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A New Theoretical Model of Creating Sustainable Competitive Advantage of Cigar Indonesia Produced in Jember

Bagus Putu Yudhia Kurniawan¹, Irma Wardati², Githa Noviana³, Fani Ardiani³

¹ Department of Agribusiness Management, Politeknik Negeri Jember, Jember, Jawa Timur, Indonesia

² Department of Agricultural Production, Politeknik Negeri Jember, Jember, Jawa Timur, Indonesia

³ Department of Agrotechnology, Institut Pertanian Stiper, Yogyakarta, Indonesia

Abstract: The empirical studies had shown a research gap, known as the Sustainable Competitive Advantage (SCA) paradox of marketing performance and information systems. This study aimed (1) to analyze the relationship of each indicator with information system variables and marketing performance that contribute to the creation of excellence for Indonesian cigars produced in Jember; (2) to analyze and examine the causal relationship between information system variables and marketing performance on sustainable competitive advantage, and (3) to find a new theoretical model for the creation of a Sustainable Competitive Advantage for Indonesian cigars produced in Jember. It was a survey research type used for explanatory or confirmatory purposes, namely to explain the influence between variables or the causal relationship between variables through hypothesis testing. It used a census or complete enumeration method. The analysis technique used is confirmatory factor analysis and path analysis. The results showed that information systems have a direct, positive, and significant effect on marketing performance. Through marketing performance, information systems also have a substantial and positive impact on sustainable competitive advantage. Marketing performance also has a direct, positive, and significant effect on the Sustainable Competitive Advantage of Indonesian cigars produced in Jember. The information system's role in companies producing export cigars is at the stage of reaching the consumer. The strategic position or priority scale of the information system is the Strategic Information System (SIS).

Keywords: business strategy, information systems, Jember Cigar, marketing, sustainable competitive advantage.

詹伯生产印尼雪茄创造可持续竞争优势的新理论模型

摘要：实证研究表明存在研究差距，即营销绩效和信息系统的可持续竞争优势（爱生雅）悖论。这项研究的目的是（1）分析每个指标与信息系统变量和营销绩效之间的关系，这些因素有助于在詹伯（詹伯）生产卓越的印尼雪茄；（2）分析和检验信息系统变量与营销绩效之间关于可持续竞争优势的因果关系，以及（3）寻找一种新的理论模型，以为詹伯生产的印尼雪茄创造可持续竞争优势。它是一种调查研究类型，用于解释性或确认性目的，即通过假设检验来解释变量之间的影响或变量之间的因果关系。它使用了人口普查或完整的枚举方法。使用的分析技术是验证性因素分析和路径分析。结果表明，信息系统对营销绩效具有直接，积极和重要的影响。通过营销绩效，信息系统还对可持续竞争优势产生了实质性的积极影响。营销业绩也对詹伯生产的印尼雪茄的可持续竞争优势产生直接，积极和重大的影响。信息系统在生产出口雪茄的公司中的作用正处于吸引消费者的阶段。信息系统的战略地位或优先级是战略信息系统（SIS）。

关键词：商业策略，信息系统，珍贝雪茄，营销，可持续的竞争优势。

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About the authors: Bagus Putu Yudhia Kurniawan, Doctor, Department of Agribusiness Management, Politeknik Negeri Jember, Jember, Jawa Timur, Indonesia; Irma Wardati, Department of Agricultural Production, Politeknik Negeri Jember, Jember, Jawa Timur, Indonesia; Githa Noviana, Fani Ardiani, Department of Agrotechnology, Institut Pertanian Stiper, Yogyakarta, Indonesia

Corresponding author Bagus Putu Yudhia Kurniawan, baguspyudhia@gmail.com

1. Introduction

The Tobacco Products Industry (IHT) is one of the manufacturing sectors that can contribute to foreign exchange earnings, namely through the export of cigarettes and cigars. In 2018, cigarette and cigar products' export value reached US \$ 931.6 million or around Rp. 13.2 trillion. It is estimated that in 2019, the value will continue to increase, surpassing the US \$ 961.7 million or around Rp.13.6 trillion [1]. Throughout 2019, cigarette excise revenues exceeded Rp.153 trillion or higher than the acquisition in 2018 of Rp. 147 trillion. The cigarette and cigars excise revenue last year contributed 95.8% to the national excise.

Jember is the number one best cigar producing region in Indonesia and the second in the world after Cuba. It is also known as a tobacco city that can make the best quality tobacco [2], [3]. Indonesian cigars produced by Jember have several well-known brands, such as Jember Cigar, Habano, Bali Djanger, Bali Legong, Don Augusto, and Cadenza.

Cigars from Jember have long been known and demanding in the Asian and European markets. The demand for Jember cigars until the end of 2019 had reached 20,000-21,000 sticks per month from each importing country. Most requests came from Bremen, China, Malaysia, Thailand, and Greece. The demand is currently starting to spread in several countries, namely Poland, Turkey, Japan, and Moldova. This condition provides an opportunity to increase its competitive advantage, especially in meeting export market demand [4]. However, the Indonesian cigar business still has weaknesses in creating a competitive advantage. This phenomenon is interesting for further study. These empirical studies show a research gap, known as the Sustainable Competitive Advantage (SCA). The paradox of marketing performance and information systems raises a problem, namely the unclear role of information systems and marketing performance in their contribution to creating SCA [5]. This study will answer the research gap and the phenomenon of the Indonesian cigar business produced in Jember using a discovery-oriented approach.

This study aimed to analyze each indicator's relationship with information system variables and marketing performance contributing to creating an SCA. It also aimed to analyze and examine the causal relationship between information system variables and marketing performance on SCA and find a new theoretical model for creating an SCA for Indonesian cigars produced in Jember.

The urgencies of this research include: (1) Jember is the number one best cigar producing region in Indonesia and the second-best in the world after Cuba;

(2) cigar exports made a significant contribution to foreign exchange earnings, reaching Rp.13.6 trillion in 2019; and (3) cigarette and cigar excise revenues contributed 95.8% to the national excise. The research scope includes: (1) this research was conducted limited to export cigars producing companies in Jember. The results of this study cannot be used as a basis for generalization. (2) other variables in marketing research, such as market orientation, organizational learning, customer value, and market networks contributing to creating SCA, were not considered in this study.

This research's scientific novelty is the use of indicators for measuring marketing performance in this study, which is a sufficiently valid indicator to measure marketing performance based on activity. Through this approach, a framework can be obtained that can be used as a guide for managers to improve their marketing performance. Besides, this study's information system is a concept in strategy theory that contributes to creating a sustainable competitive advantage because it involves technology transfer and information exchange and takes into account core capabilities. Information systems need to be part of market-oriented strategic planning.

2. Literature Review

2.1. Information Systems

According to [6], information systems are integrated to produce information, manage knowledge to support management functions, make organizational decisions, and redesign the organization. The information system is analogous to a demanding industrial society when the need for fast and inexpensive data processing and communication facilities is defined. On the other hand, information technology is an answer from the industrial world (supply) to this demand to create new products [7].

Based on the various explanations stated, information systems' role is essential, namely, considering managers in making decisions. The fast, precise, accurate, and up-to-date information helps managers make quality decisions and further improve marketing performance.

According to [8], nowadays, three developments have led to the need for a marketing information system to be greater than in the past, namely: (1) in line with the company's efforts to expand its geographic market coverage because the company managers need more information, faster than before; (2) in line with the increase in buyers' income, the sellers must develop and manage information systems well, especially marketing research; and (3) in line with increasing

brand use, product differentiation, advertising, and sales promotion, sellers must develop information systems.

Several previous studies on information systems have discussed their effects on competitive advantage and marketing performance. Research by [9]–[11] found that information systems significantly affect competitive advantage. The information technology investments made by companies can support the process of creating marketing performance [37]. Information systems play an influential role in strengthening management quality, which will later create marketing performance and increase community participation [7], [12], [13].

2.2. Marketing Performance

Marketing performance can be interpreted as objective work performance that splits on high work results and profitability of marketing decisions or the performance of work from which a company's activity is located. Marketing results are useful when the number of customers increases and the product is increasingly in demand by many consumers [38]. The emergence of marketing is also a concept in the market district with the company's right product.

Marketing performance is an effort to measure the level of strategic performance resulting from sales volume, sales growth rate, and customer growth rate [14], [15]. According to [16], company performance is not only from legal decisions but also from the adequacy of decisions. The research results of [17] concluded that the level of marketing performance is an essential instrument for creating and sustaining competitive advantage.

2.3. Sustainable Competitive Advantage (SCA)

The literature on competition acts as a prelude for developing the conception of competitive advantage. Companies should strive to have unique characteristics distinct from competitors [18]. Also, sales strategy and market share affect increased performance [19], [20]. A competitive system by considering internal and external synergies is a means to achieve long-term goals [21]. This argument forms a factual basis for the success of SCA. Many things can be done by management to achieve an SCA. According to [22], reaching SCA is to develop core competencies, which are termed by [23] as distinctive competencies - a unique set of strengths that enable organizations to achieve efficiency, innovation, and quality or customer response that create superior value and SCA.

The company has an SCA only when consumers perceive a difference between its products and its competitors, where this difference arises because of differences in capabilities. SCA can be measured from durability (the level of time it can keep competitors away), imitability (the level of difficulty to be

replicated), and the level of ease of matching strategic assets. SCA can result in a consistent increase in marketing performance [24], [25].

Based on the literature review that has been stated, the hypotheses put forward in this study are: (1) the information system has a significant effect on the marketing performance of the companies producing export cigars; (2) the information system is having a substantial impact on the SCA of companies producing export cigars, and (3) marketing performance has a significant effect on the SCA of companies producing export cigars.

3. Research Methods

This research is included in the type of survey research. It is used for explanatory or confirmatory purposes, namely to explain the influence between variables or the causal relationship between variables through hypothesis testing, also known as hypothesis-testing research. The research was conducted in Jember, East Java, considering that Jember is the number one best cigar producing area in Indonesia and the second-best in the world after Cuba. This research used the census or complete enumeration method, carried out on all export cigars producing companies in Jember, namely PTPN X Industrial Unit Bobbin, PT Mangli Djaya Raya, and PT Bin Sigar, or other words. This research did not use samples then the sampling technique in this study was also not necessary. The variables in the study were classified as follows: (1) information system (SIN) as the first exogenous variable; (2) marketing performance (KIP) as the first endogenous variable (Y1), and at the same time as an intervening variable that affects SCA(KBB) and is influenced by information systems (SIN); and (3) SCA(KBB) as the second endogenous variable (Y2) which is controlled by information systems (SIN) and marketing performance (KIP).

Information System (SIN) has a meaning as the role of information management components and integrated technology for the company to produce useful information. Information system (SIN) is measured by using instruments developed by Wilson in [7], namely: (1) information sources; (2) frequency of decisions; (3) time scale; (4) time horizon; (5) reach; and (6) the nature of the decision. Marketing Performance (KIP) can be interpreted as marketing performance produced by the company. Marketing Performance (KIP) is measured by using instruments developed by [14], namely: (1) increase or decrease in the number of customers who can increase or decrease each year, which will increase the profit or loss for the company; (2) an increase in the number of sales from year to year; and (3) the final results achieved by the company from the sales of products produced by the company (calculated as a whole from total conducted).

SCA (KBB) can be interpreted as a condition or capability that allows the company to gain a greater than average profit in the industry sustainably. SCA(KBB) is measured by using instruments developed by [26], namely: (1) durability (the level of duration that can keep competitors away); (2) imitability (the level of difficulty to be imitated); and (3) the level of ease to match the strategic assets owned by the company. Marketing performance variables, information systems, and SCA are measured using the summated rating method or a Likert scale. The measurement results are in the form of interval data.

Primary data collection was carried out through direct interviews with all management of the export cigar producing companies in Jember Regency. The questions have been systematically compiled and guided using a valid questionnaire (positive correlation

coefficient and more significant than 0.30) and reliable (having a Cronbach Alpha value greater than 0.60). Secondary data comes from information/data held by relevant agencies and literature books, scientific journals, and various forms of publications as listed in the Bibliography.

The analysis technique used in this research was confirmatory factor analysis and path analysis. Confirmatory factor analysis was used to determine the loading factor for each indicator of information system variables, marketing performance, and SCA. Path Analysis was used to analyze and test the causal relationship between information system variables and marketing performance on SCA and find new theoretical models for creating an SCA for Indonesian cigars produced in Jember. The research flow diagram is shown in Fig. 1.

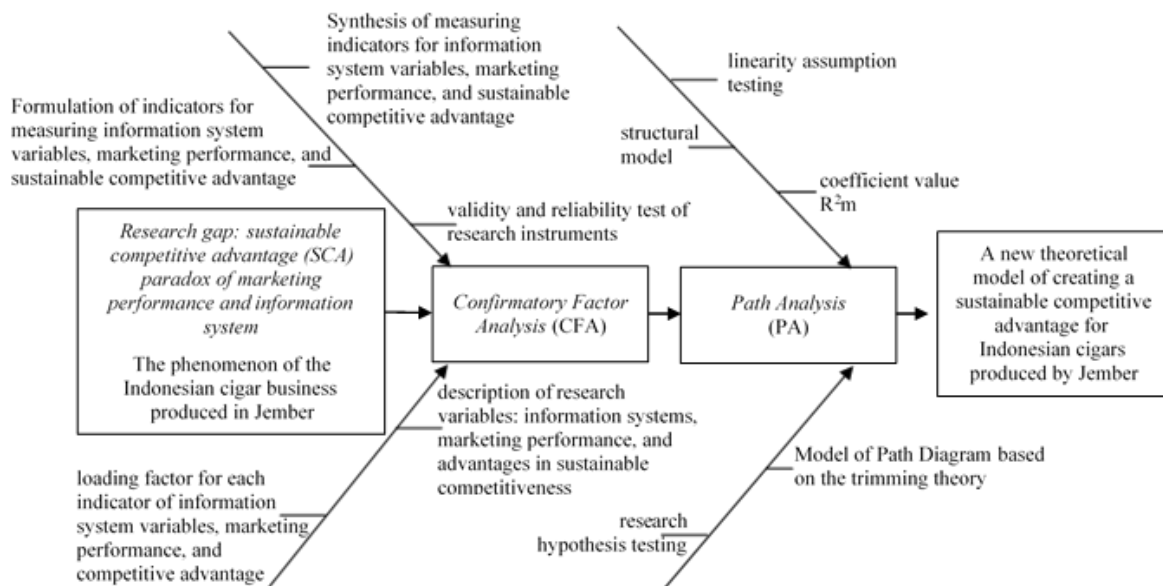


Fig. 1 Research roadmap

4. Result

4.1. Validity and Reliability of Research Instruments

This study's population was all companies producing export cigars in Jember, East Java, namely PTPN X Unit Industri Bobbin, PT Mangli Djaya Raya, and PT Bin Sigar. The research method used is the census or complete enumeration method. The number of the study population is relatively small. Thus, each census will get information or data from each of these companies. Information or data about information systems, marketing performance, and the SCA of companies producing export cigars is obtained from the leaders or owners, production managers, human resources managers, marketing managers, and information systems managers. The number of respondents is 15, comes from 5 respondents for each company producing export cigars. The research instrument (questionnaire) was tested on six

respondents before being distributed to the research respondents. After that, the questionnaire's validity and reliability were tested because it was developed from the variable theoretical concept. After making improvements to the questionnaire, then the questionnaire was distributed to the actual research respondents.

The results of the validity and reliability tests are shown in Table 1.

Table 1 Test results of the validity and reliability of research instruments

Variable	Correlation Coefficient	Cronbach Alpha	Information
Information Systems	0.55	0.76	Valid and Reliable
Marketing Performance	0.62	0.64	Valid and Reliable
SCA	0.75	0.73	Valid and Reliable

Table 1 shows that the research instrument is valid and reliable. The correlation coefficient for information system variables = 0.55, marketing performance = 0.62, and SCA= 0.75 are positive and greater than 0.30. The Cronbach Alpha value for information system variables = 0.76, marketing performance = 0.64, and SCA= 0.73 is greater than 0.60.

4.2. Description of Research Variables

Table 2 shows that the research respondents perceive the information system's role in producing export cigars as useful, with an average score of 4.31. The indicator for measuring information system variables that are considered the best is information sources (SIN1), with an average score of 4.40. In contrast, those who responded less well than others were decision natural (SIN6) with an average of 4.22.

Table 2 The results of the descriptive analysis of information systems variables

Indicators	N	Min	Max	Avg.
SIN1	15 (=3x5)	4.20	5.20	4.40
SIN2	15 (=3x5)	4.20	4.80	4.26
SIN3	15 (=3x5)	4.20	5.00	4.39
SIN4	15 (=3x5)	4.20	5.00	4.26
SIN5	15 (=3x5)	4.20	4.80	4.31
SIN6	15 (=3x5)	4.20	4.70	4.22
Information Systems	15 (=3x5)	4.20	4.92	4.31

Information:

SIN1 = Information sources
 SIN2 = Frequency of decision
 SIN3 = Time scale
 SIN4 = Time horizon
 SIN5 = Reach
 SIN6 = Experience a decision

Table 3 shows that the research respondents perceive that companies producing export cigars' marketing performance are good, with an average score of 4.41. The indicator for measuring the marketing performance variable that is considered the best is the customer growth rate (KIP3), with an average score of 4.46. The ones who responded less well than others were the sales volume (KIP1), with an average of 4.37.

Table 3 The results of the descriptive analysis of marketing performance variables

Indicators	N	Min.	Max.	Avg.
KIP1	15 (=3x5)	4.20	5.20	4.37
KIP2	15 (=3x5)	4.20	5.40	4.40
KIP3	15 (=3x5)	4.20	5.00	4.46
Marketing Performance	15 (=3x5)	4.20	5.20	4.41

Information:

KIP1 = Volume of sales
 KIP2 = Sales growth rate
 KIP3 = Customer growth rate

Table 4 shows that the research respondents perceive the SCA of companies producing export cigars as useful, with an average score of 4.30. The indicator

for measuring SCA's variable that is considered the best is imitability (level of difficulty to be imitated) (KBB1). In contrast, what responded less well than others is the ease of equaling strategic assets owned by the company (KBB3) with an average of 4.22.

Table 4 The results of the descriptive analysis of the variable of SCA

Indicators	N	Min	Max	Avg.
KBB1	15 (=3x5)	4.00	5.10	4.40
KBB2	15 (=3x5)	4.00	5.20	4.28
KBB3	15 (=3x5)	4.00	5.00	4.22
SCA	15 (=3x5)	4.00	5.10	4.30

Information:

KBB1 = Imitability (difficulty level to imitate)
 KBB2 = Durability (the old rate can keep competitors away)
 KBB3 = The level of ease with the strategic assets owned by the company

4.3. Results of Confirmatory Factor Analysis

The following tables show the loading factor value for each indicator of each research variable.

Table 5 Loading factor for each indicator of information system variables

Indicators	Loading Factor
SIN1	0.87
SIN2	0.78
SIN3	0.42
SIN4	0.65
SIN5	0.82
SIN6	0.55

Information:

SIN1 = Information sources
 SIN2 = Frequency of decision
 SIN3 = Time scale
 SIN4 = Time horizon
 SIN5 = Reach
 SIN6 = Experience a decision

Table 5 shows that the strongest indicator of information system variables is information sources (SIN1), with a loading factor value of 0.87. In contrast, the weakest hand as a measure of information system variables is the time scale (SIN3) with a loading factor value of 0.42.

Table 6 Loading factor for each indicator of the marketing performance variable

Indicator	Loading Factor
KIP1	0.72
KIP2	0.87
KIP3	0.88

Information:

KIP1 = Volume of sales
 KIP2 = Sales growth rate
 KIP3 = Customer growth rate

Table 6 shows that the strongest indicator of marketing performance variables is the customer growth rate (KIP3), with a loading factor value of 0.88. In contrast, the weakest hand as a measure of marketing performance variables is sales volume (KIP1), with a loading factor value of 0.72.

Table 7 Loading factor for each indicator of the sustainable competitive advantage variable

Indicator	Loading Factor
KBB1	0.85
KBB2	0.78
KBB3	0.81

Information:

KBB1 = Imitability (difficulty level to imitate)

KBB2 = Durability (the old rate can keep competitors away)

KBB3 = The level of ease with the strategic assets owned by the company

Table 7 shows that the strongest indicator as a measure of SCA's variable is imitability (the level of difficulty to be replicated) (KBB1) with a loading factor value of 0.85. In contrast, the weakest indicator as a measure of SCA's variable is the level of durability (KBB2) with a loading factor value of 0.78.

4.4. Path Analysis Results

4.4.1. Testing the Assumptions Underlying Path Analysis

The assumptions on which path analysis is based are: (1) the influence between variables in structural models - information systems on SCA, marketing performance on SCAs and information systems on marketing performance - linear; (2) independent between ε_1 and ε_2 with exogenous variables independent of each other, and the direction of the causal effect of the endogenous variables not entrenched, or in other words recursive models by the conceptual framework of research; (3) endogenous variables in the interval measurement scale (the numbers presented indicate the rate, consecutive numbers have the same interval, and do not have a fundamental base point (zero); (4) the research instrument was valid (positive correlation coefficient and more excellent than 0.30) and reliable (Cronbach Alpha value was more significant than 0.60); and (5) the model is correctly specified based on the relevant theories and concepts.

The approach used refers to the parsimony concept. All the models used as the basis for testing are significant or non-significant. It means that the model

is said to be linear or significant linear functions. The model specifications used as the basis for testing are linear, inverse, quadratic, cubic, logarithmic, power, S, growth, compound, and exponential. The results of testing the linearity assumption for each influence between variables are presented in Table 8.

Table 8 Test results of linearity assumptions

Independent Variable	Dependent Variable	Test result (a = 0.05)	Results
Information Systems	Marketing Performance	Significant Linear Model	Linear
Information Systems	SCA	Significant Linear Model	Linear
Marketing Performance	SCA	Significant Linear Model	Linear

Based on Table 8, it is found that all forms of influence between variables in the structural model are linear. Thus, the linearity assumption in the path analysis is fulfilled.

The recursive model (between ε_1 independent or independent, between ε_1 and ε_2 with exogenous variables independent of each other, and the direction of the causal effect of the endogenous variables is unidirectional) has been fulfilled. According to the study's conceptual framework, this also explains that the model assumptions are specified (identified) correctly based on the relevant theories and concepts that have also been fulfilled.

The assumption of endogenous variables in the interval measuring scale has been fulfilled. Based on the convention, the input path analysis data is in the form of factor scores resulting from confirmatory factor analysis, where the factor scores are standard normally distributed. Furthermore, the assumption of observed variables measured without error (valid and reliable measurement instruments) has also been fulfilled, as explained in the previous description.

4.4.2. Structural Model

Path analysis was performed with standardizing regression using SPSS Rel software. 22.00. The results of the direct effect path coefficient test are presented in Table 9.

Table 9 Path coefficient of direct effect

Independent Variable	Dependent Variable	Standardize coefficient	p	Information
Information Systems	Marketing Performance	0.343	0.020	Significant
Information Systems	SCA	0.412	0.312	Non-significant
Marketing Performance	SCA	0.826	0.006	Significant

Table 9 shows that the effect of marketing performance on SCAs is quite significant (with a small risk of error, approaching $p = 0.000$), namely $p = 0.006$, followed by the effect of information systems on marketing performance with a value of $p = 0.020$.

Table 9 also shows that marketing performance has a dominant impact on SCA with a direct influence path coefficient of 0.826, or the path from marketing performance to SCAs is a path that has a more substantial effect. The approach from information

systems to SCAs followed by 0.412 and the system information towards marketing performance of 0.343.

Testing the indirect effect is carried out by looking at the pathway test results. If all the paths that traversed are significant, then the indirect impact is also

substantial. If there is at least one path that non-significant, then the indirect effect is said to be non-significant. The path coefficients of the indirect effect are presented in Table 10.

Table 10 Path coefficient of indirect effect

Independent Variable	Intervening Variables	Dependent variable	Standardize coefficient	Information
Information Systems	Marketing Performance	SCA	0.283 *)	Significant

Information: * = 0.343×0.826

Based on the results of the path coefficient test as in Tables 9 and 10, the path analysis is in the form of a simultaneous system of equations, namely:

$$ZKIP = 0.343 ZSIN$$

$$ZKBB = 0.412 ZSIN$$

$$ZKBB = 0.826 ZKIP$$

$$ZKBB = 0.412 ZSIN + 0.826 ZKIP$$

4.5. Model Validity Testing

4.5.1. Total Coefficient of Determination (R^2m)

The total diversity of data that the model can explain is measured using the formula: $R^2m = 1 - (Pe1)^2 (Pe2)^2 (Pe3)^2$; $Pei = \sqrt{1 - R^2i}$, thus $R^2m = 0.889$. Meaning that the diversity of data that the model can explain is 88.90%, or in other words, the information contained in the data, 88.90% can be explained by the model. Meanwhile, 11.10% was explained by other variables that were not included in the model and error.

4.5.2. Trimming Theory

Based on the trimming theory, non-significant pathways are removed to obtain a new model supported by empirical data. The model in the form of a path diagram based on the trimming idea is shown in Fig. 2.



Fig. 2 A new theoretical model of creating an SCA for Indonesian cigars from Jember production in the form of a path diagram based on the trimming theory

Fig. 2 shows that information systems have a direct, positive, and significant effect on marketing performance, and through marketing performance, information systems also have a substantial and positive impact on SCA. Marketing performance also has a direct, positive, and significant effect on the SCA of Indonesian cigars produced in Jember.

Theoretically, the model in the form of a path diagram based on the trimming theory implies that the information system is an instrument that plays an essential role in improving marketing performance. The marketing performance is also an important instrument

to increase the SCA of Indonesian cigars produced in Jember.

4.5.3. Research Hypothesis Testing Results

1. Information systems have a significant effect on marketing performance is accepted. The direct impact's standardized path coefficient is 0.343 with $p = 0.020$, which is significantly positive. This study's findings mean that it supports the hypothesis that the information system substantially affects Indonesian cigars' marketing performance produced in Jember.

2. Information systems have a significant effect on SCAs accepted. The direct effect's standardized path coefficient is 0.412 with $p = 0.312$, which is significantly positive. The findings of this research mean that it supports the hypothesis, which states that the information system has a substantial effect on the SCA of Indonesian cigars produced in Jember.

3. Marketing performance has a significant effect on SCAs accepted. The direct effect's standardized path coefficient is 0.826 with $p = 0.006$, which is significantly positive. The findings of this research mean that it supports the hypothesis, which states that marketing performance has a substantial effect on the SCA of Indonesian cigars produced in Jember.

An essential finding of this study is that information systems' role has a significant effect on marketing performance. The findings of this study support the results of previous studies from [13], [27]–[29], which state that technology and information systems play an effective role in producing a company's marketing performance.

Referring to the five evolutionary stages of the development of the role of an information system through an organization from [30], it can be argued that the role of information systems in export cigar-producing companies is already at the stage of reaching the consumer, passing through the reducing costs, leveraging investment, enhancing products and services, and enhancing executive decision making. At the stage of reaching the consumer, the company has aggressively exploited the information system development to reach customers or potential customers. This is in accordance with supply chain management (SCM) theory which emphasizes the importance of a

direct relationship between the company and customers, which can be easily done through the utilization of information systems.

Another important finding from this study is that information systems have a significant effect on SCA. The findings of this study support the results of previous studies from [9], [31]–[33], which show that information systems are a potential strategic resource to produce an SCA.

Referring to the strategic matrix of the role of information systems from [34], it can be argued that the information system for export cigars producing companies is in a strategic position – significantly has strategic value for the company. Information systems can directly provide companies with an SCA, so their existence is necessary.

The role of information systems in companies can also determine the priority scale of information systems. According to [35], in a strategic position, the information system's priority scale is the Strategic Information System (SIS). The information system's priority scale is in the position of SIS if the information system can provide an SCA for the company, so it is the main instrument to beat its competitors. Functionally, the company cannot operate without being equipped with the information system concerned.

This study also found that marketing performance has a significant effect on SCA. This study's findings support the results of previous research from [24], which states that the level of marketing performance is an important instrument for developing SCA. The higher the marketing performance is, the higher the SCA.

The contribution of this study's findings is that the use of marketing performance measurement indicators developed by [36] is a sufficiently valid indicator to measure marketing performance. Through this approach, a framework will be obtained that can be used as a guideline for companies to improve their marketing performance.

5. Limitations and Conclusion

5.1. Limitations

The practical limitations of applying the results of this study are:

1. This research was conducted limited to export cigars producing companies, so this study's results cannot be used as a basis for generalization.
2. Testing in this study without considering the size effect. The company's size may affect a company's ability to improve its marketing performance and the sustainability of its competitive advantage. However, without a system that supports the exchange of information that is not handled, efforts to improve marketing performance and sustainable competitive advantage will not materialize.

3. Companies with high marketing performance involve the use of information systems directly to create products or services (enhancing products and services by making money) than companies with low marketing performance.

4. Companies with high competitive advantages involve more strategic use of information systems (strategic information systems; SIS) than companies with low competitive advantages.

5.2. Conclusion

Information systems have a direct, positive, and significant effect on marketing performance, and through marketing performance, information systems also have a significant and positive effect on SCA. Marketing performance also has a direct, positive, and significant effect on the SCA of Indonesian cigars produced in Jember. Theoretically, this study's findings imply that information systems are instruments that play an important role in improving marketing performance. Information systems and marketing performance are also important to increase the SCA of Indonesian cigars produced in Jember. The information system's role in companies producing export cigars is at the stage of reaching the consumer and in a strategic position (having strategic value for the company) with the Strategic Information System (SIS) as the priority scale.

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