

Supply Chain and Quality Management Practice: Its Impact on Competitive Advantage and Firm Performance (Study on Small and Medium Enterprises at West Java)

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Abstract. *Small and Medium Enterprises (SMEs) play an important role in encouraging economic growth of West Java. However, the contribution of SMEs is still small due to the lack of competitiveness of SME products. Competitiveness and weak SME performance can be enhanced by supply chain management and quality management practices. This study focuses on supply chain management and quality management practices that are mutually casual, competitive advantage and firm performance and the role of moderation of company age in SMEs in West Java. The purpose of this study is to determine the effect of supply chain management and quality management practices on competitive advantage either partially or simultaneously and its impact on firm performance, and how the role of moderating variable company's age in moderating the relationship between competitive advantage and firm performance. The unit of analysis in this study is the Small and Medium Enterprises business located in West Java region with a sample size of 200 business units. To test the model of the research empirically tested using structural equation modeling (SEM) with the help of LISREL 8.70. The results of this study indicate that the implementation of supply chain management and quality management are done simultaneously provide a great impact for increasing competitive advantage as well as firm performance. The role of corporate age moderation is very small in strengthening the relationship between competitive advantages with firm performance on SMEs in West Java.*

Keywords: *Supply chain management practice, quality management practice, competitive advantage, firm performance, and firm age.*

Abstrak. *Usaha Kecil dan Menengah (UKM) berperan penting dalam mendorong pertumbuhan perekonomian Jawa Barat. Akan tetapi kontribusi UKM masih kecil dikarenakan kurangnya lemahnya daya saing produk UKM. Daya saing dan performa UKM yang lemah dapat ditingkatkan oleh supply chain management dan quality management practices. Penelitian ini fokus pada supply chain management dan quality management practices yang saling kasual, keunggulan bersaing dan kinerja perusahaan serta peran moderasi umur perusahaan pada UKM di Jawa Barat. Tujuan penelitian ini adalah untuk mengetahui pengaruh supply chain management dan quality management practices terhadap keunggulan bersaing baik secara parsial maupun simultan dan dampaknya terhadap kinerja perusahaan, serta bagaimana peranan variabel moderating umur perusahaan dalam memoderasi hubungan antara keunggulan bersaing dan kinerja perusahaan. Unit analisis dalam penelitian ini adalah usaha Industri Kecil dan Menengah yang berada di wilayah Jawa Barat dengan ukuran sampel sebanyak 200 unit usaha. Untuk menguji model penelitian maka dilakukan pengujian secara empirik menggunakan structural equation modeling (SEM) dengan bantuan LISREL 8.70. Hasil penelitian ini menunjukkan bahwa penerapan manajemen rantai pasokan dan manajemen kualitas yang dilakukan secara bersamaan memberikan dampak yang besar bagi peningkatan keunggulan bersaing maupun kinerja perusahaan. Peran moderasi umur perusahaan sangat kecil dalam memperkuat hubungan antara keunggulan bersaing dengan kinerja perusahaan pada UKM di Jawa Barat.*

Kata kunci: *Manajemen rantai pasokan, manajemen kualitas, keunggulan bersaing, kinerja perusahaan, umur perusahaan.*

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Received: August 7th, 2017, Revision: December 16th, 2017, Accepted: December 19th, 2017

Print ISSN: 1412-1700; Online ISSN: 2089-7928. DOI: <http://dx.doi.org/10.12695/jmt.2017.16.3.1>

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Introduction

SMEs will have a strategic role in driving the growth of the national economy in order to create jobs and provide a major contribution to Gross Domestic Product (GDP). The important role of SMEs in developing and growing the economy is by creating new businesses, increasing employment opportunities, developing innovative product ideas, and increasing productivity (Nitani and Riding, 2005). So far, the position and role of SMEs in West Java is a fairly dominant economic actors, namely 99.9% of the total business actors, with the ability of employment reached 14 million in 2011 (Dinas KUKM Jabar, 2012). It contributed significantly in the formation of GRDP West Java which reached more than 54, 2% in 2011. (www.depkop.go.id, 2013).

The role of non-oil export of West Java to the national average per year reached more than 19% in the period 2004-2011 (Disperindag West Java, 2015). Meanwhile from the data, the proportion of non-oil export commodities is mostly produced by industries engaged in Small and Medium Industry (SME) (Disperindag West Java, 2015). With export conditions in West Java which is still relatively small at this time indicates that the SME export marketing in West Java is still weak. Weak export marketing of SMEs indicate that company performance from the customer's perspective is still low. This is due to the weak competitiveness of SME products.

Tambunan (2011) in his research found that the development of SMEs in the category of decent and efficient in Indonesia is hampered by several constraints such as lack of capital, business information, technology and skilled workers, difficulties in raw material procurement, marketing and distribution challenges, and government policies and regulations. The same opinion was also expressed Syarifuddin Hasan (Kepala Pusat Komunikasi Publik Kemenperin, 2012) that the quality of products produced SMEs is still

low so it needs to be improved in order to compete in the market, because the product quality is one of the factors that determine the success of the sale. The issue of business standardization and investment problem is a key factor increasing the competitiveness of SMEs, particularly in entering the ASEAN Economic Community that will apply from 2015.

Several previous studies have claimed that the competitive advantage of significantly affecting the performance of a company (Hao Ma, 2000; Morgan, Kaleka, & Katsikeas, 2004; Ray, Barney, & Muhanna, 2004; Singh, Sandhu, Metri, Kaur, 2010; Majeed, 2011). Li, Nathan, Nathan, & Rao, (2006) stated that those two variable, competitive advantage and firm performance can be driven by implementing supply chain management. Kaltum (2008) also stated that implementing quality management will affect competitiveness.

Furthermore research Lee (1998), Watson (2003), Ou, Liu, Hung, & Yen (2006), Fening, Pesakovic, & Amaria, (2008), and Singh, Bhardwaj, & Sachdeva (2009) showed that the application of quality management in SMEs have a significant effect on the performance of the company. Moreover Ketokivi & Schroeder (2004), Morgan et al. (2004), Ainuddin, Beamish, Hulland, & Rouse, (2007) and Ismail, Rose, Abdullah, & Uli, (2010) found that firm age gives a significant moderating effect on the relationship between competitiveness and firm performance. Based on the above authors chose the variable application of supply chain management, the quality management practices, competitive advantage, corporate performance and firm age as the research variables and examined how the relationship between the research variables.

Based on the results of the phenomenon analysis and review of some previous studies as described above, it can be seen that although there are some similarities between this study with previous research relating to the variables

studied, but overall have many differences. The difference between this study and previous research (state of the art) is as follows:

- This study was conducted on SMEs in Indonesia in this case SMEs are located in West Java, whereas previous research is more done outside Indonesia, so there are differences in characteristics between each of the SMEs studied.
- Not many previous studies have examined the relationship between two exogenous variables simultaneously (supply chain and quality management practice variables), where the relationship between these two variables is casual and influences the competitive advantage and firm performance by including moderate corporate age variables.
- In this study, not all the dimensions of the variables studied are exactly the same as the previous research, because they need to be adjusted to the unit of analysis used in this study.
- The indicators used in each dimension are not exactly the same as the previous research.

This study aims to determine the effect of the supply chain and quality management practices on competitive advantage and to the company's performance in SMEs in West Java. In addition, to determine the role of firm age in moderating influence on the performance of the company's competitive advantage in SMEs in West Java.

Supply Chain Management Practices

Supply chain management is the integration and management of organizations in the supply chain activities through cooperative organizational relationships, effective business processes, and share information at a level better for creating value system with high performance and sustainable competitive advantage (Handfield & Nichols, 2008). Koh, Demirbag, Bayraktar, Tatoglu, & Zaim, (2007) explained that supply chain management practices covers a broad of approaches and activities used by the organization to effectively

integrate supply and demand to improve the management of a supply chain. Results of empirical studies Li et al. (2006) states that the concept of supply management practice consists of five dimensions: strategic supplier partnership, customer relationship, information technology, logistic integration, and delivery practices.

Balsmeier and Voisin (1996) emphasized the importance of the supply chain management practices through strategic partnerships, sharing information and improving communication. Tan (2002) considers that an adequate supply chain consists of six application of supply chain management, among others, supply chain integration, supply chain characteristic, strategic location, information sharing, just in time capability, and customer service management. Chow et al. (2008) in his research combines the study of Tan (2002) and Anderson, Britt, and Fayre (1997) by using customer and supplier management, supply chain features, and speed communication, and information sharing to illustrate the implementation of supply chain management in the United States; integration customer service management and supply chain management features which is describing the application of supply chain management in Taiwan.

Quality Management Practices

Quality management as a philosophy or an approach used by management to build a set of principles, where each other supports each other and each part is supported by a collection of techniques and implementation (Dean & Bowen, 1994). In the competitive market conditions, the need for quality is a major factor for companies in maintaining the continuity of its business in the growing global market. Manufacturing firms are able to create a world-class competitive advantage and gain a greater market share with exceptional performance through the provision of quality products, competitive prices and product needs in accordance with customer demands.

Several studies related to the application of quality management in SMEs conducted by Lee (1998), Watson (2003), Chin et al. (2006), Fening et al. (2008), Singh et al. (2009) found that the application of quality management in SMEs provide a significant effect on the performance of the company.

Firm Age

Firm age is measured by the length (number of years) a company has operated (Morgan et al., 2004; Ainuddin et al., 2007). The difference in a company's corporate life characteristics (firm age) will affect how the company's ability to achieve better performance through the creation of competitive advantage. Under normal circumstances, long-standing companies will have more corporate publications than new ones. Therefore, companies that have long been operating, may have more experience. The longer the life of a company, the more information can be absorbed by the community (customers) about the existence of the company. In addition, companies that have long-standing of course have a strategy and tips better to stay can survive in the future.

Competitive Advantage

The various experiences and strategies that are in line with the longevity of a company will be a strength for the company to create competitive advantage. This is because the competitive advantage has a positive relationship with the firm performance (Majeed, 2011). The higher the competitive advantage of a company, the higher the performance of the company (Hao Ma, 2000; Singh et al., 2010; Majeed, 2011). Ainuddin et al. (2007) found that firm age gives a significant role as a moderator in the relationship between competitive advantage and firm performance. Moreover Ismail et al. (2010) found that firm age is a significant variable in moderating effect on the relationship between competitive advantage and firm performance, and the relationship is stronger in firms with older age.

In today's competitive global environment, facing rapid technological advances and increasing customer expectations, it is difficult for companies to win the competition if it depends only on their own capability (Su, Shi, & Lai, 2008). Competitive advantage in fact means that the company is competent to meet customer needs more effectively than its competitors. This is achieved when and when there is a significant increase in value for the perceived consumer (Emilia & Zuzana, 2006).

Competitive advantage is gaining superiority over competitors acquired from offering higher value to consumers, either by lowering the prices or by providing greater benefits and services that fit to higher prices (Porter, 1993). Competitive advantage is the extent to which companies are able to build a defensive position compared to its competitors (McGinnis & Vallopra, 1999). It consists of how an organization's ability to distinguish itself from its competitors and is the result of the most important management decisions (Tracey, Vonderembse, & Lim, 1999).

Firm Performance

Performance is defined as to what extent an operation reach the performance objectives, and important steps in order to meet customer needs (Munizu, 2013). Performance measures the extent to which organizations achieve organizational goals and market-oriented financial goals (Gunasekaran et al., 1999). The company's performance is measured by the achievement of financial goals and employee satisfaction (Sanyal, & Guvenli, 2004; Meyer, 1994). Ho (2008) added that performance can be evaluated with the efficiency and effectiveness of the achievement of objectives. Furthermore, Venkatram and Ramanujam (1986) suggested that the performance is assessed based on the financial performance such as return of investment, sales growth, profit, organizational effectiveness and business performance. Therefore the relationship between variables in this study can be seen in Figure 1.

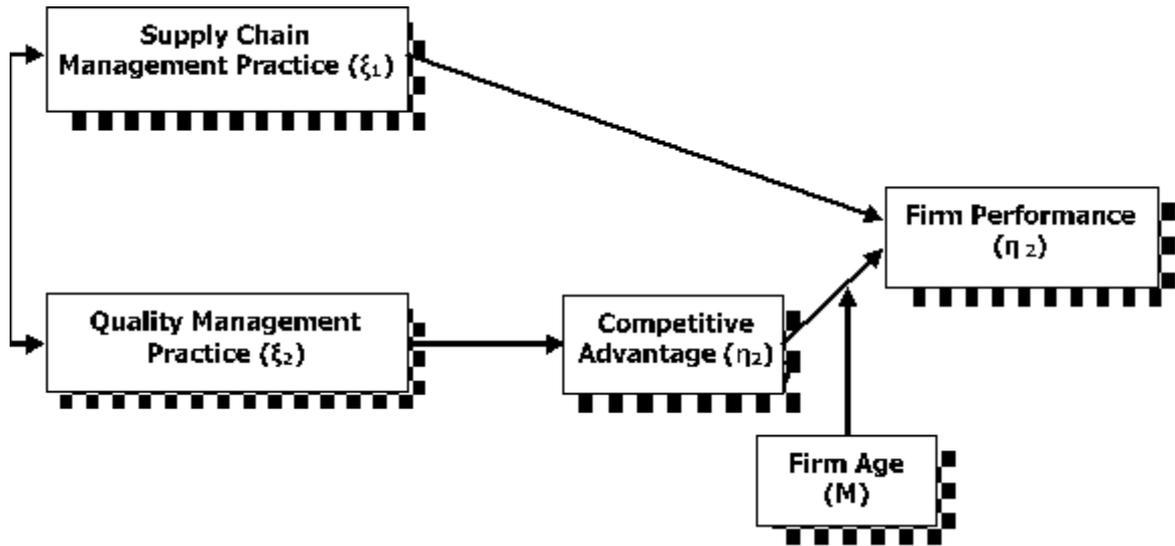


Figure 1.
Research Model

Research Methodology

The research design used in this research is verification research. In accordance with the type of research conducted through sample data in the field, then the research method used is explanatory survey. Explanatory survey was conducted in the form of distributing questionnaires to the management of SMEs selected as members of the sample. The research questionnaire was modified from previous research. The item measurement can be seen in Table 1. All items are questioned in this section by using a 5-point Likert scale with a scale that matches the measurement statement.

The steps in this research are as follows:

- Development of models that can illustrate the impact of supply chain management and quality management practices on competitive advantage and firm performance.
- Preparation of research model measurement items adapted from previous studies.
- Analysis of the impact of supply chain management practices and quality management practices on competitive advantage and firm performance.

Table 1.
Operationalization of Variables

Variable	Definition	Indicator
Supply Chain Management Practice Handfield and Nichols (2008); Chopra and Maindl (2010)	Efficient integration practices for suppliers, manufacturers, distributors and customers through the effectiveness of business processes, establishment of cooperative relationships, and sharing of information among partners in the supply chain to create competitive advantage and improve long-term performance.	<p>Supplier partnership</p> <ul style="list-style-type: none"> - How often does your company involve suppliers in solving raw material quality problems? - How often does your company do coaching to suppliers in improving the quality of raw materials? - How often does your company engage suppliers in the new product development process? - How often does your company involve suppliers in the formulation of the company's vision, mission and objectives? - How often does your company engage suppliers in marketing activities? <p>Customer relationship</p> <ul style="list-style-type: none"> - How often does your company engage customers in solving quality problems and product design? - How often does your company engage customers in the formulation of service quality standards? - How often does your company make remedial efforts to meet customer needs and expectations? - How often does your company reward customers who contribute greatly to the company? - How often does your company hold a meeting with customers to establish a long-term relationship? <p>Information sharing</p> <ul style="list-style-type: none"> - Information the company provides for customers and suppliers to know the quantity of inventory - Information provided by the company for customers and suppliers to find out the schedule of production activities - Information provided by the company for customers and suppliers to find out the data on demand for goods - Information the company provides for customers and suppliers to find out sales data - Information the company provides for customers and suppliers to find out customer data

Table 1. (Sambungan)
Operationalization of Variables

Variable	Definition	Indicator
Quality Management Practice	A philosophy or approach used by management in determining and implementing the principles of quality management through top management commitment and support, customer focus, continuous improvement, and development of human resource management, to build and maintain competitive advantage and improve firm performance.	<p>Leadership Support and Commitment</p> <ul style="list-style-type: none"> - Leaders active role in disseminating vision, mission and quality policy to all employees - The active role of leaders in disseminating quality improvement efforts - Leadership support and commitment to engage employees in the quality improvement process - Support and commitment of leaders in providing facilities for the implementation of quality improvement programs - Award given by the leadership to employees who excel in quality improvement program <p>Customer Focus</p> <ul style="list-style-type: none"> - Survey activities undertaken to determine customer needs in the last three years - Research activities undertaken to measure customer satisfaction in the last three years - The company's efforts to satisfy customers - The availability of a standard mechanism for accommodating customer complaints - Troubleshooting issues related to handling customer complaints - Availability of communication media between company management and customer - Disseminating information about customer needs to all employees <p>Continuous Improvement</p> <ul style="list-style-type: none"> - Our company always sets the target of continuous improvement with reference to certain standards - Our company always consider the inputs from consumers to improve all aspects of quality - Our company always communicates with suppliers to improve all aspects of quality - Our company always keeps improving continuously on all parts without waiting for problems to arise - Our company is always investigating ongoing improvement opportunities for new equipment and methods <p>Development of Human Resource Management</p> <ul style="list-style-type: none"> - Our company always conducts employee selection based on achievement in the process of receiving new employees - Our company always form a cross section work group to manage all aspects of quality - Our company always form a working group to carry out an activity - Our company always involves employees in all parts to manage all aspects of quality - Our company always gives opportunity to employees to convey suggestions or ideas in the improvement of work process - Our company always open the same opportunity for all employees to occupy positions at every level of work

Table 1. (Sambungan)
Operationalization of Variables

Variable	Definition	Indicator
Competitive Advantage Emilia & Zuzana (2006); Tracey et al. (2008)	The ability of a company to create a defensive position among its competitors by delivering higher value to its customers than its competitors.	Price/Cost <ul style="list-style-type: none"> - The ability of companies to reduce the costs required in the process of procurement of raw materials - The ability of companies to reduce costs used in the production process - The ability of companies to reduce the costs required in the marketing and distribution process - The ability of companies to make efficiency on other costs - The ability of companies to offer products that are cheaper than similar products
		Quality <ul style="list-style-type: none"> - The company's ability to set product quality standards on offer - The ability of companies to create products that are not easily duplicated (duplicated) by other companies - The company's ability to create high quality products - The ability of companies to offer products with better quality than similar products
		Shipping Reliability <ul style="list-style-type: none"> - Number of customer complaints caused due to defective product due to damage on delivery time - The number of customer complaints caused due to the late delivery time - The number of customer complaints caused by the incompatibility of the number of shipments by the number of orders - The number of customer complaints caused by additional shipping charges is beyond the set cost
		Product Innovation <ul style="list-style-type: none"> - The ability of companies to create products that are easily tailored to the needs of use - The ability of the company in offering various types of products to suit the needs of consumers - The ability of companies to develop products that have functional fit with changing market needs
		Time to Market <ul style="list-style-type: none"> - Rate the speed of time required to deliver (introduce) the product to the market - The ability of the company to be a pioneer (the first time) in introducing new products to the market - The ability of the company to deliver (introduce) the product to the market with a faster time than the average time of other industries - Rate the time needed to develop new products

Table 1. (Sambungan)
Operationalization of Variables

Variable	Definition	Indicator
Firm Performance Koh et al. (2006); Ho (2008)	Measures of the success rate of management in conducting company operations related to fulfilling customer expectations and achieving organizational goals assessed based on financial performance, customer performance, internal business process performance, and growth and learning performance.	<p>Financial Performance</p> <ul style="list-style-type: none"> - The rate of revenue growth in the last three years - The rate of sales growth in the last three years - The rate of return on the company's working capital in the last three years - Level of profit earned by the company in the last three years <p>Customer Performance</p> <ul style="list-style-type: none"> - Growth rate of market share (marketing mastery) in the last three years - The level of customer complaints in the last three years - The company's ability to retain old customers over the past three years - The company's ability to attract (gain) new customers over the past three years <p>Internal Business Process Performance</p> <ul style="list-style-type: none"> - The number of innovation development processes conducted in the last three years - Number of product innovation development done in last three years - The number of production activities that can be completed in a timely manner over the last three years - The number of product shipments that can be delivered on time for the past three years <p>Learning and Growth Performance</p> <ul style="list-style-type: none"> - The level of investment for new equipment and technology procurement in the last three years - Level of product research and development activities conducted in the last three years - Employee's ability to complete a job in the last three years - The ability of information systems to provide fast and accurate information over the past three years - Employee loyalty level in the last three years - Firm age
Firm Age Morgan et al, (2004); Ainuddin et al, (2007)	The number of years a company operating	

The population of this research is the Small and Medium Enterprise businesses located in West Java. The determination of the sample number based on Joreskog and Sorbom Achmad and Hope (2003: 68) formulation, where the number of samples to be determined based on the number of variables used in this research. With the number of research variables by 5 variables, the number of samples in this study were 200 units SME.

In order to determine the sample that will be used as the unit of analysis in this study conducted by the method of proportional stratified cluster random sampling. The cluster is based on the results of clustering from the Office of Industry and Trade of West Java Province, which is divided into 4 SMEs business area as shown in Table 2. Furthermore, from the results of the clustering of business centers, the sample size for each region of SME business centers is calculated proportionally.

The data collection process in this study was conducted for nine months starting January until September 2014. A total of 240 questionnaires were distributed and selected as many as 200 questionnaires that met the criteria and criteria of the study sample. Questionnaires are distributed through door-to-door visits and interviews to directors or corporate leaders and managers or employees of the company.

After data collection is done, the data that has been collected and then performed data processing with Structural Equation Model (SEM) approach. Data processing is performed to find answers regarding the formulation of the problems that have been prepared. Data processing in this research using the help of software LISREL 8.7. If the result of data processing has been obtained, then the conclusion can be done.

Table 2.
Number of Samples of each SMEs Business Sentra Area

Cluster	Territory Business Centers	Number of SMEs (N _i)	Sample Proportion (N _i /N)	Total Sample
I	Bogor	58.406	0,29	58
II	Purwakarta	43.776	0,22	44
III	Cirebon	31.904	0,16	32
IV	Periangan	65.634	0,33	66
SMEs Population (N)		199.720	n = 200	

Results and Discussion

Using robust maximum likelihood estimation method obtained the full path diagram model of the effect of the supply chain and quality management practices on competitive advantage and its implications on the performance of companies with firm age as a moderating variable as shown in Figure 2.

The hypothesis is accepted when the value of t-value is greater than t-table at the 0.05 significance level of 1.96. Supply chain and quality management practices has a positive influence on competitive advantage and firm performance ($t \geq 1.96$). For more details can be seen in Table 3.

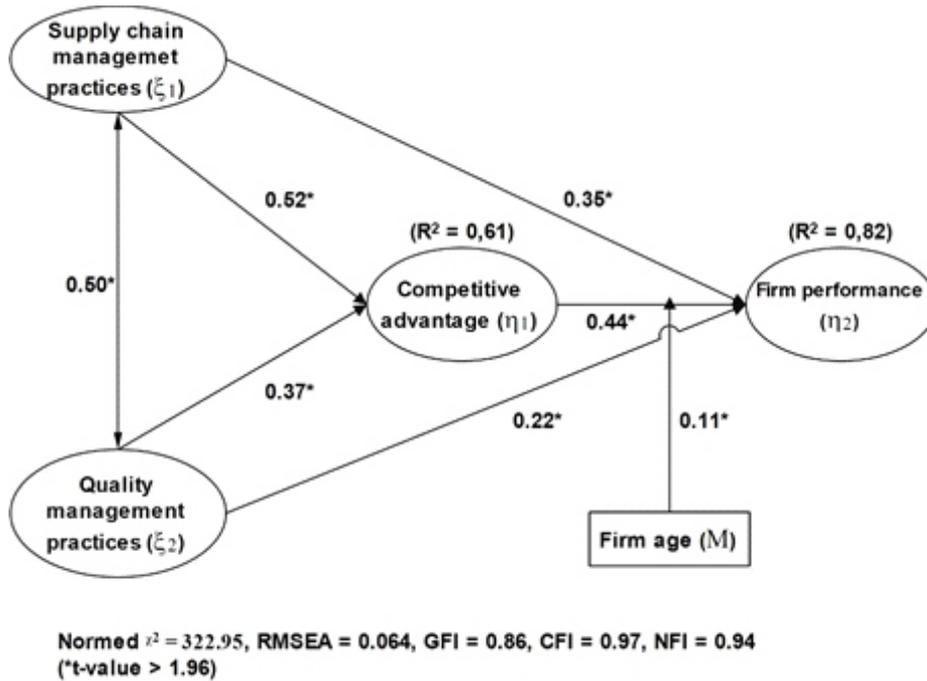


Figure 2. Coefficient of Standardized Structural Equation Modelling

Table 3. Summary of Statistic Test Result

Sub Structure	Path	Coefficient	t-cont*	R-Square
First	$\xi_1 \rightarrow \eta_1$	0.520	7.252	0,610
	$\xi_2 \rightarrow \eta_1$	0.377	5.473	
Second	$\xi_1 \rightarrow \eta_2$	0.359	4.626	0.828
	$\xi_2 \rightarrow \eta_2$	0.225	3.539	
	$\eta_1 \rightarrow \eta_2$	0.448	5.043	
	$M^* \eta_1 \rightarrow \eta_2$	0.112	2.424	

Effect of Supply Chain and Quality Management Practices on Competitive Advantage

The results of this hypothesis test showed that supply chain and quality management practices affects the competitive advantage either partially or simultaneously. Thus findings of this study reinforce the theory proposed by Handfield and Nicholas (2008) which states that the supply chain management practices will have an impact on improving the company's competitive advantage. The partial quality management practices that affecting the competitive advantage on this study

reinforce the theory proposed by Goetsch and Davis (2010) which states that the quality management practices is a fundamental strategy to create competitive advantage. This is means that where the application of supply chain management and quality management application in SMEs in the West Java performed partially or simultaneously will increase the competitive advantage of SMEs in West Java.

Direct application of supply chain management by 27.0% impact on competitive advantage. This means that the level of competitive advantage of SMEs in West Java directly affected by the supply chain management practices by 27.0%, while the rest is influenced by other variables. The findings of this study reinforce the results of previous studies (Vereecke & Muylee, 2006; Li et al., 2006; Li and Lin, 2006; Thatte, 2007 and Singh et al., 2010), which states that the effect of supply chain management application directly to the company's competitive advantage.

Furthermore, the direct effect of the application of quality management to the competitive advantage that is equal to 14.2%. This means that the level of competitive advantage of SMEs in West Java directly affected by the quality management practices by 14.2%, while the rest is influenced by other variables. The findings of this study reinforce the results of previous studies (Powell, 1995; Juergensen, 2000; Bhuiyan & Baghel, 2005; Kaltum, 2008) which states that the quality management practices directly affect the company's competitive advantage.

Among the two exogenous variables in this study, the variables of supply chain management practices are the variables that give greater influence to competitiveness variables compared with variables of quality management practices. This shows that supply chain management practices for SMEs in West Java contributes more to the achievement of competitive advantage SMEs in West Java compared with the quality management practices. The difference in the magnitude of the direct influence of the two exogenous variables on competitive advantage for SMEs in West Java shows that the competitive advantage of SMEs in West Java is more influenced by the supply chain management practices than the quality management practices. Therefore, the concentration of the first to do SMEs in West Java to increase the competitive advantage is to improve and enhance their supply chain management practices.

Priority scale improvement and enhancement of supply chain management practices for SMEs in West Java in a row is done through improvement and enhancement of information sharing activities, enhancement of partnerships with suppliers, and improved customer relationships. Subsequent concentration in order to increase the competitive advantage of SMEs in West Java is to improve and enhance the quality of management. The priority scale of improvement and enhancement of quality management practices for SMEs in West Java can be done through improvement of customer focus, improvement of leadership support and commitment to various aspects of quality, better human resource management development, and continuous improvement on all management functions.

As shown in Table 3 the coefficient of determination (R^2) are shown in the first sub-structure is equal to 0.610 implies that the supply chain and quality management implementation simultaneously (together) affect the competitive advantage of 61.0%. This shows that 61.0% of the variation in the change in the competitive advantage of SMEs in West Java can be explained by the application of supply chain management consists of the dimensions of strategic partnerships with suppliers, customer relations, and share information; and the application of quality management consists of the dimensions of support and commitment of the leadership, customer focus, continuous improvement, and development of human resources, while the remaining 39.0% is explained by other variables that are not included in the study. Therefore, there are still other variables that affect the competitive advantage of SMEs (i.e. by 39.0%) then to increase the competitive advantage of SMEs in West Java is not only done through the improvement and enhancement of supply chain management and quality management, but also should pay attention to other variables not examined in this study.

Effect of Supply Chain and Quality Management Practices on Firm Performance

The results of this hypothesis test also showed that supply chain and quality management practices affects the firm either partially or simultaneously. Thus result, reinforce the findings of the research results Handfield and Nichols (2008) and Li et al. (2006) which states that the supply chain management practices have a significant effect on the performance of the company. The partial quality management practices that affecting the firm performance on this study reinforce the theory proposed by Lakhali, Pasin, and Limam (2008) and Singh et al. (2009) which states that the quality management practices has positive effect on firm performance. This is means that where the application of supply chain management and quality management application in SMEs in the West Java performed partially or simultaneously will increase the firm performance of SMEs in West Java.

Direct application of supply chain management by 12.9% effect on firm performance. This is means that the level of performance of SMEs in West Java directly affected by the supply chain management practices by 12.9%, while the rest is influenced by other variables. Indirectly influence the supply chain management practices on the performance of the company through a competitive advantage is 11.4%. Indirectly influence the supply chain management practices on the performance of the company through a competitive advantage is smaller when compared with the direct effect of the supply chain management practices on firm performance. The findings of this study indicate that the competitive advantage variables are not suitable for use as an intervening variable because of the competitive advantage through the intervening variable effect of the application of supply chain management on firm performance becomes increasingly smaller.

Therefore, the measurement model of the effect of the application of supply chain management on firm performance in SMEs in West Java should use research paradigm with a model of a direct relationship between the variables of the supply chain management practices company with variable performance without going through competitive advantage, resulting in a new research paradigm that is recommended for use model of relationships that are not through the intervening variable of competitive advantage. The findings of this study reinforce the results of several previous studies (Koh et al., 2007; Agus & Hassan, 2008; Agus, 2011) which states that the supply chain management practices directly influence the performance of the company. These results are also in line with the theories advanced by some experts such as supply chain management Mentzer, Min, and Zacharia (2000), Hong and Jeong (2006), Chopra and Maindl (2010) and Pujawan (2010) which states that the supply chain management practices impact on improving the overall performance.

The direct effect of the application of quality management on corporate performance that is equal to 5.1%. This is means that the level of performance of SMEs in West Java directly affected by the quality management practices by 5.1%, while the rest is influenced by other variables. Indirect effect of quality management practices on firm performance through competitive advantage is 6.4%. Indirect effect of quality management practices on firm performance through greater competitive advantage when compared to the direct influence of the application of quality management on corporate performance. The findings of this study indicate that the measurement model of the effect of the application of quality management on firm performance of SMEs in West Java should use indirect measurement model relationships through intervening variable competitive advantage.

This shows that the application of quality management in SMEs in West Java should be done in order to increase competitive advantage, and to increase the competitive advantage this will be a greater impact on performance improvement of SMEs in West Java. Therefore, the new research paradigm that directly models the relationship between the variable applications of quality management on corporate performance should be eliminated, because the direct relationship model is the effect of the application of quality management on corporate performance in SMEs in West Java becomes smaller. Thus, for a new research paradigm recommended model of relationship indirectly influence the quality management practices on corporate performance through the intervening variable of competitive advantage. The findings of this study reinforce the results of previous studies (Ciptono, 2006 ; Kaltum, 2008) who found that the application does not directly affect the quality management on corporate performance.

Based on the two exogenous variables in this study, the variables of supply chain management practices are the variables that give greater influence to the company's performance variable compared with the variables of quality management practices. This suggests that supply chain management practices for SMEs in West Java contributes more to the achievement of better SMEs in West Java compared to quality management practices. The difference in the magnitude of the direct influence of the two exogenous variables on the performance of firms for SMEs in West Java shows that the performance of SMEs in West Java is more influenced by supply chain management practices than quality management practices. Therefore, to improve the performance of SMEs in West Java, the first concentration that SMEs should undertake is to improve and enhance supply chain management through improved and enhanced information-sharing activities, enhanced partnerships with suppliers, and improved customer relationships.

Furthermore, to improve and enhance quality management practices is through increased customer focus, increased support and leadership commitment to various aspects of quality, development of human resources management better, and make improvements continuously. Besides making improvements to these two variables, it is also necessary to improve and enhance on various other operational performance variables.

Together the variable application of supply chain management and quality management practices contribute (1-.560) or 44.0% of the performance of SMEs in West Java. This shows that 44.0% of variation changes the performance of SMEs in West Java can be explained by the application of supply chain management consists of the dimensions of strategic partnerships with suppliers, customer relations, and share information; and the application of quality management consists of the dimensions of support and commitment of the leadership, customer focus, continuous improvement, and development of human resources, while the remaining 56.0% is the influence of other variables not examined in this study. Contribution of 44.0% given by the application of supply chain management and quality management implementation together to variable performance of SMEs in West Java, this implies that to improve the performance of SMEs in West Java, the SMEs should continue to make improvements and remodeling in various attributes or dimensions variable application of supply chain management and quality management implementation variables simultaneously.

The Effect of Competitive Advantage on Firm Performance

Based on finding result on this study, competitive advantage have significant effect on firm performance either partially or simultaneously. The direct influence of competitive advantage on firm performance is 20.1%. This shows that the high performance of SMEs in West Java is directly influenced by competitive advantage by 20.1%, while the rest is influenced by other variables.

The direct influence of competitive advantage on firm performance of 20.1% shows that the influence of competitive advantage is significant in improving the performance of SMEs in West Java. The findings of this study reinforce the results of previous studies (Gimenez & Ventura, 2002; Morgan et al., 2004; Ray et al., 2004; Singh et al., 2010 & Majeed, 2011) who found that the competitive advantage of a company had a direct effect to the achievement of firm performance.

Thus, to improve the performance of the company then SMEs in West Java should be able to increase competitive advantage through improving the quality of products and services. Referring to the results of the research, the priority scale that SMEs must undertake in West Java in order to achieve competitive advantage is through increasing delivery reliability, accelerating time to market, cost efficiency to lower selling price, increasing product innovation, and improve the quality of products and services.

Supply chain and quality management practices jointly affect the performance of the company by 44.0%. While the influence of supply chain management practices partially to the company's performance is 12.9%, and the effect of quality management practice partially to the company's performance is 5.1%. The effect of supply chain and quality management practices together on firm performance is much greater than the partial influence of supply chain and quality management practices on firm performance. Partially the effect of supply chain management practices is greater when compared with the influence of quality management practices on firm performance. The findings of this study indicate that if supply chain and quality management practices are done together better then it will accelerate the improvement of firm performance on SMEs in West Java.

Moderate the Firm Age on the Influence of Competitive Advantage on Firm performance

Based on the test results it can be concluded that the age of the firm is able to moderate the influence on the performance of the company's competitive advantage in SMEs in West Java. This means that firm age effect in strengthening the relationship between competitive advantage and corporate performance in SMEs in West Java. This means that the longer life of a SME, the more powerful the moderating effect of the competitive advantage of the performance of SMEs. These results reinforce the findings of previous studies (Ketokivi and Schroeder, 2004; Morgan et al., 2004; Ainuddin et al., 2007; Ismail et al., 2010) who found that the age of the firm has a moderating role in strengthening the relationship between competitive advantage and corporate performance.

Contribution of firm age in moderating influence on the performance of SMEs competitive advantage of SMEs in West Java is equal to (1-.987), or 1.3%, while the remaining 98.7% is moderating influence of other variables that are not included in the study. The results of this study indicate that the age of the company is one of the moderating variables that can strengthen the effect on the performance of the company's competitive advantage, though its moderation effect (gains) small. This shows that there is a tendency on SMEs that have long-lived companies will have a better performance, although a small tendency. The weak role of corporate age moderation in SMEs is caused, among others, because most SMEs in West Java are joint ventures managed by family members. Many of the family members in the next generation no longer continue the company, preferring to work elsewhere so that the business is abandoned and managed by others lacking entrepreneurship skills. There is a tendency in SMEs in West Java, the longer the life of the company, the lower the company's performance. However, not a few SMEs that have long been operating have a better performance.

Conclusion

Based on the results of research and interview, supply chain and quality management practices have a significant impact on competitive advantage and firm performance either partially or simultaneously. In order to enhance the competitive advantage and firm performance in SMEs in West Java should be an improvement on the application of supply chain management and quality management simultaneously. Indirectly influence the supply chain management practices on the firm performance through a competitive advantage is smaller when compared with the direct effect of the supply chain management practices on firm performance. While the indirect effect of quality management practices on firm performance through greater competitive advantage when compared to the direct effect of the application of quality management on corporate performance. Age companies moderating influence on the performance of the company's competitive advantage in SMEs in West Java.

To enhance the competitive advantage of SMEs in West Java needed repairs and improvements to the supply chain management and quality management in synergy. In order to improve its performance, SMEs in West Java should focus on supply chain management practices with the aim to directly improve the firm performance. While the application of quality management addressed in order to increase competitive advantage because it would indirectly have greater impact in improving the performance of the company. For further research is recommended to conduct further research on the scope of the performance of SMEs nationwide with variables of different studies. Based on the research findings there are still many variables which has not been considered in this study should be considered for subsequent research.

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