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Does the Pricing Strategy increase the Competitive Advantage for companies implementing the ABC System?

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Abstract. This study aims to investigate the extent to which the Pricing Strategy is able to create an effective Competitive Advantage for companies implementing the ABC System in their production activities. The research of the data were obtained through questionnaire-based survey from several manufacturing companies in Indonesia implementing ABC System. This research used Structural Equation Model (SEM) with Partial Least Square statistical method. The results of this research indicate that those companies applying Activity Based Costing System are proven to be capable of making companies' Pricing Strategy more effective and increasing their Competitive Advantages. The empirical results show that price competition is unavoidable among manufacturing industries. However, implementing Activity Based Costing System can increase manufacturing companies' Competitive Advantage. Thus, the implementation of ABC System employs the Pricing Strategy as a determinant factor of Competitive Advantage. This research supports the results of previous studies that also concluded that there is a strong relationship between Activity Based Costing System and Competitive Advantage. In addition, this research found that Pricing Strategy could improve Competitive Advantage by implementing Activity Based Costing System.

Keywords: Activity Based Costing System; Competitive Advantage; Pricing Strategy

Abstrak. Studi ini bertujuan untuk menginvestigasi sejauh mana Strategi Penetapan Harga mampu menciptakan Keunggulan Bersaing yang efektif bagi perusahaan yang menerapkan Sistem Activity Based Costing dalam kegiatan produksinya. Data dalam penelitian ini didapatkan menggunakan survei berbasis kuesioner dari perusahaan manufaktur di Indonesia yang menerapkan Sistem Activity Based Costing. Penelitian ini akan menggunakan Structural Equation Model (SEM) dengan metode statistik Partial Least Square. Hasil penelitian ini menunjukkan bahwa perusahaan yang menerapkan Sistem Activity Based Costing terbukti mampu membuat Strategi Penetapan Harga perusahaan lebih efektif dan sekaligus berdampak pada peningkatan Keunggulan Bersaing. Hasil empiris menunjukkan bahwa persaingan harga tidak dapat dihindari dalam industri manufaktur. Tetapi, dengan menerapkan Sistem Activity Based Costing, perusahaan manufaktur mampu meningkatkan Keunggulan Bersaing. Sehingga, kebadiran Sistem Activity Based Costing menjadi Strategi Penetapan Harga sebagai penentu Keunggulan Bersaing. Penelitian ini memperkuat hasil penelitian sebelumnya yang juga menyimpulkan bahwa ada hubungan yang kuat antara Sistem Activity Based Costing dan Keunggulan Bersaing. Dalam penelitian ini, juga menemukan kesimpulan bahwa Strategi Penetapan Harga mampu meningkatkan Keunggulan Bersaing melalui implementasi Sistem Activity Based Costing.

Katakunci: Sistem Activity Based Costing; Keunggulan Bersaing; Strategi Penetapan Harga.

Introduction

Manufacturing sector is one of the sectors that drives Indonesian economic growth. The Ministry of Industry stated that manufacturing industry performance highly contributed

to the national gross domestic product (GDP) structure up to 20.07% in the first quarter of 2019 (Ministry of Industry Website Management Team, 2019) therefore its development and growth become the driving force of Indonesian

economic growth. However, since the implementation of the Asean Economic Community (AEC), the competition among ASEAN manufacturing industries get fiercer due to the entry of foreign manufacturing industries.

Based on the 2016 Global Manufacturing Competitiveness Index (GMCI), the competitiveness of Indonesian manufacturing industry in the Asean region is below Singapore, Thailand, Malaysia and Vietnam (Giffi, 2013). Indonesia with index score of 55.8 occupies ranking 19 under Singapore which is at ranking 10 with index score of 68.4, followed by Thailand at ranking 14th with index score of 60.4, then Malaysia at ranking 17th with index score of 59.0, and finally Vietnam is at ranking 18th, with index score of 56.5. Therefore, Indonesian manufacturing companies must improve their Competitive Advantage in order to maintain its position in the fierce business competition.

Competitive Advantage is the companies' ability to maintain its position against competitors by creating products or services that are superior to its competitors (Li et al., 2006). To survive and hold Competitive Advantage, companies must observe customer demands to be more flexible, integrated, and automated in order to increase their productivity then lower production costs (Özbayrak et al., 2004). A company is stated as holding Competitive Advantage when it can provide a product or service at a lower cost but higher quality than its competitors (Wanjiku, 2012).

Price can be used by business to differentiate itself over its competitors and is also a major determinant of the

companies' profitability (Simon et al., 2008). The price set by the company will determine whether the company hold Competitive Advantage compared to its competitors (Dutta et al., 2003). In line with this statement, Tuncel et al.(2005) adds that without proper cost calculations, companies will not have Competitive Advantage. Therefore, to achieve Competitive Advantage, the company must well regulate its Pricing Strategy in order to manage the market control, profitability, and cost effectiveness because customers will choose affordable goods with the same or even better quality (Bregman, 1995; T.Nagle & Hogan, 2007).

Pricing Strategy is one of the most important management decisions because it affects the companies' profitability and returns along with its market competitiveness (Monroe, 2003). In choosing the appropriate Pricing Strategy, companies must understand customer perceptions on prices, how to develop customer perceived value, pricing objective, and the companies' competitive position in the market (De Toni et al., 2017; Hinterhuber & Liozu, 2014; Monroe, 2003). A research conducted by Cardinaels et al., (2004) found that market information would not credibly reflect customer demand and cost factors, Cardinales proved that Activity Based Costing System model provided more accurate pricing information.

Activity Based Costing System is a cost planning system that tracks costs to calculate a product price based on the activities that consume resources and products or services (Chongruksut & Brooks, 2005).With Activity Based

Costing System information, the calculation of production cost will be more accurate and it also increase the effectiveness of decision making by the manager¹⁶ (Fatma, 2013). Various studies (Bhimani & Pigott, 1992; Innes & Mitchell, 1995; Krumwiede & Roth, 1997; Turney, 1996) support this statement, agreeing that Activity Based Costing System provides accurate calculation of production costs.

Activity Based Costing System can be utilized by manufacturing companies to improve manufacturing competitiveness that allows companies to make better decisions based on a better understanding of the companies' cost structure (Raz & Elnathan, 1999). Activity Based Costing System is developed to analyze the determinants of activity in terms of product and process design features to provide information on the cost implications of alternative design options. Activity Based Costing System can isolate various factors under the companies' control which can be used to influence manufacturing costs (Banker et al., 2008).

Companies adopting Activity Based Costing System provide accurate and reliable cost information for company managers²⁰ identify indirect cost components more precisely and contribute to a better understanding of how these product costs affect company performance (Azubike, 2017). A research conducted Pierce & Brown (2004) reports the highest percentage of the companies adopting Activity Based Costing System is the manufacturing sector (34.9%), followed by the financial services sector (28.6%), and the service sector (17.8%). Banker et al., (2008)

found a positive impact of Activity Based Costing System on factory performance in world-class manufacturing practices.

Some previous researches on Activity Based Costing System associate activity based costing with the companies' performance - financial performance/operational performance (Kennedy & Affleck-Graves, 2001; Krumwiede & Charles, 2014; Maiga & Jacobs, 2003; Rendy & Devie, 2013), business strategy (Elhamma & Fei, 2013; Mahesa et al., 2019) and also Competitive Advantage (Behesh¹, 2004). However, research on the relationship between Activity Based Costing System and Competitive Advantage has not been widely discussed, especially regarding the relationship between the two with the Pricing Strategy.

Previous studies have already argued and examined the importance of activity-based costing for determining pricing strategy (Coskun & Yilmaz, 2013; Lu et al., 2017; Raucci et al., 2020). Some other studies have also highlight the importance of pricing strategy in pursuing competitive advantage (Agbaeze et al., 2020; BAČÍK et al., 2014; Cressman, 2012; Jun & Lee, 2020; Nair, 2019). Therefore, it can be concluded that most previous studies only examine these relationships separately. However, there¹ were very limited studies combine the relationship between activity-based costing, pricing strategy, and their impact on competitive advantage.

Activity Based Costing System, Pricing Strategy, and Competitive Advantage are closely related. Implementing Activity Based Costing System in calculating cost production can help companies/managers to take proper

decisions, especially in considering Pricing Strategy as the basis for the company to reach Competitive Advantage.

The result shows that pricing strategy is able to mediate the relationship between activity based costing and competitive advantage. In the relation with resource-based theory, activity based costing will better inform decision maker to make more precision pricing strategy, and this unique internal competency could be seen as a unique resource in the form of knowledge (Arasa & Achuora, 2020). Since implementing activity-based costing involves big investment, the finding in this study incurs some important implications toward management especially in the manufacturing companies.

This study contributes to the literature as one of the few studies that combine the identification of the impact between activity-based costing, pricing strategy, and on competitive advantage. Furthermore, this study focuses on competitive advantage of manufacturing companies in Indonesia that already implement activity-based costing, and how pricing strategy can mediate the influence of activity-based costing on competitive advantage.

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Resource-Based View Theory

Jay Barney (1991) developed Resource Based View concept which states that the organization will reach sustainable Competitive Advantage if it has valuable, unique, rare resources which are difficult to imitate. Those particular resources will help the company exploiting opportunities and avoiding threats in the environment

(Barney, 1991), allowing the company to implement strategies to increase their efficiency and effectiveness (Capron & Hulland, 1999). Resource Based View Theory is useful for analyzing internal resources of the organization and emphasizing the resources as well as the ability to formulate strategies in order to reach sustainable Competitive Advantage (Madhani, 2010).

Resource Based View states that a valuable resource will enable the company to reduce costs while set the price for a product or service at the same time (Joyce & Winch, 2004). Dutta et al., (2003) argued that to maintain the existing Competitive Advantage, the company must choose an appropriate Pricing Strategy to set prices and increase economic potentials. The companies' capability to set the right price is an important means of adjusting value and a significant determinant of the companies' ability to generate value.

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Activity-Based View Theory

Activity Based View theory proposed by Porter (1998) complements the Resource Based View theory and states that competitive strategy is manifested in the company activities competing in certain businesses to reach its Competitive Advantage. Through those company activities, company resources will generate value for customers (Porter, 1998; Ray et al., 2004). Porter (1998) adds that activity driver such as the utilization of capacity, location and scale can push the company to create value for customers through lower costs to produce efficient, qualified, innovative, and effective outcome of the company activities.

With Activity Based View, the company will gain an advantageous position by configuring its separate industry-specific activities using cost driver (Hill & Jones⁴¹ 2012; Peteraf & Barney, 2003) so as to identify the value added activities and non value added activities (Wegmann¹⁵ & Nozile, 2009). This analysis uses Activity Based Costing System and can help companies to achieve overall efficiency by reducing or eliminating its non value added activities. With Activity Based View, the cost driver used in Activity Based Costing System will reduce activity costs by lowering input costs or reduce the input number needed to produce the same output (Hill¹⁵ Jones, 2012; Peteraf & Barney, 2003). In addition, Activity Based View can help the company in increasing production efficiency and thus reduce costs and boosts profitability (Demsetz, 1973; Foss, 1997).

³⁵ The Definitions of Activity Based Costing System

Activity Based Costing System is a cost planning system that tracks costs to calculate a product price based on the activities that consume resources (Chongruksut & Brooks, 2005). Chongruksut & Brooks mention²⁹ that there are 7 important factors in the implementation of Activity Based Costing System, they are top management support, competition, performance evaluation and compensation, training, non-accounting ownership, resources, consensus and clarity of objectives. The main purpose¹⁴ Activity Based Costing System is to provide detailed information that describes the range of costs and consumption in the activities done

throughout the organization as well as to provide accurate information to managers to improve their decisions including on the competitive pricing (Holmen, 1995).

Activity Based Costing System emphasizes that most costs can be traced by assigning costs to the activities required to produce outputs so that the calculation¹⁵ of the product main cost applying Activity Based Costing System will be more accurate than traditional²³ systems (Sumarsid, 2011). Besides, the application of Activity Based Costing System can help employees to analyze costs and identify activities that improve value (value added) and activities that do not improve value (non value added) (Wegmann & Nozile, 2009). This analysis can help companies to achieve overall efficiency by reducing or eliminating its non value added activities.

The Definitions of Pricing⁷ strategy

Pricing Strategy is one of the most important management decisions because it affects the companies' profitability and returns along⁴⁶ with its competitiveness (Monroe, 2003). In order to be able to compete in the market, a company must well regulate its Pricing Strategy so as not to lose control of the market, lower its profitability and cost-effectiveness (T.Nagle & Hogan, 2007). Nagle and Hogan also argued that the appropriate Pricing Strategy will affect customer consumption level because the price the customer willing to pay depends on the price set by the main competitor, therefore inappropriate Pricing Strategy allows customers to increase their bargaining power, forcing a price reduction or discount.

Pricing Strategy can be classified into three: Cost Based Pricing, Customer Value Based Pricing, and Competitor Based Pricing. Cost Based Pricing is a pricing method based on the total costs incurred to produce a product sold and adding a certain percentage as profit. Customer Value Based Pricing is a method of pricing products based on the value of the product for the customer, not on production costs. Competitor Based Pricing focuses on the prices of similar products released by similar industries (T.T.Nagle & Holden, 2003).

The Definitions of Competitive Advantage

Competitive Advantage is defined as the companies' ability to maintain their position from the competitors (Li et al., 2006). Competitive Advantage is the advantage obtained from competitors by providing consumers with higher value, either by offering lower price or giving greater benefits and services at higher price (Kurt Christensen, 2010). The research conducted by Li et al., (2006) stated that price/cost, quality, delivery dependability, product innovation, and time to market are some important factors of Competitive Advantage.

The companies with Competitive Advantage have the opportunity to create later, or at least more efficient, economic value than its competitors (Peteraf & Barney, 2003). Saloner et al., (2011) argued that companies with Competitive Advantage can produce multiple services or products with higher customers value than those produced by competitors or it may produce a service or product at a lower cost than its competitors. Companies are considered to have Competitive Advantage when

they have achieved more advantages than the market competitors, or when companies can surpass their competitors in the other significant activities (Huff et al., 2009).

Effect of Activity Based Costing System Pricing Strategy

Activity Based Costing System has become an effective tool for management because the information provided can be used in many managerial decisions, includes pricing (Vasilić, 2017). Activity Based Costing System allows the construction of initial unit cost and price simulations of the sales object that support the implementation of competitive Pricing Strategy (Stevenson et al., 1993). Brierley et al. (2001) analyzed many product pricing practices and their effects on the pricing in European manufacturing sectors. The research shows that one of the most important considerations for European companies in setting good prices for their products is their Activity Based Costing System information. Cardinaels et al., (2004) also provided some experimental evidences about the advantages of developing a pricing system using ABC system in 120 health care organizations. It was found that ABC System provided more accurate cost information so that the decision makers had better understanding of proper pricing strategy.

In addition, Bromwich & Hong (1999) in their study that focused on the analysis of Activity Based Costing System success that helps businesses in accurately measuring production costs before deciding the right price. Bromwich and Hong found that the cost estimation method without using ABC System might provide wrong data management to make

decisions, especially in Pricing Strategy. Failing to meet the ABC System requirements can distort the production costs and thus weaken the companies' competitive position. With Activity Based Costing System, companies can have a better understanding and basis of the costs, thus enabling companies to formulate more precise Pricing Strategy (Dickeson, 2001).

H1: Activity Based Costing System affects Pricing Strategy.

Effect of Pricing Strategy on Competitive Advantage

Hinterhuber & Liozu, (2014) pointed that pricing is fundamental to improve financial performance and can influence Competitive Advantage. To achieve the Competitive Advantage, companies must regulate its Pricing Strategy well in order to manage the market control, profitability, and cost effectiveness because choose affordable goods with the same or even better quality will highly attract customers (Bregman, 1995; T.Nagle & Hogan, 2007).

Choosing the wrong Pricing Strategy for a product will lessen market demand for the product, therefore setting the price to a lower rate may help companies to maintain its existence; in addition, when the product price is higher than what it should be, companies may lose its customers (Deshpande, 2018). Thus, an appropriate Pricing Strategy is a strong factor in attracting attention, increasing sales, and also a big influence on customer loyalty that determines companies' Competitive Advantage (Avlonitis & Indounas, 2006).

H2: Pricing Strategy affects Competitive Advantage

Effect of Activity Based Costing System on Competitive Advantage

Activity Based Costing System has been suggested as an appropriate tool to guide and direct the improvement process because ABC System can reduce product costs and lower product prices. The implementation of Activity Based Costing System will classify the companies' activities to value added ones and non-value added ones. This will help companies to eliminate its non-value added activities with the collected Activity Based Costing System information (Gunasekaran & Sarhadi, 1998) and lead to the Competitive Advantage establishment. With Activity Based Costing System, companies can create products with Competitive Advantage because the production costs can be reduced that leads to lower selling price and better Competitive Advantage compared to its competitors (Sheehan & Foss, 2009).

In addition, companies adopting Activity Based Costing System can obtain better Competitive Advantage than its competitors because Activity Based Costing System provides accurate cost information (Kalićanin & Knežević, 2013). Moreover, by gaining a better understanding of the costs through Activity Based Costing System implementation, management can take better decisions in terms of Competitive Advantage i.e. creating better quality products at competitive prices (Bogdănoiu, 2009). Therefore, Activity Based Costing System is a powerful tool whose the implementation can enhance companies' competency in managing Competitive Advantage.

H3: ¹ Activity Based Costing System affects Competitive Advantage

Research Methodology

Sample

This research uses quantitative case study approach with primary data. The data and information in this study were collected using questionnaire in a survey that was developed from previous studies to test the hypotheses presented. In this case the respondents are to fill out an assessment with a five-point Likert scale, where 1 point means strongly disagrees, and 5 points if the respondent strongly agrees with the statement given. The questionnaire was distributed on September 2020 and ended in two months later on November 2020.

This research used non-probability sampling technique. Non probability is a sampling technique that does not provide chances for every element or member of the population to be selected as part of the sample. Sample selection was done using purposive sampling method where the samples are not randomly selected, and information is obtained based on certain criteria. In this research, the samples selected were those that met the following criteria: (a) manufacturing company located in Indonesia and is still operating, (b) having an active email address, (c) implementing ABC System in its operations. Based on these criteria, there were 69 samples that met the requirements.

Measures

There are three research variables, namely Activity Based Costing System as the independent variable, Pricing Strategy as intervening variable, and Competitive Advantage as dependent variable. Table

A1 in the appendix shows the definition of the variables in this study. The list of questions for each item in this study is structured in Table A2-A4 in the appendix. The instrument used in this study was Likert scale of 1 to 5. Scale 1 indicates strongly disagree, scale 2 indicates fairly disagree, scale 3 indicates disagree, scale 4 indicates agree and scale 5 indicates strongly agree.

To measure Activity Based Costing System, this research adopted 7 important factors in the implementation of Activity Based Costing System by Chongruksut ⁶ Brooks (2005) which consisted of top management support, competition, performance evaluation and compensation, training, non-accounting ownership, resources, consensus and clarity of objectives. Next, to measure Pricing Strategy, this research used 3 groups of Pricing Strategy by T.T.Nagle & Holden (2003) namely Cost Based Pricing, Customer Value Based Pricing, and Competitor Based Pricing. Meanwhile, to measure Competitive Advantage, this research employed 5 important factors of Competitive Advantage which was adopted from a research ³⁸ Li et al., (2006) which consists of price/cost, quality, delivery dependability, product innovation, and time to market.

Data analysis

² The data was analyzed using Partial Least Square (PLS) with WarpPLS software to test its validity, reliability, and the hypothesis. WarpPLS was chosen because it could process smaller samples (J.F.Hair et al., 2011). With PLS, the influence between variables in this research can be predicted. PLS has two models, they are inner model and outer

model. Inner model can be used to test relationship between variables, while outer model is used to test the validity and reliability of the study.

Results and Discussion

This study distributed 200 questionnaires and 92 questionnaires returned. However, those who meet the criteria, namely those who apply the ABC System to their company are only 69 respondents (75%) and those who do not meet the criteria are those who do not apply the ABC System as many as 23 respondents (25%). The use of input data required by PLS is a minimum of 30 data or questionnaires, then the sample received is declared eligible so that the data to be tested and processed is 69 respondents. Most of the respondents who answered this questionnaire were large companies with more than 1000 employees with a total of 43 respondents (62%) while 26 respondents (37%) were companies with less than 1000 employees. This shows that most of companies that implement activity based costing are large companies according to the sample gathered.

Model suitability test in table 1 reveals that this model is acceptable because it conforms to the minimum limit. In addition, we calculated the model suitability of the measurement and the quality index value, it was found that it fits well (J.Hair et al., 2014). This research also adopted Kock (2015) suggestion on the use of nonlinear bivariate causality direction ratio (NLBCDR) to test for causality. The result confirms that NLBCDR value is 0.833, that is greater than the required limit of 0.7.

Table 2 presents the respondents' scores in research variables. The mean value is found to be greater than 3.40, indicating that the respondents' response to the ABC, PS, and CA variables is quite high. In addition, the standard deviation

value of each variable is in the range of 0.533–1.033 that is considered high. It means that the respondent answered questions with a high degree of diversity. Based on Table 2, it can also be concluded that each indicator in the measured construct has a higher loading value than the loading value on other constructs. Therefore, it can be concluded that the constructs have sufficient discriminant validity.

Table 3 shows the value of the measurement model in relation to the correlation between constructs. The result indicates that the square root AVE value or the diagonal value is greater than 0.50. This value describes the validity or convergent construct which explains more than half of the variance indicators. In addition, each composite reliability and cronbach's alpha value reaches the acceptable range of 0.7. Thus, this research model is proven to be reliable.

Table 4 shows the effect sizes for the path coefficients. All values in the table below are more than 0.02, it means that they have sufficient effect to be declared as relevant from a practical point of view. Figure 1 describes the SEM model applied in this research. The beta coefficient (β) shows the strength of the relationship between the latent variables associated with the arrows. The results are highly significant with $p < 0.001$.

Table 5 explains the direct effect as well as the indirect effect of the variables. Based on the research results, the R^2 value obtained is 0.42, means that 42 percent of changes in the variation of the PS variables can be described by the ABC variable with the ABC variable path coefficient of 0.65. The direct effect of CA described by ABC and PS of 0.54 with ABC and PS variable path coefficients of 0.76 and 0.21, respectively. Afterwards, R^2 is used to calculate Goodness of Fit (GoF) as follows $Q^2 = 1 - ((1 - 0.42) \times (1 - 0.54)) = 73\%$. The indirect influence score from ABC in CA

With the mediating variable PS 0.42 means that PS is able to mediate the relationship between ABC and CA. ABC total score can positively influence CA directly and indirectly.

The success of Pricing Strategy in building Competitive Advantage is very much determined by the implementation of ABC System because the applied Pricing Strategy may help companies to increase their competitiveness by reducing production costs to be able to adjust prices according to their customer preference. If the companies do not implement ABC System, the Pricing Strategy chosen by the company has less potential to help the company in achieving Competitive Advantage. Pricing Strategy chosen by the company will impact on Competitive Advantage if the company applies ABC System through top management support, competition, performance evaluation and compensation, training, non-accounting ownership, resources, consensus and clarity of objectives.

This research proves that the manufacturing sector implemented ABC System could reach Competitive Advantage more effectively through a Pricing Strategy, it is proven with the high average response score (Table 2). The highest average Pricing Strategy obtained is the PS5 points which indicates that Cost Based Pricing is the approach most used by respondents when companies apply ABC System. This result is supported by Hinterhuber (2008) which states that the main source for setting prices is the data resulted from cost accounting using Cost Based Pricing. Cost Based Pricing is considered quite simple because this calculation can be obtained by adding up direct costs and overhead costs (Calabrese & De Francesco, 2014).

Competitive Advantage allows the organization to differentiate itself from its competitors and Competitive

Advantage itself is the result of critical management decisions (Tracey et al., 1999). The results of this research found that the points got highest average in the Competitive Advantage section are point CA4 and CA6, It means that the manufacturing company provides even offers the highest quality products and reliable product delivery.

This research also proved that ABC System has a positive effect on Pricing Strategy in tracing costs to calculate product prices (Hypothesis 1). This is in line with previous studies (Bhimani & Pigott, 1992; Innes & Mitchell, 1995; Krumwiede & Roth, 1997; Turney, 1996) that found similar results. Another result found is that Pricing Strategy has positive effect on the Competitive Advantage building (Hypothesis 2). These results confirm several previous studies (Bregman, 1995; Dutta et al., 2003; T.Nagle & Hogan, 2007; Tuncel et al., 2005; Agbaeze et al., 2020; BAČIK et al., 2014; Jun & Lee, 2020; Nair, 2019). The findings of this research also prove that ABC System has a positive effect on Competitive Advantage because it can produce competitive products (Hypothesis 3). This finding supports previous researches (Bogdănoiu, 2009; Gunasekaran & Sarhadi, 1998; Kalićanin & Knežević, 2013) that found the same results, stating that ABC System was used in managing Competitive Advantage.

In general, it can be concluded that all the hypotheses presented in this research are acceptable because they have significant effects (Figure 1). Pricing Strategy is able to mediate ABC System influence to the achievement of companies' Competitive Advantage. In other words, Pricing Strategy can support and strengthen the influence between ABC System to Competitive Advantage. Therefore, Pricing Strategy can affect Competitive Advantage directly or indirectly.

Resource-based View states that the sustainable Competitive Advantage could be achieved if organization has valuable, unique, rare resources which are difficult to imitate. It requires company exploring its own internal competencies that would be considered the best to obtain competitive advantage (Arasa & Achuora, 2020). Activity-based costing will better inform decision maker to set optimal pricing strategy. This is in line with previous studies that examine the relationship between activity-based costing practice and pricing (Coskun & Yilmaz, 2013; Lu et al., 2017; Raucci et al., 2020).

Implementing activity-based costing involves big investment. However, implementing activity-based costing can better inform decision maker by better explain indirect cost and

resulting in better cost-informed pricing. Agbaeze et al. (2020) conclude that cost-informed pricing practice has positively significant impact on performance. Those cost information could be used to implement unique pricing strategy based on the organization direction. Furthermore, different human capital on different organization with similar direction could implement different pricing strategy.

Therefore, the result of this study which shows that pricing strategy is able to mediate the relationship between activity based costing and competitive advantage incurs important implication for management in organization. This unique internal competency of implementing activity based costing and translate it toward certain kind of pricing strategy could be seen as a unique resource of the organization to achieve competitive advantage.

Table 1. Model fit and quality indices

Average path coefficient (APC)=0.541, P<0.001
Average R-squared (ARS)=0.478, P<0.001
Average adjusted R-squared (AARS)=0.466, P<0.001
Average block VIF (AVIF)=1.445, acceptable if ≤ 5 , ideally ≤ 3.3
Average full collinearity VIF (AFVIF)=1.859, acceptable if ≤ 5 , ideally ≤ 3.3
Tenenhaus GoF (GoF)=0.495, small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36
Sympson's paradox ratio (SPR)=1.000, acceptable if ≥ 0.7 , ideally = 1
R-squared contribution ratio (RSCR)=1.000, acceptable if ≥ 0.9 , ideally = 1
Statistical suppression ratio (SSR)=1.000, acceptable if ≥ 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)=0.833, acceptable if ≥ 0.7

Table 2. Indicator's Loading, cross loading value, mean and standard deviation

	ABC	PS	CA	SE	p-value	Mean	SD
ABC1	(0.532)	-0.231	0.201	0.101	<0.001	4.58	0.579
ABC2	(0.523)	-0.237	0.017	0.101	<0.001	4.54	0.698
ABC3	(0.696)	-0.373	0.174	0.095	<0.001	4.49	0.699
ABC4	(0.589)	-0.201	0.305	0.099	<0.001	4.61	0.699
ABC5	(0.630)	-0.384	0.292	0.097	<0.001	4.52	0.699
ABC6	(0.672)	-0.077	0.036	0.096	<0.001	4.61	0.599
ABC7	(0.634)	0.317	0.002	0.097	<0.001	4.26	0.980

ABC8	(0.624)	0.184	0.037	0.098	<0.001	4.14	1.033
ABC9	(0.719)	0.079	-0.096	0.095	<0.001	4.28	0.838
ABC10	(0.763)	0.075	-0.130	0.093	<0.001	4.29	0.859
ABC11	(0.715)	-0.040	-0.306	0.095	<0.001	4.33	0.869
ABC12	(0.757)	0.127	-0.288	0.093	<0.001	4.39	0.771
ABC13	(0.776)	0.245	-0.155	0.093	<0.001	4.29	0.750
ABC14	(0.698)	0.330	0.108	0.095	<0.001	4.46	0.698
PS1	-0.213	(0.611)	0.209	0.098	<0.001	4.14	0.625
PS2	-0.253	(0.733)	-0.012	0.094	<0.001	4.14	0.772
PS3	-0.467	(0.580)	0.298	0.099	<0.001	4.22	0.661
PS4	-0.163	(0.679)	0.178	0.096	<0.001	4.12	0.777
PS5	0.213	(0.841)	-0.146	0.091	<0.001	4.41	0.773
PS6	0.659	(0.786)	-0.370	0.093	<0.001	4.33	0.852
CA1	0.130	-0.165	(0.781)	0.093	<0.001	4.67	0.560
CA2	0.138	-0.189	(0.820)	0.092	<0.001	4.61	0.647
CA3	-0.018	-0.090	(0.864)	0.090	<0.001	4.67	0.560
CA4	-0.032	0.025	(0.875)	0.090	<0.001	4.68	0.556
CA5	-0.614	0.311	(0.559)	0.100	<0.001	4.49	0.779
CA6	0.152	-0.143	(0.867)	0.090	<0.001	4.68	0.528
CA7	-0.316	0.436	(0.554)	0.100	<0.001	4.65	0.590
CA8	0.051	0.031	(0.731)	0.094	<0.001	4.55	0.697
CA9	0.118	0.257	(0.655)	0.097	<0.001	4.32	1.007
CA10	0.117	-0.167	(0.853)	0.091	<0.001	4.49	0.720

Table 3. Correlation among latent variables with sqrts.of AVEs, composite reliability and Cronbach's alpha

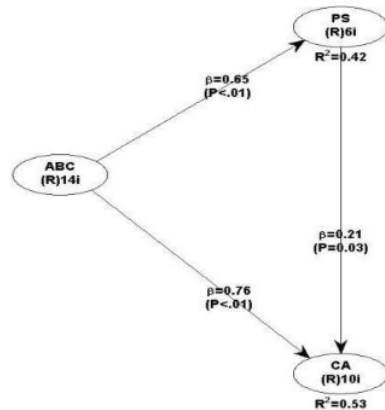
	ABC	PS	CA	Composite reliability	Cronbatch's alpha
ABC	(0.671)	0.609	0.571	0.919	0.904
PS	0.609	(0.711)	0.209	0.858	0.800
CA	0.571	0.209	(0.765)	0.932	0.917

Table 4. Effect size for path coefficients

	ABC	PS	CA
ABC	-	-	-
PS	0.420	-	-
CA	0.491	0.045	-

Table 5. Inner model result

	Direct effect	Indirect effect	Total effect
ABC → PS	0.65 (p <.01)	-	0.648 (p <0.001)
PS → CA	0.21 (p 0.03)	-	0.213 (p 0.030)
ABC → CA	0.76 (p <.01)	ABC → PS → CA 0.138 (p 0.046)	0.901 (p <0.001)

**Figure 1.** PLS-based structural equation model

Conclusion

Since the implementation of the Asean Economic Community (AEC), the competition among ASEAN manufacturing industries get fiercer due to the entry of foreign manufacturing industries. Therefore, Indonesian manufacturing companies have to improve their Competitive Advantage in order to maintain its position in the fierce

business competition. This research focuses on maintaining and improving the companies' Competitive Advantage by implementing Activity Based Costing System with Pricing Strategy as an intervening variable.

This study tried to fill the gap where there were very limited studies combining the relationship between activity-based costing, pricing strategy,

and their impact on competitive advantage. Most previous studies only examine the relationships between these three variables separately despite they are closely related. Furthermore, this study confirms that manufacturing companies in Indonesia which already implement activity-based costing could also consider pricing strategy to mediate the ABC influence on competitive advantage.

The result of this research also shows that Competitive Advantage can be achieved through the use of appropriate resources such as top management support, competition, performance evaluation and compensation, training, non-accounting ownership, resources, consensus and clarity of objectives through Activity Based Costing System. With ABC System, the company can identify several ways to trim its production costs rather than avoid total costs in the long run (Broad & Crowther, 2001). ABC System is a strategic management that can help companies to implement the appropriate Pricing Strategy. Pricing Strategy implemented by the companies must be able to meet the needs of the company as a whole. Based on the research we conducted, we found a positive and significant relationship between companies' Activity Based Costing System, Pricing Strategy, and Competitive Advantage. Thereby, the three proposed hypotheses in this research can be accepted and companies are recommended to apply Activity Based Costing System and choose the appropriate Pricing Strategy in order to achieve Competitive Advantage.

The result of this study incurs important implication for management especially in manufacturing companies. Management should realize that ABC System is a unique resource of organization which help companies to implement the appropriate Pricing Strategy. The implementation of pricing

strategy itself could also be seen as unique internal competency which could help organization to achieve competitive advantage. Therefore, management in ABC-implementing organizations could go further to link the information from ABC practices with the pricing strategy of the organization. Thus, organization will have a bigger opportunity to achieve competitive advantage.

In this study, our sample is limited to Indonesian companies engaged in the manufacturing sector, there is potential for future research to examine the application of ABC System in the manufacturing sector outside Indonesia as well. It is also encouraged to conduct research in other sectors, for example companies engage in the service sector, both in Indonesia or other countries. Furthermore, the variables used in this research are dynamic variables that will make the respondents perceptions different when they are applied in different places, times and objects. 73 percent of GoF value implies that 27 percent of factors outside the variables used in this study can affect the result of the research findings because Competitive Advantage can also be achieved using other strategies. In addition, emphasizing the benefits of other ABC System implementations is another strategy to achieve companies' Competitive Advantage.

References

- Agbaeze, E., Chiemeke, M. N., Ogbo, A., & Ukpere, W. I. (2020). Impact of pricing practice management on performance and sustainability of supermarkets in the urban area of Enugu State, Nigeria. *Sustainability* (Switzerland), 12(15). <https://doi.org/10.3390/su12156019>
- Arasa, R. M., & Achuora, J. O. (2020). Strategic Inventory Management Practices and the Performance of

- Supermarkets in Nairobi County, Kenya. *European Journal of Business and Management Research*, 5(2). <https://doi.org/10.24018/ejbmr.2020.5.2.108>
- Avlonitis, G. J., & Indounas, K. A. (2006). Pricing practices of service organizations. *Journal of Services Marketing*, 20(5), 346–356. <https://doi.org/10.1108/08876040610679954>
- Azubike, J. U. B. (2017). Activity Based Costing and Firm's Value of Manufacturing Companies in Nigeria. *Research Journal of Finance and Accounting*, 8(13), 17–26.
- Bačík, R., Štefko, R., & Gburová, J. (2014). Marketing Pricing Strategy As Part Of Competitive Advantage Retailers. *Journal of Applied Economic Sciences*, IX(30), 602–607.
- Banker, R. D., Bardhan, I. R., & Chen, T. Y. (2008). The role of manufacturing practices in mediating the impact of activity-based costing on plant performance. *Accounting, Organizations and Society*, 33(1), 1–19. <https://doi.org/10.1016/j.aos.2006.12.001>
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Beheshti, H. M. (2004). Gaining and sustaining competitive advantage with activity based cost management system. *Industrial Management & Data Systems*, 104(5), 377–383. <https://doi.org/10.1108/02635570410537462>
- Bhimani, A., & Pigott, D. (1992). Implementing ABC: A case study of organizational and behavioural consequences. *Management Accounting Research*, 3(2), 119–132. [https://doi.org/10.1016/S1044-5005\(92\)70007-9](https://doi.org/10.1016/S1044-5005(92)70007-9)
- Bogdănoiu, C. (2009). Activity based cost from the perspective of competitive advantage. *Journal of Applied Economic Sciences*, 4(1), 5–11.
- Bregman, R. L. (1995). Integrating marketing, operations, and purchasing to create value. *Omega*, 23(2), 159–172. [https://doi.org/10.1016/0305-0483\(94\)00065-I](https://doi.org/10.1016/0305-0483(94)00065-I)
- Brierley, J. A., Cowton, C. J., & Drury, C. (2001). Research into product costing practice: A European perspective. *European Accounting Review*, 10(2), 215–256. <https://doi.org/10.1080/09638180126635>
- Broad, M., & Crowther, D. (2001). Activity based costing in universities - An inappropriate technique? *Journal of Applied Accounting Research*, 6(2), 55–89. <https://doi.org/10.1108/96754260180001028>
- Bromwich, M., & Hong, C. (1999). Activity-based costing systems and incremental costs. *Management Accounting Research*, 10(1), 39–60. <https://doi.org/10.1006/mare.1998.0102>
- Calabrese, A., & De Francesco, F. (2014). A pricing approach for service companies: Service blueprint as a tool of demand-based pricing. *Business Process Management Journal*, 20(6), 906.
- Capron, L., & Hulland, J. (1999). Redeployment of Brands, Sales Forces, and General Marketing Management Expertise Following

- Horizontal Acquisitions: A Resource-Based View. *Journal of Marketing*, 63(2).
- Cardinaels, E., Roodhooft, F., & Warlop, L. (2004). The Value of Activity-Based Costing in Competitive Pricing Decisions. In *Journal of Management Accounting Research*.
- Chongruksut, W., & Brooks, A. (2005). The adoption and implementation of activity-based costing in Thailand. In *Asian Review of Accounting* (Vol. 13, Issue 2, pp. 1–17).
<https://doi.org/10.1108/eb060784>
- Coskun, A., & Yilmaz, M. (2013). Pricing Decisions in Educational Institutions: An Activity based Approach. *Procedia - Social and Behavioral Sciences*, 106, 2112–2118.
<https://doi.org/10.1016/j.sbspro.2013.12.240>
- Cressman, G. E. (2012). Incorporating competitive strategy in pricing strategy. *Advances in Business Marketing and Purchasing*, 19, 81–101.
[https://doi.org/10.1108/S1069-0964\(2012\)0000019010](https://doi.org/10.1108/S1069-0964(2012)0000019010)
- De Toni, D., Milan, G. S., Saciloto, E. B., & Larentis, F. (2017). Pricing strategies and levels and their impact on corporate profitability. *Revista de Administração*, 52(2), 120–133.
<https://doi.org/10.1016/j.rausp.2016.12.004>
- Demsetz, H. (1973). Industry Structure, Market Rivalry, and Public Policy. In *Source: The Journal of Law & Economics* (Vol. 16, Issue 1).
- Deshpande, S. S. (2018). Various Pricing Strategies: A Review (Vol. 20).
<https://doi.org/10.9790/487X-2002087579>
- Dickeson, R. V. (2001). Enter the World of Activity-based Costing--
- Dickeson. BUSINESS MANAGEMENT.
- Dutta, S., Zbaracki, M. J., & Bergen, M. (2003). Pricing process as a capability: A resource-based perspective. *Strategic Management Journal*, 24(7), 615–630.
<https://doi.org/10.1002/smj.323>
- Elhamma, A., & Fei, Z. Y. (2013). The Relationship between Activity Based Costing, Business Strategy and Performance in Moroccan. *Journal of Accounting and Management Information Systems*, 12, 22–38.
- Fatma, S. (2013). Penerapan Metode Activity Based Costing Dalam Menentukan Cost Kamar Hotel Pada XYZ Hotel Program Studi Akuntansi. *Jurnal Akuntansi, Ekonomi Dan Manajemen Bisnis*, 1(2), 175–182.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50.
- Foss, N. J. (1997). Equilibrium vs Evolution in the Resource-Based Perspective: The Conflicting Legacies of Demsetz and Penrose. *Resources, Technology and Strategy*, October.
- Giffi, C. A. (2013). Global Manufacturing Competitiveness Index. *Deloitte*, 40.
- Gunasekaran, A., & Sarhadi, M. (1998). Implementation of activity-based costing in manufacturing. *International Journal of Production Economics*, 56–57(97), 231–242.
[https://doi.org/10.1016/S0925-5273\(97\)00139-4](https://doi.org/10.1016/S0925-5273(97)00139-4)
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.

- <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J., Sarstedt, M., Ringle, C., & Henseler, J. (2014). On the Emancipation of PLS-SEM: A Commentary on Rigdon. *Long Range Planning*, 47(3), 154–160. <https://doi.org/10.1016/j.lrp.2014.02.007>
- Hill, C. W. L., & Jones, G. R. (2012). *Strategic Management: An Integrated Approach*. Cengage Learning.
- Hinterhuber, A. (2008). Customer value-based pricing strategies: Why companies resist. *Journal of Business Strategy*, 29(4), 41–50. <https://doi.org/10.1108/02756660810887079>
- Hinterhuber, A., & Liozu, S. M. (2014). Is innovation in pricing your next source of competitive advantage? *Business Horizons*, 57(3), 413–423. <https://doi.org/10.1016/j.bushor.2014.01.002>
- Holmen, J. . (1995). ABC vs. TOC: It's a matter of time. *Management Accounting*, 76(7).
- Huff, A. ., Floyd, S. ., Sherman, H. ., & Terjesen, S. (2009). *Strategic Management: Logic and Action* (1st editio). Wiley. <https://lib.ugent.be/catalog/rug01:001290914>
- Innes, J., & Mitchell, F. (1995). A survey of activity-based costing in the U.K.'s largest companies. *Management Accounting Research*, 6(2), 137–153. <https://doi.org/10.1006/mare.1995.1008>
- Joyce, P., & Winch, G. (2004). A framework for codifying business models and process models in e-business design. *Value Creation from E-Business Models*, January, 35–64. <https://doi.org/10.1016/B978-075066140-9/50005-9>
- Jun, W., & Lee, D. (2020). Lee, W.J. (2020). Understanding the dynamics of pricing strategy and competitive advantage: an action research on a regional ICT company in Asia.
- Kalićanin, D., & Knežević, V. (2013). Activity-based costing as an information basis for an efficient strategic management process. *Economic Annals*, 58(197), 95–120. <https://doi.org/10.2298/EKA1397095K>
- Kennedy, T., & Affleck-Graves, J. (2001). The Impact of Activity-Based Costing Techniques on Firm Performance. *Journal of Management Accounting Research*, 13(1), 19–45. <https://doi.org/10.2308/jmar.2001.13.1.19>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*, 11(4), 1–10. <https://doi.org/10.4018/ijec.2015100101>
- Krumwiede, K. R., & Charles, S. L. (2014). The use of activity-based costing with competitive strategies: Impact on firm performance. In *Advances in Management Accounting* (Vol. 23). Emerald Group Publishing Limited. <https://doi.org/10.1108/S1474-787120140000023004>
- Krumwiede, K. R., & Roth, H. P. (1997). Implementing Information Technology Innovations: The Activity-Based Costing Example. *SAM Advanced Management Journal*, 62(4).
- Kurt Christensen, H. (2010). Defining customer value as the driver of competitive advantage. *Strategy and Leadership*, 38(5), 20–25.

- <https://doi.org/10.1108/10878571011072048>
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Subba Rao, S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, 34(2), 107–124. <https://doi.org/10.1016/j.omega.2004.08.002>
- Lu, T. Y., Wang, S. L., Wu, M. F., & Cheng, F. T. (2017). Competitive Price Strategy with Activity-Based Costing - Case Study of Bicycle Part Company. *Procedia CIRP*, 63, 14–20.
- Madhani, P. (2010). Resource Based View (RBV) of Competitive Advantage: An Overview. *Resources Based View: Concepts and Practices*. http://papers.ssrn.com/sol3/paper.cfm?abstract_id=1578704
- Mahesa, F. R., Rismayani, R., Bisnis, F. E., Telkom, U., & Lampung, A. D. (2019). Analisis Strategi Bisnis dalam Peningkatan Competitive Advantage pada Astra Daihatsu Lampung (Studi kasus PT Astra Daihatsu Lampung). *E-Proceeding of Management*, 6(2), 2205–2211.
- Maiga, A., & Jacobs, F. (2003). Balanced Scorecard, Activity-Based Costing and Company Performance: An Empirical Analysis. *Journal of Managerial Issues*, 15(3), 283.
- Monroe, K. B. (2003). *Pricing: Making profitable decisions* (English: 3). McGraw-Hill/Irwin.
- Nagle, T., & Hogan, J. (2007). *Estratégia e táticas de preço* (Pearson (ed.)). Prentice Hall.
- Nagle, T. T., & Holden, R. K. (2003). *Estratégia e táticas de preços: Um guia para decisões lucrativas* (3 edition). Prentice Hall.
- Nair, G. K. (2019). Dynamics of pricing and non-pricing strategies, revenue management performance and competitive advantage in hotel industry. *International Journal of Hospitality*
- Naranjo-Gil, D., & Hartmann, F. (2006). How Top Management Teams Use Management Accounting Systems to Implement Strategy. *Journal of Management Accounting Research*, 18(1), 21–53. <https://doi.org/10.2308/jmar.2006.18.1.21>
- Özbayrak, M., Akgün, M., & Türker, A. K. (2004). Activity-based cost estimation in a push/pull advanced manufacturing system. *International Journal of Production Economics*, 87(1), 49–65. [https://doi.org/10.1016/S0925-5273\(03\)00067-7](https://doi.org/10.1016/S0925-5273(03)00067-7)
- Peteraf, M. A., & Barney, J. B. (2003). Unraveling the resource-based tangle. In *Managerial and Decision Economics* (Vol. 24, Issue 4, pp. 309–323). <https://doi.org/10.1002/mde.1126>
- Pierce, B., & Brown, R. (2004). An empirical study of activity based systems in Ireland. *The Irish Accounting Review*, 11(1), 33–35.
- Porter, M. E. (1998). *The Competitive Advantage: Creating and Sustaining Superior Performance*. *The Competitive Advantage: Creating and Sustaining Superior Performance*.
- Raucci, D., Lepore, D., & Sabatiello, R. (2020). Activity-based pricing in small and medium-sized restaurants. Evidence from the Italian context. *International Journal of Culture, Tourism, and Hospitality Research*, 14(4), 565–577. <https://doi.org/10.1108/IJCTHR-02-2020-0046>
- Ray, G., Barney, J. B., & Muhanna, W. A. (2004). Capabilities, business processes, and competitive advantage: Choosing the dependent

- variable in empirical tests of the resource-based view. In *Strategic Management Journal* (Vol. 25, Issue 1, pp. 23–37). <https://doi.org/10.1002/smj.366>
- Raz, T., & Elnathan, D. (1999). Activity based costing for projects. *International Journal of Project Management*, 17(1), 61–67.
- Rendy, & Devie. (2013). Analisa pengaruh activity based costing terhadap keunggulan bersaing dan kinerja organisasi. *Jurnal Akuntansi Dan Bisnis Universitas Kristen Petra*.
- Saloner, G., Shepard, A., & Podolny, J. (2011). *Strategic Management*. John Wiley.
- Sheehan, N. T., & Foss, N. J. (2009). Exploring the roots of Porter's activity-based view. *Journal of Strategy and Management*, 2(3), 240–260. <https://doi.org/10.1108/17554250910982480>
- Simon, H., Bilstein, F. F., & Luby, F. (2008). Gerenciar para o lucro, não para a participação de mercado (Bookman (ed.)). Porto Alegre.
- Stevenson, T. H., Barnes, F. C., & Stevenson, S. A. (1993). Activity-based Costing: An Emerging Tool for Industrial Marketing Decision Makers. *Journal of Business & Industrial Marketing*, 8(2), 40–52. <https://doi.org/10.1108/08858629310041375>
- Sumarsid. (2011). Pendekatan metoda activity based costing pada perencanaan harga pokok produksi untuk memperoleh keunggulan bersaing. *Jurnal Fakultas Ekonomi Universitas Islam*, 5(1).
- Tim Pengelola Website Kemenperin. (2019). *Kemenperin Pacu Kontribusi Industri Manufaktur terhadap Perekonomian*. <https://kemenperin.go.id/artikel/20855/Kemenperin-Pacu-Kontribusi-Industri-Manufaktur-terhadap-Perekonomian>
- Tracey, M., Vonderembse, M. A., & Lim, J.-S. (1999). Manufacturing technology and strategy formulation: keys to enhancing competitiveness and improving performance. In *Journal of Operations Management* (Vol. 17).
- Tuncel, G., Akyol, D. E., Bayhan, G. M., & Koker, U. (2005). Application of Activity-Based Costing in a Manufacturing Company: A Comparison with Traditional Costing (pp. 562–569). https://doi.org/10.1007/11428862_77
- Turney, P. B. B. (1996). *Activity Based Costing: The Performance Breakthrough*. Kogan Page.
- Vasilić, M. (2017). the Use of Activity-Based Costing in Pricing Decisions-the the Use of Activity-Based Costing in Pricing Decisions - the Example of Prune Production. *The 11th International Days of Statistics and Economics*, Prague, September 14, 1718–1728.
- Wanjiku, W. A. (2012). Factors influencing competitive advantage of firms in the micro finance industry in Kenya.
- Wegmann, G., & Nozile, S. (2009). The activity-based costing method developments: state-of-the art and case study. *The IUP Journal of Accounting Research and Audit Practices*, 8(1), 7–22.

APPENDIX

Table A1. Variable Definition

Variable	Definition
<i>Activity Based Costing System</i>	A cost planning method that tracks costs to calculate a product price based on the activities that consume resources.
<i>Pricing Strategy</i>	One of the most important management decisions because it affects the companies' profitability and returns along with its competitiveness.
<i>Competitive Advantage</i>	The companies' ability to maintain their position from the competitors.

Table A2. Items of Activity Based Costing

Item number	Items
ABC1	We have strong support from top management in terms of the ABC initiative
ABC2	Our leaders have a clear commitment to using ABC information as a basis for decision making
ABC3	We improve the company's competitive position and profitability with ABC information
ABC4	We have a competitive strategy with regard to ABC
ABC5	We use ABC information for performance evaluation activities
ABC6	We designed a compensation system in the company to motivate employees to implement ABC
ABC7	We provide adequate training regarding ABC design and objectives
ABC8	We provide training on ABC implementation
ABC9	All of our departments are committed to using ABC information in decision making
ABC10	We share accountants' ABC information with non-accountants
ABC11	We have sufficient in-house resources to provide employees with opportunities to learn about ABC systems and benefits
ABC12	Our leaders have provided sufficient resources, such as time and commitment to the ABC implementation effort
ABC13	We are implementing the ABC system effectively
ABC14	We use ABC to improve the accuracy of cost estimates for customized products

Table A3. Items of Pricing Strategy

Item number	Items
PS1	We offer competitive prices that trigger a reaction from competitors
PS2	We offer products at lower prices than competitors
PS3	We believe our products offer customers an advantage
PS4	We believe the value of the product felt by customers is in accordance with the benefits and costs incurred
PS5	We calculate the selling price based on the total cost of the product

PS6	We determine ⁸ the percentage of the profit margin in relation to the price of the product
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Table A4. Items of Competitive Advantage

Item number	Items
CA1	²⁷ We offer competitive prices
CA2	We able to offer prices that are lower or lower than our competitors
CA3	We offer a ²² very reliable product
CA4	We offer high quality products to customers
CA5	We deliver customer orders on time
CA6	We provide reliable delivery
CA7	We provide products according to customer desires
CA8	We modify our product offerings to meet customer needs
CA9	We have lower market time compared to the industry average
CA10	We develop products rapidly

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