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Analysis of the Effect of Total Quality Management Implementation on Company Managerial Performance (Case Study: PT. X)

Wahyu Ismail Kurnia[1*], Arfandi Ahmad[2], Muhammad Hasyim Tuankotta[3], Masurin[4],
[1,3] Program Studi Teknik Industri, Fakultas Teknologi Industri, Universitas Balikpapan
[2] Program Studi Teknik Industri, Fakultas Teknologi Industri, Universitas Muslim Indonesia

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ABSTRACT

Optimization of the company's management quality performance is dependent on the accuracy of choosing the business strategy applied to the company. if improving the quality management of company only focuses on one aspect, then competitive advantage is very difficult to achieve. Total Quality Management (TQM) is one of the concepts of quality management improvement that considers all aspects of improving company performance. Therefore, this study aims to determine the implementation of TQM on managerial performance at PT. X. This company is the largest company in Eastern Indonesia, located in Makassar City and is engaged in the production of wheat flour. This study uses 3 of the 10 principles that exist in the TQM concept is customer focus, obsession with quality, education and training. The number of samples used as many as 120 respondents. The analytical method of this research uses a structural equation modeling (SEM) approach. The results showed that the implementation of Total Quality Management which describes the variables focused on customers, obsession with quality, education and training has an insignificant positive effect on managerial performance at PT. X. In addition, there is a direct effect of each TQM variable on the managerial performance variable.

*Corresponding Author
Wahyu Ismail Kurnia
wahyu.ismail,kurnia@uniba-bpn.ac.id

INTRODUCTION

Global competition is pressuring the manufacturing industry to improve thecompany's internal performance as quickly as possible and develop collaboratively intelligently. Achieving performance optimism cannot rely solely on the company's infrastructure, but how to maintain a competitive advantage through transformational corporate leadership in integrating the company with customers [1].The development of human resources, the application of advanced manufacturing technology and supported by reliable company leaders, to prioritize long-term relationships between internal and external supply chain partners are able to increase positive trends for the company [1][2]

Manufacturing companies have an important role in Indonesia's economic growth, ranging from National Gross Domestic Product, job growth to increasing export value[3]. In 2013, the contribution of manufacturing companies reached 20.8%. Despite the increasing growth, manufacturing companies are still slow compared to others. In 2009-2011 growth increased from 2.56% to 6.83%. When entering 2011-2013 the growth of manufacturing companies only reached 6.83%, 6.32%, and 6.69% [4]. Indonesia's future medium-term development plan relies on the contributions of various companies in Indonesia, including manufacturing companies [5]. The growth of manufacturing companies is expected to be able to provide significant growth in improving the Indonesian economy[6].

The growth of the performance of manufacturing enterprises largely depends on the implementation of targeted strategies. If performance improvement is focused on only one aspect, then competitive advantage is difficult to achieve. One approach that is able to improve the performance of manufacturing companies by covering all aspects is with *Total Quality Management* (TQM). TQM is proven to be able to provide the best solution to the problems that afflict the company[7]. revealed that TQM is able to provide tangible benefits in terms of productivity and project progress in the United Arab Emirates. By applying TQM principles such as, cost and schedule performance, safety, productivity, and also quality are able to improve kinerjca measurably[7]. [8] explained that 70% of variance in applying TQM can be achieved by following all the principles in TQM. The principles include continuous improvement, teamwork, training, top management commitment, and customer focus implemented on hospitals in Jordan. In addition, [9] revealed that TQM has positively influenced the manufacturing performance of Indian SMEs. His research involved 127 Manufacturing SMEs in India with structural model testing (SEM). The correlation of TQM with organizational performance is significantly strong, as found by [10]. using aspects of education, leadership, continuous improvement, internal customers and external customers on its investigations.

In order for a manufacturing company to remain optimal in achieving competitive advantage, serious attention must be paid to improving overall performance. Tak terkecuali dengan perusahaan PT. X which is one of the manufacturing companies that produce wheat flour as a food staple. As the largest company in eastern Indonesia, it should receive serious attention in improving company performance, especially in the aspect of manajerial. As [11].say that strategic corporate dreamers are an important element to improve company performance. Company managers who are oriented towards entrepreneurship, ambidextrous behavior and maximize the integration of suppliers and customers are able to improve the response to the market[12]. For this reason, this study investigates the effect of the application of *Total Quality Management* (TQM) on managerial performance in pt. X located in Makassar City. With this research, the hope of growing and accelerating the

revival of the Indonesian economy can soon be realized, especially in eastern Indonesia [13].

RESEARCH METHODS

1. **Objects and Subjects**
   The object of this study is the influence of TQM implementation on the managerial performance of PT. X. Meanwhile, the subjects of this study are employees who serve as managers, deputy managers, to the field, deputy heads of fields, chief of staff, vice-chief of staff and senior and junior employees of pt. X
2. **Popolation and Sample**
   The study population is the entirety of the object under study consisting of a number of individuals, both limited and unlimited. The population of this study was all employees who worked for PT. X, including employees who fill structural positions in the company with a total of 120 employees. To get optimal research results, all employees totaling 120 people were used as samples for this study.
3. **Data Collection Methods**
   The data collection method consists of 2 stages, namely (1) literature review or literature study sourced from scientific papers in the form of journals, report publications, final projects and company archives and through field studies; (2) the compilation and dissemination of research questionnaires. The research questionnaire contains general information of respondents and instruments for measuring TQM concepts and managerial performance using the likert scale as a scale for assessing respondents' answers. To ensure that the measuring instrument is suitable for use, validity and reliability tests were carried out through 30 initial respondents. The result was that the instrument was declared valid and reliable with a significance value greater than 0.05 and an acquired *cronbach's alpha* value greater than 0.06 (0.7343>0.6); and filling out a research questionnaire by 120 respondents who were confirmed in PT. X.
4. **Data Processing Methods**
   This study uses the SEM (*Structural Equation* Modelling) model approach. It is known that SEM is able to provide detailed and accurate information regarding the implications and relationships between variables in the proposed model[14]. The data processing process uses the help of IBM AMOS *softwere* version 22. The data management consists of: (1) Elaboration of the characteristics of research respondents. In this section, the results of filling out a questionnaire containing the identity of the respondent in general are described; (2) *confirmatory analysis factor* (CFA). This test is used to measure the level of adequacy and feasibility of the construct and the proposed model with a value standard of >0.05; (3) complete model testing. This test is carried out when a complete model has been proposed and has been declared valid and reliable throughout its construct. Through complete model testing, the implications of the influence of TQM on managerial performance are known; (4) testing the normality of the data using the critical criteria of *the skewness* ratio of ± 2.58 with a significance level of 0.1. This test is as a condition of assumption that must be met with *maximum likelihood*; and (5) hypothesis testing. This section is carried out testing of hypotheses that have been previously proposed in this study with the aim of proving whether the results of processing and analysis are in accordance with hypothesis or not.

RESULTS AND DISCUSSION

A. Characteristics of respondents

The characteristics of respondents aim to provide a general picture of the respondents involved in the study. The total number of respondents who participated in this study was 120 people. the characterisitic results of the respondents are shown in table 1 as follows.

Table 1. Characteristics of Respondents

Variable		Onrsentasi	Frequency
Gender	Man	69,67%	80
	Woman	30,33%	40
Total			120
Position	Head of Department	2,5%	3
	Head of Division	4,17%	5
	Implementing Staff	80,83%	97
	Chairman and deputy of the division group	12,5%	15
Total		100%	120
Service Life	> 5 Years	70,83%	85
	5-Year <	29,17%	35
Total		100%	120

The characteristics of respondents shown in table 1 above showed that 69.67 percent were male and 30.33 percent were female. Respondents who filled structural positions in the company included the head of the department as many as 3 people or by 2.5 percent, kepala devisi as many as 5 people or by 4.17 percent , staff implementers as many as 97 people or 80.83 percent, chairman and deputy division as many as 15 people or 12.5 percent. Then, based on a service period of less than 5 years as many as 35 people or 29.17 percent and more than 5 years as many as 85 people or 70.83 percent.

B. *Confirmatory Analysis Factor* (CFA)

Confirmatory Analysis factor (CFA) is a test of the levelof adequacy and feasibility of the proposed model construct. The test results are shown in figures 1 through 4 as follows.

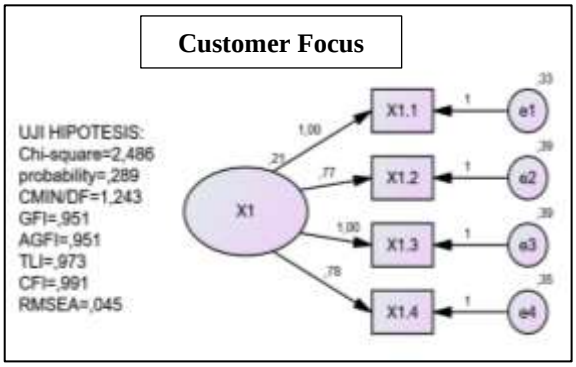

Figure 1. Customer Focus

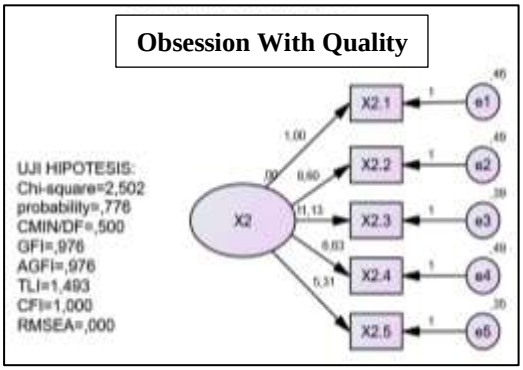

Figure 2. Obsession With Quality

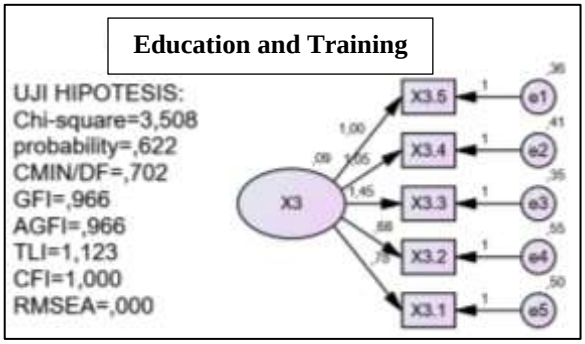

Figure 3. Education and Training

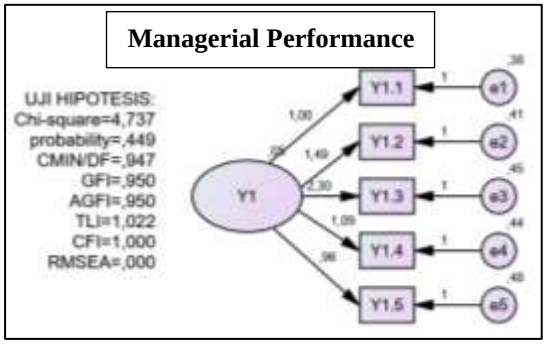

Figure 4. Managerial Performance

Based on the test results shown in figures 1 to 4, it shows the CFA value of each of the model's constituent variables. Each of the variables namely the variables of focus on the customer, obsession with quality, education and training and managerial performance has 5 constructs or indicators. The results of the CFA test of the variable construct showed a significance value above 0.50. This means that the entire construct of each variable is declared sufficient and feasible to use for testing the complete model as proposed.

C. *Complate* Model Testing

Complete model testing uses a number of predetermined standard scoring criteria. The model is said to be feasible and acceptable if it meets the value standards of the model assessment criteria or *goodness of fit*. the criteria used consist of *chi-square*, *Goodness of Fit Index* (GFI), CMIN/DF, AGFI (*Adjusted* GFI) and *Root Mean Square Error of Approvimation* (RMSEA). Figure 1 displays the test results of the complete model and in table 2 displays a recapitulation of the test results based on standard assessment criteria.

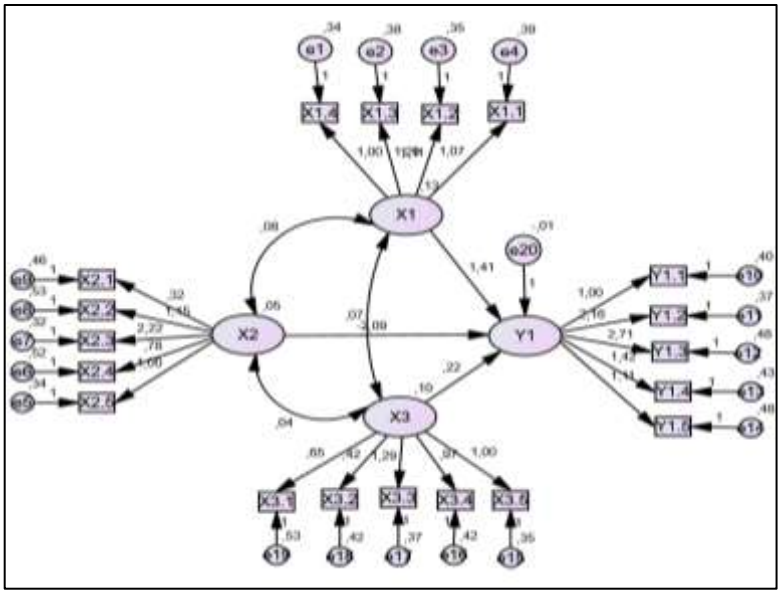

Figure 5. Complete Model Test Results

Table 2. Recapitulation of Complete Model Test Results

Assessment Criteria	Test results	Standard Criteria	Source
CMIN/GF	1,174	$1 \leq x \leq 2$ or $1 \leq x \leq 3$	Singh (2018b); Zainal et al (2021); Wagimin et al (2019)
GFI	0,839	> 0,80	
AGFI	0,862	> 0,80	
RMSEA	0,038	< 0,05 good fit; < 0,08 acceptable fit	

Based on the results shown in table 2, it shows that the complete model tested as shown in figure 5 is declared valid and acceptable with a much better level of compatibility . This is based on the standard *goodness of fit* assessment criteria where the CMIN/GF value of 1.174 is greater than 1 less than 2, the GFI value of 0.839 is greater than 0.80, the AGFI value of 0.862 is greater than 0.80 and the RMSEA value is less than 0.05.

D. Validity and Reliability Testing

after testing the complete model, next is the testing of the validity and reliability of the construct. for validity testing, a standard value of factors above 0.05 (Hair et al., 2010) is used. Meanwhile, reliability testing uses standard Cronbach alpha coefficient values and composite reliability (CR) above 0.70. Based on the test in figure 2 above, the validity test results found that the standard value of the factor was entirely above 0.05. this means that the entire construct constituent of the model is declared valid. then the results of reliability testing, processed the value of the Cronbach alpha coefficient and composite reliability (CR) above 0.70. this means that the constructs constituting the model are declared feasible and have good reliability. thus the entire construct is declared fit for use.

E. Hypothesis Testing

After passing a series of levies, the next step is hypothesis testing. this testing is to confirm the hypothesis of previously submitted research. based on the test results shown in tables 3 and 4, it can be known, namely the influence of *Total Quality Management* (TQM) represented by the variable focus on the customer (X1), obsession with quality (X2), education and training (X3) have an insignificant effect on managerial performance (Y1) based on the acquisition of a p value (p *value*) greater than 0.001. Then based on the value of the *standardized regression* coefficient obtained ranging from 0.596-2.896, it can be stated that the TQM represented by the three variables has a positive effect on performance. managerial. thus, from the results of hypothesis testing it can be revealed that TQM has an insignificant positive effect on managerial performance. This proves that of the three hypotheses that have been previously proposed, the H2 hypothesis is accepted, the H1 and H3 hypotheses are rejected.

Tabel 3. *Regression Weights*

			Estimate	S.E.	C.R.	P	Label
Y1	<--	X2	2,085	4,569	0,456	0,648	par_16
Y1	<--	X1	1,412	2,730	0,517	0,605	par_17
Y1	<--	X3	0,225	0,375	0,599	0,549	par_18

Tabel 4. *Standardized Regression Weights*

			Estimate
Y1	<---	X2	2,578
Y1	<---	X1	2,897
Y1	<---	X3	0,596

CONCLUSION

Based on the results of the research that has been obtained, it can be concluded for this study that *Total Quality Management* , which is represented by three assessment indicators, namely customer focus, obsession with quality, education and training has a positive effect

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