

TOTAL QUALITY MANAGEMENT PRACTICES AND ORGANIZATIONAL COMMITMENT OF EMPLOYEES IN PALM OIL PLANTATION

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ABSTRACT

This study was conducted to identify the domain of total quality management practices that best influences organizational commitment of employees in palm oil plantation in Trento Agusan del Sur. The study employed a quantitative, non-experimental research design employing correlation technique. A total of 138 personnel were surveyed utilizing the complete enumeration technique. The primary tool for data collection was a structured questionnaire following a 5-point Likert-type scale. The data gathered were subjected to statistical analyses through the use of Mean, Pearson's r and regression. Results of the study indicate that the level of Total Quality Management practices and organizational commitment is very high. Further, findings show that TQM practices is significantly correlated with commitment. When regressed, it was found that only supplier quality management and system and processes of TQM influence organizational commitment. Between the two, the supplier quality management domain best influences TQM practices.

Keywords: *business administration, total quality management practices, organizational commitment, palm oil plantation, correlation, regression, Philippines*

I. INTRODUCTION

Employee commitment is one of the most studied business topics because of its relationship with turnover, one of the most costly problems facing organizations (Hana & Lucie, 2011). This is one concept that most business executives are wary about because of its adverse impacts many critical dimensions of the organization. Therefore, employee commitment is a significant factor affecting employee work behavior, retention and productivity. When employee retention declines and turnover increases, organizations incur costs for hiring, training, and developing new employees. This loss is especially acute if a valuable employee leaves and join a competitor. Not only the organization losing critical resource, but also giving the competitor a potential competitive advantage from such resource given the relative strength of the person's identification with and involvement in a particular organization (Fornes & Rocco, 2013).

The significant shifts in the global economy and business world in the 21st century have made organizations seek innovative ways through research and empirical studies to address the many emerging challenges including employee commitment and productivity (Haid & Sims, 2009). In its psychological nature, employee commitment is characterized by the employees' relationship with the organization and has implications for the decision to continue employment with the organization (Allen & Meyer, 1990). Studying organizational commitment is critical to understanding the impacts of commitment to employee behaviour, performance and satisfaction as well as the contribution of organizational politics and leadership, management styles, policies and practices in building employee commitment (Lok & Crawford, 1999).

While there were multiple researches done on employee commitment (Batemen & Strasser, 1984), such investigations focused on its impact to employee performance and retention. Much so there were studies linking it to work environment, management and job satisfaction (Amjad, 2015). In recent literature, one concept that is associated with employee commitment is Total Quality management (TQM). However, there seems to be a consensus among scholars and experts of TQM that it is not easy to introduce a single explanation for the construct of TQM that merely affects employee commitment (Vijande &Gonzalez, 2007), hence this study is undertaken. The result of this inquiry would be of great help to organizations to look at their TQM policies and practices in order to develop relevant interventions to improve employee commitment and retention.

II. RESEARCH ELABORATION

The primary objective of this study was to determine which domain of total quality management (TQM) practices best influences organizational commitment of employees in palm oil plantation.

The independent variable is the total quality management practices as espoused by Dubey (2012) with the following indicators: *Management leadership* which refers to the top-level management of the organization; *Resource management* which relates to the resources of the organization; *Measurement and Feedback* which refers to the customer satisfaction level; *Continuous Improvement* which refers to the quality improvement coordinating body; *Supplier Quality Management* which refers to the superior quality of incoming material from a technically competent, reliable and flexible supplier is a prerequisite to the excellent quality of the finished product; *Systems and Processes* which refers to quality assurance; *Education and Training* which refers to the top management training to update knowledge; and *Work Environment and Culture* which refers to the pleasant environment exist in all working areas.

While the dependent variable is the organizational commitment as proposed by Saxon (2012). Organizational commitment has the following indicators: *Affective Commitment*, which refers to the commitment driven by affection of the employees to the organization; *Continuous commitment* which refers to the loyalty of employee brought about by fear of the cost of leaving an organization; and *normative commitment*, which involves the concept of moral responsibility as the reason for staying in an organization.

Table 1 Distribution of the Respondents

Respondents	Sample Size	Percent
Finance	8	7.77
Accounting	7	6.80
Managers	3	2.91
Supervisor	3	2.91
Field Staff	82	79.61
Total	103	100

This study employed a quantitative, non-experimental research design using the correlational technique. This approach to problem-solving seeks to answer questions to the real facts relating to the existing condition. A quantitative description technique determines

the prevailing situation in a group of cases chosen for the study or, in this case, the palm oil plantations employees. According to Creswell (2013), correlational research design investigates correlation statistics tests to describe and measure the degree of association or relationship between two or more variables. In this study, the researcher will measure the extent to which two variables co-vary, which is where the changes in one variable are reflected in changes in the other. This study sought to describe the relationship between the level of total quality management practices and organizational commitment of employees of palm oil plantation using variables from authors. Hence, the goal of this formal research design was to test the hypothesis and answer the research questions posed by the researcher. The researcher also collects the responses by personal means among palm oil plantation employees through survey questionnaires

On the other hand, as this is a correlation study, it was conducted in non-contrived settings. The natural environment was preserved where transactions generally proceed as the case observable among Palm Oil plantations in Trento Agusan del Sur. The study was conducted in the natural setting as a fundamental element of correlation studies. The study was conducted in Palm oil Plantations in the Municipality of Trento Province of Agusan del Sur. From one hundred thirty-eight (138) total number of population, a sample of one hundred three (103) was chosen through the use of Slovin's formula with a margin of error of 0.05%. According to Stephanie (2003), when it is not possible to study an entire, a smaller sample is taken using a random sampling technique. Slovin's formula allows a researcher to sample the population with a desired degree of accuracy.

Simple random technique specifically lottery method was applied in order to obtain the respondents. Simple random is defined as a sampling technique where every item in the population has an even chance and likelihood of being selected in the sample. Using the lottery method is one of the oldest ways and is a mechanical example of random sampling. In this method, the researcher gives each member of the population a number. Researcher drew numbers from the box to choose the samples (Acharya *et al.*, 2013).

Two standardized scales were utilized to measure the variables which were tested for relationship and influence. The first instrument that measures the level of TQM practices was adapted and contextualized from the works of Dubey (2012). The instrument followed a five point Likert –type scale with 42 item statements equally distributed to eight domains: management leadership, resource management, measurement and feedback, continuous improvement, supplier quality management, systems and processes, education and training and work environment and culture. The Cronbach alpha reliability score of the instrument was .923, suggesting an excellent internal consistency.

On the other hand, the instrument for organizational commitment was adapted and contextualized from Saxon (2012) with 25 item statements equally distributed to three domains: affective commitment, continuance commitment, and normative commitment. The Cronbach alpha reliability score of the instrument was .738 implying an acceptable internal consistency.

In interpreting the results of data gathered, the likert scale was used.

The first draft of the research instrument was submitted to the research adviser for comments and recommendations to improve its content and form with 31 corrections to be included and integrated. The final copies were submitted to five panel of experts for refinement. The validation of the instruments obtained an overall mean rating of 3.89 described as very good.

III. RESEARCH FINDINGS

The results of the analyses made on the collected data about total quality management practices and organizational commitment of employees of palm oil plantations. The order of presentation follows the order of the following: extent of total quality management practices; level of organizational commitment of the employees; the correlation between the two variables; and the analysis on the domain of total quality management practices that best influences and organizational commitment. The standard deviation in the two descriptive tables, Table 1 and Table 2, ranged from 0.16 to 0.39, which are less than 1.0 as the typical standard deviation for a five-point Likert-type scale. This means that the ratings given in the measures indicated in the instruments are consistent among the respondents, hence reliable (Bayer & Wittink, 1994).

Total Quality Management Practices Of the Palm Oil Plantation

Shown in Table 2 is the extent of total quality management practices as perceived among palm oil plantation employees. The overall mean score was 4.61 described as very high which meant that the items on total quality management practices were always observed in the palm oil plantation. When taken individually, all indicators of TQM registered at a very high level although the system and processes and work environment and culture domains both posted the lowest mean scores ($m = 4.59$)

Table 2. Level of Total Quality Management Practices of the Palm Oil Plantation

Indicators	SD	Mean	Descriptive level
Management Leadership	0.23	4.63	very high
Resource Management	0.26	4.63	very high
Measurement and Feedback	0.23	4.60	very high
Continuous Improvement	0.26	4.60	very high
Supplier Quality Management	0.23	4.61	very high
System and Processes	0.27	4.59	very high
Education and Training	0.26	4.63	very high
Work Environment and Culture	0.27	4.59	very high
Overall	0.16	4.61	very high

Organizational Commitment of Employees of Palm Oil Plantations

Presented in Table 2 is the level of organizational commitment of the employees in the palm oil plantation, which was measured through the following indicators: affective commitment, continuance commitment, and normative commitment. The overall mean score of employability skills is 4.61 described as very high. This implies that work commitment is always manifested among respondents in the workplace. When analyzed the indicators

separately, it must be noted that all measures of the endogenous variable are at very high levels with affective commitment obtaining the highest mean of 4.63.

Table 3. Level of Organizational of Employees in Palm Oil Plantations

Indicators	SD	Mean	Descriptive Level
Affective Commitment	0.30	4.63	very high
Continuance Commitment	0.26	4.62	very high
Normative Commitment	0.39	4.60	very high
Overall	0.21	4.61	very high

Significance on the Relationship between Total Quality Management Practices And Organizational Commitment

Depicted in Table 3 is the result of the test of relationship conducted between the exogenous and endogenous variables. The overall r-value of 0.647 with a p-value less than 0.05 indicated that total quality management practices in palm oil plantation is significantly correlated with employee commitment, hence the rejection of null hypothesis. Moreover, it can be observed that independently, all the indicators of the total quality management practices had a significant relationship with organizational commitment as shown by its positive r-values and p-values <0.05.

Significance on the Influence of Total Quality Management Practices on Organizational Commitment

As exhibited in Table 4, the result of the multiple linear regression analysis shows that on an aggregate capacity, TQM practices significantly influences employees' organizational commitment having an F-value of 9.340, $p < 0.05$, hence the rejection of the null hypothesis. Further, the computed R^2 value of 0.667 and adjusted R^2 of 0.446 means that 44.6 to 66.7 percent of the variance of employees' commitment in palm oil plantation can be attributed to the interplay of the eight indicators of total quality management practices. This means further that 33.3 to 55.4 percent of the remaining variance can be attributed to other variables not covered in the study.

Table 4. Correlation between Total Quality Management Practices and Organizational Commitment

Total Quality Management Practices	Organizational Commitment			
	Affective Commitment	Continue Commitment	Normative Commitment	Overall
Management Leadership	0.366** (0.000)	0.234* (0.018)	0.111 (0.266)	0.339** (0.000)
Resource Management	0.315** (0.001)	0.385** (0.000)	0.069 (0.491)	0.349** (0.000)

Measurement and Feedback	0.236* (0.017)	0.199* (0.045)	0.296** (0.003)	0.373** (0.000)
Continuous Improvement	0.390* (0.017)	0.338* (0.045)	0.146 (0.003)	0.373** (0.000)
Supplier Quality Management	0.329** (0.001)	0.402** (0.000)	0.273** (0.005)	0.490** (0.000)
Systems and Processes	0.470** (0.000)	0.409** (0.000)	0.191 (0.054)	0.510** (0.000)
Education and Training	0.177 (0.075)	0.328** (0.001)	0.198* (0.046)	0.343** (0.000)
Work Environment and Culture	0.360** (0.000)	0.317** (0.001)	0.117 (0.243)	0.374** (0.000)
Overall	0.537** (0.000)	0.532** (0.000)	0.281** (0.004)	0.647** (0.000)

When regressed independently, it was found that among the eight indicators of total quality management practices, supplier quality management ($\beta=0.237$, $t=2.777$, $p<0.05$), and system and processes ($\beta=0.174$, $t=2.339$, $p<0.05$) significantly predict overall employees' commitment: This means that holding the six remaining non-significant predictors as well as other unaccounted variables constant, a one-point increase of supplier quality management, and system and processes may likely provide a corresponding increase in employees' commitment by 0.237, and 0.174, respectively. Further, between the two measures, supplier quality management obtained the highest beta coefficient, hence the best predictor

Table 4. Significance on the Influence of Total Quality Management Practices on Organizational Commitment of in Palm Oil Plantation

Total Quality Management Practices	Employees Commitment			
	B		t	Sig
Management Leadership	0.028	0.030	0.320	0.750
Resource Management	0.052	0.064	0.729	0.468
Measurement and Feedback	0.138	0.154	1.791	0.077
Continuous Improvement	0.129	0.158	1.676	0.097
Supplier Quality Management	0.237	0.264	2.777	0.007
System and Processes	0.174	0.227	2.339	0.021
Education and Training	0.025	0.031	0.327	0.745
Work Environment and Culture	0.071	0.092	1.011	0.315
R²	0.667			
Adjusted R²	0.446			
F	9.340			
p-value	0 .000			

IV. CONCLUSION

This study revealed that employees in the palm oil plantation perceived the total quality management practices in the organization at a very high level. The same very high level was noted in the level of organizational commitment of employees. Furthermore, a direct and significant relationship between total quality management practices and employees' organizational commitment was noted. Through regression analysis, it was found that in its entirety, TQM practices significantly influence employee commitment. Among the domains of total quality management practices, supplier quality management and systems and processes predict organizational commitment. Between the two, supplier quality management best predicts the behavior of employee commitment. These findings imply that when organizations under the palm oil plantation want to improve their employees' organizational commitment, they should start by improving the company's total quality management practices. To do so, they should nurture an organization where employees feel empowered, adequately equipped with knowledge and tools, and have clear and fair processes.

V. REFERENCE

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