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Accounting Network Disclosures, Market Competition, and the Implementation of Strategic Management Accounting Technique

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Abstract: Strategic Management Accounting (SMA) assists companies in expressing strategic goals and identifying strategies owned by competitors. This study aims to determine whether accounting networking and market competition affect strategic management accounting techniques. This study used a purposive sampling method with 25 samples of the subsector of metal and food and beverage companies in the 2016-2021 observation period. The dependent variable uses the disclosure of thirteen strategic management accounting techniques in the annual report. The market competition variable is measured by market share and the accounting networking, which is measured by the number of board of directors' companies that have attended training or seminars related to high school technical development. The result found that accounting networking and market competition did not affect the number of strategic management accounting techniques used in the sample companies. These results indicate that even though executives know the benefits of various strategic management accounting techniques, implementing them in companies takes work. This result also discovered that the sample companies used more strategic management accounting techniques that helped increase company efficiency.

Keywords: Strategic Management Accounting, Accounting Network, Market Competition, Firm Size, Firm Growth, Accounting Technique

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1. INTRODUCTION

Strategic Management Accounting (SMA) assists companies in expressing strategic goals and identifying strategies owned by competitors in today's global competition. SMA practice will help company decision-makers to understand the market, competitors, and customers and utilize this knowledge to evaluate the choice of company strategy. Evaluation of corporate strategy selection can be applied to SMA practices such as competitor performance appraisal and competitive position monitoring to help company management provide an assessment by gathering information relating to the business performance of competing companies. Customer profitability analysis helps companies identify customer costs and benefits to increase profitability. Activity-based techniques, life cycle costing, target costing, and quality costing are used to identify and analyze production costs, life cycle, repair of low-quality products, and cost efficiency of manufacturing companies.

Strategic management accounting is influenced by the company's choice of competitive strategy, whether it is more dominant using the cost leadership strategy or product differentiation. Technological developments also influence the development of methods in management accounting and the application of high school practices. Technological developments trigger new management accounting calculation innovations that align with computerization in the manufacturing process (Rashid, 2020). The new management accounting calculation innovation gave birth to several SMA techniques, such as activity-based costing, life cycle costing, and quality costing, used to keep up with the development of computerized manufacturing processes such as Just in Time (JIT) and Total Quality Management (TQM) to increase competitive advantage in global competition.

Many public manufacturing companies in Indonesia use the strategic management accounting method to create competitive advantages, such as PT. Astra International Tbk. The company's strategy is realized by pursuing productivity and efficiency and encouraging the innovative program, which produces new projects related to the suggestion system, quality control circle and project, business performance improvement, and value chain innovation. PT. Kimia Farma (Persero) Tbk stated that the company performs supervisory duties and functions by strengthening cost efficiency and selective customer selection. In addition, PT. Kimia Farma uses customer profitability analysis and quality costing, while other companies, such as PT. Indocement Tunggal Prakarsa Tbk makes the manufacturing sector efficient by automating procedures, maintaining quality consistency to ensure control in production, and using surveys to determine the retailer's distribution network by implementing target costing, customer profitability analysis, and quality costing.

An accounting network is needed to build relationships with other practitioners besides helping increase knowledge related to the latest accounting practices. Social networks stimulate thinking by facilitating access to information, being a source of rewards and punishments, and increasing trust between companies and individuals. As a result, they can affect economic outcomes (Bianchi et al., 2023). Gu et al. (2019) also found that social networks have strong incentives to help other

members by providing them with information, improving their skills, and facilitating promotions. However, according to Souther's (2018) findings, he finds that boards with shared educational, occupational, and family backgrounds show lower market values, higher expense ratios, higher levels of director compensation, and an increased likelihood of financial misstatement.

The increasing level of competition encourages companies to look for the latest techniques that support strategy implementation to increase company efficiency and credible and timely information within organizations (Huyen et al., 2021; Quesado & Silva, 2021). The findings of Gonçalves and Gaio (2021) state that increasing the intensity and complexity of management accounting will help companies have a competitive advantage at a high level of competition. Research by Cescon et al. (2019) found that competitive forces influence the implementation of high school practices, such as strategic pricing, balanced scorecard, target costing, and life-cycle costing. Competitive advantage can be formulated using a market orientation approach, which has a positive relationship to implementing one of the high school practices, namely strategic pricing and environmental management accounting, which can create sustainable competitive advantages (Turner et al., 2017; Gunarathne & Lee, 2021).

This study uses thirteen strategic management accounting techniques as the dependent variable. The independent variables used are accounting networks and market competition. This research is an extension work of Hadid and Sayed (2021), which examined the influence of the management accountant network on high schools with organizational culture and information systems as moderators. Research differentiation is in the sample, variables, and data measurement. Hadid and Sayed's (2021) research sample uses 149 manufacturing companies in the United Kingdom (UK), and the author's research sample uses public manufacturing companies in Indonesia. The market competition variable, a control and moderating variable, was added as an independent variable, considering that this variable is still infrequent to be tested. Data measurement uses a questionnaire survey method in the original research, while the research carried out by the author uses the content analysis method. This research contributes to literacy related to strategic management accounting, which is still relatively small in Indonesia. The main contribution of this paper is to provide an alternative approach to determine the number of accounting networks that the board of directors has by utilizing the human resources disclosure available on the company's annual report. This study aims to identify whether accounting networking and market competition positively affect the implementing thirteen SMA practices.

2. LITERATURE REVIEW

Contingency Theory

The development of strategic management accounting is related to contingency theory. Contingency theory is based on the premise that company management can run smoothly if company leaders can adapt and adjust specific strategic approaches to the situation. In other words, no one formula can be applied to various situations companies face. This theory can be used to analyze management accounting design and systems and face competition (Majid, 2021). The form or design of a management accounting system that is implemented in a company must follow the situations and conditions in which the company operates to improve performance (Mawali, 2015). Therefore, the adoption of Strategic Management Accounting within a company depends on the contextual factors faced by the company. In the context of this research, the more complex the problems faced by the company, the more management accounting techniques that the company will use.

Market Competition Theory

Market competition increases investment through management discipline, strengthens corporate governance, and allows companies to optimize manager performance to win the competition from their competitors (Nugroho & Stoffers, 2020). Today's global trade is characterized by intense competition. Intense competition triggers companies to use strategic management accounting to make strategic choices and increase competitive success (Duçi, 2021). The competition discussed depends on the market based on its structure, namely perfect competition market, monopoly market, oligopoly market, and monopolistic competition (Mankiw, 2018).

A company's competitive success in current business conditions largely depends on its ability to engage and efficiently use its material and non-material resources, adapt quickly to constant environmental changes, and recognize and meet consumer needs and requirements (Quesado & Silva, 2021). Measuring the level of market competition can use the market share percentage. The more competition in the market increases, the market share percentage will be close to zero, indicating that the market does not have a high concentration. Conversely, if the market share percentage is close to one, market competition will be lower and tend to have a high level of market concentration.

Strategic Management Accounting

According to CIMA (2015), strategic management accounting arises due to criticism of management accounting practices, which should focus more on internal operations and assist management accountants in evaluating company strategy. This criticism triggered a shift in the focus of management accounting to an external perspective, such as competitors and competitive position. As a result, strategic management accounting is the provision and analysis of financial and non-financial data information management accountants use regarding the company's business and its competitors, which will be used to monitor and develop

business strategies (Kalkhouran et al., 2017; Pavlatos & Kostakis, 2018; Hadid & Sayed, 2021).

Several SMA techniques have developed over time, classified into five categories: costing, planning, control and performance measurement, strategic decision-making, competitor accounting, and customer accounting (Alamri, 2019; Sedevich, 2018).

a. Costing

Financing is an essential part of the company's operational activities. This SMA technique involves calculating product attributes and lifetime costs, identifying preventative costs and product failure, and extending the cost analysis to capitalize on potential synergies and alliances.

- b. Control and Performance Measurement
 - This technique involves financial and non-financial calculations, where these calculations can increase the level of customer satisfaction.
- c. Strategic Decision Making Formulating the company's strategic decisions aims to enable it to find solutions to increase its competitive advantage. This technique strategically allocates company costs and creates brand valuations to increase competitive advantage.
- d. Competitor Accounting

Studying how competitors carry out their company's strategy is a complex thing to study. This complexity can be studied using this technique. Competitor accounting techniques identify, observe, collect information, and study competitors' financial structure, performance, and business strategies.

e. Customer Accounting

Customers are one of the primary sources of running a company. If customers have a high level of loyalty, the company's existence and profits will increase. This technique calculates customer profitability, which will be synergized with the company's targets.

Accounting Network

Promoting a network of other accounting practitioners is important for exchanging information and increasing knowledge of the latest accounting practices, especially strategic management accounting. Hadid and Sayed (2021) said that networking is communication with managers, professional accounting institutions, and other supply chain companies to expand relationships and increase knowledge about implementing strategic management accounting. One of the main factors for accountants in gathering strategic information related to SMA practice is knowing the business and operational complexities to understand the techniques used to shape corporate strategy.

Social networks are especially prominent in the corporate environment, where knowledge sharing and interpersonal collaboration are crucial to decision-making. For example, investors, managers, company directors, analysts, and auditors often interact, communicate, share ideas, and get expert advice from one another (Bianchi et al., 2023). Based on Hadid and Sayed's (2021) definition of networking of accountant professionals, we develop alternative approaches to identify the

number of accountants' networks based on corporate disclosure on annual reports. Hence, we measured the accounting network by using the number of accounting professional association members, the number of companies that the BOD has worked with, and the number of seminars that the BOD has attended, scaled by the total number of BOD which is formulated is as follows:

$$AN = \frac{T_{MAPA} + T_{WE} + T_{S}}{T_{BOD}}.$$
(1)

Information:

AN = Accounting Network

 T_{MAPA} = number of accountants' professional association membership (CIMA, CMA, etc)

T_{WE} = number of companies where BOD members have worked

T_s = number of seminars related to high school accounting, finance, and engineering attended by the board of directors

 T_{BOD} = Total BOD (Board of Directors)

The formula above becomes the main contribution of this research since we use the content analysis approach to detect the network of the BOD.

Accounting Network and the implementation of Strategic Management Accounting Techniques

Accountants communicating with other practitioners have a broader knowledge of strategic management accounting practices. Good communication will increase the acquisition of varied information related to strategic management accounting practices. Management accountants with a good network of internal managers, employees, and professional accounting institutions in the supply chain can learn the latest accounting practices and better understand the business environment, together with the information needs of the nature of accounting processing in accountants in other functions. Social networks are especially prominent in the corporate environment, where knowledge sharing and interpersonal collaboration are crucial to decision-making (Bianchi et al., 2023).

Glyptis et al. (2021) explains that changes in management accounting practices are influenced by a strong influence from other parties, such as demands arising from several routines, such as changes in corporate governance, disengagement and replanting of accounting practices from one social context to another, which produces relevant information for the purpose decision-making. In addition, management accounting involves acquiring and combining new knowledge to produce relevant information for strategic decisions. This argument indirectly helps the management accountant adopt the latest insights related to SMA practice.

Based on contingency theory, several contingency factors are used to understand how an accounting network based on management accountants influences strategic management accounting tools to improve company performance. Kalkhouran's (2017) research documents the positive influence of CEO education and networking on adapting SMA tools. Pavlatos & Kostakis (2018) also stated that the Top Management Team (TMT), which has education, tenure, and creativity, influences the adoption rate and use of SMA techniques.

H1: Accounting network has a positive effect on the implementation of strategic management accounting techniques.

Market Competition and the implementation of Strategic Management Accounting Techniques

Intense market competition triggers companies to use innovative techniques in managing company resources to have a competitive advantage and compete. A competitive advantage allows a productive entity to generate more sales or superior margins than its competitors. Therefore, companies must have an excellent strategy to face intense competition to increase competitive advantage. Using strategic management accounting techniques assists management accountants in increasing competitive advantage by considering external factors. Hamid (2018) states that a competitive environment conditions the company's strategy. Company strategy and performance, in turn, affect the competitive environment and resources. These changes generate information and provide opportunities to create new resources. Cescon (2019) found that solid market competition influenced companies to use SMA techniques to form corporate strategies such as strategic pricing, balanced scorecard, target costing, and lifecycle costing. Research conducted by Alamri (2019) found that competition intensity has a positive correlation with five related SMA aspects, namely: the existence of formal and informal advisory channels, availability of special management accounting units, adoption, and use of external and market-oriented management accounting techniques with a strategic focus, the availability of a modern management accounting information system, as well as adequate support and encouragement from top management. Thus, awareness of the competitive environment is the primary driver of SMA adoption rather than traditional management accounting.

H2: Market competition has a positive effect on the implementation of strategic management accounting techniques.

3. RESEARCH METHOD

The research object is the public manufacturing companies in Indonesia. The sub-sectors of companies in the samples are metals and food and beverage, with an observation period of 2016-2021. Secondary data from this study are annual reports obtained from both the www.idx.co.id website and company websites taken as samples. This research uses purposive sampling with the following criteria:

- 1. The sample is a sub-sector of public manufacturing companies in Indonesia, namely the metals sub-sector and the food and beverages sub-sector, listed on the Indonesia Stock Exchange.
- 2. Provide financial reports in Rupiah from 2016-2021.

Variable Operationalization Dependent Variable

The dependent variable in this study is measured through the large number of Management Accounting techniques reported in the annual report, namely:

- a. Competitor Performance Appraisal (CPA)
 - CPA is one of the SMA techniques that measures and validates competitors' cost estimates and estimates competitors' overall position and strength. Measurements were made using numerical analysis of LK issued by competitors (Tandiharjo & Devie, 2015; Dang et al., 2021)
- b. Competitive Position Monitoring (CPM)
 CPM is an SMA technique that analyses and provides data on competitors' sales, manufacturing activity, and cost structure (Dang et al., 2021).
- c. Environmental Cost Management (ECM) ECM is one SMA technique that emphasizes external orientation by focusing on the company's environmental impact and associated costs. (Hadid and Sayed, 2021).
- d. Life Cycle Costing (LCC)
 - Cost assessment is based on the life stage of the product or service, including development costs (planning, design, testing), production costs, and logistical support such as advertising, distribution, and maintenance (Marlina et al., 2020).
- e. Balanced Scorecard (BSC)
 - The BSC technique focuses on the long-term and has an external orientation by incorporating a non-financial customer-related perspective (Hadid & Sayed, 2021). The balanced scorecard translates corporate strategy into four perspectives: finance, customers, internal business, and learning and growth (Saputri, 2021).
- f. Quality Costing (QC)
 - Quality Costing is creating, identifying, repairing, and preventing defects. This technique can be classified into three categories: prevention, appraisal, and internal and external failure costs (Marlina et al., 2020).
- g. Strategic Costing (SC)
 - Use cost data based on strategic and marketing information to develop and identify superior strategies to generate sustainable competitive advantages (Turner, 2017).
- h. Target Costing (TC)
 - Target costing is a cost accounting system that provides management with information to enable management to monitor the progress achieved in reducing product costs towards predetermined target costs (Pavlatos & Kostakis, 2021).
- i. Economic Value Added (EVA)
 - EVA is defined as the difference between the net operating profit after tax, less the cost of capital, and the increase in surplus income. EVA uses the formula (Geng et al., 2021):
 - EVA = NOPAT total capital x weighted average cost of capital(2)
- j. Value Chain Analysis (VCA)

VCA is a technique that understands how and where value is added in all the processes required for a product, from initial design to distribution to customers (Hadid & Sayed, 2021). The value chain shows a company's activities to produce a product or service for a particular market. VCA may be internal to the company when the goal is to identify which activities are most valuable and which can be improved to increase competitiveness (Nor et al., 2020).

k. Activity-Based Technique (ABT)

Activity-based techniques or costing support strategies through activities have been documented in several studies (Hadid & Sayed, 2021). For example, the ABC system breaks down processes into their main activities, traces overhead costs to activities, and then uses the most relevant cost drivers (volume-based and non-volume-based) to allocate accumulated overhead to final cost objects (Sayed, 2019).

- I. Customer Profitability Analysis (CPAN)
 - This technique involves calculating the profit earned from a particular customer. Profit calculations are based on costs and sales that can be traced to specific customers (Helgesen, 2021; Dang et al., 2021).
- m. Total Quality Management (TQM)

Total quality management is a contemporary philosophy based on indicators and modern management concepts regarding innovative initiatives, basic administrative definitions, and specific technical skills (Hassan & Jaaron, 2021). TQM refers to the overall control and management of engineering products and the work quality of all participants, that is, to carry out thorough mobilization and comprehensively manage all departments and all aspects of work (Wu & Liu, 2021). TQM continuously improves every organizational process (Shafiq et al., 2019).

The number of SMA techniques reported in the annual report will be the basis for measuring variables as follows:

$$SMA = \frac{\vec{n}}{13}....(3)$$

Information:

- n = Number of strategic management accounting practices identified in the annual report.
- 13 = Total strategic management accounting practice (13 practices).

Independent Variables

Independent variables are variables that affect other variables in the study. In this study, the independent variables used were the accounting network and market competition, which were measured using content analysis for each variable.

a. We proposed an alternative approach to measuring the accounting network variable. We use content analysis technique to measure the extent of disclosure in financial reports related to the number of memberships in the management accounting profession, the number of seminars or training related to accounting, finance, and SMA engineering, and the amount of work experience as measured by the number of companies where BOD members have been working. This paper's main contribution is developing a new approach to identify the network related to accounting. We extend Hadid and Sayed (2021) definition of a management accountant network and transform it into the following formula:

$$AN = \frac{T_{MAPA} + T_{WE} + T_s}{T_{BOD}} \tag{4}$$

Information:

TMAPA = Number of accountants' professional association membership (CIMA, CMA, etc.)

TWE = Number of companies where BOD members have worked

TS = Number of seminars related to high school accounting, finance,

and engineering attended by the board of directors

TBOD = Total member of BOD (Board of Directors)

b. Market competition is measured using the company's market share as measured by the total revenue per company divided by the total revenue in the company's sector.

$$\frac{Si}{S_{Sub-sector}} \tag{5}$$

Information:

Si = firm sales

 $S_{sub\ sector}$ = total sales of sub sector

Control Variables

Control variables are research variables used to help ensure that results are fair and prevent factors outside the study from interfering with the relationship between the dependent and independent variables.

Firm Size

The size of the company will affect both the profitability and financial performance of the company. Company size is measured by the natural logarithm of total assets in the company. Company size is also controlled for considering its potential impact on reserving resources for company operations.

$$SIZE = Ln (Total Asset)$$
 (6)

Firm Growth

Firm growth occurs when companies increase their size. The growth is usually measured in terms of sales, jobs, profits, or added value. In addition, company growth may involve replication or diversification into new markets (e.g., internationalization) and may occur through organic growth or acquisitions. The formulation for measuring firm growth is as follows:

$$Growth = \frac{Sales_t - Sales_{i-t}}{Sales_{i-t}}.$$
(7)

Research Model

$$SMAT_{it} = \beta_0 + \beta_1 AN_{it} + \beta_2 MC_{it} + \beta_3 SIZE_{it} + \beta_4 Growth_{it} + \varepsilon_{it} \dots (8)$$

Information:

SMAT = Strategic Management Accounting Technique

AN = Accounting Network
MC = Market Competition

SIZE = Firm Size

Growth = Firm Growth

4. RESULTS AND DISCUSSION

The number of companies meeting the criteria is 25 companies, with 17 data outliers, so 133 observations are obtained. There are 13 companies in the metal sub-sector, while 12 companies in food and beverages. The data obtained in this research will be further analysed using descriptive statistical analysis, while hypothesis testing will be carried out using regression analysis. This study uses E-Views 10 to estimate the research equation. The panel data regression model used is the random effect model.

Descriptive Statistic

Table 1. Descriptive Statistic

Variable	Mean	Median	Max.	Min.	Std. Dev.	Skew	Obs
SMAT	0.58473	0.615539	0.76923	0.38462	0.08306	-0.53542	133
AN	2.45364	2.00000	8.00000	0.60000	1.37488	1.84383	133
MC	0.10111	0.03228	0.70843	0.00202	0.16013	2.22474	133
SIZE	1178321	172565	1.79E+08	136619.	2900887	3.77869	133
Growth	0.10189	0.07594	2.58307	-0.8464	0.34584	2.73218	133

Source: data processing result (2022)

The SMAT variable shows a mean value of 0.58473, with a median value of 0.615539 It shows that the strategic management accounting technique, measured by the number of SMA technical disclosures, is low because the mean value is lower than the median value. The maximum value is owned by PT. Sekar Bumi Tbk (SKBM) in 2021. The minimum value is owned by the company PT Lionmesh Prima Tbk. (LMSH) in 2016. In this study, the variation in data distribution tends to be small.

The AN variable show that the accounting network as measured by the number of board of directors who attended seminars related to high school techniques, accounting, and finance, the number of companies where BOD members have worked, and the number of members of the management accounting profession association is high because the mean value is higher than

the median value. The maximum value is owned by the company PT Citra Turbnido Tbk (CTBN) in 2017. The minimum value is owned by the company PT Steel Pipe Industry of Indonesia Tbk (ISSP) in 2018. In this study, the variation in AN data tends to be small.

The MC variable showed a mean value of 0.101107, with a median value of 0.032280. It shows that market competition, as measured by the number of companies in each sub-sector, is high because the mean value is higher than the median value. The maximum value is owned by PT. Jakarta Kyoei Steel Works Tbk (JKSW) in 2020. The minimum value is owned by the company PT Beton Jaya Manunggal Tbk. (BTON) in 2016. The standard deviation result has a value of 0.160132, which shows that the variation in data distribution tends to outspread.

The FS variable shows a mean value of 11783210, with a median value of 1725650, showing that firm size, as measured by the total assets in each subsector company, is classified as high because the mean value is higher than the median value. The maximum value owned by PT. Indofood Sukses Makmur Tbk (INDF) in 2021. The minimum value is owned by PT Alakasa Industrindo Tbk. (ALKA) in 2016. The standard deviation results have a value of 29008867, it shows that the variation in data distribution tends to be high.

The FG variable shows a mean value of 0.101890, which shows that firm growth, measured by the company's sales growth in each sub-sector, is high because the mean value is higher than the median value. The maximum value is owned by PT. Indofood CBP Sukses Makmur Tbk (ICBP) in 2016. The minimum value is owned by PT Alumindo Light Metal Industry Tbk. (ALMI) in 2021. The standard deviation result has a value of 0.345837, where this value is greater than the mean value of 0.101890, showing that the variation in data distribution tends to be high.

The Regression Result

Table 2. The Regression Results

Tubic 2. The Regression Results										
Variable	Pred	Coefficient	Std. Error	t-Statistic	Prob.	Hypothesis				
С		0.319679	0.118338	2.701403	0.0078	-				
SMAN	+	-0.008308	0.004274	-1.944012	0.0541	Rejected				
MC	+	-0.185600	0.097037	-1.912679	0.0580	Rejected				
FS	+	0.047904	0.019217	2.492765	0.0140					
FG	+	0.003455	0.007139	-0.483988	0.6292					
R-squared	0.074470									
Adjusted R	0.045547									
Prob(F-stat	0.040727									

Source: EViews 10 (2022)

The Effect of the Accounting Network on the Implementation of Strategic Management Accounting Techniques

Based on the research results, the accounting network variable does not influence the implementation of strategic management accounting techniques. One of the possible reasons is that only a few companies disclose strategic management accounting techniques in detail, and several SMA techniques have the potential to be identified as one technique. Companies tend to focus more on prioritized techniques for production efficiency. For example, suppose the company aims to implement as much as SMA techniques. In that case, the company must allocate more funds towards investment, both for HR management, such as training seminars related to new SMA or adding consultants under the technical specifications of each SMA. This result differs from the research by Kalkhouran et al. (2017), which documented the positive influence of CEO education and networking on the adaptation of high school tools, although indirectly. So, it is concluded that the accounting network does not affect the implementation of strategic management accounting practices.

Effect of Market Competition on the Implementation of Strategic Management Accounting Techniques

Based on the research results, the market competition variable does not influence the implementation of strategic management accounting techniques. One possible explanation is that the company should have reproduced the SMA technique in order to increase the company's production efficiency. Instead, the company focuses more on quality standards, assuming that the product will be guaranteed if the production quality is guaranteed and can be an added value (competitive advantage). The findings do not align with research conducted by Alamri (2019).

Managerial Implications

The results show that both the accounting network and market competition variables still need to be confirmed to improve the implementation of strategic management accounting practices. Market competition in the metals and food and beverages sub-sectors is classified as a high market concentration, which indicates that market competition in these two sectors is classified as low. Therefore, the company focuses more on SMA techniques related to operational efficiency and the quality of the company's products so that it can be concluded that they use fewer SMA techniques. Companies seeking to diversify SMA engineering must allocate more funds for investment in human resources development. HR development includes providing training or seminars related to strategic management accounting techniques. Different SMA specifications are also required to use consultants who understand the specifications of each SMA technique. Therefore, companies tend to focus more on SMA techniques, which are more prioritized. A company can implement a cost-benefit analysis to choose which SMA technique is more suitable for the company's strategy.

Cost-benefit analysis is a systematic method to estimate the company's strengths and weaknesses against the available options to make decisions that provide maximum benefits at the lowest cost—for example, PT. Indofood Sukses

Makmur states that if there is a rising commodity and raw material price risk, the company will try to diversify raw material suppliers, carry out strategic partnerships with suppliers, and use high-quality material substitutes without compromising the final product quality. The company also conducts market research to meet consumer needs and tastes, improve product quality, and carry out targeted marketing activities, which will later be adjusted to a cost-efficiency program.

5. CONCLUSION

This research aims to confirm whether accounting networks and market competition can increase the number of strategic management accounting techniques companies implement. Using a sample of manufacturing companies in the food and mineral sub-sector, the following results were obtained:

- a. The accounting network do not affect the implementation of strategic management accounting practices.
- b. Market competition does not affect the implementation of strategic management accounting practices.

Based on the research results, there are limitations in processing data as follows:

- Most of the company's annual reports do not disclose SMA techniques, training, or seminars for BOD in detail; different results may exist if the number of information increases.
- Several SMA techniques have the potential to become one SMA technique, such as quality cost and total quality management, which can be unified as quality technique; therefore, future research may combine and calculate as one group of SMA techniques if they are identified as having similar purposes of supporting decision-making tools.
- 3. The value of the dependent variable ranges from 0-1 and regresses the model as an ordinary least square. Further research can improve the analysis method by using fractional regression.
- 4. The sample companies do not have the same level of competition category. Therefore, future works can use an industry with the same competition level.

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