



Strategic Alliance and Tacit Collusion, of Competitive Advantage Through Market Area, Product Innovation Cooperativa Café Timor and National Cooperative Business Association (CCT-NCBA) in Timor Leste

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Abstract. This study aims to prove that the implementation of strategic alliance and tacit collusion can increase the competitive advantage of CCT-NCBA in organic coffee production by developing market areas and product innovation. This study aims to prove that implementing a strategic alliance can increase the competitive advantage of coffee organic through developing the market area and product innovation. Based on the results of hypothesis testing and the analysis of strategic alliances, market area, and product innovation against competitive advantage, it is known that building a competitive advantage in the product coffee organic be achieved through the establishment of strategic alliances and tacit collusion right, based on the exchange of raw material resources, technology or resources marketing. Strategic alliances and tacit collusion are used to strengthen the position of organic coffee production in the face of competition organic coffee business. The more precise the model selection strategic alliance and tacit collusion, product innovation organic coffee production will be able to build a competitive advantage of her. The development model of strategic alliances and tacit collusion CCT-NCBA that needs to be developed is to increase the competitive advantage has the form of an alliance focused on cooperation in the provision of raw materials, interest in improving the skills of cooperation, and the application of the production process technology.

Keywords: Strategic Alliance · Tacit Collusion · Product Innovation · Market Area · Competitive Advantage

1 Introduction

1.1 Background

In an increasingly complex global business environment, companies have found it impossible to run alone. A tool that companies from large to small and medium-sized multinationals have found in helping them navigate dangerous foreign markets is the formation

of strategic alliances. In an interconnected world, networked companies that can find and form suitable strategic partnerships will be able to gain a sustainable competitive advantage. The development of strategic alliances in various industries, from healthcare to computer research, is changing the way business is conducted internationally. Small and large businesses need to be aware of these developments. A “capacity to collaborate” that a company may have has become an important asset that differentiates it in the marketplace. Companies that lack the ability to cooperate or are reluctant to form networks and alliances operate at a competitive disadvantage.

Strategy Alliance was conducted by Cooperativa Café Timor and the National Cooperative Business Association (CCT-NCBA). The strategy sets the direction of the business and guides the allocation of resources. What sometimes happens in the industry are what are known as strategic alliances. A strategic alliance is a company strategy that crosses industry lines to form cooperative agreements toward common business goals while each company maintains its independence. The two cooperatives, namely Cooperativa Café Timor and the National Cooperative Business Association (CCT-NCBA), can form an agreement to share capital-intensive investment in the Coffee Production industry by diversifying with various business units such as Casava Unit, Clove Unit, Vanilla Unit, Health Division or Clinic. The agreement allows every business access to technology at half the investment. Of course, both parties must determine the specific allocation details of the agreement and other aspects such as maintenance, etc. Cooperativa Café Timor and the National Cooperative Business Association (CCT-NCBA) operate strategic alliance and tacit collusion through the CCT-NCBA partnership through a cooperation agreement, which is carried out in tacit collusion of – setting selling prices, premiums and determining purchase prices to distribution profit percentage. This partnership allows negotiating and buying power over the industry and gains operational efficiency through the Organic Coffee Industry and several other business units such as the Cassava Unit, Clove Unit, Vanilla Unit, Health Division, or Clinic together.

1.2 Strategy Alliance and Tacit Collusion CCT-NCBA Cooperative

Strategy is a strategy in which companies work together to achieve common goals. The purpose of this cooperative strategy is to create value for customers where value must exceed the cost of obtaining that value and to establish a relative position to compete. The first type of cooperative strategy is strategic alliance, which will be discussed extensively in this chapter. And the second one is a collusive strategy, in which two or more firms work together to raise prices above the level of full competition.

1.3 Strategic Alliance as the First Type of Cooperation Strategy

A strategic alliance is an alliance between companies that combine resources and capabilities to create a competitive advantage. Both strategic alliance and tacit collusion in Merging local companies CCT (Cooperativa Café Timor) and NCBA (National Cooperative Business Association) international companies will be able to bring effective results and work together to fill each other’s shortcomings both financially, financially, or capital, human resources, and not to be forgotten is the technique so that foreign companies will support the merger of local companies to be able to compete with other

international companies. However, given the differences in focus, it is expected that the two types of strategic and tacit collaboration could be managed differently. The authors have acknowledged that while there is significant research on strategic alliance management, there has been limited examination of the different collaborations that should be managed differently. This area of research is further explored in road, bridge, and house construction companies in the context of corporate partnerships. Strategic Alliances are strategically divided into five, namely: (1) License, (2) Franchising: another variation of the licensing company strategy, and a contract between a holding company with other parties that allow the parties The franchisee operates a business developed by the franchisee. (3) Joint Venture: a joint venture is a strategy to enter a host country market where the (local) partner has joint ownership in a newly formed company, (4) Production contract: the company concentrates on product design and marketing and transferring responsibility for facility ownership – production facilities, (5) Direct investment: direct investment is carried out to avoid tariff and quota barriers, experience to transfer technology, and provide new manufacturing techniques.

Tacit Collusion “tacit collusion” need not involve “collusion” in the legal sense, and in the legal sense of special necessity does not involve communication between the parties. This is referred to as tacit collusion simply because the outcome (in terms of pricing or quantity produced, for example) may be very similar to explicit collusion or even an official cartel. THAT a better term from a legal perspective would probably be “tacit coordination.” In the remainder of this paper, we will continue to refer to tacit collusion because it better reflects terminology in the economics literature, but our analysis does not presuppose explicit collusion.

Collusion can take many forms. It can be explicit, tacit, or a combination of both. However, because antitrust laws usually prohibit explicit collusion, we will focus here on the possibility of tacit collusion. As already mentioned, tacit collusion is market behavior that allows firms to earn supra-normal profits, where “normal” profits correspond to the equilibrium situation described in Part II above. Silent collusion can arise when companies interact multiple times. They can then hold prices higher by tacitly agreeing that any deviation from the collusive path will trigger some retaliation. To be sustainable, retaliation must be sufficiently probable and costly to outweigh the short-term benefits of “cheating” on a collusive path. These short-term benefits and the magnitude and likelihood of retaliation depend on the characteristics of the industry. Meanwhile, tacit collusion is an act of tacit collusion (patterns) that occurs when a company undertakes actions that tend to minimize the response of other companies, for example, avoiding the opportunity to cut the price of opposition. In other words, two companies agree to play a certain strategy without explicitly saying so. Thus, there may be an unwritten rule of collusive behavior such as price leadership (silent collusion).

Tacit collusion or tacit collusion occurs when a company chooses actions that tend to minimize the response of other companies, for example, avoiding the opportunity to cut the price of opposition because it will cause the opposition to retaliate. In other words, two companies agree to play a certain strategy without explicitly saying it. Oligopolies usually try not to engage in premium price cuts, excessive advertising, or other forms of competition. Thus, there may be unwritten rules of collusive behavior, such as price leadership (tacit collusion). A price leader will then emerge and set general industry

prices, with other companies following suit. For example, look at the cases of British Salt Limited and New Cheshire Salt Works Limited. References Examples of duopoly Silent collusion is best understood in the context of duopoly and game theory concepts (ie, Nash equilibrium). The CCT-NCBA both played a game in the competition for organic coffee quality and the advertising of organic coffee products for an indefinite period (effectively saying ‘very much’) in their collusion.

The rewards of both companies depend on their actions, but what is more important is the actions of their competitors. They can choose to stay at the quality level of organic coffee products, and current advertising chooses more aggressive marketing or advertising strategy. If one of the same companies is competitive in low organic coffee products and lacks a strategy in organic marketing coffee, while others choose high, companies that have coffee products and low advertising will suffer a significant loss in market share while others experience an increase. But if they both choose high advertising, then the company’s market share will not increase. However, the cost of producing organic coffee and their advertising will increase, thereby lowering their profits. If they both choose to stay at normal organic coffee production and advertising levels, then sales will remain constant with no additional advertising costs. Both companies will get greater returns if they choose quality and normal production and advertising.

The payment matrix is presented with the numbers given: Company B Organic coffee production and normal advertising Company B organic coffee production and aggressive advertising Company A organic coffee production and normal advertising Each earns a profit of \$50. Company A: a profit of \$0 Company B: \$80 profit Organic coffee production company and aggressive advertising Company A: \$80 profit Company B: \$0 profit Each earns \$15. Note that the Nash equilibrium is established for both firms that choose an aggressive advertising and organic coffee production strategy. This is to protect yourself from lost sales. This game is an example of a prisoner’s dilemma. In general, if the rewards for colluding (normal, normal) are greater than the rewards for cheating (aggressive, aggressive), then the two companies will collude (quietly). While this collusive arrangement is not an equilibrium in the one-shot game above, repeating the game allows the company to sustain collusion over a long period of time. This can be achieved, for example, if each company’s strategy is to carry out normal product and advertising as long as its rivals do the same, and to pursue quality organic coffee products and aggressive advertising forever as soon as the rival uses an aggressive advertising campaign at least once (see: grim triggers). (This threat is believable because the symmetrical use of aggressive advertising is the Nash equilibrium of each stage of the game). Production innovation in the CCT-NCBA company is the adoption and diffusion of the company’s production ideas or ideas.

Production innovation generally moves from industry to consumer needs and wants and product development by taking into account increased productivity and business competition. Production Innovation and the basic concept is to be able to maintain its competitiveness, every company must innovate, including companies engaged in manufacturing. In carrying out the organic coffee production process, CCT-NCBA or manufacturing companies must continue innovating to improve product quality, reduce production and operating costs, and increase labor productivity. So basically, what is meant by Production Innovation or Production Innovation is an activity to make changes

in production in order to reduce production and operational costs, increase the amount of production and improve product quality. Strive for production to run as efficiently and effectively as possible. Production and operating costs are costs incurred during production such as employee wages/salaries, materials used, production equipment, transportation costs, and rework costs. Innovation can not only be done by investing in the purchase of expensive machines, but even at a small cost can produce something extraordinary. Innovation can also not only be done by professionals or people who are educated and hold high positions, but can be done by anyone. Innovation is very dependent on creativity and our way of thinking. Currently, many companies provide special bonuses for their employees who can propose creative ideas to innovate and improve product quality and reduce production costs.

1.4 The Basic Concept of Production Innovation

The following are 5 (five) basic concepts in innovating in production: 1. Simplify (Simplify) It means simplification of a process Example: Purchases of coffee that used to be able to be purchased using a system we call pattern A, which is purchased directly from coffee farmers at the coffee shop or TPK, are now changed from pattern A to pattern B, where purchases are made at the factory, thus avoiding manipulation of kilograms. Coffee Farmer → Coffee shop → Mill reweigh → Sorting → Vermentation basin → Milling (6 steps) This can be avoided by: Coffee grower → Mill Reweigh → Enter Vermentation Tub → Milling (4 steps) 2. Combine means to combine 2 (two) or more processes into one process Example: The purchasing process with 2 patterns A and pattern B contains the process of purchasing red fruit coffee from farmers, with the same purchase specifications, then pattern A can be transferred to pattern B to reduce double handling time. 3. Integrate (integrate/unify) This means integrating several processes into other processes to reduce redundant transportation and handling, and storage places. Example: - Entering the Preparation/sub-process (for example, the drying and storage processes are given one by one without distinguishing or dividing according to the coffee producing area) in order to fulfill the warehouse capacity. 4. Re-arrange This means rearranging the process or layout of a process to make it more efficient. Example: -Rearrange the layout of the components in the coffee storage following the entry date or FIFO system. 5. Eliminate.

This means eliminating or getting rid of double or multiple processes or processes that should not need to be done. Example: a. Eliminate redundant checks. b. Eliminate wastes. What benefits does the company provide? What real benefits does the product provide? It must be something your customers really need. It must also offer real value. Must know the features of the product, its advantages, and how it benefits the customer. You should always keep up with new trends affecting products which include new technologies. For example, newspapers are slow to respond to the availability of free news on the internet. They thought people would continue to pay for news that was sent on paper once a day. Determine the target market Who are the customers? What are their needs? must know exactly who is buying from our company and how to make their lives better. That's how it creates demand, the driver of all economic growth.

2 Literature Review

2.1 Definition of Reason and Concept

2.1.1 Definition of Strategy

The resource-based view can be positioned relative to at least three theoretical traditions: SCP-based theories of industry determinants of firm performance, neo-classical microeconomics, and evolutionary economics. The resource-based view of the firm has not been systematically applied to strategic alliances. By examining the role of firm resources in strategic alliances, we attempt, in this paper, to put forward a general resource-based theory of strategic alliances, synthesizing the various findings in the literature on alliances from a resource-based view.

The resource-based view acknowledges that many factors of production may, in fact, be elastic in supply. However, this view also argues that because some resources and capabilities can only be developed over long periods of time (i.e., path dependence), because it may not always be clear how to develop these capabilities in the short to medium term (i.e., causal ambiguity), and because some resources and capabilities cannot be bought and sold (i.e., social complexity), at least some factors of production may be inelastic in supply. Supply inelasticity implies that firms that possess these kinds of resources and capabilities may be able to generate above normal profits, and these profits not lead to increased supply of these resources and capabilities in the short term, and perhaps not even in the long run. Supply inelasticity thus can become a source of sustained competitive advantage.

Strategic alliance is as “the pooling of resources and specific skills by companies working together to achieve common goals, as well as specific goals for each business partner personally or individually”. Alliance is a collaborative effort between two or more companies in which companies combine their resources in an effort to achieve mutually compatible goals that cannot easily be achieved alone.

Strategic alliance exists whenever two or more independent organizations cooperate in the development, manufacture, or sale of products or services. Strategic alliances can be grouped into three broad categories: non-equity alliances, equity alliances, and joint ventures. [2] the essence of strategic alliances is the complementation of various expertise and company resources so as to create capabilities that are difficult to achieve if the company is alone.

2.2 Tacit Collusion

George Mailath, seminar participant at the Universities at Pompeu Fabra, Universitat de València, Penn-Wharton, and EARIE 2011, and research assistance from Wei Zhao. Collusion theory is tacitly developed on the basis of coordination through price leadership and less than a full mutual understanding of strategy. It's common knowledge to get that prices have increased slightly but who should lead and at what price is not common knowledge. Steady-state prices are characterized and they are far from the best collusive equilibrium price. That coordination through tacit means and non-disclosure of communication is then shown to limit the rate of price increase from collusion. Silent Collusion, whose approach is quite different. To start, it is based on the company's announcement

of proposed price changes rather than making actual price changes. Axioms determine how companies respond to repeated announcements, and these axioms are common knowledge. The company's allowed price response depends on the existing price vector and the announced price change, and it is assumed that the company that announces the price change will apply it. If it is assumed that the price response is continuous with announcements, does not change with changes in scale, and does not depend on the identity of the firm, then the response function must include matching the announced price changes. Acit is knowledge gained from individuals (individuals) whose development is through experience that is difficult to formulate and communicate through the CCT-NCBA collusion, the desire to work together is based on the experience and knowledge of their respective companies, namely between CCT and NCBA not described but occurs suddenly to do a joint venture. While explicit is something that is easily communicated and divided in a formal and systematic manner, the application of explicit knowledge will be easier because the knowledge or existing statements have been documented in written form.

2.3 Market Area/Market Location

This theory was first put forward by August Losch in 1954, who based the analysis of optimal location selection on the market area that can be controlled and the competition between places. Based on this view, a company will choose a place as an optimal location based on the strength of competition between places and the size of the market that it can control. Thus it can be seen that demand and supply between places is an important element in determining the optimal location of a company's activities.

2.4 Definition of Product Innovation

The definition of product innovation according to Hurley and Hult defines innovation as a company mechanism to adapt in a dynamic environment, therefore companies are required to be able to create new thoughts, new ideas and offer innovative products as well as improving service that satisfies customers. Avanti Fontana [3] defines product innovation as the process of introducing a new product or system that brings economic success to the company and social success to consumers and the wider community or environment.

2.5 Competitive Advantage (Competitive Advantage)

[1] defines competitive advantage as follows: In general, a firm has a competitive advantage when it is able to create more economic value than rival firms. Economic value is simply the difference between the perceived benefits gained by a customer who purchases a firm's products or services and the full economic cost of these products or services. Barney argues that sustainable competitive advantage comes from resources that are valuable, rare, difficult to imitate and substitute. Capabilities and resources are said to be substitutability in two senses, firstly they cannot be imitated or can actually replace similar resources owned by competitors. The indicator used to measure the competitive

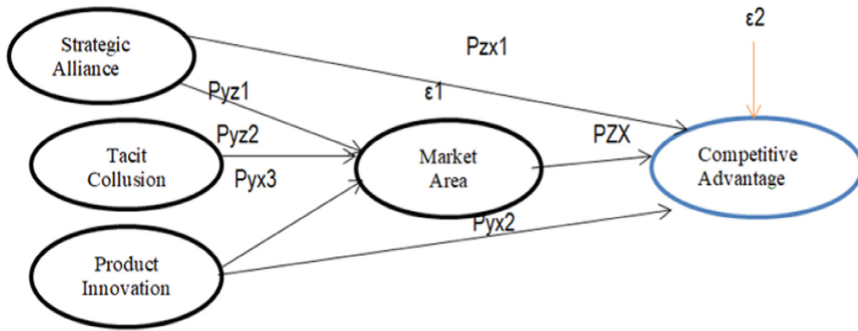


Fig. 1. Theoretical Thinking Framework Model

advantage variable refers to the research of Bharadwaj, Varadarajan & Fahy, namely a valuable resource, different from other companies, not easily imitated, and not easily replaced.

2.6 Theoretical Framework

The framework that will be developed is as follows (Fig. 1):

- H1: Strategic alliances have a positive effect on the company’s market area
- H2: Tacit Collusion has a positive effect on the company’s market area
- H3: The Company’s Market Area has a positive effect on competitive advantage
- H4: Product Innovation has a positive effect on competitive advantage
- H5: Strategic alliances have a positive effect on competitive advantage
- H6: Tacit Collusion has a positive effect on competitive advantage

3 Research Methods

3.1 Types of Research

This research includes the combined research method, namely quantitative and qualitative. Combined research is a procedure for data collection, sequential data analysis using quantitative and qualitative methods or vice versa. The analytical method used is analysis. PLS path modeling was chosen for data analysis, used to analyze the relationship between variables, with the aim of knowing the direct or indirect effect, a set of independent variables (exogenous) on the dependent variable (endogenous). Strategic Alliance and Tacit Collusion on competitive advantage through product innovation market areas.

PLS is a structural equation-based variance modeling technique, suitable for structural measurement models, small samples, and exploratory research aimed at testing and validating models. CCT-NCBA research setting in the mobile computing market has not been studied in the international business and strategy literature; The concept of innovation capability has not been fully explored by perceptively measuring enterprise-level new product and market development capabilities in the innovation and strategy management literature.

3.2 Research Focus (Research)

The focus of research is a variable that will provide clear boundaries for the things that will be studied to answer the existing problems. In this research, the focus of research is the strategic management of the Alliance and Tacit Collusion, competitive advantage, market area, Product Innovation at Cooperativa Café Timor (CCT) in alliance with the Nacional Cooperative Business Association (NCBA) International Cooperatives to work together in producing organic and other diversification: a. Company Alliance - Company which includes: Company history, vision, mission and goals company, company form, work area, company products and services, day and working hours. b. Production Alliance which includes: Organic Coffee, Vanilla, Clove, Cassava, Health Market areas, beliefs, people and processes. c. The company's remote environment which includes: government, economic, social factors culture, competition and technology. d. Production Environment which includes: the threat of new competitors, competition between Coffee Production company, coffee purchasing bargaining power. e. The company's internal environment which includes: marketing, finance, HR, research and development, information systems.

3.3 Research Sites

The place or location of this research was carried out at Coperativa Café Timor and the National Cooperative Business Association (CCT-NCBA) having its address in Dili, Timor-Leste. The reason for choosing the location is because the company is an Alliance company engaged in Coffee Production and Other Business Diversification.

3.4 Data and Data Sources

According to Sekarang in Bilson Simamora ([4]:219) Data is available raw information, obtained through interviews, questionnaires, observations, and secondary databases. Based on the above definition, the data sources in this study include: 1. Primary data, namely: Data that is not yet available so as to answer research problems, data must be obtained from the original source. In other words, the data collected for research objectives being carried out. This data can be qualitative or quantitative. 2. Secondary data are: Data that is already available, in the sense that this data has been collected by other people, institutions others, or previous researchers themselves. Secondary data can be obtained from reports – research reports, mass media, books, and others.

3.5 Data Collection Techniques

The research method used in this research is a survey method, namely research which in primary data collection conducts questions and answers with respondents to obtain the necessary information. Therefore, the techniques used in data collection in this study are: 1. Interviews, namely: Primary data collection techniques by conducting interviews directly with respondents or parties - parties related to research. 2. Questionnaires, namely: A number of formal written questions aimed at obtain information from respondents. 3. Documentation, namely: Is a method of collecting data related to the object research by categorizing and then studying written materials that related to research problems and retrieve data or information that needed.

Table 1. The weight of each question

Alternative Answer Strongly	Symbol	Value Weight
Alternative Answer Strongly agree	SS	5
Alternative Answer Strongly agree	S	4
Neutral Disagree Strongly Disagree	N	3
Neutral Disagree Strongly Disagree	STS	1

Source: Sugiyono ([5]:133)

3.6 Research Instruments

Interview Guide As explained in the data collection technique, the instrument used in this study is an interview guide in the form of list of questions, stationery and notebook. 2. Questionnaire guide: This is the procedure used in designing the questionnaire. 3. Documentation Guidelines: It is a tool used to record and store existing documents according to research needs with the help of documentation tools.

3.7 Measurement Scale

In the research score, the researcher uses a Likert Scale. The Likert Scale, a number of questions are arranged with response questions on a continuum that are weighted according to the item, in this study there are five categories of answer assessments containing graded value variables, including; Table 1 The weight of each question.

4 Results and Discussion

As a superior model with a second generation, PLS-SEM performs better estimates and regression models of covariance to test moderating and mediating variables. Based on the discussion and arguments given to choose PLS-SEM as the appropriate statistical technique, this study then uses PLS-SEM because of the complexity of the research model. In the view of other researchers, this is an appropriate method with multiple exogenous variables that explain some latent endogenous variables. Thus, PLS-SEM can especially be used in social science, strategic management, and marketing because it is a multivariate analysis method. Moreover, PLS-SEM does not pose any limitations on the interactions compared to other covariance techniques. Thus, it is a worthy substitute for analyzing the moderating effect. Complex models can be estimated via PLS-SEM involving chain effects, viz., mediation, and complex relationships. Therefore, Smart PLS v.3.0 was used in this study to estimate convergent validity, discriminant validity, and reliability of the outer model and the coefficient of determination, path coefficient significance, predictive relevance, and effect size for the inner model. PLS Algorithm.

4.1 Data Analysis

4.2 Evaluation of Measurement (Outer) Model

The measurement model for testing the validity and reliability, the coefficient of determination of the model and the path coefficient for the equation model, can be seen in Fig. 2 (Tables 2, 4, 5 and 6).

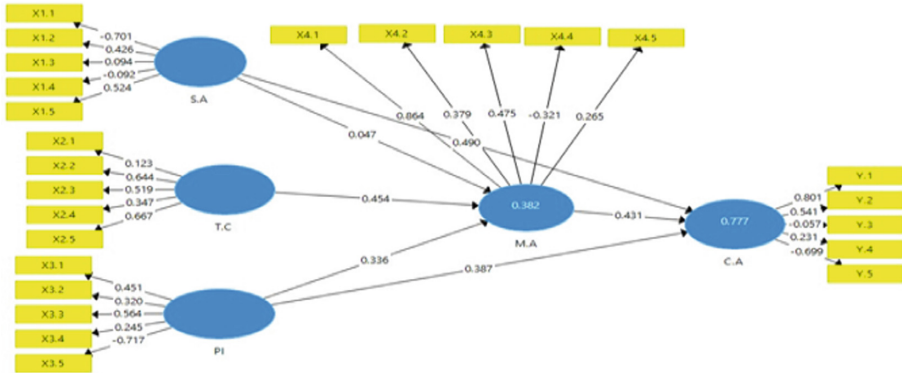


Fig. 2. PLS Algorithm Results. Source: Results of research data processing from Software PLS (2022)

Table 2. Segment Pos 1

	CA	MA	PI	S.A	TC
CA	.	.	.	.	.
MA	0.431	.	.	.	.
PI	0.387	0.336	.	.	.
SA	0.49	0.047	.	.	.
TC		0.454	.	.	.

Table 3. Segment Pos 2

	CA	MA	PI	S.A	TC
CA	.	.	.	.	.
MA	-0.306		.	.	.
PI	0.154	0.417	.	.	.
SA	0.823	-0.151	.	.	.
TC		0.517	.	.	.

Table 4. Original Path Coefficient

	CA	MA	PI	S.A	TC
CA	.	.	.	.	.
MA	0.341		.	.	.
PI	0.217	0.231	.	.	.
SA	0.228	0.115	.	.	.
TC		0.328	.	.	.

Table 5. Total Influence Result Segment Pos 1

	CA	MA	PI	S.A	TC
CA	.	.	.	.	.
MA	0.431		.	.	.
PI	0.531	0.336	.	.	.
SA	0.51	0.047	.	.	.
TC	0.196	0.454	.	.	.

Table 6. Total Influence Result Segment Pos 2

	CA	MA	PI	S.A	TC
CA	.	.	.	.	.
MA	-0.306		.	.	.
PI	0.531	0.336	.	.	.
SA	0.51	0.047	.	.	.
TC	0.196	0.454	.	.	.

In PLS-SEM estimation, the first step is to estimate the measurement model, also known as the outer model. This involves measuring components, showing how well the indicator items fit theoretically and correspond to each construct. In addition, the estimation of the outer model also confirms whether survey items measure the respective constructs, as assumed to be measured, thereby ensuring their validity and reliability. Reliability and validity are important criteria used to estimate external models in PLS-SEM analysis. The validity and reliability of the measurements also determine the

association of variables in the inner model. Furthermore, external model compatibility can be observed by assessing 1) the reliability of individual items, such as internal consistency reliability and indicator reliability, using a composite reliability measure; 2) discriminant validity of the model using external loading and Fornell and Larcke convergent validity for individual measures of the construct through AVE. It starts with internal consistency, which determines the consistency between the same test items, i.e., whether the construct items show the same score. Thus, the internal consistency of this study was measured through composite reliability.

The CR value lies between 0 and 1 and has 0.60 as a threshold value but must be equal to or above 0.70 to be at the desired level. If the CR value is between 0.6 and 0.7, it represents an average internal consistency, whereas if the CR is between 0.7 and 0.9, it represents an adequate level of internal consistency. Another criterion is convergent validity, which is defined as the degree to which two measures of the same construct that are supposed to be related theoretically turn out to be related to each other. Thus showing the degree of correlation between the exact construct sizes.

The mean of the extracted values (AVE) was used, with 0.50 as a threshold value or sufficient convergent validity. Therefore, latent constructs show an adequate level of convergent validity and explain half the variance of the indicators. After the wards, discriminant validity was observed, indicating whether the measurements assumed to be unrelated are unrelated to each other. Criteria are the standard approaches to confirm discriminant validity for this study. In addition, the cross-loading method can also be used to check discriminant validity because it is more radical and has more constructs (Table 7).

Finally, to test the contribution of indicators in the specified construct, external factor loads are obtained. The value for external load must show a value of 0.50 or above. It has been suggested by Hair Jr et al. (2013) that if the external load shows a value below 0.70 and a value above 0.40, it must be observed and removed carefully if it is higher than the AVE and CR value.

Table 7. Indirect Effect

Segment Pos 1	Segment Pos 2	Original Indirect Effect		
CA	CA	MA	PI	SA
MA				
PI	0.145			
SA	0.020			
TC	0.190			

Table 8. Outer Weight

Segment Pos 1	Segment Pos 2	Original Indirect Effect			
TX1.1.	CA	MA	PI	SA	TC
				-0,762	
X1.2				-0,419	
X1.3				0,119	
X1.4				-0,176	
X1.5				-0, 539	
X2.1					0,036
X2.2.					0,425
X2.3					0,375
X2.4					0,457
X2.5					0,566

Table 3 Outer Loadings

X1.1				-0,701	
X1.2				0,426	
X1.3				0,094	
X1.4				-0,092	
X1.5				0,524	
X2.1					0,123
Y2.2					0,644
Y2.3					0,519
Y2.4					0,347
Y2.5					0,667

Source: Results of research data processing (2022)

The next step after examining collinearity is the estimation of the structural model. Estimating a structural model involves the following: steps namely checking predictive relevance, coefficient of determination, significance of path coefficient, and coefficient of determination (Fig. 3 and Table 8).

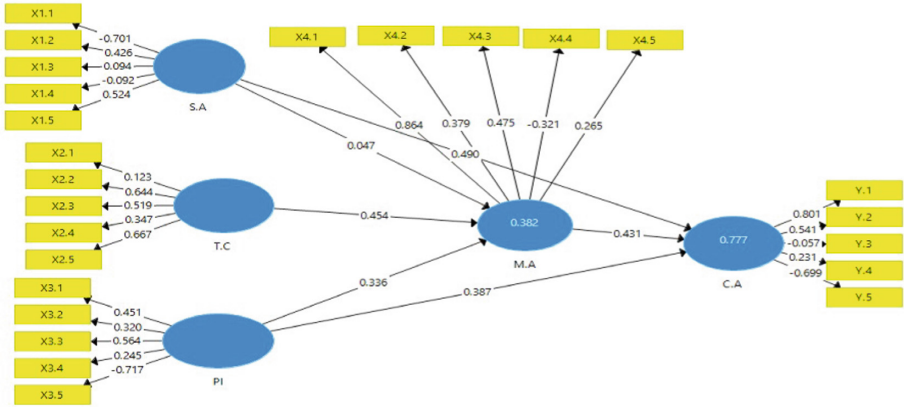


Fig. 3. PLS SEM Algorithm Results. Source: Results of research data processing from Software PLS (2022)

After that, a bootstrap procedure was used, which tested the path model for the direct relationship between the dependent and independent variables, regardless of the role of the mediator. The path coefficient obtained through the PLS SEM algorithm and the t value obtained from the bootstrap procedure is a path model. The model's path with the mediator variables is estimated in the second step. The main emphasis is to assess whether the mediator relationship between the dependent and independent variables is significant. This is a necessary but not sufficient condition for determining the effect of the mediator. Finally, to determine the significance of the indirect effect, the product of the path coefficients for the two indicators is divided by the standard error of this product.

5 Conclusion

The relationship between SA, TC, PI, MA, and CA Competition is one of the prominent constructs in the management, strategy, and entrepreneurial literature that influences Competitive Advantage. Preliminary studies investigating business performance have demonstrated the importance of SA constructs on corporate actions. Several experts theorize about the relationship between SA and firm performance. Research has reported on corporate performance that companies characterized by entrepreneurial behavior, such as risk-taking, innovation, and proactiveness, can achieve superior performance. For example, this study aligns with Yang et al. (2008) argument that superior business performance can be achieved if the company has healthy entrepreneurial behavior. The effect of SA on firm performance has been confirmed, who reported the direct impact of proactiveness, autonomy, and innovation on firm performance. Similarly, SA improves firm performance because most competing firms exhibit some or all of the SA activity. In addition, it has been reported that the company's business achieves superior competition through SA. Other Researches on SA and competitiveness and innovation report a direct relationship and indirect effect of SA on competitive advantage.

Therefore, MA acts as a significant indicator of company performance because market-oriented companies have the ability to improve financial performance and satisfy customer needs through feedback. With their preferences, needs, and through tracking. This research provides insight into the relationship between the Strategic Alliance, Tacit Collusion, Product Innovation, market orientation, and the Competitive Advantage of SMEs in Timor Leste. This research provides a clear understanding of the relationship between competitive SMEs in Timor Leste and the strategic Alliance, Tacit Collusion, Product Innovation, and what role Market Area access mediation plays in this relationship. This research discusses that it seems necessary to identify strategic variables that may reflect the management mentioned above activities or processes, such as cooperation, tacit cooperation, innovation, and market areas, which SMEs use and may affect their competitive advantage. This research is one of the pioneering studies on issues related to strategic alliance, tacit collusion, market are, entrepreneurial orientation, tacit collusion, and access to markets in Timor Leste. Thus, the current research has used the SEM-PLS as a statistical tool to answer the research questions raised in this research and the research objectives described in the current study. The findings of the current study have provided support for the hypothesized results.

This Riste argues that in order to face current external opportunities and threats, knowledge, and skills to improve their current and future performance should be provided to organizations will be very helpful for policymakers and researchers in examining the relationship between market orientation, entrepreneur orientation, learning orientation, technology orientation, and access to finance in Competition in Timor Leste SMEs in Timor Leste. Technology companies may have the will and ability to use them to learn better technology and achieve a competitive advantage. The company, Tacit Collusion, adopt innovation and market areas as strategic priorities, which results in adaptability, acquiring technical skills, being proactive, and creativity in developing services and products. Thus, in order to achieve product differentiation and innovative product design, there is a need to provide ultimate solutions, which in turn improve enterprise performance.

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