

# The Influence Of Strategic Management Accounting And Information Technology Capability On Company Performance With Sustainable Competitive Advantage As The Mediator

Elyzabet Indrawati Marpaung<sup>1</sup>, Titik Aryati<sup>2</sup>, Yvonne Augustine<sup>3\*</sup>

<sup>1</sup> Business Faculty, Universitas Kristen Maranatha, Bandung, Indonesia

The Accounting Doctoral Student of Universitas Trisakti, Jakarta, Indonesia

<sup>2,3</sup> Faculty of Economics and Business, Universitas Trisakti, Jakarta, Indonesia

\*Corresponding Author :

Email: [yvonne.augustine@trisakti.ac.id](mailto:yvonne.augustine@trisakti.ac.id)

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## Abstract.

*This study analyzes the influence of strategic management accounting and information technology capability on company performance and examines sustainable competitive advantage that can mediate the effect of strategic management accounting and information technology capability on company performance. The population of this study was companies from raw materials, industry, primary and non-primary consumer goods, and health sectors in Indonesia. Meanwhile, the research respondents were the employees of these companies. To collect the respondents' responses, we employed the survey method. The employees' responses from the same company were averagely calculated to be one value; therefore, one value stands for one company. This study employed 203 relevant companies so that it employed a structural equation model based on covariance. The hypothesis examination has revealed that strategic management accounting has a positive effect on sustainable competitive advantage. Sustainable competitive advantage has a positive effect on company performance. In contrast, strategic management accounting and information technology capability do not affect company performance. Information technology capability has no effect on sustainable competitive advantage. Sustainable competitive advantage can mediate the influence of strategic management accounting on company performance. Sustainable competitive advantage cannot mediate the effect of information technology capability on company performance. Finally, the application of strategic management accounting enables companies to achieve sustainable competitive advantage and ultimately improve company performance.*

**Keywords:** *Strategic management accounting, information technology capability, sustainable competitive advantage and company performance.*

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## I. INTRODUCTION

Competition in the business world is unavoidable. To win the competition, companies must be able to understand environmental changes and understand how to manage their various resources (Kuncoro & Suriani, 2018). According to the Resource Based View (RBV), superior company performance depends on the resources owned and used by a company in its operations (Turulja & Bajgoric, 2018). In line with the firm's resource-based view (RBV) internal resources are a source of competitive advantage and performance (Phornlaphatrachakorn & Na-Kalasindhu, 2020). In this study, strategic management accounting and information technology capability are internal company resources that have an important impact on sustainable competitive advantage (SCA) and company performance (Herwiyanti, 2015; Phornlaphatrachakorn & Na-Kalasindhu, 2020). To deal with environmental changes, companies must survive and become sustainable. Good information has become a key factor to drive the success and sustainability of the company. (Obloh & Ajibolade, 2017; Phornlaphatrachakorn & Na-Kalasindhu, 2020). Strategic management accounting provides significant information to companies to cope with the dynamic environment and run the company in an economical, efficient and effective way (Noordin et al., 2015). Cynthia and Devie (2015), Tandiharjo and Devie (2015), Kalkhouran, Nedaei and Rasid (2017), Emiaso and Egbunike (2018), Alamri (2019), Adeniran and Obembe (2020), Madhoun (2020), Azmi and Harti (2021), and Dang *et al.*, (2021) have proven a positive association between strategic management accounting and company performance.

However, this proof is still contradictory as Aykan and Aksoylu (2013) as well as Lay and Jusoh (2017) declare no association. The concept of innovative use of information technology is a source of competitive performance of a company that results in potential strategic impacts on a wide industry scope (Wu & Chiu, 2014). Kamdjoug et al. (2019), Ong & Chen (2013), Turulja and Bajgoric (2018), as well as Turulja and Bajgorić (2015) researched the effect of information technology capability on company

performance. The results show that information technology capability has a positive effect on company performance. In contrast, Benitez-Amado and Walczuch (2012), Chae et al. (2014), and Peng et al. (2016) have revealed that information technology capability has no effect on company performance. Sustainable competitive advantage is achieved when the company has competencies and resources that are valuable, rare, difficult to imitate, and there are no substitutes (Barney, 1991). Elijah and Millicent (2018), Rauf, Kadir and Kamariah (2019), and Dhyanasaridewi and Augustine (2021) have proven that sustainable competitive advantage has a positive effect on company performance.

The novelty in this research is strategic management accounting using measurement which is the development of a previously existing strategic management accounting instrument adopted from Cadez and Guilding (2008). Measurement of strategic management accounting based on Cadez and Guilding (2008) has 16 indicators. The developments carried out are as follows: for the costing dimension, indicators for activity-based costing, time driven ABC, and environmental costing are added. For the dimensions of planning, control and performance measurement, indicators for better budgeting and beyond budgeting are added. There are 5 indicators added so that the strategic management accounting variable has 21 indicators. Measurement of IT Infrastructure Capability adopted from Wei, Xu and Liu (2021) by adding data security indicators to the IT Infrastructure Capability dimension. Security information technology is an important issue related to the development of the internet and integrated systems between organizations (Lewis & Byrd, 2003). Based on this research gap, this study intends to prove the impact of strategic management accounting and information technology on the company performance in Indonesia by surveying the perception of employees working in the raw material, industry, primary and non-primary consumer goods, and health sectors. This study also intends to prove whether sustainable competitive advantage can mediate the effect of strategic management technology capability and information technology capability on company performance.

### **Hypothesis**

#### **Strategic management accounting and sustainable competitive advantage**

By applying strategic management accounting, companies can minimize costs, carry out planning and control, make strategic decisions, assess competitors, analyze customer profitability and create added value to survive (Sumkaew & Intanon, 2020). The existence of strategic management accounting will support the company to be able to achieve competitive advantage because the company's strategy focuses on competition and is long term. This argument is supported by Alamri (2018), Cynthia and Devie (2015), as well as Tandiharjo and Devie (2015) who declare that strategic management accounting positively influences competitive advantage. Based on this explanation, the first hypothesis is proposed as follows.

H<sub>1</sub>: Strategic management accounting positively influences sustainable competitive advantage.

#### **Information technology capability and sustainable competitive advantage**

The resource-based view perspective postulates that information technology capability is one of the resources that can provide a competitive advantage for an organization (Herwiyanti, 2015). Information technology capability supports a company's operations; on the contrary, the absence of information technology capability will disrupt a company's activities. Good information technology capability enables a company to compete with other companies. Kamau et al. (2019) have proven that information technology capability positively influences competitive advantage. Based on this explanation, the second hypothesis is proposed as follows.

H<sub>2</sub>: Information technology capability positively influences sustainable competitive advantage.

#### **Sustainable competitive advantage and company performance**

Companies that have advantages in carrying out their business activities will provide good things for the performance of the company itself (Herman et al., 2018). This argument is supported by Elijah and Millicent (2018), Rauf, Kadir and Kamariah (2019), and Dhyanasaridewi and Augustine (2021) who declare that sustainable competitive advantage positively influences company performance. Based on this explanation, the third hypothesis is proposed as follows.

H<sub>3</sub>: Sustainable competitive advantage positively affects company performance.

### Strategic management accounting and company performance

The choice of strategy, strategy formulation, and market orientation are considered as factors that can increase the role of strategic management accounting. When the role of strategic management accounting increases, it will result in better company performance (Azmi & Harti, 2021). This statement is supported by Cynthia and Devie (2015), Tandiharjo and Devie (2015), Kalkhouran, Nedaei and Rasid (2017), Emiaso and Egbunike (2018), Alamri (2019), Adeniran and Obembe (2020), Madhoun (2020), Azmi and Harti (2021), and Dang *et al.*, (2021), who declare that strategic management accounting positively influences on organizational performance. Based on this explanation, the fourth hypothesis is proposed as follows.

H<sub>4</sub>: Strategic management accounting positively influences company performance.

### Information technology capability and company performance

The use of IT capability enables a company to increase its revenue, reduce costs, and improve its performance (Turulja & Bajgorić, 2016). Thus IT capability can improve company performance because the development of information technology capabilities enables a company to eliminate inefficiencies, reduce long-term costs, increase service reliability, and reduce errors; consequently, the company can improve its performance (Ringim *et al.*, 2015; Tippins & Sohi, 2003). Meanwhile, Kamdjoug *et al.* (2019), Ong and Chen (2013), Turulja and Bajgoric (2018), as well as Turulja and Bajgorić (2015) deploy that IT capability has a positive effect on company performance. Based on this explanation, the fifth hypothesis is proposed as follows.

H<sub>5</sub>: Information technology capability positively influences company performance.

## II. METHODS

### Variable measurement

This research had four variables: strategic management accounting (SMA), information technology capability (ITC), sustainable competitive advantage (SCA) and company performance (CP). SMA and ITC functioned as the independent variables, SCA functioned as the mediating variable, and CP functioned as the dependent variable.

- The SMA measurement referred to Cadez and Guilding (2008) with five dimensions and several indicators (see Table 1): (1) costing (C1, C2, C3, C4, and C5), (2) planning, control, and performance (PCP1 and PCP2), (3) strategic decision-making (SDM1, SDM2, and SDM3), (4) competitor accounting (COMPAC1, COMPAC2, and COMPAC3), and (5) customer accounting (CUSTAC1, CUSTAC2, and CUSTAC3).

**Table 1.** Dimensions and indicators of strategic management accounting

Dimensions	Indicators	Sources
Costing	This company sets attribute product cost attracting consumers, for example, after-sales service (C1). This company assesses costs in each step of the product life cycle: design, introduction, growth, and decline (C2). This company allocates costs of maintaining the quality of products: prevention, assessment, as well as internal and external failure (C3). This company calculates production costs by reducing the profit margin from the estimated selling price (C4). This company allocates costs to research, develop, design, produce, market, and distribute products and serve the products to customers (C5).	Cadez and Guilding (2008)
Planning, control, and performance	This company compares its performance with the established standard to improve its activities (PCP1). This company combines its performance based on financial and non-financial measurements (PCP2).	
Strategic decision-making	The company arranges and applies strategies based on consumer's conditions when applying cost (SDM1). The company sets the price of the selling products by considering customers' purchasing power (SDM2). This company regularly assesses its brands (SDM3).	
Competitor accounting	This company analyzes costs by comparing its cost with its competitors' (COMPAC1).	

**Table 1.** Dimensions and indicators of strategic management accounting

Dimensions	Indicators	Sources
	This company analyzes its position with its competitors based on sales (COMPAC2). This company assesses competitors' performance based on published financial reports (COMPAC3).	
Customer accounting	This company analyzes customers' purchases (CUSTAC1). This company studies long-term profits based on customers' performance (CUSTAC2). This company pays attention to customers' contribution to large profits (CUSTAC3).	

As a novelty, we added three indicators to the costing dimension, i.e., (1) activity-based costing (C6) by referring to Cinquini and Tenucci (2010), (2) time-driven activities-based costing (C7) by referring to Namazi (2016), as well as (3) environmental costing (C8) by referring to Tanc and Gokoglan (2015). Additionally, we combined two items with two existing items of the planning, control, and performance dimension: better budgeting (PCP3) and beyond budgeting (PCP4) by referring to Petera and Šoljaková (2020). The measurement of information technology capability referred to Wei et al. (2021) with three dimensions and several indicators (see Table 2): (1) IT infrastructure capability (ITIC1, ITIC2, ITIC3, ITIC4, and ITIC5), (2) IT business-spanning capability (ITBSC1, ITBSC2, ITBSC3, and ITBSC4), and (3) IT proactive stance (ITPS1, ITPS2, ITPS3, and ITPS4). As a novelty, we added one indicator to the IT infrastructure capability dimension and security (ITIC5) by referring to Lewis and Byrd (2003).

**Table 2.** Dimensions and indicators of information technology capability

Dimensions	Indicators	Sources
IT infrastructure capability	The company has data management services, such as databases, data storage, data access, and data sharing (ITIC1). The Company has communication network services, such as internet connectivity, local area network (LAN), and wide area network (WAN) (ITIC2). The company has a portfolio of applications and services, such as enterprise resource planning (ERP) and active server pages (ASP) (ITIC3). The company has adequate information technology facilities, such as servers, processors, and monitors (ITIC4). The company has information technology infrastructure security related to internet network protection (ITIC5).	Wei et al., (2021)
IT business-spanning capability	The company develops a clear vision of how information technology can contribute to corporate values (ITBSC1). The company integrates corporate strategic planning with information technology planning (ITBSC2). The company activates management functions and capabilities to understand the value of information technology investments (ITBSC3). The company establishes an effective and flexible information technology planning process and develops robust information technology (ITBSC4).	
IT proactive stance	The company keeps abreast of the latest development in new information technology innovations (ITPS1). The company has the capability and continues to experiment with new information technology as needed (ITPS2). The company has a favorable climate to try out new ways of using information technology (ITPS3). The company constantly looks for new ways to increase the effectiveness of using information technology (ITPS4).	

Yang et al. (2021) denote the measurement of sustainable competitive advantage with six indicators.

1. The company offers a better quality of products than the competitors do (SCA1).
2. The company has better research and development capabilities than the competitors do (SCA2).
3. The company has more excellent managerial capability than the competitors do (SCA3).
4. This company has better profitability than its competitors (SCA4).
5. This company has a better image than its rivals (SCA5).

6. The position of competitors to compete with this company is challenging (SCA6).

The measurement of company performance referred to three dimensions and several indicators (see Table 3). The financial and non-financial performance indicators referred to Wu and Wu (2014). Additionally, the environmental performance indicators refer to Lisi (2015).

**Table 3.** Dimensions and indicators of company performance

Dimensions	Indicators	Sources
Financial performance	The company can achieve the market share target (FP1). The company can annually increase its profits (FP2). The company can increase sales revenue from time to time (FP3). The company can attain profits based on its expectations (FP4).	Wu and Wu (2014)
Non-financial performance	This company measures customer satisfaction, showing that most customers are satisfied (NFP1). This company can elevate its production (NPF2). This company measures employee performance based on crucial achievement indicators (NPF3). This company evaluates the products sold to customers (NPF4). This company can utilize the existing resources effectively (NPF5).	
Environmental performance	The company complies with environmental protection regulations (EP1) The company limits activities that may damage the environment (EP2). The company overcomes ecological problems (EP3). The company trains its employees with environmental protection knowledge (EP4).	Lisi (2015)

### Population and samples

The population of this study was Indonesian companies raw which run material, primary consumer goods, non-primary consumer goods, and health sectors. By referring to the verification theory, this study set the minimum number of samples of 200 based on the structural equation model and covariance (Ghozali, 2021). Meanwhile, employees working in these companies were involved to gain information on research variables. However, since the number of employees was unknown, this study employed the snowball sampling to select the research respondent. According to Kristaung and Augustine (2019), snowball sampling technique involves multiple effects from informants. The first respondent was asked to contact other employees to participate in this survey by considering the first-rate relationship. The contacted person then called another workmate to participate in this survey.

### Data collection method

This study employed a survey method to grab the data on variables. The survey was done by distributing online questionnaires to related persons Hartono (2013). Specifically, the intended respondents were employees with three years of working experience in the accounting, finance, marketing, production, sales, and information technology departments.

### Data analysis method

This study employed a structural equation model based on covariance because the sample of this research was 203 companies, where the respondents worked. This circumstance is in line with Ghozali (2021). Meanwhile, this model was obtained using the first and second equations.

$$SCA = \beta_0 + \beta_1SMA + \beta_2ITC + \gamma_1 \quad (1)$$

$$CP = \beta_0 + \beta_3SMA + \beta_4ITC + \beta_5SCA + \gamma_2 \quad (2)$$

Before testing the coefficients, the validity and reliability should have been initially checked. Moreover, the confirmatory factor and composite reliability analyses were employed to execute them. This step was conducted by comparing the loading factor with 0.5 (Ghozali, 2017; Sholihin & Ratmono, 2020) and the composite reliability coefficient with 0.7 (Sholihin & Ratmono, 2020):

- If the loading factor is more significant than 0.5, the response to items is accurate.
- If the composite reliability coefficient is higher than 0.7, the valid response is accurate.

Furthermore, the goodness of fit in the structural equation model was examined using the measurements of CMIN/DF (Ghozali, 2017) and parsimony ratio (P-RATIO) (Latan, 2013):

- If CMIN/DF is below 5, the model fits the data.
- If P-RATIO is higher than 0.6, the model is suitable for the data.



### III. RESULT AND DISCUSSION

#### Statistical description

This study conducted the survey in May and July 2022 and successfully obtained 258 employees. These employees are classified based on demographic features, including gender, age, formal educational level, and working features (tenure and position). The characteristics of these employees are presented in Table 4.

**Table 4.** Demographic and working features of employees participating in the survey

Features	Sub-Features	Description	Total	Percentage
Demographic	Gender	Male	127	49.2%
		Female	131	50.8%
		Total	258	100%
	Age	Below 25 years old	20	7.75%
		25-35 years old	175	67.83%
		36-45 years old	51	19.77%
		Above 46 years old	12	4.65%
		Total	258	100%
	Formal educational levels	Vocational degree	19	7.36%
		Bachelor degree	210	81.34%
		Master degree	27	10.47%
		Doctoral degree	2	0.78%
Total		258	100%	
Working	Tenure	3-5 years	150	58.14%
		6-8 years	44	17.05%
		9-11 years	28	10.85%
		Above 11 years	36	13.96%
		Total	258	100%
	Positions	Manager	64	24.81%
		Manager Assistant	6	2.32%
		Supervisor	26	10.08%
		Staff	162	62.79%
		Total	258	100%

#### Validity and Reliability Result

Before examining the validity and reliability, the responses of employees from one company were averaged. Therefore, the relevant number of responses is 203. Afterward, the confirmatory factor and composite reliability analyses were performed. The results of the validity and reliability tests on strategic management accounting are explained as follows (see Tables 5A).

- The loading factors of the original items for costing (C1, C2, C3, C4, and C5) are 0.478, 0.620, 0.534, 0.586, and 0.696, respectively. Meanwhile, the loading factors of three additional items (C6, C7, and C8) are 0.739, 0.711, and 0.639, respectively. Since the loading factor for C1 is 0.478, the response for this item is invalid. However, the responses of the other items are valid because their values are higher than 0.5.
- The loading factors of the original items for planning, control, and performance (PCP1 and PCP2) are 0.799 and 0.613, respectively. Meanwhile, the loading factors of the additional items (PCP3 and PCP4) are 0.911 and 0.536, respectively. Since their values exceed 0.5, the answers for these items are accurate.
- Meanwhile, the loading factors for strategic decision-making (SDM1, SDM2, SDM3) are 0.815, 0.843, and 0.788, respectively. Meanwhile, those of competitor accounting (COMPAC1, COMPAC2, and COMPAC3) are 0.798, 0.746, and 0.699, respectively. Those of customer accounting (CUSTAC1, CUSTAC2, CUSTAC3) are 0.668, 0.703, and 0.757, respectively. Since their values exceed 0.5, the answers to these items are accurate.

**Table 5A.** Results of the validity test by the confirmatory factor analysis for strategic management accounting

Indicators/ Dimensions	Loading factors					
	Costing	PCP	SDM	COMPAC	CUSTAC	SMA
C1	0.478					
C2	0.620					
C3	0.534					
C4	0.586					
C5	0.696					
C6	0.739					
C7	0.711					
C8	0.639					
PCP1		0.799				
PCP2		0.613				
PCP3		0.911				
PCP4		0.536				
SDM1			0.815			
SDM2			0.843			
SDM3			0.788			
COMPAC1				0.798		
COMPAC2				0.746		
COMPAC3				0.699		
CUSTAC1					0.668	
CUSTAC2					0.703	
CUSTAC3					0.757	

Source: Modified AMOS 19 outputs

After removing the invalid items, the validity was retested. The results of this retest are presented in Table 5B. Unlike the loading factor of the CUSTAC dimension, the other dimensions of SMA have loading factors exceeding 0.5. Hence, they meet the validity examination. This situation also occurs in their accurate indicators (C2, C3, C4, C5, C6, C7, C8, PCP1, PCP2, PCP3, PCP4, SDM1, SDM2, SDM3, COMPAC1, COMPAC2, COMPAC3, CUSTAC1, CUSTAC2, and CUSTAC3). Besides the composite reliability coefficient for costing, the loading factors of PCP, SDM, COMPAC, CUSTAC, and SMA are higher than 0.7 for are higher than 0.7 for 0.834, 0.814, 0.857. 0.793, 0.753 and 0.839. Thus, the reliability test is fulfilled.

**Table 5B.** Results of the validity test by the confirmatory factor analysis for strategic management accounting after removing invalid indicators

Indicators/ Dimensions	Loading factors					
	Costing	PCP	SDM	COMPAC	CUSTAC	SMA
C2	0.599					
C3	0.519					
C4	0.576					
C5	0.670					
C6	0.721					
C7	0.750					
C8	0.680					
PCP1		0.615				
PCP2		0.799				
PCP3		0.910				
PCP4		0.536				
SDM1			0.815			
SDM2			0.844			
SDM3			0.788			
COMPAC1				0.798		
COMPAC2				0.747		

**Table 5B.** Results of the validity test by the confirmatory factor analysis for strategic management accounting after removing invalid indicators

Indicators/ Dimensions	Loading factors					
	Costing	PCP	SDM	COMPAC	CUSTAC	SMA
COMPAC3	0.699					
CUSTAC1	0.667					
CUSTAC2	0.705					
CUSTAC3	0.757					
Costing	0.705					
PCP	0.658					
SDM	0.873					
COMPAC	0.718					
CUSTAC	0.603					

**Table 5C. Results of the reliability test for strategic management accounting**

Measurement	Costing	PCP	SDM	COMPAC	CUSTAC	SMA
Composite reliability coefficient	0.834	0.814	0.857	0.793	0.753	0.839

Source: Modified AMOS 19 outputs

The results of the validity and reliability examination for information technology capability are comprehensively described as follows (see Tables 6A). The loading factors of the IT infrastructure capability items (ITIC1, ITIC2, ITIC3, ITIC4, and ITIC5) are 0.696, 0.737, 0.702, 0.836, and 0.899, respectively. Meanwhile, the loading factors of IT business-spanning capability (ITBSC1, ITBSC2, ITBSC3, and ITBSC4) are 0.913, 0.937, 0.869, and 0.896, respectively. The loading factors of IT proactive stance (ITPS1, ITPS2, ITPS3, and ITPS4) are 0.900, 0.930, 0.909, and 0.913, respectively. The loading factors of ITIC, ITBSC, and ITPS dimensions are 0.850, 0.948, and 0.918, respectively. Since these values are higher than 0.5, the items and their dimensions are valid. Meanwhile, Table 6B shows that the composite reliability coefficients for ITIC, ITBSC, ITPS and ITC in Table 6B are 0.884, 0.947, 0.952, and 0.932, respectively. Because these values are higher than 0.7, the respondents' answers are reliable.

**Table 6A.** Results of validity test by the confirmatory factor analysis for information technology capability

Indicators/ Dimensions	Loading factors			
	IT infrastructure capability	IT business-spanning capability	IT proactive stance	Information technology capability
ITIC1	0.696			
ITIC2	0.737			
ITIC3	0.702			
ITIC4	0.836			
ITIC5	0.899			
ITBSC1				
ITBSC2		0.913		
ITBSC3		0.937		
ITBSC4		0.869		
ITPS1		0.896	0.900	
ITPS2			0.930	
ITPS3			0.909	
ITPS4			0.913	
ITIC				0.850
ITBSC				0.948
ITPS				0.918

**Table 6B.** Results of the reliability test for information technology capability

Measurement	IT infrastructure capability	IT business spanning-capability	IT proactive stance	Information technology capability
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**Table 6A.** Results of validity test by the confirmatory factor analysis for information technology capability

Indicators/ Dimensions	Loading factors			
	IT infrastructure capability	IT business-spanning capability	IT proactive stance	Information technology capability
Composite reliability coefficient	0.884	0.947	0.952	0.932

Source: Modified AMOS 19 outputs

Table 7 shows that the loading factors for the sustainable competitive advantage items (SCA1, SCA2, SCA3, SCA4, and SCA5) are 0.803, 0.836, 0.750, 0.766, 0.859, and 0.835, respectively. These values are higher than 0.5; hence, the responses are valid. Meanwhile, the composite reliability coefficient for SMA is 0.919; this score exceeds 0.7, indicating that the respondents' answers are reliable.

**Table 7.** Results of the validity and reliability test by confirmatory factors and composite reliability analysis for sustainable competitive advantage

Indicators	Loading factors	Composite reliability coefficient
SCA1	0.803	0.919
SCA2	0.836	
SCA3	0.750	
SCA4	0.766	
SCA5	0.859	
SCA6	0.835	

Source: Modified AMOS 19 output

Table 8A shows that the loading factors of the financial performance items (FP1, FP2, FP3, and FP4) are 0.917, 0.884, 0.920, and 0.927, respectively. Meanwhile, the loading factors of non-financial performance (NFP1, NFP2, NFP3, NFP4, and NFP5) are 0.928, 0.853, 0.843, 0.788, and 0.807, respectively. The loading factors of environmental performance (EP1, EP2, EP3, and EP4) are 0.798, 0.841, 0.902, and 0.815, respectively. The loading factors of FP, NFP, and EP dimensions are 0.786, 0.615, and 0.829, respectively. Because their values are higher than 0.5, these items and their dimensions are valid. Meanwhile, Table 8B shows that the composite reliability coefficients of FP, NFP, EP, and CP are 0.952, 0.926, 0.905, and 0.791, respectively. Since these values are higher than 0.7, the respondents' answers are reliable.

**Table 8A.** Results of the validity test by the confirmatory factor analysis for company performance

Indicators/ Dimensions	Loading factors			
	Financial performance	Non-financial performance	Environmental performance	Company performance
FP1	0.917			
FP2	0.884			
FP3	0.920			
FP4	0.927			
NFP1		0.928		
NFP2		0.853		
NFP3		0.843		
NFP4		0.788		
NFP5		0.807		
EP1			0.798	
EP2			0.841	
EP3			0.902	
EP4			0.815	
FP				0.786
NFP				0.615
EP				0.829

**Table 8B.** Results of the reliability test for company performance

Measurement	Financial performance	Non-financial performance	Environmental performance	Company performance
Composite reliability coefficient	0.952	0.926	0.905	0.791

**Table 8A.** Results of the validity test by the confirmatory factor analysis for company performance

Indicators/ Dimensions	Loading factors			
	Financial performance	Non-financial performance	Environmental performance	Company performance

Source: Modified AMOS 19 outputs

**Results of the goodness of fit test**

Table 9 demonstrates that CMIN/DF is 3.166 and P-RATIO is 0.953. After comparing these values with each required cut-off point declared by Ghozali (2017) and Latan (2013), this study reveals that the model fits the data.

**Table 9.** Results of the goodness of the fit test

Measurement	Results	Compulsory conditions	Meaning
CMIN/DF	3.166	Below 5 (Ghozali, 2017)	The model fits the data.
P-RATIO	0.953	Above 0.6 (Latan, 2013)	The model fits the data.

Source: Modified AMOS 19 output

**Results of the structural equation model estimation**

Table 10 shows the result of the estimation of the structural equation model based on covariance. The probability of the critical ratio for the relationship between SMA and SCA is 0.017, between ITC and SCA is 0.442, between SCA and CP is 0.000, and between SMA and CP is 0.299. Meanwhile, the likelihood of the association between ITC and CP is 0.935. The first and third hypothesis are accepted because their probability values are less than 5% of the significance level. In other words, strategic management accounting positively influences sustainable competitive advantage, and sustainability positively influences company performance. The second, fourth, and fifth hypothesis are not accepted because their probability values are greater than 0.05. This result indicates that (1) information technology capability has no effect on sustainable capability, (2) strategic management accounting has no effect on company performance, and (3) information technology capability has no effect on company performance.

**Table 10.** Results of the structural equation model estimation:  
The determinant of company performance

Hypothesis	Direction of variables	Coefficient	Standard errors	Critical ratio	Probability
1	SMA → SCA	0.852	0.358	2.381	0.017
2	ITC → SCA	1.166	0.216	0.769	0.442
3	SCA → CP	0.535	0.155	3.446	***
4	SMA → CP	0.592	0.570	1.039	0.299
5	ITC → CP	0.028	0.336	0.082	0.935

Source: Modified AMOS 19 outputs

Table 11 shows the tests on direct or indirect effects. Sustainable competitive advantage can mediate the influence of strategic management accounting on company performance because the probability (2-tailed) of the Z-statistic is 0.065 or less than 10%. SCA cannot mediate the effect of information technology capability on company performance because the probability (2-tailed) of the Z-statistics is 0.307 or exceeds 5%. Meanwhile, strategic management accounting has an effect on company performance through sustainable competitive advantage.

**Table 11.** Test on Direct and Indirect Effects

Causal relationships	Path relationship	Path coefficient (PC)	SE (PC)	Multiplication between PC	SE (Sobel)	Z-statistics	Prob. (2-tailed)
SMA → SCA → KP	SMA → SCA	0.852	0.358	0.456	0.239	1.906	0.065
	SCA → KP	0.535	0.155				
ITC → SCA	ITC → SCA	0.166	0.216	0.089	0.123	0.722	0.307

→ KP	SCA → KP	0.535	0.155				
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Source: Modified AMOS 19 outputs

## Discussion

The first hypothesis test has proven that strategic management accounting positively influences sustainable competitive advantage. This study supports a resource-based view, stating that strategic management accounting as one of the company's internal resources that has an important impact on sustainable competitive advantage (Phornlaphatrachakorn & Na-Kalasinth, 2020). Strategic management accounting has a positive effect on sustainable competitive advantage because strategic management accounting can provide strategically oriented information for planning, decision making and control to decision makers in the company which in turn can increase sustainable competitive advantage (McManus, 2013). Additionally, the interview has revealed that companies should analyze customers and competitors to win market competition. A strategic business unit enables the companies to determine which products and consumers highly contribute to profits and what advantages their competitors have. These results agree with Alamri (2018), Cynthia and Devie (2015), as well as Tandiharjo and Devie (2015), who have proven that strategic management accounting positively affects competitive advantage.

By mentioning the second hypothesis examination, this study verifies that information technology capability has no effect on sustainable competitive advantage. This result disagrees with the hypothesis that information technology capability positively affects sustainable competitive advantage. However, the result of this study agrees with Widodo (2015), who states that information technology capability has no effect on sustainable competitive advantage. Information technology is essential for survival so that every company must try hard to stay competitive. However, when each company is equipped with almost the same information technology capability, the information technology capability no longer offers a clearly visible competitive advantage (Chae et al., 2018). The third hypothesis test has proven that sustainable competitive advantage positively influences company performance. This result agrees with the resource-based view theory postulating that a company with a sustainable competitive advantage can continually create an accomplishment (Lay & Jusoh, 2017; Newbert, 2007). The company's performance is expected to always be superior to its competitors by having a sustainable competitive advantage (Dhyanasaridewi & Augustine, 2021). These results are support Elijah and Millicent (2018), Rauf, Kadir and Kamariah (2019), and Dhyanasaridewi and Augustine (2021).

The fourth hypothesis test has discovered that this study proves that strategic management accounting has no effect on company performance. This study disagrees with the proposed hypothesis. The results of this study confirm that strategic management accounting cannot directly improve company performance. However, strategic management accounting can improve company performance through sustainable competitive advantage. The results of this study support Aykan and Aksoylu (2013) as well as Lay and Jusoh (2017), who have proven that strategic management accounting has no effect on company performance. The fifth hypothesis test has proven that information technology capability has no effect on company performance. This result agrees with Benitez-Amado and Walczuch (2012), Chae et al. (2014), and Peng et al. (2016), who deploy that IT capability has no effect on firm performance. The advent of the internet as well as the continued and dramatic reduction in the cost of information technology resources have made technology more standardized and accessible. As a result, it is increasingly difficult for companies to achieve and maintain superior performance through information technology capability (Chae et al., 2018).

Sustainable competitive advantage can mediate the influence of strategic management accounting on company performance. Companies with the best strategic management accounting tend to have excellent business practices, superior company competitiveness, and valuable company performance (Oboh & Ajibolade, 2017; Phornlaphatrachakorn & Na-Kalasinth, 2020). Meanwhile, important information about markets, products, suppliers, competitors, and customers provided by strategic management accounting increasingly enables a company to achieve competitiveness (Alamri, 2018). Sustainable competitive advantage cannot mediate the effect of information technology capability on the company performance. This result connects previous findings that information technology capability does not affect sustainable competitive advantage. In contrast, sustainable competitive advantage affects company performance. This

result agrees with Hair et al., (2019), who assert that mediation is considered significant if all path coefficients are also significant.

## V. CONCLUSION

This study concludes that strategic management accounting has a positive effect on sustainable competitive advantage, and sustainable competitive advantage has a positive effect on company performance. Meanwhile, strategic management accounting and information technology capability have no effect on company performance, and information technology capability has no effect on sustainable competitive advantage. Sustainable competitive advantage can mediate the influence of strategic management accounting on company performance. In contrast, sustainable competitive advantage cannot mediate the effect of information technology capability on company performance.

In other words, a company can increase its performance by effectively applying strategic management accounting and sustainable competitive advantage. Besides, the company can elevate its sustainable competitive advantage by applying strategic management accounting. This study has two major limitations. First, respondents in this study consisted of staff, supervisors, assistant managers, and managers, previously targeted as respondents were managers. Second, in this study, the number of respondents who work in the field of information technology is relatively very small. The suggestion in this research is that the next researcher will conduct research on strategic management accounting and information technology capability. First, the respondent should be the company manager. Second, the number of respondents who work in the field of information technology should be adequate. Third, it is better to add the dimensions of green information technology or transformation information technology to the measurement of information technology capability variables.

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