Application Influence of The Competitive Advantage Strategy and Total Quality Management Towards Corporation Performances (Study in The Manufacturing Corporation Certificates of ISO 9000 in East Java)

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Abstract: *This research is aimed at obtaining empirical evidence and perfect understanding about influence phenomenas of the competitive advantage strategy application and Total Quality Management towards manufacturing corporation performances obtaining certificates of ISO 9000 in East Java.Contribution of this research is expected to be able to provide ideas about the scientific development in the fields of Strategic Management, Cost Management and Operational Management. Especially for corporations and professionals, this research is expected to provide contribution to the setting of strategic plan, application of Total Quality Management and performance appreciation using Balanced Scorecard perspective.Census research method is applied in this research. While the research type is descriptive-verificative. To test the hypothesis used method of Structural Equation Modeling and Principle Component Analysis is applied. Results of the descriptive analysis show that application influence of the competitive advantage strategy and Total Quality Management, towards corporation performances is proved to be categorically high. Application on each perspective existing in the Balanced Scorecard is also proved to be categorically high.Results of the hypothesis test show that application influence of the competitive advantage strategy towards corporation performance is 34%, application influence of Total Quality Management towards corporation performance is 21%. Simultaneously application influence of the competitive advantage strategy and Total Quality Management towards corporation performance is 91 %.This research implies that application of competitive advantage strategy, and Total Quality Management are proved to provide positive and significant contribution towards manufacturing corporation performance.*

Keywords: *Competitive Advantage Strategy, Total Quality Management, Balanced Scorecard, Certificate of ISO 9000, Stretegic Busines Unit*

In this globalization era, we have been facing the features of free international trade as stated in Uruguay turn applied since January 1995, Asean Free Trade Agreement (APEC), enacted since 2003, and Asean Pacific Economic Committee (APEC) enacted in 2010. This condition leads to competition among many countries to market their goods and services all over the world without any barrier at all. With this economic climate, Indonesian exports must be able to compete with any export in the international market, while our national products must be able to compete with foreign products coming to our country.

Various regional economic cooperation existing like European Economic Community (EEC), World Trade Organization (WTO), and others can create strategic trade climate (strategic alliance), in which competition taking place is no longer competition among individual companies, but it has turned to be competition among alliances.

Many companies through out the world combine to form alliances. Kenichi Ohmae in Budi W. Sutjipto (1995:8).

Implication of world free trade agreement is that trade alliances are required to be ready to fight in that competition. This is conducted to create

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competitive advantage from any available resources possessed, not only rely solely on comparative advantage which has been the world strategy in competing, but also able to create (produce) highly qualified goods and services. This means that level of comformance between companies and customer demand is met.

Based on the data obtained, there has been a continual decrease on the number of manufacturing companies in Indonesia since 1998. The number of manufacturing companies in Indonesia in 1998 was 21.423, and this number kept on decreasing to 21.051 in 1999, and it continued to decrease till 2002 as follows; 2000 (20.597 companies), 2001 (20.186 companies), and 2002 (20.023 companies). Perceived in four years from 1998 to 2002, number of manufacturing companies in Indonesia experiencing an average decrease of 1,69%, shown in Table 1 as follows:

Table 1. Growth of Manufacturing Companies in Indonesia

Years	Manufacturing Companies	Growth
1998	21.423	-
1999	21.051	(1,77%)
2000	20.597	(2,16%)
2001	20.186	(2,00%)
2002	20.023	(0,81%)

(Source : BPS (Statistic Center Institution) Indonesia of the year 2002 which is processed)

This condition occurred in any companies including manufacturing companies in east java from 1998 to 2002, in which the number of manufacturing companies continued to decrease in east java. In 1998, the number was 4.976, then, it kept on decreasing to be 4.934 in 1999, 4.895 in 2000, and 4.838 in 2001. Observed in four years from 1998 to 2002, the number of manufacturing companies experiencing a decrease of 0,79% in east java, as shown in Table 2 as follow:

Table 2. Growth of Manufacturing Companies in East Java

Years	Manufacturing Companies	Growth
1998	4.976	-
1999	4.934	(0,85%)
2000	4.895	(0,80%)
2001	4.838	(1,20%)
2002	4.823	(0,31%)

(Source: BPS (Statistic Center Institution) East Java of the year 2002 which is processed)

This phenomena explains that manufacturing companies in Indonesia especially in east java are having a problem, and this condition requires that business world must be able to create competitive advantage in trade by increasing both quality and productivity, together with creating high capability to survive. If the company cannot adapt itself to the changing adaptability environment quickly, it will affect its existence and the company should be ready to exit from the business world.

Business competitions get tighten and more intensively encourage companies to constantly strive to formulate and imperfect their business strategies so that both strategic advantage and comparative advantage are created. To find out how good the effectiveness of an implementation strategy, a company should be able to measure its business performance.

A firm is said to have competitive advantage if it is considered more superior than its competitors, both in product quality and in price. Success Fullness of a business can be achieved by having competitive advantage which is continually sustained. Therefore, company's business strategy is also called competitive advantage strategy. Competitive advantage can be achieved in various ways, such as offering products with minimum price, or offering products which is unique and more specific than those produced by its competitors or by focusing at certain (specific) market segment. Porter in Robert M.Grant (1995;54).

One approach used to control quality is Total Quality Management or TQM. TQM is a system implemented in the long term period which continually satisfies its customers by improving product quality and company services (Mears, 1993;8). According to Samson and Terziovski (1999;395) Total Quality Management was an effort that was done continually by individuals in an organization to understand, meet, and exceed customer expectations.

There have been many research describing that quality management has an influence on organization performance. Research result by Benson et.al (2003;234–257), supported by research result by Madu (1996;34–45) described that there was a relation between quality dimension and organization performance. This research also showed that company typology affected relation between quality dimension and organizational performance. Other research conducted by Flynn, et al. (1995;89), this

research examined the effect of quality management practices upon performance and company competitive advantage. In this research, infrastructures creating supporting environment of quality management practice had an influence on performance, and company performance had an influence on company competitive advantage; success of TQM implementation requires the existence of company infrastructures supporting the TQM implementation.

In Indonesia according to ninth turn of survey data of ISO institution, it is stated that till the end of 2002, there have been 1890 companies certified ISO 9000. The development of ISO 9000 seems to have grown very rapidly since 1996 in Indonesia. Since it was first implemented, the development of ISO 9000 till 2002 can be seen in Table 3 as follow:

Table 3. The Number of Certification Development

Years	1993	1994	1995	1996	1997
The number of certification	8	22	125	340	1273
Years	1998	1999	2000	2001	2002
The number of certification	1442	1525	1630	1755	1890

(Source: ISO survey – Ninth Cycle (2002: 17))

Compared with several ASEAN countries like Singapure and Malaysia, the number of certified companies in Indonesia is relatively low, and it can be seen in Table 4 below:

Table 4. ASEAN ISO 9000 Certifications

Countries	The Number of Companies Having Got ISO 9000 Certification Up To The End of 2002
Singapure	3340
Malaysia	2521
Thailand	2027
Indonesia	1890
Philippines	923
Brunei	315

(Source: ISO survey – Ninth Cycle (2002: 19))

When viewed from the number of manufacturing companies, according to BPS data till be end of 2002, there were 20.023 companies in Indonesia. And this means that certificate acquisition of manufacturing companies is considered low.

PT Sucofindo, working together with centre of National Standardization (Pustan) of industrial in trade department, conduct a research in 1998 upon 150 respondents taken from companies in Indonesia which had got ISO 9000 certificates, found empirical evidence showing that the acquisition of ISO 9000 certificates tended to encourage some increases in operational parameter, such as: internal increasement, documentation increase, process increase, better working relationship among working units focusing to customers, reducing scrap/rework, productivity increase and external increase, concerning on product quality, increase on customer satisfaction, increasement on sales, most effective promotion equipments, reducing customer complaints, and increase of market share (Mulyanto, 1999;57).

Empirical study conducted by Banker and Schroeder (2003;33–35) about adoption of new manufacturing practice (TQM/JIT and teamwork) give a picture that TQM manufacturing practice emphasize employees in solving problem, working in teamwork, and encouraging an innovative approach to improve production. According to them, employees were requested to identify ways of increasing manufacturing process, reducing damage and determining that the company operation work efficiently. Before, Voss (1987;236) conducted a research at automobile component facturies and several other industries which resulted a picture about traditional manufacturing practice which tended to depend on function our macine process, line personnel is separatede from their fellow workers, employees became experts on their own fields since working process is completed repeatedly in a large batch with the same materials. Product resulted is issued from quality control system conducted by department of quality control at the end of production.

Thus in manufacturing practice, TQM gives more emphases on employee involvement (Zipkin, 1991;40–49). Employees learn from work which generate high capability to understand problems and to find solutions to the problem (Aoki, 2004;971–983), so that productivity and quality information reported to the line personnels will provide a feedback needed for production learning and improvement (Banker at.al, 2003;33–35).

From the above description, it can be concluded that there is a difference between companies having applied TQM and those haven't. Applying TQM will result in organizational structure changing, organization goal, operational process, roles of

managers and employees, ways of evaluating performance, etc.

Resource on competitive advantage strategic application and manufacturing practice using TQM can interactively influence company performance to become an interasting topic, as competitive advantage strategic application and Total Quality Management perform common techniques frequently used by manufacturing companies to increase their performances. Besides, technical application of TQM has also been approved to have been able to increase customer satisfaction, employee satisfaction, and productivity (Wollner, 1992:34). In this research, companies taken as samples, have applied TQM technique. And the are manufacturing companies having obtained certificates of ISO 9000 obtained from Sucofind, Deperindag, Profile of Indonesian Companies ISO Certificate, and National Standardization Agency (BSN).

The main problem of this research can be formulated as follows: How big is the influence of competitive advantage strategic and TQM both partially and simultaneously on company performance.

This research is intended to find clarity of phenomena related to manufacturing company performance having been certified ISO 9000 and factors influencing it. The aim of this research is to discover empirical evidence and to find clarity of phenomena about influences of competitive advantage strategy and Total Quality Management upon manufacturing company performance having been certified ISO 9000 in East Java.

METHOD

Objects of this research are competitive advantage strategy, Total Quality Management, and Manufacturing company performance having been certified ISO 9000 in East Java. Subject of this research are company leaders or managers of strategic business units representing in company strategic settings.

This research uses business unit managers individually as analysis units. Research respondents are business unit managers considering that business unit managers are: (1) Implementors of top management decisions who can interact with employees and top management; (2) Having capability of direct involvement with policy of top management implementation.

Instrument used in this research is questionnaire. Time horison researched is cross sectional, that is the object researched is only in a specific time having a lot of subjects (respondents).

Briefly, variable operationalisation of this research can be seen at the following Table 5.

The population of this research are managers of company business units operating in manufacturing fields having been certified ISO 9000. Samples (respondents) of this research are 151 managers of strategic business units (SBU) from 151 manufacturing companies having been certified ISO 9000. To achieve the objectives of this research, samples are taken from population of companies operating in manufacturing fields having obtained certificates of ISO 9000. Sample selection are managers of manufacturing company business units having obtained certificated of ISO 9000 based on the argument that:

- One of the variables in this research is competitive advantage strategic. Based on the theoretical study and empirical study, it is found out that most of the research on competitive advantage strategy, variables used are respondents of strategic business unit managers (Govindarajan and Gupta, 1985; Govindarajan, 1988; Govindarajan and Fisher, 1990) in Nizarul alim (2002:117).
- Researcher assumption to take companies having been certified ISO 9000 is that those companies have applied TQM, which is a requirement to obtain certificate of ISO 9000. And, they must meet twenty evaluation criterias and several evaluation elements which perform TQM implementation indicators.

Research sample is taken from list of companies having obtained certificates of ISO 9000 obtained from Sucofindo, Deperindag, Nation Standardization (BSN), and from Profile and Directory of Indonesian Companies ISO Certificate Issued by LIPBI. In this research, variables being measured are to exogenous variables and one endogenous variables. Those variables are interrelated one another so that they must be reviewed entirely. Therefore, suitable analysis technique is multivariate statistic analysis technique.

Table 5. Research Variable Operationalisation

Exogenous and Endogenous Variables	Sub variables	Indicator	Scale
Competitive Advantage Strategy (X_1)	1. Cost Leadership Strategy (X_{11})	– Economic scale in production – Production capasity – Sharing existence – Market access timing – Cost efficiency by program	Ordinal
	2. Differentiation Strategy (X_{12})	– Innovation in production – Continued improvement – On time delivery – Design perfection – Role of research and development department – Unique product development	Ordinal
	3. Imitation Strategy (X_{13})	– Pressing on cost efficiency and innovation – Pressing on cost efficiency and production program – Pressing on cost efficiency and selling program – Pressing on cost efficiency and advertizing program	Ordinal
Total Quality Management (X_2)	1. Oriented to Customer Satisfaction (X_{21})	– Product quality – Customer satisfaction and needs – Safety and on time delivery – Quality garantee	Ordinal
	2. Employee Empowerment and Involvement (X_{22})	– Creativity and innovation freedom – Employee participation in decision making – Training and employee development – Involvement in strategic setting and company policy	Ordinal
	3. Continued Improvement (X_{23})	– Continued improvement – Perfect planning – Quality control – Continued evaluation	Ordinal
Company Performance by Balanced Scorecard Approach (Y)	1. Financial Perspective (Y_1)	– Operational income position – Gross profit position – Return on equity position – Return on investment position – Economic value added position	Ordinal
	2. Customer Perspective (Y_2)	a. Core group : -Market share -New customers coming -Ability to keep customers -Customer satisfaction phenomena b. Supporting group : -Product attributes -Relation with customers -Company reputation and prestige	Ordinal
	3. Internal Business Process Perspective (Y_3)	a. Innovation b. Operationanal process c. Process of after sale service	Ordinal
	4. Learning and Growth Perspective (Y_4)	a. Worker capability b. Information system capability c. Motivation-empowerment-harmony	Ordinal

Modeling Analysis (SEM)

RESULTS

Research respondent data analysed amounts to 151 respondents, coming from consumer product which can be categorized in accordance with Indonesian Business Field Classification Directory (KLUI) issued by Statistic Centre Agency of East Java Consisting of 14 consumer product industries like presented in Table 6.

Respondent demografic data description from the selected samples (n=151) is precented in Table 7.

Result of sample selection explains that the number of respondents selected, based on respondent criteria, amounts to 151 respondents (business unit managers). Business Unit Managers participated in this research are mostly product line managers from Strategic Business Units.

Based on Table 7, respondent demografic data obtained from selected sample can be described as follows: most business unit managers are university graduates amounting to 112 persons or 74,2%. The rest are devided into: (1) senior high school graduates amounting to 9 persons or 6%; (2) diploma graduates amounting to 18 persons or 11,9%; (3) magister graduates amounting to 12 persons or 7,9%. Viewed from respondent educational background, it is found out that there are 91 persons or 60,3% having economics study background, and there are 60 persons or 39,7% having non economics background, meaning that they are from various scientific diciplines.

Most respondents, 97 persons or 64,2%, have served between 1– years; 37 respondents or 24,5%, have served between 5–10 years; 17 respondents or 11,3% have served more than ten years. Mean value of 4,1 and deviation standard of 2,5 explain that average respondent has served for 4,1 years and there is a high length of serving, caused by the low difference between mean and deviation standard. Range value between 0,8–13 with a median of 3,4 explains that average length of serving is minimally 8 months, and maximally 13 years, with the number of respondents providing service between 0,8- 3,4 years which amounts to 50%.

Viewed from respondent long working time, those having worked 1–5 years amounts to 70 persons or 46,4%; 6–10 years amount to 62 persons or 41,1%; and the rest that is 19 respondents or 12,6% have worked for 10 years. Mean value of 7,3 and deviation standard of 3,98 explain that they have worked for 7,3 years on average, and its variation is relatively low, caused by mean value which is bigger than its deviation. Range value between 2,5–25,1 with a median of 6 explains that respondent long working time is minimally 2,5 years and maximally 25,1 years with the number of respondents having worked between 2,5–6 years which amounts to 50%.

The number of respondent subordinates between 1–10 persons amounts to 75 persons or 49,7%; respondents having subordinates between 10–20 persons amounts to 26 persons or 17,2%; and, the rest of the respondents having subordinates of 20 persons amounts to 50 persons or 33,1 persons. Viewed from its mean value of 68 with a deviation standard of 200 explains that average respondent has subordinates of 68 persons with a high variation because its

Table 6. Industry Types (Consumer Products)

Nb	Product Types Customers	Total	Nb	Product Types Customers	Total
1	Food and drink industry	23	8	Minimg industry other than metal	9
2	Chemical industry and chemical based goods industry	21	9	Textile industry	7
3	Base metal industry	17	10	Garment industry	6
4	Electrical engine industry and its equipments	17	11	Industry of goods from metal except engine and its equipments	4
5	Rubber industry and rubber based good industry	15	12	Tobacco process in industry	4
6	Engine industry and its equipment	15	13	Furniture industry and its equipment	3
7	Paper industry and paper based goods industry	9	14	Natural gaz processing industry	1
				Total	151

(Source: Processed Primery Data)

Table 7. Respondent Demografic

Demografi and Education Data	Total	%	*Range*	*Mean*	Deviation Standard	Median
I. Education						
1. Post graduate	12	7,9				
2. Graduate	112	74,2	1 - 4	2,8	0,64	3
3. Diploma	18	11,9				
4. Senior High School	9	6				
II. Long Serving						
1 – 5 years	97	64,2				
6 – 10 years	37	24,5	0,8 - 13	4,1	2,5	3,4
> 10 years	17	11,3				
III. Long Working						
1 – 5 years	70	46,4				
6 – 10 years	62	41,1	2,5–25,1	7,3	3,98	6
> 10 years	19	12,6				
IV. Total of Subordinats						
1 – 10 persons	75	49,7				
11 – 20 persons	26	17,2	6 - 1500	68.6	200	12
>20 persons	50	33,1				
V. Field						
1. Economics	91	60,3		1,4	0,49	
2. Non Economics	60	39,7				

(Source: Ordinal data)

DataTable 8. Competitive Advantage Strategy Values (Scores)

Nb	Scala	Cost Leadership Strategy	% Max	Differentiatio n Strategy	% Max	Imitation Strategy	% Max
1.	1	30	0,57%	37	0,55%	0	0
2.	2	494	9,35%	554	8,15%	456	6,71%
3.	3	684	12,94%	861	12,67%	618	9,10%
4.	4	1468	27,78%	2100	30,91%	2588	38,10%
5.	5	925	17,51%	1270	18,69%	1390	20,46%
		3601		4822		5052	
	% Total	68,14%		70,96%		74,35%	

(Source: Ordinal data)

Table 9. Total Quality Management Values (Scores)

Nb	Scala	Customer Satisfaction	% Max	Employee Empowerment and Involvement	% Max	Continued Improvement	% Max
1.	1	2	0,03%	2	0,07%	14	0,46%
2.	2	358	5,93%	192	6,36%	144	4,77%
3.	3	381	6,31%	381	12,62%	363	12,02%
4.	4	1992	32,98%	868	28,74%	960	31,79%
5.	5	1510	25%	710	23,51%	785	25,99%
		4543		2153		2266	
	Total %	75,22%		71,30%		75,03%	

(Source: Ordinal data)

deviation standard value is much higher than its mean. This variation can also be seen from its range between 6–1500.

Research result recapitulation obtained from competitive advantage strategic variables consists of subvariables of cost leadership strategy, differentiation and imitation strategy which can be viewed in table 8 below:

Table 8 explains that the total score of each sub variable of competitive advantage strategy can be descriptively explained that the competitive advantage strategy dominantly applied by manufacturing companies having obtained certificated of ISO 9000 in East Java is imitation strategy with total values (scores) amounts to 5052 or about 74,35%. This result explains that subvariables of competitive advantage strategy dominantly applied by manufacturing companies having obtained certificated of ISO 9000 in East Java can be explained by the imitation strategy. Next, it can be explained by differentation strategy having values (scores) of 4822 or 70,89% and cost leadership strategy having values (scores) of 3601 or 68,14%.

The dominance of sub variables of imitation strategy from the competitive advantage strategic variables compared with sub variables of differentiation and cost leadership strategies proves that strategic planners simultanious agree that imitation strategy of a company from its competitors is achieved when the differences provide something unique and valuable for buyers, besides the low price they have in supplying a product or service differentiated. Therefore, in setting competitive advantage strategic planning, strategic planners are focusing more on imitation strategy associated with business to understand product or service and to understand customers.

Research result obtained for variables of Total Quality Management consists of three sub variables: (1) those oriented to customer satisfaction; (2) those oriented to employee involvement and empowerment; and (3) those oriented to continued improvement, can be seen in Table 9.

Table 9 explains that the total scores of each Total Quality Management variable can be decriptively explained that such variable scores oriented to customer satisfaction is 4547 or 72,22%. Scores of employee involvement and empowerment is 2266 or 75,03%. This data explains that Total Quality Management can be explained by orienting to customer satisfaction, that is 72,22%, employee invovement and empowerment, that is 71,30%, and continued improvement, that is 75,03%.

The dominant sub variable can explains variables of Total Quality Management technical application in manufacturing companies having been certified ISO 9000 in East Java are sub variables of continued improvement. The dominance of continued improvement sub variables compared with employee involvement and empowerment and customer satisfaction in explaining Total Quality Management variables provides an empirical evidence that technical application of Total Quality Management is much more explained by dimention of continued improvement. Values (scores) of the three Total Quality Management variables have unsignificant ranges, meaning that in setting technical application of Total Quality

Table 10. Company performance Values (Scores)

Nb	Scala	Financial Perspective	%Max	Customer Perspective	%Max	Internal Business Process Perspective	%Max	Learning and Growth Perspective	%Max
1.	5	3685	24,40%	3645	24,14%	3925	23,63%	2145	23,68%
2.	4	2592	17,17%	2644	17,51%	2776	16,71%	1528	16,87%
3.	3	2025	13,41%	1710	11,33%	2274	13,69%	1083	11,95%
4.	2	1316	8,72%	1416	9,38%	1452	8,74%	920	10,16%
5.	1	302	2%	352	2,33%	661	3,98%	331	3,65%
		9920		9767		11088		6007	
	Total %	65,95%		64,68%		66,76%		66,30%	

(Source: Ordinal data)

Management, strategic planners are focusing more on continued improvement variable, rather than sub variables of customer satisfaction and employee involvement and empowerment.

Research results for manufacturing performance variables being measured by balance scorecard consists of sub variables of finance perspective, customer perspective, internal business process perspective and learning and growth perspective, can be seen in Table 10.

Taken from each balance scorecard perspective, table 10 explains that total score of each balance scorecard performance variable can discriptively be explained that values of financial perspective is 9920 or 65,95%. Values of customer perspective is 9767 or about 64,68%. Values of internal business process perspective is 11088 or 66,76%, and values of learning and growth perspective is 6007 or 66,30%. This data explains that company performance measured by balance scorecard can be explained by finance perspective, that is 65,95%, customer perspective, that is 64,68%, internal business process perspective, that is 66,67%, and learning and growth perspective, that is 66,30%.

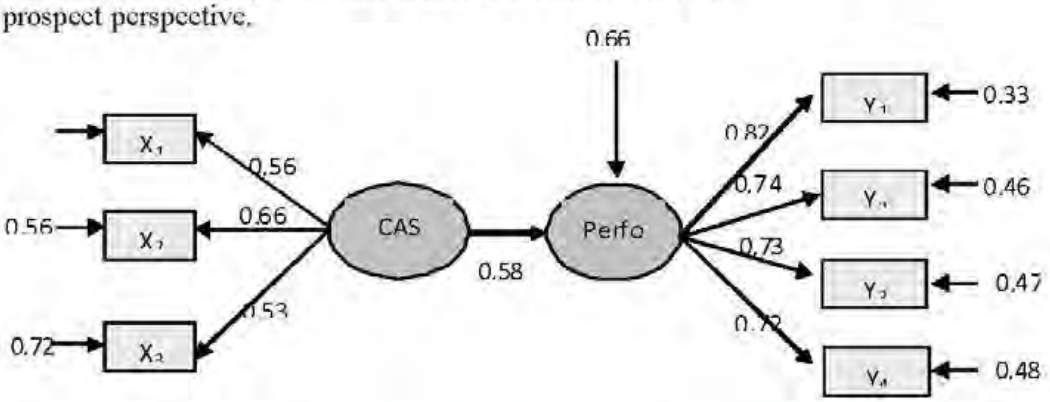
The most dominant sub variable in explaining company performance variables measured by balance scorecard, being applied to manufacturing companies having been certified ISO 9000 in East Java is internal business process perspective with value of 66,67%. The dominance of internal business process perspective sub variable compared with sub variables of finance perspective and customer perspective, together with learning and growth perspective in explaining company performance variables provides an evidence that company performance variables are much more expained by dimention of internal business prospect perspective.

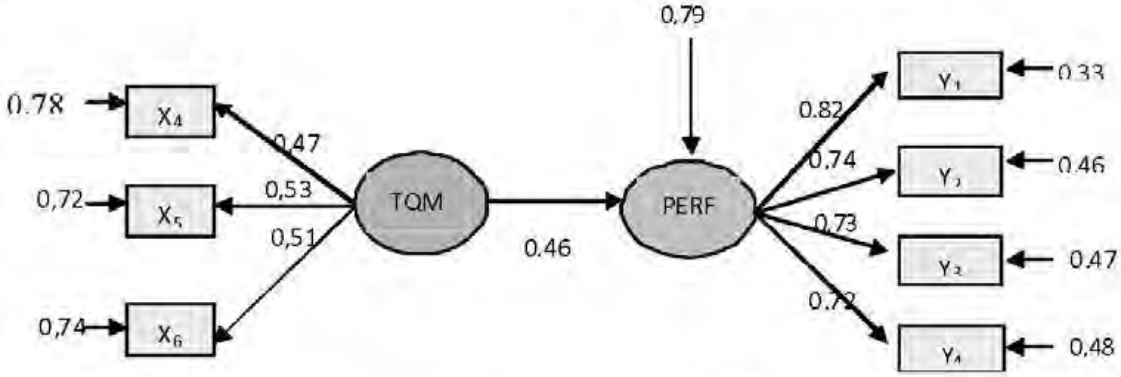
Test of the first hypothesis using SEM is conducted to test influence of competitive advantage strategic application (x_1) upon company performance (h_1). Calculation result performed by using the aid of LISREL Program can be perceived in figure 1.

From the calculation result conducted by LISREL Program packet, it is obtained a result presented in figure 1 about the wide direct influence of competitive advantage strategic application upon achievement of company performance measured by balance scorecard perspective which results (0,58 x 0,58 x 100%) = 34. This means that the influence of competitive advantage strategic application consisting of cost leadership strategy, differentiation strategy, and imitation strategy upon company performance is positive and significant, that is 34%. While influences of other variables untested in this research is 66%.

The second hyphotesis performs a temporary respond to problem formulation about how much influence Total Quality Management application has on company performance. The proceeded hyphotesis is that Total Quality Management application (x_2) has positive influence on company performance (h_1). Calculation result performed by using aid of LISREL Program can be perceived in figure 2.

Figure 2 explains that direct influence of Total Quality Management application on working performance being measured by balance scorecard is (0,46 x 0,46 x100%)= 21%. Thus, it can be stated that the application of Total Quality Management consisting of customer satisfaction, employee involvement and empowerment and continued improvement have direct positive and significant influence on the achievement of company performance, while influence of other variables untested in this research is 79%.





Test of the third hyphotesis using SEM is conducted to test applications of competitive advantage strategy (x_1) and Total Quality Management (x_2) simultaneously have positive influence on company performance (h_1). Calculation result performed by using aid LISREL Program can be noticed in figure 3.

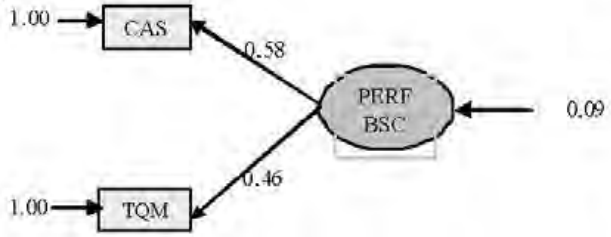
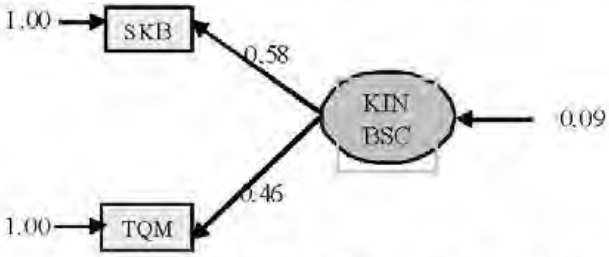


Figure 3 explains that the entire influence of competitive advantage strategic application and Total Quality Management application on company performance being measured by balance scorecard is 91%. Thus, it can be stated that the applications of competitive advantage strategy and Total Quality Management simultaneously have a positive and significant influence on company performance being measured by balance scorecard.

DISCUSSION

Results of the first hyphotesis test support a statement that application of competitive advantage strategy has an influence on the achievement of company performance. Influence of competitive advantage strategic application on the achievement of company performace is positive, meaning that better competitive advantage strategic quality can determine successfulness in company performance achievement. Company successfulness or failure in its performance can be explained by competitive advantage strategy. Besides, influence of competitive advantage strategy on the achievement of company performance provides a significant result, meaning that the influence of competitive advantage strategic application on company performance achievement provides a significant influence.

Results of this hyphotesis test support Porter' argument (1980;35) and Smith at.al (1991;23) which stated that the application of competitive advantage strategy tended to make companies win in competition. Cost leadership strategy could make companies efficient in cost. Next, Smith at.al (1991;23) stated that the differentiation strategy could make companies performance continue innovation.



Result of the first hypothesis can also support research result conducted by Akram (2001;159), stating that application of competitive advantage strategy had a positive and significant influence on efforts of company performance achievement.

Further, based on respondent responses on application of competitive advantage strategy, it is found out that the three sub variabels of competitive advantage applied by a company, are applied on high scale, of which the dominant variable is the one applied by companies having obtained ISO 9000 in East Java, the imitation strategy, with a total score of 5052 or 74,35%. This research explains that sub variable of competitive advantage strategy dominantly applied in

manufacturing companies having been certified ISO 9000 in East Java can be explained by imitation strategy. This research discovery is consistent and supports statements of Robbins (2001;451) and Smith at.al (1991:34) stating that there was a tendency that companies using imitation strategy to win in a competition, and imitation strategy could make the companies efficient in cost and innovative in product development. This discovery is also consistent and supports statement of Grant (1995;164) stating that practically, there were only a few companies faced with such a defined (clear) alternative between being on cost leadership strategy or on differentiation strategy. So, that the most advantageous position was positioning this products and servies on imitation strategy. The discovery proves that strategic planners simultaneously think that imitation strategy of a company against its competitors is achieved when the difference provides something unique and valuable for buyers, in addition to the low price resulting from supplying products or services which have been differentiated.

Result of the second hypothesis supports a statement stating that Total Quality Management application has an influence on company performances. Influence of Total Quality Management on achievement of company performance is positive, meaning that by applying TQM techniques, companies can increase customer satisfaction by conducting continued quality improvement on products and services which implicate to the achievement of company financial performance. Besides, TQM application on company performance achievement provides a significant result, meaning that the influence of TQM techniques on company performance achievement provides a significant influence.

Result this hypothesis support argument of Banker and Schroeder (2003;36) stating that TQM manufacturing practice enabled employees to solve problems, to work in a team or to create a teamwork and to generate innovative approach to improve production which is focusing more on products and customer satisfaction which implicate to the achievement of company performance than on others.

Further, results of this hypothesis also supports research discoveries conducted by both Daniel and Reitsperger (1991;601-618) and by Wruch and Jansen (1994;256) stating that TQM technique application would have an impact on the occurrence of organization structure changing, organization goal, operational process, roles of managers and employees, ways of evaluating performance, etc. Further, Daniel and Reitsperger (1991:601–618) provided an empirical evidence by describing Javanese electronic and automobile companies which applied TQM technique, and provided a feedback of better company performance.

Results of the second hypothesis also supports research conducted by Hendrik et.al (1997:757–777) examining influence of TQM program application on financial performance of company operational activities. He explained that companies having obtained quality awards (TQM application proxy), experienced 10 years financial performance increase.

Further, results of this second hypothesis also support research discoveries conducted by PT. Sucofindo, cooperating with PUSTAN in Mulyanto (1999: 57), stating that TQM technique application had an impact on the increases of organizational intern, productivity and extern, and sale.

Results of this hypothesis also supports discoveries of Flynn, et al. (1995;89), Madu, et al. (1996:34–45), Benson, et al. (2003;234–257), who tested influence of quality management practice on company performance. Also, Flynn, et al. (1995:91) who used 400 companies having obtained quality awards (proxy TQM) to assess influence of TQM technique application on financial performance of company operational activities.

The result is a relation between quality dimension and company performance, in which those companies experience an increase on financial performance. Quality management practice has a positive and significant influence on company performance. The successfulness of TQM technique application requires company infrastructure supporting that TQM technique application. This research also indicates that company tipology affects relationship between quality dimension and organizational performance.

Further, result of this second hypothesis also supports research results conducted by PQM Consultant in Mulyanto (1999:95), stating that survey conducted to 250 companies in Indonesian indicated that most of those companies (80%) stated that the main reason of the TQM application was to increase

competing power and product quality. This survey also explains that 8% of the companies applying TQM obtain a satisfaction result, and 60% of all have satisfaction result in the achievement of company financial performance.

Result pf this statistic rest, conducted to test the three hypothesis simultaneously which indicates a positive and significant influence. Overall, the influence of competitive advantage strategic application and TQM on company performance measured in Balanced Scorecard is 91%. Influence of other variables excluded from this research is 9%.

Thus, this research results prove that the third hypothesis: Application of competitive advantage strategy and Total Quality Management simultaneously has a positive and significant influence on company performance measured by Balance Scorecard perspective can be accepted. This means that management, in planning strategy to achieve the company goal, needs to consider competitive advantage strategy and TQM which finally will implicate to the increase of company performance as a whole.

CONCLUSION

Overall, indicators used to describe variables in this research are significant. The Three indicators used to explain (measure) implementation variable of competitive advantage strategy, all have positive coefficient, and the biggest coefficient is differentiation strategy, which then followed by cost leadership strategy and imitation strategy. The three indicators used describe (measure) implementation variable of TQM have positive coefficient while the biggest coefficient is then followed by continued improvement and customer satisfaction. While performance indicators with Balance Scorecard concept, the biggest coefficient can be described (measured) by financial perspective, and the smallest coefficient is growth and learning perspective.

Influence of competitive advantage strategy application on the company performance achievement is relatively high. It partially means that if the application of competitive advantage strategy increase, the achievement of company performance in perspective of Balance Scorecard will tend to increase. Competitive advantage strategy, most dominantly applied by manufacturing companies having obtained certificates of ISO 9000 in East Java, is immitation strategy. Overall, degree of competitive advantage strategy application applied by companies is categorically high.

Influence of TQM technical application on the achievement of company performance is relatively. It partially means that if TQM technical application increases, company performance achievement in Balance Scorecard perspective will tend to increase.

Overall, influence of competitive advantage strategy and Total Quality Management application on company performance achievement is relatively high (91%). It means that, simultaneously, if the application of competitive advantage strategy and TQM technique increase, performance achievement with balance scorecard concept will experience a meaningfull and significant increase.

Balance scorecard application degree separated performance evaluation of each perspective is relatively high, and so is the overall integrated application in general which is categorically high.

Recommendation

Based on the previous discussion and conclusion, several suggestions are proceeded as follows; (1) In general, the application of competitive advantage strategy performed by business firms lies on high category. Therefore, it is suggested to the management to determine firmly what competitive advantage strategy is chosen, that is the cost leadership strategy, differentiation strategy or imitation strategy. This action must be conducted for it is followed by firm implementation by using available resources, skill, organizational design and control system possessed by the companies maximally so that company direction in setting performance standard will be clearer and more measurable. (2) In applying techniques of TQM, though it has empirically a positive influence upon working performance in this research, it is suggested that management pay attention o constraints which might cause the application of TQM to be less maximum or even experience failure in achieving the company goal. An typical example is that management must pay more attention on the establishment of incorrect team or the established team has no commitments on TQM goal, unclear purpose of team establishment, high frequency of

team member exchange, less understanding on TQM, bad communication among team members, problem identification is not conducted entirely to each management level. Those constraints can be categorized into: employee and cultural constraints, infrastructural constraints, managerial constraints, and organizational constraints. Evaluating potential constraints in TQM application is suggested to function as an integral segment of TQM application process. (3) It is suggested to management that performance evaluating and perspective balanced scorecard should not only be perceived as a means of evaluating working performance only, but more important as a means of strategic instrument to make a future decision. Evaluating on each performance indicator in balanced scorecard should be conducted gradually following the development of business environment and business strategic changing conducted by companies so that it will result performance appraisal system and strategic plan for companies having comprehensive characteristics, coherent, balanced and measurable. (4) Since this research is limited only to managers working in manufacturing companies, it is suggested that the following researchers to use research respondents of managers of service companies and trading having accepted certificate of ISO 9000, because it is import to test the research result consistency for it might give a different results.

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