

## THE EFFECT OF TOTAL QUALITY MANAGEMENT IMPLEMENTATION ON QUALITY CULTURE AT PT LONDON SUMATRA

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### *Abstract*

This study aims to determine the influence between total quality management on the quality culture of case studies at PT London Sumatera-Medan. The research approach carried out in this study is associative / quantitative. The population of this study is managers and employees of PT London Sumatera-Medan totaling 40 people. The sampling method used is census i.e., making the entire population a sample in this study. So that the number of samples is 40 respondents. The analysis method used in writing this thesis is an analysis technique with a simple linear regression method with SPSS software application tools. The results showed that Total Quality Management has a positive and significant effect on Quality Culture.

**Keywords:** *Total Quality Management, Quality Culture*

### INTRODUCTION

In the era of globalization and trade liberalization, there have been various changes in almost all aspects, for example in economic, political, socio-cultural, technological, legal, hankam, other spec funds. A company's survival depends largely on its ability to respond effectively to these changes. This kind of thing becomes a reference for an organization to further improve the productivity and quality of its business so that the organizational goals that have been proclaimed can be achieved. Therefore, its quality and management are associated with continuous improvement carried out by many companies in order to encourage market improvement and win competition. Companies that don't manage those changes will fall behind. In line with the paradigm shift of organizations from 'market oriented' to 'resources oriented', one way that can be taken by companies is to fix the resources they have in order to survive in long-term competition. One of the right ways is to implement Total Quality Management (Muluk, 2003). Total quality management is a modern management concept that seeks to respond appropriately to any changes, both driven by external and internal forces. TQM focuses more on the company's goal to serve customer needs by supplying goods and services that are of the highest possible quality.

The presence of TQM as a new paradigm according to long-term commitment and a total change over the traditional management paradigm. The need for a complete change is because the way of doing business with TQM is very different from radiational carat. The main differences are in the form of characteristics covered in the elements of TQM, which include: Customer focus, have a high obsession with quality, Scientific approach in decision making and problem solving, long-term commitment, teamwork, employee involvement and empowerment, continuous process improvement, bottom-up employee education and training, controlled freedom, and the existence of unity of purpose. The relationship between TQM implementation and culture is stated by Cortada (1993), Goetsch and Davis in (Tjiptono, 2016), and (Hardjosentono et al., 1995), that TQM implementation can change the cultural orientation of an organization towards a quality culture which in turn can improve organizational competence. According to Metri (2005) in TQM implementation, culture plays a role more than others, therefore quality culture is considered as one of the most important things as an indicator of the success of TQM implementation.

Culture is 'how we think about the environment to achieve success; Organizational tendencies in relationships, identity, dynamic relationship patterns, reality, or genetic code. (Schneider in Metri, 2005). The definition of quality culture according to Goetsch and Davis in (Tjiptono & Diana, 2020) is an organizational value system that produces an environment conducive to the formation and continuous improvement of quality. Quality culture consists of philosophies, beliefs, attitudes, norms, traditions, procedures, and expectations that enhance

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quality. Litwin and Stringer (1998), Kekale (1999), Kujala and Ullrank (2004) and Srismith (2005) even modeled climate and cultural quality appropriately as indicators of TQM success.

Challenging competition and change have also spurred the Indonesian industrial world to be able to adapt by developing programs that can improve their competence so that they can compete effectively. Quality Management at PT. PP London Sumatra is applied from the beginning of the production process, namely: supplier determination, strict selection of raw materials and auxiliary materials, and monitoring processes at every stage of production until the final production process. Customer focus is a form of company appreciation to meet customer expectations, needs and desires to achieve a quality culture. However, it is not yet known whether customer focus affects the creation of a quality culture at PT. PP London Sumatera. The business philosophy that has been applied by the company has proven to make the company develop from time to time. There are differences of opinion in the relationship between TQM and Organizational Culture - some argue that TQM implementation will change culture while others argue that organizational culture affects TQM - so it is not clear which is the relationship between the two variables on the basis of differences in theory and research findings on TQM implementation and there is still limited research on TQM implementation in developing countries when related to quality culture.

## LITERATURE REVIEW

### Total Quality Management (TQM)

According to (Aebi et al., 2012) Quality Management or Integrated Quality Management (Total Quality Management = TQM) is defined as a way of continuously improving performance at every level of operations or processes, in every functional area of an organization, using all available human resources and capital. TQM is a system that companies are currently starting to implement because it is considered capable of supporting their managerial performance. TQM is also known as integrated management. According to Ishikawa in Nasution (2005), TQM is defined as the fusion of all management functions, all parts of a company and everyone into a holistic philosophy built on the concepts of quality, teamwork, productivity, and customer satisfaction. According to Purwanto in Suharyanto (2005, TQM is basically an effort to create an "aculture of countinous improvement" among employees by applying various group problem solving techniques by focusing on customer satisfaction.

### Quality Culture

Rita (2003) formulated that culture is a pattern and social mechanism carried out by an organization to take care of its members and can be used as a firm basis to move its members in carrying out their work well. Culture is how our mindset towards the environment to achieve success such as organizational tendencies in behavior, identity, dynamic relationship patterns, reality, or genetic code (Schneider in Metri, 2005). While organizational culture according to Nasution (2005) is a daily embodiment of the values and traditions underlying the organization. This looks at how employees behave, employee expectations of the organization and vice versa, as well as what is considered reasonable in terms of how employees carry out work.

## METHOD

### Research Approach

The research approach carried out in this study is associative / quantitative because this study aims to determine the degree of relationship and pattern or form of influence between two or more variables, where with this research a theory will be built that serves to explain, predict and control a symptom (Rusiadi et al., 2016).

### Population and Sample

A population is a group of people, events, something that has certain characteristics. If researchers use all elements of the population into research data, it is called a census." (Erlina and Mulyani, 2007: 72). The population of this study is managers and employees of PT PP LONSUM

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INDONESIA Tbk. The sampling method used is census, that is, making the entire population as a sample in this study. A sample is a portion of the population that is seen as representative of the population to be used as a source of data or information. According to (Arikunto, 2013) for just ancer-ancer if the subject is less than 100, it is better to take all of them and if the number is more then taken around 10% - 15% or 20% - 25% or more. Based on this opinion, a sample of 10% x 400 people = 40 respondents was taken. So in this study the sample size was rounded up to 40 people The sampling technique in this study is by random sampling technique, because the population is heterogeneous and randomly selected so that every element in the population has the same opportunity to be selected.

### Data Analysis Techniques

The analytical method used in this writing is an analytical technique with a simple linear regression method to test and determine the effect of packaging quality variables on consumer satisfaction variables stated in the formulation:  $Y = a + b X + \Sigma$

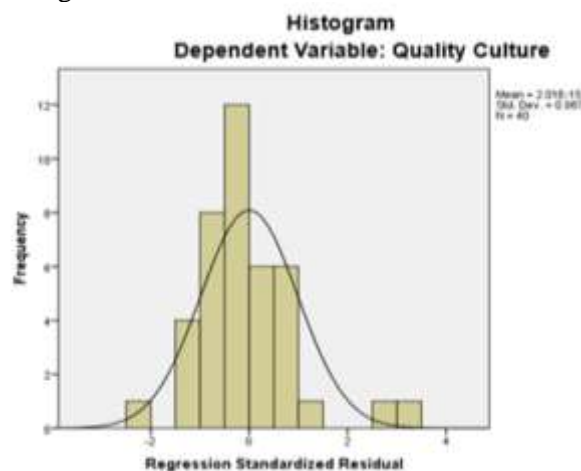
## RESULTS AND DISCUSSION

### Contents Results and Discussion

#### Classical Assumption Test

##### a. Data Normality Test

The normality test aims to test whether in a regression, confounding or residual variables are normally distributed or not. Regression models are either normal or near-normal data distribution.

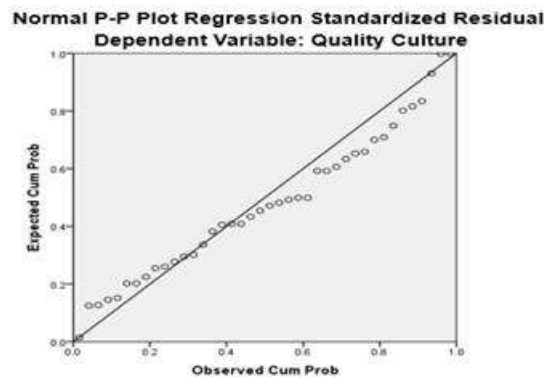


Source : SPSS Processing Results Version 20.0

Figure 1. Normality Test Histogram

Based on Figure 1. Above, the results of data normality testing are known that the data has been distributed normally, where the histogram image has a bell-forming line and has a balanced convexity in the middle.

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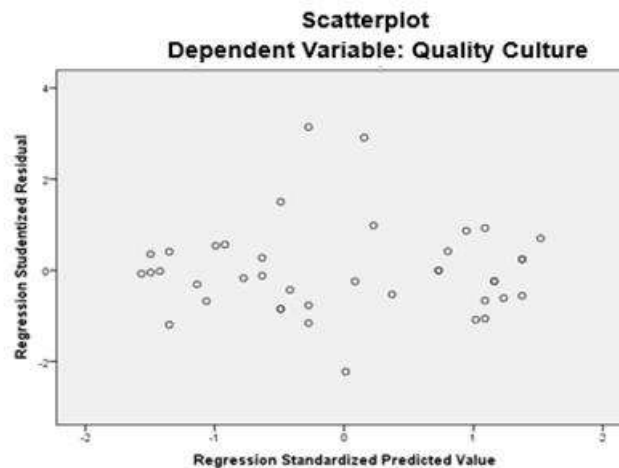
Source: SPSS Processing Results Version 20.0

Figure 4.2 PP Normality Test Plot

Based on Figure 2. above, then for the results of testing data normality using the PP Plot image, data points for the spread Culture Quality variable are seen around the diagonal line so that the data has been distributed normally. From the two figures above, it can be concluded that after testing the normality of the data, the data for the Total Quality Management variable, and Quality Culture are distributed normally.

#### b. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual of one observation to another. A good regression model is one that does not occur heteroscedasticity. In this study, the method used to detect symptoms of heteroscedasticity by looking at the plot graph between the predicted value of the dependent variable (ZPRED) and its residual (SRESID).



Source: SPSS Processing Results Version 20.0

Figure 3. Scatterplot Heteroscedasticity Test

Based on figure 3. Above, the scatterplot image shows that the resulting points spread out randomly and do not form a specific pattern or trend line. The figure above also shows that the data spread is around the zero point. From the results of this test shows that this regression model is free from heteroscedasticity problems, in other words: the variables to be tested in this study are homoscedasticity.

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**c. Multicollinearity Test**

The multicollinearity test aims to test whether in the regression model there is a correlation between independent variables. This test is carried out by looking at the value of tolerance and variance inflation factor (VIF) from the results of the analysis using SPSS. If the tolerance value > 0.10 or VIF < 10, it is concluded that multicollinearity does not occur. Multicollinearity test from questionnaire results that have been distributed to respondents can be seen in the following table.

**Table 1. Multicollinearity Test Results**  
Coefficientsa

Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-2.706	1.626		-1.664	.104		
Total Quality Management	.932	.030	.981	31.284	.000	1.000	1.000

a. Dependent Variable: Quality Culture

Source : SPSS Processing Results Version 20.0

Based on Table 1 above, it can be seen that the Variance Inflation Factor (VIF) number is smaller than 10, including Total Quality Management 1,000 < 10, and the Total Quality Management Tolerance value of 1,000 > 0.10, so it is free from multicollinearity.

**Hypothesis Testing**

**a. Partial Significant Test (Test t)**

The Partial Test (t) shows how far the independent variable individually explains the variation of this test performed using a significance level of 5%. If the significance value of  $t < 0.05$ , it means that there is a significant influence between one independent variable and the dependent variable. If the significance value of  $t > 0.05$  means that there is no influence between one independent variable and the dependent variable.

**Table 2. Test Results t (Partial)**  
Coefficientsa

Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-2.706	1.626		-1.664	.104		
Total Quality Management	.932	.030	.981	31.284	.000	1.000	1.000

a. Dependent Variable: Quality Culture

Source : SPSS Processing Results Version 20.0

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Based on table 2 above it can be seen that:

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Significant testing with decision-making criteria:

Ha is accepted and H0 is rejected, if  $t_{count} > t_{table}$  or  $Sig. t < \alpha$

Ha is rejected and H0 is accepted, if  $t_{count} < t_{table}$  or  $Sig. t > \alpha$

The value of t is calculated at 31.284 while t table is 1.686 and significant is 0.000, so t count is  $31.284 > t_{table}$  is 1.686 and significant  $0.000 < 0.05$ , then Ha is accepted and H0 is rejected, which states partially Total Quality Management has a positive and significant effect on Quality Culture.

#### b. Coefficient of Determination

This coefficient of determination analysis is used to determine the percentage of variation in the influence of the independent variable on the dependent variable. From the processing of questionnaire data using the SPSS 20.00 for Windows Software application tool, the results are obtained as shown in the table below:

Table 3. Coefficient of Determination  
Model Summary<sup>b</sup>

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.981a	.963	.962	2.592

a. Predictors: (Constant), Total Quality Management

b. Dependent Variable: Quality Culture

Source : SPSS Processing Results Version 20.

Based on table 3. above it can be seen that the adjusted R Square figure of 0.962 which can be called the coefficient of determination which in this case means 96.2% Quality Culture can be obtained and explained by Total Quality Management and. While the remaining  $100\% - 96.2\% = 3.8\%$  was explained by other factors that were not included in this study.

### CLOSING

#### Conclusion

- 1) Special attention and improvement need to be focused on variables and statement items that have the lowest average on each variable in TQM implementation, namely: The company carries out its operational activities according to the policies set by the company, all employees should be trained across sections in order to complement each other, employees are given authority in making decisions proportionally, the company conducts comparative studies on the quality of work processes, all equipment and work processes are expected to take place under statistical control (Statistical Processing control) to improve the quality culture at PT PP London Sumatra.
- 2) In order for other researchers who want to research PT PP London Sumatra, can continue this research on variables that have not been studied

## REFERENCES

- Aebi, V., Sabato, G., & Schmid, M. (2012). Risk Management, Corporate Governance and Bank Performance in The Financial Crisis. *Journal of Banking & Finance*, 36, 3212–3226.
- Arikunto, S. (2013). *Prosedur Penelitian Suatu Pendekatan Praktik*. Edisi Revisi. : PT Rineka Cipta.
- Daulay, M. T. The Influence Of Organizational Restructuring On Employee Performance In The Housing And Residential Areas, North Sumatra Province, Indonesia.
- Daulay, M. T. (2019). The Effect of Mutation, Promotion and Job Satisfaction on Employee Performance of Plantation Companies in Medan. *American International Journal of Business Management (AIJBM)*, 2(1), 11-21.
- Gimenez-Espin, J. A., Jiménez-Jiménez, D., & Martínez-Costa, M. (2013). Organizational culture for total quality management. *Total Quality Management & Business Excellence*, 24(5-6), 678-692.
- Goetsch, D. L., & Davis, S. B. (2016). *Quality management for organizational excellence: Introduction to total quality. pearson*.
- Nasution, M.D.T.P., Rafiki, A., Lubis, A. and Rossanty, Y. (2021), "Entrepreneurial orientation, knowledge management, dynamic capabilities towards e-commerce adoption of SMEs in Indonesia", *Journal of Science and Technology Policy Management*, Vol. 12 No. 2, pp. 256-282. <https://doi.org/10.1108/JSTPM-03-2020-0060>
- Nasution, M.D.T.P., Rini, E.S., Absah, Y. and Sembiring, B.K.F. (2022), "Social network ties, proactive entrepreneurial behavior and successful retail business: a study on Indonesia small enterprises", *Journal of Research in Marketing and Entrepreneurship*, Vol. 24 No. 1, pp. 141-160. <https://doi.org/10.1108/JRME-07-2020-0095>
- Purba, Rahima Br.; Aulia, Farid; Tarigan, Vita Cita Emia; Pramono, Agus Joko; Umar, Haryono (2022). Detection of Corruption in Village Fund Management using Fraud Analysis. Vol. 23 Issue 190, p120-128. 9p. <http://dx.doi.org/10.47750/QAS/23.190.14>
- Rusiadi, Subiantoro, N., & Hidayat, R. (2016). *Metode Penelitian Manajemen, Akuntansi, dan Ekonomi Pembangunan, Konsep, Kasus dan Aplikasi SPSS, Eviews, Amos, Listrel*. USU Press.
- Rossanty, Y., Sari, P. B., Amlus, M. H., & Nasution, T. A. (2021). Islam, Opinion Leaders, and Social Media Influencer. In M. Abdul Mutalib & A. Rafiki (Eds.), *The Role of Islamic Spirituality in the Management and Leadership Process* (pp. 66-84). IGI Global. <https://doi.org/10.4018/978-1-7998-6892-7.ch004>
- Ross, J. E. (2017). *Total quality management: Text, cases, and readings*. Routledge.
- Setiawan, A., Hasibuan, H. A., Siahaan, A. P. U., Indrawan, M. I., Fatmawati, I., Wakhyuni, E., ... & Rahayu, S. (2018). Dimensions of cultural intelligence and technology skills on employee performance. *International Journal of Civil Engineering and Technology*, 9(10), 50-60.
- Setiawan, N., Hasibuan, H. A., & Setiawan, A. PENGARUH HUBUNGAN INTERPERSONAL DAN EFEKTIVITAS KERJA TERHADAP KUALITAS PELAYANAN PUBLIK (STUDI EMPIRIS PADA KANTOR BASARNAS MEDAN). *Jurnal Ilmu Manajemen METHONOMIX* p-ISSN, 2622, 5204.
- Setiawan, N., Nasution, M. D. T. P., Rossanty, Y., Tambunan, A. R. S., Girsang, M., Agus, R. T. A., ... & Nisa, K. (2018). Simple additive weighting as decision support system for determining employees salary. *Int. J. Eng. Technol*, 7(2.14), 309-313.
- Yanti, E. D., & Sanny, A. (2019). The influence of motivation, organizational commitment, and organizational culture to the performance of employee universitas Pembangunan Panca Budi. *Int. J. Res. Rev*, 6(10), 176-184.