scope of research, small sample size, and respondents with limited work experience. It also faces challenges in accounting for diverse member backgrounds. Future research should involve broader samples, more variables (e.g., budgeting, accountability), and improved methods.
Keywords: *Cooperative, Sustainability, Management Accounting Information*
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1. Introduction

To maintain its sustainability in the industrial revolution, the cooperative industry cannot be separated from digital technology and artificial intelligence. The ability of cooperatives to adapt digital technology is a keyword in the current era. The use of E-Commerce platforms, online retail applications, and other business applications is a-significant instrument for achieving main goal of cooperatives (the prosperity of its members). Thus, not only the accuration of management information but accounting information is needed by cooperative managers, especially in making strategic decisions. This information will provide benefits for determining the right performance measurement system for cooperatives. As a people's economic movement that is familial, cooperatives intend to achieve the prosperity of its members. This principle, which appreciates as significant added value, can provide

micro and macroeconomic benefits (Kumar et al., 2018). In developing countries, cooperatives have succeeded in reducing poverty, contrary able to increase the income and welfare of their members (Kumar et al., 2018; Ma & Abdulai, 2016; Verhofstadt & Maertens, 2015). The important-role makes cooperatives need reliable information systems and appropriate performance measurement to maintain managerial performance stability. In general, cooperative managerial-performance has an impact on increasing the number of members. This shows an indicator of public trust in the performance of cooperatives as a form of a joint venture that provides welfare for each member. Cooperatives are expected to be able to exist in various conditions, including during the COVID-19 pandemic (Ahmad & Krisnadi, 2020). However, the phenomenon of 40 cooperatives in the Lebak district experienced a decrease in cooperative members in the last three years. This phenomenon shows in the table below:

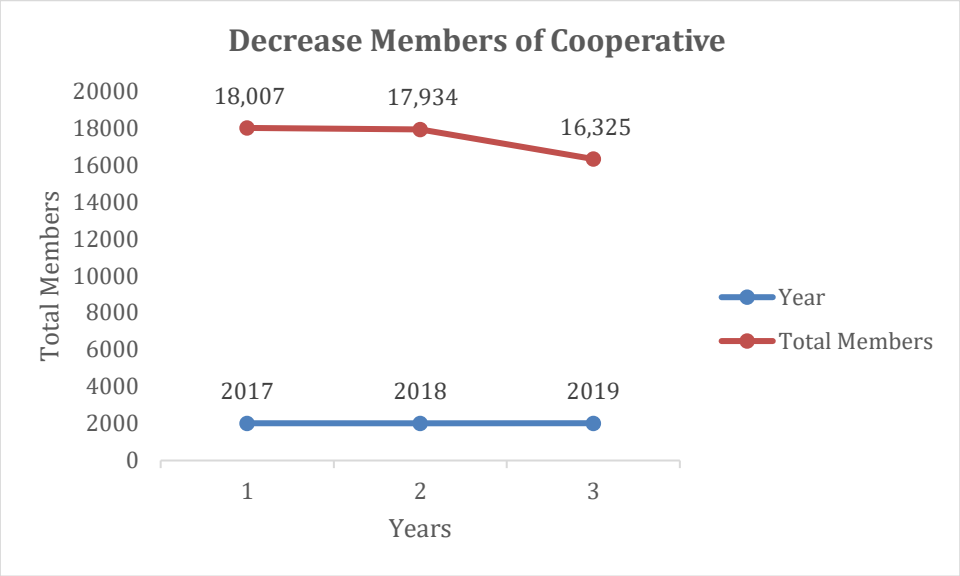

Figure 1. Decrease in the Number of Cooperative Members

This information is believed to be the basic input of a decision-making process. This component becomes very important for management accounting in helping managers to achieve organizational goals. Managers need the role of the MAIS that provides direction and overcomes various business problems in an organization (Mia & Chenhall, 1994). Along with global competition in the digital era where changes and developments in products and process technology are faster and changing currency value. This condition is an important determining factor for the use of MAIS. The reason is that the MAIS can provide the latest information and can follow the development of ongoing trading conditions. The research on PMS in small companies and cooperatives has a dominant role in improving the performance of employees and managers (Basuony, 2014; Hakola, 2010; Bianchi & Cosenz, 2013; Sigilipu, 2013). However, several research results explain the opposite situation (Jusuf, 2013; Lubis, 2008). The study is expected to provide information more useful on these differences. We considered on contingency approach on the premise that there is a no-absolute management accounting system that is used as a universal solution (D. Otley, 2016). This view provides guidance in this study to take steps that can be complementary in decision-making related to managerial performance issues from the aspect of PMS and MAIS. The contingency approach forms a model based on the ideas of organizational control and effectiveness. It is perceptive and shows the right direction for future work. In several studies, a contingency approach is needed to evaluate conditional factors on the effectiveness of management accounting information and organizational performance measurement on managerial performance (Hammad et al., 2013; D. Otley, 2016; Pešalj et al., 2018).

We replicated the research of Hammad et al., (2013) by changing the position of the management accounting information variable as a determinant factor of the performance appraisal system and managerial performance. Furthermore, we use the performance appraisal system as an intervening variable in the relationship between management accounting information and management performance. The research object follows the recommendations suggested to focus on a single business

unit (Rudiyanto, 2017). In addition, we expected the study to be able to contribute to cooperative business organizations that need the support of research results.

2. Literature review

2.1 Contigency Theory

The contingency approach is an argument of various alternatives to provide solutions in designing management systems according to organizational contexts (Jones, 1985). Generally, in various-organizational contexts, it is recognized that the power of accounting information can be the basis for making the right decisions (D. T. Otley, 1980). The contingency theory in management activities comes from a basic assumption. That is universal, where is a management system should be applied in various conditions throughout the company (Purwati & Zulaikha, 2018).

The contingency approach emerged as the search for the best formulation in producing a company's performance. The contingency approach is a consideration for decision making which is no absolute system that can used as a universal settlement tool (D. Otley, 2016). This view believed to appropriate in taking several complementary steps to overcome managerial performance problems in business organizations. Through a model that focuses on organizational control and effectiveness, the contingency approach serves as a guide for future sustainability. In several studies, a contingency is needed to evaluate conditional factors on the effectiveness of management accounting information and measurement of organizational performance on managerial performance (D. Otley, 2016; Pešalj et al., 2018).

2.2 Management Accounting Information Systems And Performance Measurement Systems

The management accounting information system (MAIS) has motivated and assisted managers in achieving organizational goals in a timely, efficient and effective manner (Langfield-Smith et al., 2017; Kaplan & Atkinson, 1998). MAIS quality with five dimensions (reliability, flexibility, integration, accessibility, and timeliness) is able to help optimal work completion (Napitupulu, 2018; Bui et al., 2020). Besides its function as a provider of information for decision makers, MAIS is considered safe, easy and efficient (Hariyati et al., 2019). MAIS information is widely used as a business strategy approach so that it can improve the performance of marketing managers in increasing sales(Akanbi & Jonathan, 2018).

In recent years, the use of MAIS in SMEs has received increasing attention (Shelleman & Shields, 2014; Pedroso & Gomes, 2020; Zainun et al., 2018). In addition, the success of MAIS information quality in SMEs depends heavily on the use of information technology (Senivongse et al., 2019). Hariyati et al., (2022) revealed that the use of MAIS with the right technology function greatly impacts the profit and value of post-pandemic SMEs. Hariyati et al., (2022) found that the use of information systems facilitates the implementation of unstructured tasks and task variations, as well as report completion and information transparency in terms of scope, timeliness, and aggregation. The characteristics of MAIS that we use follow Chenhall & Morris, (1986), which consist of: scope, timeliness, aggregation, and integration.

Every manager needs quality management accounting information in the decision-making (Groot & Selto, 2013). In line with the role of PMS as information for controlling and achieving organizational goals (Merchant & Van der Stede, 2018). PMS in organizations is most important because it is a performance measurement tool that can encourage work achievement and problem solving. PMS correlates planning, monitoring and evaluating activities, rewards and sanctions, communication tools, and customer satisfaction (Pešalj et al., 2018). A reliable MAIS is the intelligence of a business organization and can be used to create future stability (Rikhardsson & Yigitbasioglu, 2018). MAIS has been used to oversee the implementation of corporate governance strategies (Massicotte & Henri, 2021). In particular, the MAIS stated as a contingent factor that plays a role in mediating the relationship between innovation strategy and financial performance (Hutahayan, 2020). The results of Napitupulu, (2018) who explain that the MAIS is a very important part of the progress of individual companies. The flexibility of MAIS based on the selection of based inputs to be used in work processes can produce realistic and practical PMS. Therefore, we formulate the following hypothesis:

H_1. "The effectiveness of managers in using MAIS by providing scope, timeliness, aggregated, and integrated information correlates with the performance measurement system".

2.3 Management Accounting Information Systems And Managerial Performance

MAIS generated from a system process that serves to provide information for decision-makers. Managers use MAIS services in the hope of obtaining quality information. MAIS quality is an aggregation of four characteristics (scope, timeliness, aggregation, and integration), correlated with work delegation, and MAIS scores can differ between levels of education receiving it (Hammad et al., 2013). MAIS assists managers to carrying out planning, controlling, and decision-making activities to resolve problems and evaluate performance (Groot & Selto, 2013). This information is the basic-input for processing various activities such as collection, measurement, storage, analysis, reporting, and data management (Hansen et al., 2009). There are four main characteristics of MAIS that can support managerial performance: (1) Broadscope with indicators of focus, quantification, and time; (2) Timeliness; (3) Aggregation; and (4) Integration (Hammad et al., 2013). In recent years, the use of MAIS in cooperatives has received increasing attention (Handayani & Hariyati, 2014; Satria & Dewi, 2019; Mawaddah et al., 2021). This is because a comprehensive management accounting information system helps managers in planning, investigating, coordinating, evaluating, monitoring, staffing, negotiating, and representing efficiently and effectively (Hammad et al., 2013). The results of Handayani & Hariyati (2014) empirically prove through 52 SMEs that the MAIS produced is very much needed by MSME managers in producing quality performance. Irawati & Ardiansah (2018) using 35 middle-level managers at PT Japfa Comfeed Indonesia have proven that the two dimensions of MAIS (Timeliness and Aggregation) affect increasing managerial performance. Different results were obtained from research by Sigilipu (2013) on 30 managers of PLN in Sulawesi region concluded that the MAIS system hasn't a significant effect on managerial performance, while the nature of the relationship was negative. However, the thing to remember is that the success of MAIS information quality in cooperative organizations is generally very dependent on information technology (Satria & Dewi, 2019). Therefore, we formulate the following hypothesis:

H_2. The effectiveness of managers in using MAIS which provides scope, timeliness, aggregated, and integrated information is correlated with managerial performance.

2.4 Performance Measurement Systems And Managerial Performance

Performance measurement is a formal process, which aims to obtain, analyze, and disclose information about an aspect of an activity process (Micheli & Mari, 2014). Thus, performance measurement is a process related to the acquisition and use of information that aims to influence the behavior and actions of members (Koufteros et al., 2014). The research has shifted from PMS design and implementation to its use and impact (Melnyk et al., 2014). Empirical research has found that PMS effected on employee engagement and improves managerial performance (Franco-Santos et al., 2012). Most researchers focus more on the context of large private companies, PMS often assesses the design, implementation, and use of the Balanced Scorecard framework (Micheli & Mari, 2014). Currently, several researchers are concentrate on SMEs and cooperatives (Basuony, 2014), although the results have not been able to explain in-depth enough how SMEs can use the PMS system. Research conducted by Hakola, (2010) on 15 small companies in Finland, shows that PMS is comprehensively able to identify and improve the most critical aspects of performance to improve company performance. In line with the case study conducted by Bianchi & Cosenz, (2013), which concluded that design and use of PMS adequated to lead the identification of strategic resources that drive performance and sustainable development in SMEs. Sigilipu, (2013) research with 30 managers as respondents consisting of 10 managers and 20 deputy managers at PT. PLN (Persero) in Central-Sulawesi, provides an empirical conclusion that the performance measurement system is proven to have a significant effect on managerial performance. However, the results of Jusuf (2013) research at PT. Cahaya Murni Raya Industri found that the PMS had no significant effect on managerial performance. Likewise, in the test of 97 managers in the Medan Industrial Estate that PMS cannot to moderate the formation of management performance through TQM (Lubis, 2008). Based on the above study, we formulate the following hypothesis:

H_3. PMS is correlated with managerial performance.

Based on the discussion of the previous literature, the theoretical framework that we can develop in this study is shown in Figure 2 below.

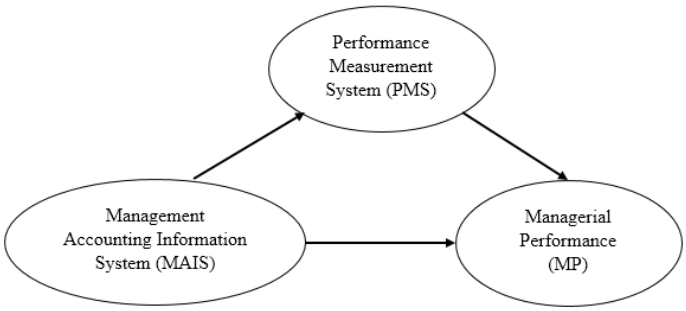

Figure 2. Theoretical Framework

3. Methodology

We used data collected by distributing questionnaires to 161 cooperative managers from 216 units in the Lebak district. Before we used the questionnaire to generate data, we conducted a pilot test (10th respondents) to ensure the instrument items were valid and reliable. Firstly, we obtained the data and tabulated it on statistical data information. The characteristics of MAIS follows on Hammad et al., (2013) to measures respondents' perceptions of the information received from the MAIS (Table 1). Our questionnaire includes 19 items consisting of four dimensions of MAIS (scope, timeliness, aggregation, and integration).

The selected instrument by the respondents used a likert-scale with five options (1 – Strongly Disagree, 2 – Disagree, 3 – Doubtful, 4 – Agree, 5 – Strongly Agree). The respondents asked to provide their perception of the implementation of MAIS in their cooperatives. Before analyzing the data, we need to test whether each dimension and indicator meets the elements of being valid and reliable. The test results on the value of Construct Reliability (CR = 0.89) and Average Variance Extracted (AVE) are more greater than 0.70 and 0.50 (Table 4). All the MAIS-dimensions are within the acceptable range of 0.60 or more (Hair et al., 2014).

The PMS uses a questionnaire that has been use in research (Appuhami, 2019). It consists of 7-items regarding the strategic performance measurement system with the indicators being: documented, performance evaluation, key performance actions, consistent with the long-term strategy, linking business unit activities to the achievement of goals, showing how business unit activities affect other unit activities, provides key-indicators and provides lagging indicators (past performance. The five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), the extent to which the PMS applied to the identified cooperative unit managers. The CR value is 0, 90 within the acceptable range (Table 5). Managerial performance. Managerial performance is measured by Hammad et al., (2013), which was developed by Mahoney et al. (1963, 1965). Managers asked to rate their own perceived performance on eight subdimensions: planning, investigation, coordination, evaluation, supervision, staffing, negotiation, and representation. Their responses were perceived using a five-point Likert scale ranging from 1 (well below the average) to 5 (well above the average). The managerial performance gives a CR value of 0.88, which is also well above the acceptable limit (Table 4).

Table 1. Operational Research Variables

Variable	Indicators	Scale
Managerial Performance (Mahoney et al dalam Hammad et al., 2013)	1) Planning 2) Investigation 3) Coordination 4) Evaluation 5) Supervision 6) Staffing 7) Negotiation 8) Representative	Likert

Management Accounting Informastion (Chenhall & Morris dalam Hammad et al., (2013)	1) Scope 2) Timeliness 3) Aggregation 4) Integration	Likert
Performance Measurement System (Appuhami, 2019)	1) PMS Documentation 2) Variety of main activities 3) Consistency of long term strategy 4) Achievement of goals and objectives 5) Influence on the activities of other units 6) Main indicators 7) Lagging indicator	Likert

4. Results and discussions

We used data collected by distributing questionnaires to 161 cooperative managers from 216 units in the Lebak district. Before we used the questionnaire to generate data, we conducted a pilot test (10th respondents) to ensure the instrument items were valid and reliable. Firstly, we obtained the data and tabulated it on statistical data information. The characteristics of MAIS follows on Hammad et al., (2013) to measures respondents' perceptions of the information received from the MAIS (Table 1). Our questionnaire includes 19 items consisting of four dimensions of MAIS (scope, timeliness, aggregation, and integration).

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Performance Measurement System (Appuhami, 2019)	8) PMS Documentation 9) Variety of main activities 10) Consistency of long term strategy 11) Achievement of goals and objectives 12) Influence on the activities of other units 13) Main indicators 14) Lagging indicator	Likert

5. Conclusion

5.1 Conclusion

This research studies how managers realize their desire to apply several management accounting principles mediated by a performance measurement system so as to help improve their managerial performance. By showing how managers work based on management accounting information by implementing a performance measurement system. Managers' efforts to apply of MAIS helping their performance are in line with the findings (Hall, 2010; Sigilipu, 2013). Our research developed from the cognition and actions of managers who require the perception of appropriate valuation systems and management accounting principles. We think that the placement of a performance measurement system in solving managerial performance problems based on a contingency approach. Our results refer to the contingency approach scheme that to resolve managerial performance problems requires various alternative instruments that complement each other. In achieving organizational goals is strongly influenced by the situation and conditions. However, business organization really depends on the type and scope (D. T. Otley, 1980). The information produced by the management accounting system depends on situational factors that exist in each situation to produce more effective management performance (Pedroso & Gomes, 2020).

In addition to explaining knowledge and actions that are in line with contingency theory in solving managerial performance problems in cooperatives, this study also provides an overview of how the performance measurement system can mediate the relationship between management accounting information and managerial performance (Hariyati et al., 2019). Handayani & Hariyati (2014) explain how managerial performance needs management accounting information. Managers of cooperatives and SMEs need timely information (timelines) to make good decisions (Handayani & Hariyati, 2014; Kurniawati & Meilianaintani, 2016; Irawati & Ardiansah, 2018).

Choe (2004) argues that managers' performance-building activities help to encourage the provision of management accounting information promptly when needed. This view is consistent with the results of research (Handayani & Hariyati, 2014; Kurniawati & Meilianaintani, 2016; Irawati & Ardiansah, 2018) that managers strive for accurate information as material in solving performance problems so that their work results are better. Similarly, Sigilipu (2013) examined managerial performance at PT. PLN believes that the performance measurement system can be a control and encourage managers to create a framework to guide efforts to build their performance.

The results of our research explain that the application of PMS to the correlation of MAIS and MP can be a fairly good mediator. The strength of the relationship makes the influence of MAIS on MP. It means that the MAIS has a significant effect on managerial performance, where when MAIS is increased, managerial-performance also increases, and vice versa. The PMS variable is significantly intervening between MAIS and MP, so it is said that PMS as a mediating variable is able to make a higher contribution to the relationship between MAIS and managerial performance. This is in line with the results of research (Handayani & Hariyati, 2014) that producing quality MAIS in a micro

organization (a type of cooperative) is indeed not easy because of the many differences in member backgrounds (education, experience, culture and value traditions). However, MAIS should be used as a strong barometer in determining cooperative strategic policies so that long-term goals can be achieved and are able to be competitive locally, regionally and globally.

Although our research intends to provide maximum contribution to managers in producing the information needed by cooperatives. Whatever, we realize that there are still many shortcomings and weaknesses in this study, including: (1) the sample we obtained (33.54 percent) had relatively minimal work experience, this of course would provide a different perspective than expected, (2) the object in this study combine cooperatives in one district so as to provide specific results (3) the variables used as determinants of factors in this study are very limited so that they provide a fairly high error variance rate (30 percent). In future research, we hope to expand the sample size, including the range of provinces and types of cooperatives that vary so that the research results are more-unique. In addition, the addition of several other variables that may contribute to the formation of managerial performance, especially in cooperative business units, such as: budgeting and accountability accounting.

5.2 Recommendations

To gain a broader perspective, it's recommended to broaden the sample by including respondents with more varied work experience to better understand the impact of performance measurement systems on managerial performance. For future research, adding variables like budgeting and accounting accountability can provide a deeper understanding of managerial performance in cooperatives. Improving the quality of management accounting information stands as a key challenge, requiring reinforcement of existing systems or the development of new strategies to provide more relevant information for effective decision-making within cooperatives.

Furthermore, enhancing the quality of management accounting information to address diverse member backgrounds within cooperatives is crucial. Strengthening existing information systems or developing new strategies in data collection, processing, and presentation will support more effective decision-making. Lastly, future research should address the limitations by expanding samples, incorporating additional variables, and refining research methodologies to reduce variance errors. Focusing on areas like budgeting and accounting accountability within cooperatives can offer deeper insights into enhancing specific managerial performance.

References

Ahmad, K., & Krisnadi, I. (2020). Digitalisasi Koperasi dalam Penyempurnaan Konsep Pasar Digital Nasional sebagai Penangkal Resesi Ekonomi di Masa Pandemi Covid-19. *Jurnal Ekonomi*, *9*, 1–12.

Akanbi, T. A., & Jonathan, O. A. (2018). Investment in accounting information system and sales growth: An investigation of Nigeria small and medium enterprise. *Journal of Accounting and Taxation*, *10*(6), 71–77. https://doi.org/10.5897/jat2018.0299

Appuhami, R. (2019). Exploring the relationship between strategic performance measurement systems and managers' creativity: the mediating role of psychological empowerment and organisational learning. *Accounting and Finance*, *59*(4), 2201–2233. https://doi.org/10.1111/acfi.12287

Basuony, M. A. K. (2014). The Balanced Scorecard in Large Firms and SMEs: A Critique of the Nature, Value and Application. *Accounting and Finance Research*, *3*(2), 14–22. https://doi.org/10.5430/afr.v3n2p14

Bianchi, C., & Cosenz, F. (2013). A Dynamic Performance Management Approach to Evaluate and Support SMEs Competitiveness: Evidences from a Case Study Carmine Bianchi. *International Conference of System Dynamics Society*.

Bui, N. T., Tu Le, O. T., & Nguyen, P. T. T. (2020). Management accounting practices among Vietnamese small and medium enterprises. *Asian Economic and Financial Review*, *10*(1), 94–115. https://doi.org/10.18488/journal.aefr.2020.101.94.115

Chenhall, R. H., & Morris, D. (1986). The Impact of Structure, Environment, and Interdependence on the Perceived Usefulness of Management Accounting Systems. *Source: The Accounting Review*, *61*(1), 16–35.

http://www.jstor.org/stable/247520%5Cnhttp://www.jstor.org/page/info/about/policies/terms.jsp
Chin, W. W., Marcelin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information Systems Research*, *14*(2). https://doi.org/10.1287/isre.14.2.189.16018
Choe, J. min. (2004). The relationships among management accounting information, organizational learning and production performance. *Journal of Strategic Information Systems*, *13*(1), 61–85. https://doi.org/10.1016/j.jsis.2004.01.001
Ferneley, E., & Bell, F. (2006). Using bricolage to integrate business and information technology innovation in SMEs. *Technovation*, *26*(2), 232–241. https://doi.org/10.1016/j.technovation.2005.03.005
Franco-Santos, M., Lucianetti, L., & Bourne, M. (2012). Contemporary performance measurement systems: A review of their consequences and a framework for research. *Management Accounting Research*, *23*(2), 79–119. https://doi.org/10.1016/j.mar.2012.04.001
Groot, T., & Selto, F. (2013). *Advanced Management Accounting*. Pearson.
Hair, Thomas, Christian, & Marko. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE Publication.
Hakola, M. (2010). Balanced scorecard as a tool for small business reorganisation. *International Journal of Management and Enterprise Development*, *9*(4), 364–384. https://doi.org/10.1504/IJMED.2010.037564
Hall, M. (2010). Accounting , Organizations and Society Accounting information and managerial work. *Accounting, Organizations and Society*, *35*(3), 301–315. https://doi.org/10.1016/j.aos.2009.09.003
Hammad, S. A., Jusoh, R., & Ghozali, I. (2013). Decentralization, perceived environmental uncertainty, managerial performance and management accounting system information in Egyptian hospitals. *International Journal of Accounting and Information Management*, *21*(4), 314–330. https://doi.org/10.1108/IJAIM-02-2012-0005
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. https://doi.org/10.26740/jaj.v5n2.p184-204
Hansen, D. R., Mowen, M. M., & Guan, L. (2009). Cost Management: Accounting and Control. In *Rob Dewey*.
Hariyati, H., Nuswantara, D. A., Hidayat, R. A., & Putikadea, I. (2022). Management accounting information system and intellectual capital: a way to increase SME's business performance. *Jurnal Siasat Bisnis*, *27*(1), 61–75. https://doi.org/10.20885/jsb.vol27.iss1.art5
Hariyati, Tjahjadi, B., & Soewarno, N. (2019). The mediating effect of intellectual capital, management accounting information systems, internal process performance, and customer performance. *International Journal of Productivity and Performance Management*, *68*(7), 1250–1271. https://doi.org/10.1108/IJPPM-02-2018-0049
Hutahayan, B. (2020). The mediating role of human capital and management accounting information system in the relationship between innovation strategy and internal process performance and the impact on corporate financial performance. *Benchmarking*, *27*(4), 1289–1318. https://doi.org/10.1108/BIJ-02-2018-0034
Irawati, A., & Ardiansah, R. (2018). Pengaruh Karakteristik Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial Dengan Desentralisasi Sebagai Variabel Moderating. *Jurnal Akuntansi Dan Keuangan*, *9*(1), 20. https://doi.org/10.36448/jak.v9i1.997
Jones, C. S. (1985). An empirical study of the evidence for contingency theories of management accounting systems in conditions of rapid change. *Accounting, Organizations and Society*, *10*(3), 303–328. https://doi.org/10.1016/0361-3682(85)90022-4
Jusuf, R. S. (2013). Analisis Pengaruh Tqm, Sistem Pengukuran Kinerja Dan Reward Terhadap Kinerja Manajerial. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *1*(3), 634–644. https://doi.org/10.35794/emba.v1i3.1870
Kaplan, R. S., & Atkinson, A. A. (1998). *Advanced Management Accounting* (Third Edit). Prentice Hall.
Koufteros, X., Verghese, A., & Lucianetti, L. (2014). The effect of performance measurement systems

on firm performance: A cross-sectional and a longitudinal study. *Journal of Operations Management*, *32*(6), 313–336. https://doi.org/10.1016/j.jom.2014.06.003

Kumar, A., Saroj, S., Joshi, P. K., & Takeshima, H. (2018). Does cooperative membership improve household welfare? Evidence from a panel data analysis of smallholder dairy farmers in Bihar, India. *Food Policy*, *75*(January), 24–36. https://doi.org/10.1016/j.foodpol.2018.01.005

Kurniawati, E. P., & Meilianaintani, A. (2016). Effect analysis of the use of accounting information, managerial performance and employee performance Towards SMEs. *Journal of Administrative and Business Studies*, *2*(3), 131–142. https://doi.org/10.20474/jabs-2.3.4

Langfield-Smith, K., Smith David, Andon, P., Hilton Ronald, & Thorne Helen. (2017). *Management Accounting Information for Creating and Managing Value*. McGraw-Hill Education.

Lubis, H. Z. (2008). Pengaruh Total Quality Management Terhadap Kinerja Manajerial Dengan Sistem Pengukuran Kinerj Sebagai Variabel Moderating (Studi Pada Perusahaan Manufaktur Di Kim). *Pengaruh Kualitas Produk Dalam Perusahaan Pemasaran*, *Vol. 8*, *No*(1), 1–18. http://jurnal.umsu.ac.id/index.php/akuntan/article/view/445

Ma, W., & Abdulai, A. (2016). Does cooperative membership improve household welfare? Evidence from apple farmers in China. *Food Policy*, *58*, 94–102. https://doi.org/10.1016/j.foodpol.2015.12.002

Marcis, J., Bortoluzzi, S. C., de Lima, E. P., & da Costa, S. E. G. (2019). Sustainability performance evaluation of agricultural cooperatives' operations: a systemic review of the literature. *Environment, Development and Sustainability*, *21*(3), 1111–1126. https://doi.org/10.1007/s10668-018-0095-1

Massicotte, S., & Henri, J. F. (2021). The use of management accounting information by boards of directors to oversee strategy implementation. *British Accounting Review*, *53*(3), 100953. https://doi.org/10.1016/j.bar.2020.100953

Mawaddah, R., Animah, & Jumaidi, L. (2021). Pengaruh Sistem Informasi Akuntansi Manajemen, Budget dan Ketidakpastian Lingkungan Terhadap Kinerja Manajerial Koperasi Syariah di Pulau Lombok. *Jurnal Risma*, *1*(3), 117–140. http://jurnal.fe.unram.ac.id/index.php/risma/article/view/99

Melnyk, S. A., Bititci, U., Platts, K., Tobias, J., & Andersen, B. (2014). Is performance measurement and management fit for the future? *Management Accounting Research*, *25*(2), 173–186. https://doi.org/10.1016/j.mar.2013.07.007

Merchant, K. A., & Van der Stede, W. A. (2018). Management control systems - Performance Measurement, Evaluation and Incentives. In *Pearson Education Limited*.

Mia, L., & Chenhall, R. H. (1994). The usefulness of management accounting systems, functional differentiation and managerial effectiveness. *Accounting, Organizations and Society*, *19*(1), 1–13. https://doi.org/10.1016/0361-3682(94)90010-8

Micheli, P., & Mari, L. (2014). The theory and practice of performance measurement. *Management Accounting Research*, *25*(2), 147–156. https://doi.org/10.1016/j.mar.2013.07.005

Muda, I., Roosmawati, F., Siregar, H. S., Ramli, Manurung, H., & Banuas, T. (2018). Performance Measurement Analysis of Palm Cooperative Cooperation with Using Balanced Scorecard. *IOP Conference Series: Materials Science and Engineering*, *288*(1). https://doi.org/10.1088/1757-899X/288/1/012081

Napitupulu, I. H. (2018). Organizational Culture in Management Accounting Information System: Survey on State-owned Enterprises (SOEs) Indonesia. *Global Business Review*, *19*(3), 556–571. https://doi.org/10.1177/0972150917713842

Otley, D. (2016). The contingency theory of management accounting and control: 1980-2014. *Management Accounting Research*, *31*, 45–62. https://doi.org/10.1016/j.mar.2016.02.001

Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society*, *5*(4), 413–428.

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. https://doi.org/10.1108/JAAR-05-2018-0059

Pešalj, B., Pavlov, A., & Micheli, P. (2018). The use of management control and performance measurement systems in SMEs: A levers of control perspective. In *International Journal of Operations and Production Management* (Vol. 38, Issue 11). https://doi.org/10.1108/IJOPM-09-

2016-0565
Purwati, A. S., & Zulaikha, S. (2018). Teori Kontijensi, Sistem Pengendalian Manajemen dan Outcomes Perusahaan: Implikasinya Dalam Riset Masa Kini dan Masa yang Akan Datang. *Performance*, *4*(1), 1–11.
Rikhardsson, P., & Yigitbasioglu, O. (2018). Business intelligence & analytics in management accounting research: Status and future focus. *International Journal of Accounting Information Systems*, *29*, 37–58. https://doi.org/10.1016/j.accinf.2018.03.001
Rudiyanto. (2017). Pengaruh Partisipasi Anggaran Terhadap Kinerja Manajerial Dengan Variabel Intervening Job Relevant Information. *Jurnal Studia Akuntansi Dan Bisnis*, *5*(1), 1–10. https://ejurnal.latansamashiro.ac.id/index.php/JSAB/article/view/189
Satria, P. A., & Dewi, P. P. (2019). Faktor-Faktor Yang Mempengaruhi Kinerja Sistem Informasi Akuntansi: Studi Kasus Pada Koperasi Simpan Pinjam Di Kabupaten Gianyar. *Jurnal Ilmiah Akuntansi Dan Bisnis*, *4*(1), 81. https://doi.org/10.38043/jiab.v4i1.2148
Senivongse, C., Bennet, A., & Mariano, S. (2019). Clarifying absorptive capacity and dynamic capabilities dilemma in high dynamic market IT SMEs. *VINE Journal of Information and Knowledge Management Systems*, *49*(3), 372–396. https://doi.org/10.1108/VJIKMS-11-2018-0105
Shelleman, J., & Shields, J. (2014). Integrating Sustainability into SME Strategy. *Journal of Small Business Strategy*, *25*(2), 59–76.
Sigilipu, S. (2013). Pengaruh Penerapan Informasi Akuntansi Manajemen Dan Sistem Pengukuran Kinerja Terhadap Kinerja Manajerial. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *1*(3), 239–247. https://doi.org/10.35794/emba.v1i3.1732
Verhofstadt, E., & Maertens, M. (2015). Can agricultural cooperatives reduce poverty? Heterogeneous impact of cooperative membership on farmers' welfare in Rwanda. *Applied Economic Perspectives and Policy*, *37*(1), 86–106. https://doi.org/10.1093/aepp/ppu021
Zainun, T., Mat, T., & Johari, N. (2018). *Influence of Information Technology, Skills and Knowledge, and Financial Resources on Inventory Management Practices Amongst Small and Medium Retailers in Malaysia*. *13*(2), 173–200.