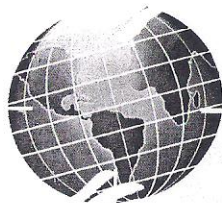


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The 7<sup>th</sup> International Conference on Business  
and Management Research

# PROCEEDINGS

*"Transforming Local  
and Regional Networks into  
Sustainable Growth"*

16<sup>th</sup> November 2012  
University of Economics-Ho Chi Minh City, Vietnam

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**Joint Conference University of Economics-Ho Chi Minh City (UEH) and**

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**Supported by ABEST 21**

**16<sup>th</sup> November 2012**

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## WELCOMING NOTES FROM ORGANIZING COMMITTEE

Dear colleagues,

I am pleased to welcome you to **The 7<sup>th</sup> International Conference on Business and Management Research (ICBMR)** by Management Research Center (MRC). For seven years this Conference has been held consistently and become one of the leading academic international conferences.

The first ICBMR was held in August 2007 in Bali, while the second ICBMR was held in Augusts 2008 in Jakarta. To establish a platform for international collaboration for research, MRC actively look for potential partners in conducting the annual conference. The 3<sup>rd</sup> ICBMR was held in Bali together with The 14<sup>th</sup> Euro-Asia Conference, and in 2009, MRC hosted the joint conference with the University of Adelaide. Since 2010, the event was also supported by ABEST 21. The 6<sup>th</sup> ICBMR was conducted in collaboration with Ateneo de Manila University, Philippines in Manila. In the future, MRC is maintaining its effort to look for international partnership opportunity in organizing the conference.

We hope that the publication of this proceeding will be able to serve as a media for the latest researches and new ideas; this thought is aligned with Universitas Indonesia's vision to become Research Oriented University.

Finally, on behalf of all my colleagues from Universitas Indonesia and University of Economics-Ho Chi Minh City, and all the members of Organizing Committee ICBMR 2012, we wish you not only an enriching conference but also a pleasant stay in Ho Chi Minh City, Vietnam.

Regards,

**Rofikoh Rokhim, Ph.D.**  
Head of Organizing Committee ICBMR 2012

## CONFERENCE SCHEDULE

16<sup>th</sup> November 2012

University of Economics Ho Chi Minh City

59C Nguyen Dinh Chieu Street, District 3, Ho Chi Minh City

07.30 – 08.00	Registration
08.00 – 09.00	Welcome Remarks : <ul style="list-style-type: none"><li>• The President of University of Economics – Ho Chi Minh City</li><li>• Dean of Faculty of Economics and Business Universitas Indonesia</li><li>• President of ABEST21</li></ul>
09.00 – 12.30	Thematic Research Presentations I
12.30 – 14.00	Lunch Break
14.00 – 17.00	Thematic Research Presentations II
17.00 – 18.00	Dinner preparation
18.00 - 21.00	Dinner on board at Mekong river & best paper awarding

Joint Conference  
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# **Management Perception toward *Total Quality Management* and The Impact of it's Implementation on Organizational Performance: Survey throughout SME's in Yogyakarta Region, Indonesia**

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## **Abstract**

In the competitive, global and turbulent business environment, quality is the only key to survive. Quality is a critical success factor for achieving competitive advantage in today's market. Total Quality Management (TQM) is a concept to respond to the situation. The purposes of this study are to determine the manager's perception of Small Medium Enterprises (SME's) on TQM and to measure their effect of its implementation on organizational performance.

By using questionnaire, data were collected from 96 SME's throughout Yogyakarta Special Region Province, Indonesia. The samples were selected by convenience random sampling. All selected companies have implemented Total Quality Management, although vary in the length of implementation, but all surveyed SME's have implemented TQM more than 1 year. The research revealed that Total Quality Management was perceived as Product Quality Improvement Program (46.15%), and Product Cost Reduction Program (22.49%). Managers of the surveyed companies got information on TQM from the successful TQM Companies (58.33%). It proved that lesson learned from others companies was an important factor to motivate others in implementing a certain program.

The research also indicated that SME's managers were fully aware that TQM was a method for improving quality of product and had become the critical factor in improving organizational performance. The reasons of implementing TQM were more influenced by external factors rather than internal. According to the research, there two main reasons of implementing TQM in SME's, the first was to satisfy customers and the second was to increase the SME's competitiveness in a global market.

The last finding was related to organizational performance. The study result indicated that TQM gives some positive impacts on SME's performances. The major impact of implementing TQM on organizational performance were (1) reducing the number of defective products (79.17%), (2) Decreasing the number of customer's complaints (73.96%), (3) improving the efficiency of production processes (69.79%), and (4) Reducing the sales returns (67,71%). Although there were several good impacts of TQM implementation, but the impact themselves have not yet improved the organizational performance significantly.

*Keywords: Total Quality Management, Quality, Organizational Performance, SME's,*

## INTRODUCTION

In the last decade, the business environment in global market reflecting intense competition both in price and in product variety. Lee (2004) stated that customers all over the world becoming more quality-conscious. Quality has become one of the most important drivers in the market today. The new wave of quality awareness has given a significant influence on how to manage a business. Business success may simply be the extent to which an organization can produce a higher-quality product or service than their competitors. In many industries, quality excellence has become a standard for doing business. To meet the challenges, a firm has to pay more attention to quality management program. The decision on what quality programs to be implemented in an organization are influenced by the internal needs of improving quality and the organizational motivation in improving quality of products (Hesham Mag, 2003).

Many companies understand that Total Quality Management (TQM) is necessary for them to remain in the business, to retain their market share and to be able to respond to changing competitive demand in today business world. TQM and ISO 9000 are considered as the most popular quality programs in the last decade (Lee and Palmer, 1999). The increasing on competition has forced many manufacturer to embrace TQM actively in order to survive and succeed in business (Hawkes and Adam, 1995 in Agus, Krishnam and Kadir, 2000). There are two major positive impacts of improving quality to the organizational performance, the first is increasing the sales revenue and the second is decreasing the production costs per unit. In the short run, the increasing sales revenue and the decreasing production costs will increase the company profit and in the long run, the improvement of product quality will increase the customer satisfaction.

The impacts of TQM implementation on financial and non-financial organizational performance have been proved empirically in all over the world. Several companies that implemented TQM have experienced the increasing of organizational performance consistently. There are several studies that have proved the relationship between TQM and organizational performance, however, most of them were focused on large corporation. Hasan and Kerr (2003), Sun (2000) and Terziovski and Samson (1999) find out that the implementation of TQM in services companies could increase the organizational performance significantly.

There are also several researchers who investigate the implementation of TQM on Small Medium Enterprises. Generally, SMEs are differ compare to Big companies in several aspects, such as management style, production process, available fund, purchasing policy, inventory system and power to bargain with external parties (Lee, 1998). Haksever, 1996; Welsh & White, 1981 in Rahman (2001) wrote that SMEs differ from large organizations in management style, structure, decision-making process, availability and utilization

of resources and negotiating power. These differences are likely to influence the relevance, planning and implementation of TQM principles and procedures. Several researches (Lee, 1998) stated that the implementation of TQM would have more significant impacts on SMEs rather than big companies, because TQM elements mostly are more suitable for SMEs. Mandal et. al (2000) in Sohail and Hoong (2003) stated that in developing countries where the economies are primarily regulated by government policies and the scope and competition is limited, the position of quality programs has been distinctly different from that of the developed countries.

There are some criteria to classify business unit into small, medium or large-sized enterprises in Indonesia. The classification could be based on the number of employees or based on other variables such as annual sales, total assets and number of employees. The Indonesian Ministry of Industry and Trade defines manufacturing SMEs on the basis of the value of their assets (excluding land and buildings). Firms with assets of less than 200 million IDR are considered smallscale enterprises and those with assets of 200 million IDR to Rp 5 billion IDR are medium-scale enterprises. State Ministry of Cooperatives and Small & Medium Enterprises defines smallscale enterprises as firms with assets (excluding land and buildings) of less than Rp 200 million or with sales of less than Rp 1 billion and medium scale as those with assets more than 200 million IDR but less than 10 billion IDR. The Central Statistics Bureau classifies medium sized enterprises and industries in three ways: micro enterprises with household industries made up of three employees or less (including non-paid laborers), small enterprises consisting of 5-9 employees, and medium enterprises consisting of 20-99 employees.

## **RESEARCH PROPOSITION and RESEARCH OBJECTIVES**

Kushnir, Miemulstein and Ramalho (2010) wrote that SMEs are not only better in the business structure, but also employ a higher percentage of the workforces. Formal SMEs employ more than one-third of the global population, contributing around 33% of employment in developing economies. From a regional perspective, East Asia and the Pacific have the highest ratio of SMEs employment to total employment. This is mainly driven by China, where formal SMEs account for 80 percent of total employment. The low ratio of formal SME employment to total employment in South Asia could be explained by the fact that in the three countries covered, Bangladesh, India, and Pakistan, the informal sector is large. Kushnir, Miemulstein and Ramalho (2010) also stated that on average, there are 31 SMEs per 1,000 people across the 132 economies covered.

SMEs are vital component of growing economy and contribute positively in development of economic development by creating employment for both urban and rural workforce and by providing much needed flexibility and innovation in the economy as a whole. SMES in Indonesia have a critical role in national economeies by providing more job opportunities. Musnandar (2012) stated that SMEs in Indonesia constitute 91.8 million employment in 2011. According to Syarif Hasan, Indonesian Cooperation and Small Business Minister, Indonesian SMEs could provide 15 million job each year. In Yogyakarta, formal SMEs could provide 69.341 job opportunities in 2004, without considering informal SMEs.(Kompas, October 2005).

As part of the global market, Yogyakarta SMEs also have done the quality improvement program actively by implementing TQM in providing better products to customer. In a view of the fact that the success of SMEs has a direct impact on national economic condition, this paper tries to present the evidences of the impact of TQM implementation on organizational performance. TQM is always led from the top of the organization, and it is therefore important to avoid a situation where it simple stays at the top. The Top manager has to encourage the TQM implementation across the organization. What top manager percieves toward TQM, his or her perception will deliberate to all organization employess. In light of the above, the research was initiated with following propositions : **(1) How are the perception of SMEs managers toward Total Quality Management as an approach in improving the quality? (2) How are the impacts of TQM Implementation and Financial and non-financial Organizational performance of SMEs?**

The classification of SMEs in this reasearch will based on the definition stated by The Indonesian Ministry of Industry and Trade that defines manufacturing SMEs on the basis of the value of their assets (excluding land and buildings). Firms with assets of less than 200 million IDR are considered smallscale enterprises and those with assets of 200 million IDR to Rp 5 billion IDR are medium-scale enterprises. By investigating the perception of managers toward TQM and the impact of TQM imepelemntation on SMEs, this reaserach objectives are: (1) To identify the perception of management towards Total Quality Management that in general it is perceived as the program to increase product quality (2) To analyze the impact of TQM implementation on organizational performance, both mesaure in financial ad non-financial indicators; (3) To recommend strategies for government, acadeciains in promoting the implementation of TQM effectively among SMEs.

## **THEORYTHICAL FRAMEWORK**

### **The Definition of *Total Quality Management* (TQM)**

TQM is a quality concept, however, Total quality management is a much broader concept than just



controlling the quality of the product itself. The word “Total” refers to everybody in the organization should be involved in the process. The word “Quality” means that the products or services must meet or exceed the customer expectation. The last word “management” refers to that senior executives are fully committed. As a quality concept, Agus, Krishnam and Kadir (2000) defined TQM as a holistic management philosophy, applying to everything, in order to satisfy all customer, internal and external, specifically users of the customers’ products and services (quality) and it follows the example set and reinforced in the organization (management). Demirbag et.al (2006) also stated that TQM is a holistic management *philosophy* aiming at continuous improvement an all fuction of an organizationn to produce and deliver goods or services in line with customers’ needs or requirements by better, cheaper, faster, safer, easier processing than competitors with the participation of all employees under the leadership of top management. TQM that focus on continues improvement on quality will put a company on (1) strengthening the company competitive advantage in the market and (2) increasing the degree of conformance. The ultimate contributions of successful TQM implementation includes attaining excellence, creating a right first-time attitude, acquiring effective and efficient business solutions, achieving zero defects, delighting customers and suppliers.

As a holistic management philosophy, the strong top management commitment is a critical success factor in implementing TQM continously. Management’s role in TQM is to develop a quality strategy that is flexible enough to be adapted to every department, aligned with the organizational business objectives, and based on customer and stakeholder needs. Once the strategy is set, it must be the motivating force to be deployed and communicated for it to be effective at all levels of the organization. TQM is a comprehensive approach that works horizontally across an organization, involving all departments and employees and extending backward and forward to include both suppliers and customers. Gaspersz (2005) mentioned that TQM covered all managerial function in which quality policy, quality objective are established, and the concepts are implemented through quality planning, quality control, quality assurance and quality improvement. All these definitions actually yield to the same conclusion that strong emphasis must be given towards achieving customer satisfaction by providing excellent quality of products or services.

### **Principles of Total Quality Management**

There are certain essential principles, which can be implemented to attain the TQM goals. Nasution (2001) stated that the principles of TQM were Customer Focus, Quality Obsesion, Scientific approach, Long term commitment, teamwork, and continues improvement, Education and Training, Controllable freedom,

goal congruence and Employee empowerment. In general, there are nine principles that have been identified as the most important principles of total quality management (Lee, 1998). They are (1) Customer focus; (2) top management's commitment; (3) quality data and reporting; (4) training; (5) roles of quality department; (6) employee involvement; (8) product/service design and (9) supplier quality management.. Some TQM element and programs are more compatible with SMEs; other TQM benefits may be more significant to SMEs. Hensler dan Brunell (Tjiptono and Diana, 1996) stated that TQM has four main concepts or principles that make TQM work well. They are Customer focus, Response to everyone, Management based on facts and continuous improvement.

- a. **Customer Focus.** Quality is defined by the customer. To satisfy customer needs, quality is built into the design and development process. Customer always want the best quality of the purchased products or services. If the product does not meet the customer needs, the customer will not purchase the company's products. TQM recognizes that a perfectly produced product has little value if it is not what the customer wants. In TQM, quality of product is *customer driven*. Companies must always remember that they would not be in business if it were not for their customers.
- b. **Response to anyone.** Employees is the most essential economic resources in total quality management. Systems, standards and technology themselves will not provide quality. People must understand what to do, how to do and must be ready to review the progress of their own work, for continuous improvement of quality. Giving workers the responsibility for improvements provides strong motivation for employees. A company should treat them well and equally and gives an opportunity to participate in making decision.
- c. **Management by facts.** To be a world-class company, Total quality management encourages steady data collection and rational decision making based on data rather than on feeling, intuition, impressions or uninformed opinions. Knowledge of facts at all levels is an essential aspect of continuous improvement.
- d. **Continuous Improvement.** The fourth principle of the TQM philosophy is the focus on **continuous improvement**. Companies need to continually doing continuous improvement in quality in order to stay in tune with what customers want. Continuous improvement means that the company continually strive to be better through learning and problem solving. Because we can never achieve perfection, we must always evaluate our performance and take measures to improve it.

## Performance Indicators

Several empirical research have been done to investigate the impact of TQM implementation on organizational performance. The result of those research indicated that there are various measures of

performance, i.e organizational performance, corporate performance, business performance, operational performance, financial and non-financial performance innovation performance and quality performance (Salaheldin, 2008). *Performance*, as well as TQM, can be defined in several terms. EFQM (1999) in Eriksson and Hansson (2003) defined performance as measure of attainment achieved by an individual, team, organization or process. Prawirosentono (1999) defined organizational performance broader. He said that performance is achievement of an individual, a team work or a group in an organization, based on their own responsibility in order to attain the organizational goal legally and ethically. Lee (2004) mentioned that there are several aspects in evaluating organizational performance (1) Financial performance, (2) Quality Performance, (3) Manufacturing performance, (4) Inventory-related performance, (5) supplier-related performance.

Demirbag *et.al.* (2006) stated that traditionally, organizational performance has been measured by using financial indicators, such as profit, market share, sales revenue growth etc. Actually, Financial measure of performance is an ultimate result of other performance. The use of financial measures of performance, primarily because it was easy to measure. Kaplan and Norton (1996) stated that financial measures of performance would measure only past performance. However, in order to overcome potential shortcomings of traditional organizational performance measurement, non financial performance measurement is needed. Generally, non financial measures reflect the operational impacts of TQM practices. The operational performance are considered as primary indicators, because they follow directly from the action taken during the implementation of TQM. The indicators of operational performance are reducing waste, reducing the customers' complaints, reducing the defective goods, improving the quality of products, improving manufacturing flexibility, improving the responsiveness to customers' complaint and improving the productivity etc. Whereas, the financial indicators are considered as secondary indicators, because they are the a consequence of TQM practices. The financial indicators are revenue growth, net profit, and Return on assets etc. Accordingly, the financial and non financial indicators are used as performance variables in this research.

## **Prior Researches Review**

In order to get complete understanding of the theory and practice, various studies were analyzed and reviewed. Several studies on the impacts of TQM implementation on organizational performance of SMEs have done worldwide recently. Anderson and Sohal done their research in Australia (1999), Huang and Chen in Taiwan (2003), Sohail and Hoong (2003) in Malaysia, Lee (2004) in China, Demirbag *et. al* (2006) in Turkey and Malik *et.al* (2010) in Pakistan.

Anderson and Sohal (1999) examined the impact of TQM on performance of Australian SMEs. In this research, they used Australian Quality Awards framework to determine the relationship between TQM adopters and business performance. They revealed a positive correlation between TQM adopters and organizational performance, reiterating the need for effective implementation of the TQM practices along with strategic decision making which will ultimately yield long-term fruitful results for SMEs.

Huang and Chen (2002) investigated the impact of TQM implementation on organizational performance in services companies. Indicators used to measure TQM implementation were employee empowerment, executive support, training, measuring product and service, benchmarking on quality and service, statistical method, benchmarking on cost, supplier cooperation, and employee involvement. The conclusion revealed that there was a correlation between TQM implementation and organizational Performance on services companies.

Sohail and Hoong (2003) compared the impact of TQM implementation on organizational performance between SMEs with and without ISO 9000 certification in Malaysia. SMEs with ISO 9000 are considered as the companies that have implemented TQM, whereas, without ISO9000 certification represent companies that have not implemented TQM. The research found that there was a significant difference on financial performance between companies with and without ISO9000 certification in Malaysia. This findings proved that ISO9000 certification can be put as “*recognition*” in implementing TQM that will increase the organizational performance..

The next research is done by Lee (2004) in China. This research described how TQM concepts were introduced to SMEs in China for the first time, what are their perception of TQM and the impact of the implementation on organizational performance. Based on 112 SMEs, this research revealed that mostly SMEs got the knowledge of TQM from their foreign business partners. This study also found that 43,75% of SMEs practitioners perceived that TQM was a *cost saving tools*. The impact on organizational performance were: reducing the inventory and waste (75%), reducing the defective goods (59,82%), increasing the sales volume (55,36%) and 60% of SMEs surveyed experienced the increasing of profit..

The same manner research was done by Demirbag et al. (2006) in Turkey. This Study investigated the impact of TQM implementation on organizational performance in Turkish SMEs. The TQM implementation is measured using several indicators. They are quality data and reporting, role of top management, employee relations, supplier quality management, training, quality policy, and process management. The organizational performance is defined as financial performance, non-financial performance and output. Results showed that



there is a positive and significant correlation between TQM implementation and Organizational performance, both financial and non-financial performance. The latest study was done by Valmohammadi (2011) in Iran. In summary, the research conclusion have shown a positive indication that there is a relationship between TQM implementation and organizational performance of Manufacturing SMEs in Iran.

## **RESEARCH METHOD**

### **Variables Measurement**

The reserach questionnaire consists of 3 parts. The first part is general questions on respondent profile that will describe the characteristics of SMEs. There were 6 questions in the first part. The second part consists of 7 questions on the managers perception on TQM. The last part of the questionnaire asked the impacts of TQM implementation on organizational performance. This study measured the organizational performance by using both financial and non-fiancial indicators. There are 9 indicators of non-financial performance: reducing inventories (raw material and finished goods), reducing waste and emmision, reducing the number of defective goods, decreasing customers complaints, decreasing interruption during production process, increasing the on-time delivery to customers, increasing the on-time receicing from supplier and increasing the production efficiency. However, there are only 2 indicators of financial performance: increasing sales revenue and increasing profit from selling goods or services.

### **Population and Sample**

The data used in this research includes primary data obtained from the answers of respondents collected through questionnaire and list of questions. The respondents in this research were managers, both middle managers and top managers (Lee, 2004) who were responsible for the quality of Small and Micro Enterprises (SME) in the Yogyakarta. The population of this research was manufacturing Small and Medium Enterprises in Yogyakarta. Being only 3,185.8 km<sup>2</sup> and inhabited by about 3.5 million people, Yogyakarta is greatly suitable for the development of MSEs than the development of industry-based economic activities (Kompas, October 18<sup>th</sup>, 2005). This condition was supported by the potential of human resources, arts centres and educational institutions in Yogyakarta.

Manufacturing SMEs as the research subject because they have the most complete process, from material procurement to finished products. Such a long process cannot be found in SMEs engaged in trade and services. With such a long production process it is expected that the measurement of TQM variables will be thorough and exhaustive from the upstream to the downstream. Sample was determined randomly. Questionnaire respondents were member of top managers or senior managers who were in charge of quality

management area of the SMEs (Lee, 2004). Because the survey was confined to a local area, the data were collected by using Personally Administered Questionnaires. The advantage of this is that the researcher or research assistants can collect all the completed responses within a short period of time and can clarify any question directly at that time. Personally Administered Questionnaire also avoids any confusion at the spot. The researcher afforded the opportunity to introduce the research topic and motivate the respondents to answer the questions correctly. There were 96 SMEs that were inclined to participate in this research.

### Respondents' Profile of TQM Implementation

The respondents profile were presented in table 1. Most SMEs studied were personal enterprises (82.30%) while the rest were joint venture ones. As much as 42.71% of the product range was handicraft made of diverse materials, such as silver, leather, wood and other materials. The other product range includes clothes, food and beverages and furniture. By using the classification of SMEs according to The Indonesian Ministry of Industry and Trade, only 41.56% of the samples were small scale enterprises, whereas 58.44% were medium scale enterprises.

**Table 1. SMEs Profile**

Status or type of enterprise	Personal enterprise	79	82.30%
	Joint venture	17	17.70%
	Branch of multinational company	0	0.00%
	Others	0	0.00%
Type of products	Handicraft	41	42.71%
	Furniture	10	10.42%
	Automotive spare parts	3	3.13%
	Clothes	6	6.25%
	Food and beverages	18	18.75%
	Printing and publishing	9	9.38%
	Others	9	9.38%
Implementation Duration	Less than 1 year	2	2.08 %
	1-2 years	5	5.27 %
	2-5 years	20	20.83%
	More than 5 years	69	71.88%
Amount of financial asset	less than Rp 200 million	40	41.67%
	Rp 200 - Rp 500 million	24	25.00%
	Rp 500 million - Rp 1 billion	7	7.29%
	Rp 1 billion - Rp 2 billion	12	12.50%
	More than Rp 2 billion	12	13.54%

Based on the initial questions in the questionnaire, all samples have implemented TQM, although they varied in the length of implementation. From Table 1 it is also indicated that mostly SMEs has implemented TQM more than 5 years (71.88%) while others had just implemented TQM for 1 to 5 years (28.12%). From the

research outcome it found that the main source of TQM concept used in implementing TQM in the enterprises studied in this research was learning from other enterprises (48.70%), followed by seminars, articles and local books (26.96%). The most interesting outcome was that 12.17% of samples have implemented TQM by self learning. This outcome indicated the high motivation in implementing TQM (See Table 2 for the details).

**Table 2. Main Source of Knowledge on TQM and Main Reasons of Implementing TQM**

<b>Main Source of Knowledge on TQM concept was obtained from:</b>			
1	Main office	1	0.87 %
2	International seminars / articles / books	2	1.74 %
3	Local seminars / articles / books	31	26.96 %
4	Other enterprises	56	48.70%
5	Self learning	14	12.17 %
6	Formal Education	5	4.35 %
7	Others	6	5.22 %
<b>Mains reasons why enterprises implemented TQM concept</b>			
1	Enhance competitiveness of enterprise	64	66.67%
2	To be a quality leader in Industry	33	34.38%
3	Fulfil customers' demand of quality	80	83.33%
4	Enhance efficiency of enterprise operational activities	17	17.71%
5	Eliminate unefficiency	15	15.63%
6	Follow the trend	1	1.04%
7	Others	17	17.71%

This research also revealed that the reasons of implementing TQM were varied. The main reasons were to fulfil the demand of customers on quality (83.33%), to enhance competitiveness of their enterprises (66,67%) and to be a quality leader in industry. These findings indicated that external forces more powerfull in motivating SMEs to implemen TQM rather than internal factors. The enhancement of competitiveness and customer satisfaction truly became a special attention. It could be stated that SMEs were aware that creating competitiveness and produceing the best values for customers would become the major determinant to survive and grow in the global, competitive and turbulent business environment. To cope with the situation, SMEs attempted to implement TQM concept in their daily operational activities.

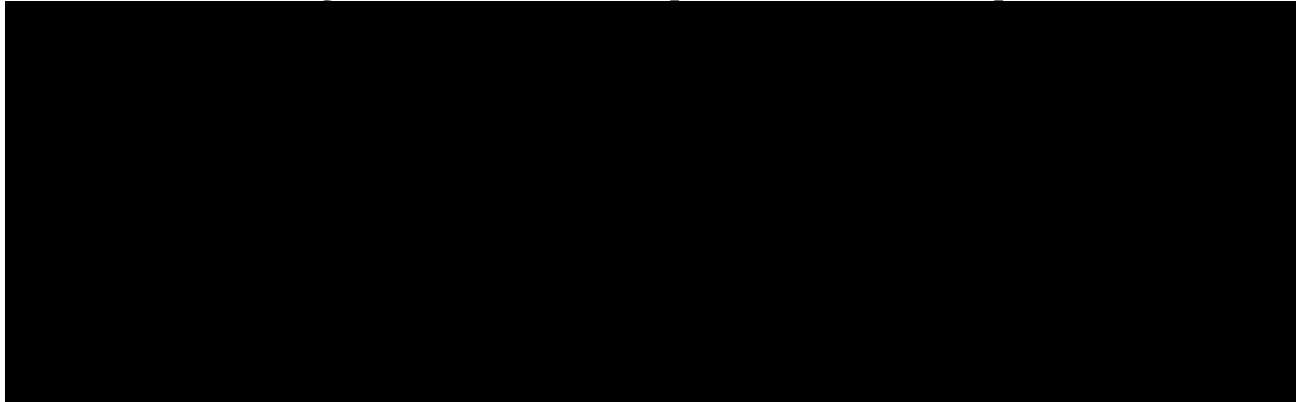
### **SMEs' Perception on the TQM Concept**

This study revealed a consistent perception on TQM. Accoridng to company size, duration of implementation and type of industries, the finding was consisitent. It can be concluded that all SMEs, whether they were small scale or medium enterprises, whether they have just implemented TQM or have implemented TQM for more than 5 years, mostly percieved that TQM was a product quality improvement program. Table 3 indicated that From five perception option, most of them stated that the Total Quality Management was a





**Table 5. TQM Programmes that have been implemented based on enterprise scale**



**Table 6. List of Priority TQM's Program Implemented of SMEs**

Medium SMEs	Small SMEs
1. Activate the existing quality programs	1. Education and Training Program of Employees
2. Education and training Programs	2. Customer Service Program
3. Customer Service Program	3. Activate the existing quality program
4. Product design program	4. Product design program
5. Commitment Program of enterprise's head	5. Commitment program of enterprise's head

### **Impact of TQM Implementation for SMEs**

Based on 96 SMEs studied it was visible that the TQM implementation in their operation, SMEs in Yogyakarta felt great positive impact from implementing TQM to their the performance. The impacts that were experienced strongly by SMEs included the decreasing defective goods (79.17%), decreasing customers or buyers complaints (73.96%), decreasing of product return (67.71%), and increasing production cost efficiency (69.79%). These impacts were consistent with perception of the managers of the TQM. It has been elaborated in the previous section that the TQM had been more perceived as a Product Quality Improvement Programme so the first impact of improving quality should be decreasing product failure, and the decreasing of customers and buyers complaints. However, there were four outcomes that were not strongly experienced in implementing TQM, namely (1) decreasing production waste (31.25%), (2) decreasing production process interruption (27.08%), (3) decreasing inventory (26.04%) and (4) increasing on timely delivery to buyers (17.71%). The details of the impacts of the TQM implementation for SMEs can be seen in Table 8 and 9.

If it was connected to the relation between quality improvement and profit as the reflection of enterprise's performance as stated by Stephen in Nasution (2001), there were some connections that strengthened this research. The decreasing product failure and sales return means that the products generated by SMEs got more appreciation from customers. The higher customer appreciation was a strong indication that SMEs were able to provide better quality of products. Since the customers considered that the products they bought had good quality they would willing to pay a relatively high price than that of competitors. Accordingly,

the product was considered as having relatively higher value. It had led to the increase of market share and profit at last.

### Table 8. Impacts of TQM implementation

**Table 9. Impacts of TQM implementation (in details)**[illegible]

The real impacts that were also experienced by SMEs was the increase of production cost efficiency. By implementing TQM, SMEs gained impacts effectively in decreasing production costs. Finally, the combination between the relative excellence in price, market and production costs had brought impacts to the increasing of product sale that eventually led to the achievement of profitability improvement and the growth of the enterprises. Although the impacts of TQM implementation had been experienced by all SMEs, but the degree of impacts was diverse among them. Table 9 showed that SMEs mostly experienced the decreasing of defective goods from implementing TQM (79.17%), however, only 32 respondent (33.33%) experienced more than 30% in decreasing defective goods. The second largest impact of implementing TQM was decreasing customer and buyers complaints, but only 34 respondents (35.41%) experienced more than 30% in decreasing customers and buyers complaints. These research findings shows that the organizational performance as the impact of

implementing TQM the impacts of implementing a new method or concept, including TQM, do not appear instantly. Instead, it will have to go through a continuous process and need endless improvement to gain real and significant result. It can be said that the TQM is a long-term approach or concept. Although it was mentioned that the initial programme which was implemented was employees education and training, the TQM needs the awareness of products' quality role from all elements of organisations in achieving competitive advantages. The strong top management commitment and employees empowerment are needed in implementing TQM successfully.

## CONCLUSION

Based on 96 SMEs observed, this study revealed that SMEs mostly learned TQM from other enterprises, from their participation in local seminars and also articles and books. Among SMEs, TQM was perceived as a method to improve product quality. Although, the external factors more powerful in motivating SMEs to implement TQM, but none of them consider TQM as a method in increasing customer satisfaction. By implementing TQM, SMEs in Yogyakarta experienced the positive impact on their performance both financially and non-financially. The impacts that were experienced strongly by SMEs included the decreasing defective goods (79.17%), decreasing customers or buyers complaints (73.96%), decreasing of product return (67.71%), and increasing production cost efficiency (69.79%). However, there were four outcomes that were not strongly experienced in implementing TQM, namely (1) decreasing production waste (31.25%), (2) decreasing production process interruption (27.08%), (3) decreasing inventory (26.04%) and (4) increasing on time delivery to buyers (17.71%). Although the impacts of TQM implementation had been experienced by all SMEs, but the degree of impacts was diverse among them.

Two main reasons of implementing the TQM concept were the efforts to fulfil customers' demand of quality (83.33%) and in efforts of enhancing competitiveness of enterprises (66.67%). These findings indicated that external forces more powerful in motivating SMEs to implement TQM rather than internal factors. This study also revealed that in general the most favourable TQM program for small scale enterprises was education and training program for their employees, however, activating the existing quality division was more favourable for medium scale enterprises. In general, employees' education and training was a program that were greatly used by the small scale enterprises as a starting point in implementing TQM. TQM is a long-run program so SMEs need more than 1 year to get the significant impact on organizational performance.

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