

The influence of total quality management toward organization performance

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CHRONICLE

Article history:

Received: April 15, 2019

Received in revised format: April 27 2019

Accepted: May 11, 2019

Available online:
May 12, 2019

Keywords:

*Total quality management
Organizational performance
Quality practices*

ABSTRACT

This study is primarily focused on the effect of total quality management (TQM) on organization performance of Small and Medium Enterprises (SMEs) service sector in Selangor, Malaysia. The four critical elements of TQM; namely customer focus (X_1), continuous improvement (X_2), strategically based (X_3), and total employee involvement (X_4) are used as an important factors influencing on organization performance (Y). The necessary data are collected from 350 managers/owners of service sector SMEs in Selangor, Malaysia using some questionnaire. Multiple linear regression analysis is performed in this study by using SPSS 23. All hypotheses are positively fit with the conceptual model and show a positive impact of TQM on organization performance. The research finding indicate that TQM elements; namely customer focus, continuous improvement, strategically based, and total employee involvement have a positive and significant effects on organization performance.

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1. Introduction

Like other developing countries in ASEAN, Malaysia has recently faced recession symptoms. There has been a slowdown indicated by the performance of Small and Medium Enterprises (SMEs), which means the business is weakening, and unemployment tends to go up. Therefore, the government realized the importance of SMEs existence and established some policies, action plans, and programs for the improvement of SMEs performance (Khan & Khalique, 2014). Considering the importance role of SMEs some other problems faced by Malaysia associated with national economic symptoms, it is necessary to support SMEs to perform better since SMEs represent 98.5% of the total 920,624 firms operating in Malaysia. In fact, about 89.2% (809.126 firms) of the firms which are active in Malaysia are SMEs associated with service industries (SMEs Corp, 2018). Through quality improvement by analyzing the implementation of the TQM approach, this paper attempts to examine the research gap associated with TQM concept in SMEs and the impact on organization performance. Total number of Malaysia service trade exporters tends to lower (USD 12,228 million) than the other five ASEAN countries (Asean Statistics, 2018), whereas service sector has the biggest contribution on Malaysia's GDP (54.2%) (MITI Report, 2016). However, contrary to the government target of growth domestic product (GDP) contribution

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which is expected to increase at 56.5% in 2020, export trade in service fell down year over year from 2013 to 2015, and there was a narrow increase in 2016 (ASEAN Statistics, 2018). Looking at the service industry, import data tends to be higher than the export and this condition raises the government concern to make better strategies (ASEAN Statistics, 2018). Moreover, the TQM implementation impact on organization performance in Malaysia especially in SMEs has been poorly understood, although there are many types of studies in the field of quality management (Yunoh & Ali, 2015). According to Yunoh and Ali (2015a), even though the number of SMEs in Malaysia is increasing, literature shows that as a business entity, SMEs are struggling different barriers. One of the identified significant obstacles is the chance to develop the business, product quality, and competitiveness in the market. The barrier faced by SMEs is caused by the lack of knowledge, skill, business resource, and the capability to produce quality products (Yunoh & Ali, 2015b).

2. Literature Review

This part contains theories from experts' opinions and existing theories regarding total quality management and its four critical elements which are, customer focus, continuous improvement, strategically based, and total employee involvement.

2.1. Total Quality Management

Implementing TQM will elevate quality as a whole and improve business performance in the service industry (Haque et al., 2014). There have been many researchers studied and reviewed this approach. According to Goetsch and Davis (2016) "Total quality in reference with is an approach to doing business that attempts to maximize the competitiveness of an organization through the continuous improvement of the quality of its products, services, people, processes, and environments". TQM consists of 11 critical key elements among others, strategically based, customer focus, obsession with quality, scientific approach, long-term commitment, teamwork, continual process improvement, education and training, freedom through control, unity of purpose, and employee involvement and empowerment (Goetsch & Davis, 2016). The key element of TQM used in this research as variables are customer focus, continuous improvement, strategically based, and total employee involvement.

2.2. Customer Focus

The organization ought to identify both current and future customer's needs, comply the customer requirements, and attempt to exceed the customer expectations since any organization depends on the customers (Evans, 2017). According to Goetsch and Davis (2016), "In a total quality setting, the customer is the driver". In attaining customers satisfaction organization needs to fulfill customers' needs and expectations (Ahmad et al., 2019). Customer focus becomes a significant factor for the success of an organization because it is a starting point of any quality initiative, it is recommended to conduct research in the context of service industries and to specify the long term impact of customer focus towards other organizational performance (Sousa, 2007; Cai, 2009). In measuring customer satisfaction, service quality is the most important thing which is the key for the organizational survival (Endara et al., 2019). Customer focus is one of four TQM elements that has a significant contribution to both the financial and operational performance (Abusa and Gibson, 2011). Indicators of customer focus in this research include organizational customer orientation, customer relationship practices, and customer satisfaction (Cai, 2009).

2.3. Continuous Improvement

Products development and delivery services are carried out by people including processes within environments. In a total quality setting, in order to maintain and improve products and services, quality continually is a pace in achieving the primary purpose and it is essential to conduct system improvement continually (Goetsch & Davis, 2016). Evans (2017) emphasized that continuous improvement ought to be part of the management through all systems and processes. In both manufacturing and service indus-

tries, continuous improvement is recognized as the most useful aspect to enhance competitiveness, efficiency, quality, and performance accordingly (Li et al., 2016). Continuous improvement has a positive and significant impact on maintenance performance (Maletić et al., 2012). Continuous improvement is a particular set of routines that assists an organization to improve performance (Maletić et al., 2012). Process is an indicator used in this survey (Sousa, 2007).

2.4. Strategically Based

According to Goetsch and Davis (2016), “the strategic plan of a total quality organization is designed to give it a sustainable competitive advantage in the marketplace”. The competitive advantages drive the organization with TQM implementation can achieve world-leading quality over time horizon. This term consists of several elements among others, vision, mission, broad objectives, and activities conducted in order to achieve broad objectives (Goetsch & Davis, 2016), in which needed leadership for quality that is the top management responsibility (Evans, 2017). Strategic management is an approach to specify the organization objectives, to develop organization’s policies, to determine plan in attaining the objectives, and to manage resources for policies and plans implementation (Mohamud et al., 2015). The strategy should be harmonized with environment and should have capability to adjust the strategy so that it can compete and survive in the competitive business environment (Rahman et al., 2018). The study by Abusa and Gibson (2011), revealed that top management commitment has no significant positive impact on operational performance. However, the role of top management commitment comes up as an essential performance predictor for financial performance. Indicators of strategically based used in this research include leadership, critical resources, and management involvement (Oruma et al., 2014).

2.5. Total Employee Involvement

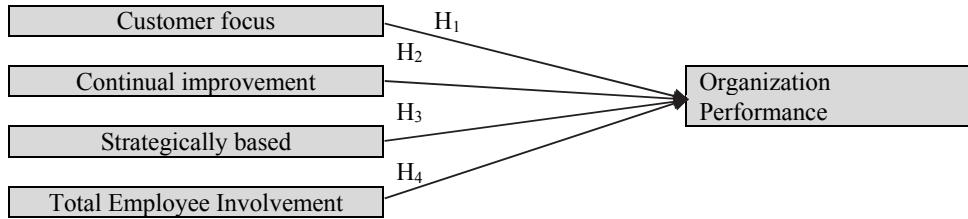
Total employee involvement and teamwork can foster employee motivation and success through the opportunities to learn and to practice new skills. The increasing of workforce's knowledge, skills and motivation will lead the company's success (Evans, 2017). The study Sofijanova and Chatleska (2013), indicated that using employee involvement effectively has a positive impact on perceived organizational performance. People Management (in this study Total Employee Involvement) is one of the four TQM elements that have a significant contribution to both financial and operational performance (Abusa & Gibson, 2011). Indicators of total employee involvement are used in this research which are employee participation and empowerment, and the use of self-managed teams (Sofijanova & Chatleska, 2013).

2.6. Organization Performance

The performance here means the outcome and the number of workforce. Further, it can be the outcome accomplished by a person, team, organization, or process (Mahfouz, 2019). Small business commonly assesses business/organization performance in terms of economic perspective (Ranasinghe et al., 2018). Nevertheless, it might be measured in terms of social contribution and personal satisfaction (Ranasinghe, 2018), spiritual perspective, customer perspective, learning and growth perspective (Ranasinghe et al., 2018). An integrated approach to organizational performance generates delivery of ever-improving value to customers and stakeholders, assists organization sustainability, enhances the organization capabilities and effectiveness as a whole and leads to better performance (Evans, 2017). Indicators of organization performance in this research include financial performance, internal or operational performance, customer satisfaction, employee satisfaction, and learning and growth (Abusa & Gibson, 2011).

2.7. Conceptual Framework

Based on the given theories, a conceptual framework is built, and a research model has been proposed to examine the influence of four critical TQM elements toward organization performance. The conceptual framework consists of five variables, in which independent variables are customer focus, continuous improvement, strategically based, and total employee involvement while the dependent variable is organization performance (See Fig. 1).

**Fig. 1.** Conceptual Framework

Based on the literature review and conceptual framework, the following hypotheses can be drawn:

- H₁: Customer Focus has a positive influence on Organization Performance.
- H₂: Continuous Improvement has a positive influence on Organization Performance.
- H₃: Strategically Based has a positive influence on Organization Performance.
- H₄: Total Employee Involvement has positive influence on Organization Performance.

3. Research methodology

This research attempts to analyze the TQM implementation particularly towards SMEs service sector in Selangor, Malaysia by using a quantitative approach, in which the primary data were gathered through questionnaires. By using non-probability sampling technique (convenience sampling), the sample was taken in this study with 350 respondents of sample size, from 2308 of the population which is service sector SMEs in Selangor, Malaysia where the unit of analysis is associated with the owner/manager of SMEs. Multiple linear regression analysis is performed by using the SPSS 23 application. Reliability and validity are utilized in order to conduct pre-test in this study. Standard assumption test performed in this study which are normality test, multicollinearity test, and heteroscedasticity test.

4. Result

This part discusses the data finding upon the research results. The result consists of a general description of respondents, descriptive analysis of variables, classical assumption test results, hypothesis test results, and regression analysis.

4.1. Demographic Profile

Table 1 Profile of Owner/Manager		
GENDER	FREQUENCY	PERCENTAGE
Male	146	42%
Female	204	58%
AGE	FREQUENCY	PERCENTAGE
≤25	75	21%
26 – 35	154	44%
36 – 45	76	22%
46 – 55	31	9%
≥56	14	4%
POSITION	FREQUENCY	PERCENTAGE
Owner	169	48%
Manager	181	52%

Source: Processed primary data from SPSS, 2018

Table 2 Profile of SMEs		
AGE OF SMEs	FREQUENCY	PERCENTAGE
< 1 year	67	19%
1 – 5 years	164	47%
> 5 years	119	34%
NUMBER OF EMPLOYEES	FREQUENCY	PERCENTAGE
≤5	75	21%
6 – 30	154	44%
31 – 75	76	22%
SALES TURNOVER	FREQUENCY	PERCENTAGE
< RM 300,000	118	34%
RM 300,000 – RM 3 M	202	57%
RM 3 – 20 M	30	9%

Source: Processed primary data from SPSS, 2018

General description of the respondents contains the finding about gender, age, position of the respondent in the SMEs, ownership, the amount of time the SMEs are running, the number of employees, and sales turnover of service sector SMEs in Selangor, Malaysia and all the necessary information are gathered from the questionnaires.

4.2. Descriptive Analysis

Descriptive analysis of variable includes the aim to describe respondents' perception on items studied on each variable in this research viz. customer focus (X_1), continuous improvement (X_2), strategically based (X_3), total employee involvement (X_4), and organization performance (Y). The highest average score belongs to strategically based variable (3.80) followed by organization performance (3.74), customer focus (3.62), continuous improvement (3.57), and total employee involvement (3.34).

4.3. Classical Assumption Test

The classical assumption test has been accomplished by using SPSS 23 in this study and normality, multicollinearity and heteroscedasticity tests have been examined. The result of the normality test using Kolmogorov Smirnov has indicated that the value of asymptotic significance at 0.2 is higher than 0.05. Thus it can be concluded that the residual data has a normal distribution. According to Sekaran and Bougie (2016), one of the simple measures for identifying multicollinearity is to use tolerance value and variance inflation factor (VIF) or the inverse of tolerance value. A regression model that is free of multicollinearity is the model which has tolerance value more than 0.01 or has a variance inflation factor (VIF) less than 10. All variables in this study have the tolerance value more than 0.1 and the variance inflation factor (VIF) value less is than 10. Thus, it can be concluded that the model is free from multicollinearity. In order to conduct the heteroscedasticity test, Glitter test was performed by regressing the residual absolute value against the independent variable. If the significance value is more than 0.05, then the regression model is free of heteroscedasticity. The result of heteroscedasticity test using Glitter test, show that all independent variables had a significant value higher than 0.05. Thus, the regression model is free of heteroscedasticity tendency.

4.4. Hypothesis Test

Hypothesis tests performed in this research is T-test, in which T-test is intended to know the influence of independent variable on the dependent variable partially (Ghozali, 2016). The result of T-test in this research by using SPSS 23 can be seen in Table 3 as follows,

Table 3
T-test Result

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	50.284	3.946		12.743 .000
	CUSTOMER FOCUS	.189	.061	.180	3.095 .002
	CONTINUOUS IMPROVEMENT	.387	.115	.172	3.371 .001
	STRATEGICALLY BASED	.243	.060	.234	4.027 .000
	TOTAL EMPLOYEE INVOLVEMENT	.246	.065	.203	3.768 .000

a. Dependent Variable: ORGANIZATION PERFORMANCE

T table value can be obtained from t distribution table with a significant level of 5% (0.05), one-tailed and $df = 346$ ($df = n - k$, where n is a total sample, and k is a total number of independent variables) (Ghozali, 2008). Thus, the value of t table based on the criteria in this study is equal to 1.6493. Therefore,

- a. If the value of t count $> t$ table or the significance value is less than 0.05, then H_a is accepted, in which there is a significant partial influence between the independent variable and the dependent variable.
- b. If the value of t count $< t$ table, or the significance value is greater than 0.05, then H_a is rejected, in which there is no significant partial influence between the independent variable and dependent variable.

H_1 : Customer Focus has positive influence on Organization Performance.

As seen in Table 3, the t count value of Customer Focus variable is 3.095, with the significant value is 0.002. While the t table value is 1.6493, which means the t count value is higher than t table value ($3.095 > 1.6493$) and the significant value is less than 0.05, so the hypothesis is accepted. Thus, it can be concluded that there is a significant favorable influence of Customer Focus (CF) on Organization Performance (OP).

H_2 : Continuous Improvement has positive influence on Organization Performance.

Table 3 shows the t count value of Continuous Improvement is 3.371, with significance value is 0.001. Since the t count value is greater than t table value ($3.371 > 1.6493$) and the significance value is less than 0.05, so the hypothesis is accepted. This could be concluded that there is a significant positive influence of Continuous Improvement (CI) on Organization Performance (OP).

H_3 : Strategically Based has positive influence on Organization Performance.

From Table 3, it can be seen that the t count value of Strategically Based is 4.027, and the significance value is 0.000. Since the t count value is higher than t table value ($4.027 > 1.6493$) and the significance value is less than 0.05, so the hypothesis is accepted. This can be concluded that there is a significant positive influence of Strategically Based (SB) on Organization Performance (OP).

H_4 : Total Employee Involvement has a positive influence on Organization Performance.

As shown in Table 3, the t count value of Total Employee Involvement variable is 3.768 with the significance value is 0.000. Since the t count value is higher than t table value ($3.768 > 1.6493$), and the significance value is less than 0.05, then the hypothesis is accepted. Thus, this can be concluded that there is a significant positive influence of Total Employee Involvement (TEI) on Organization Performance (OP).

4.5. Multiple Regression Analysis

The multiple regression analysis is performed in this study in order to understand the influence of customer focus, continuous improvement, strategically based, and total employee involvement on organization performance of service sector SMEs in Selangor, Malaysia. The multiple regression analysis results by using SPSS 23 is presented in Table 5 as follows.

Table 5
Multiple Regression Output

Model		Unstandardized Coefficients		Standardized	
		B	Std. Error	Beta	T
1	(Constant)	50.284	3.946		12.743 .000
	CUSTOMER FOCUS	.189	.061	.180	3.095 .002
	CONTINUOUS IMPROVEMENT	.387	.115	.172	3.371 .001
	STRATEGICALLY BASED	.243	.060	.234	4.027 .000
	TOTAL EMPLOYEE INVOLVEMENT	.246	.065	.203	3.768 .000

a. Dependent Variable: ORGANIZATION PERFORMANCE

Based on the unstandardized coefficients, the equation of multiple regression model is as follows (Sugiyono, 2015).

$$Y = 50.284 + 0.189(\text{Customer Focus}) + 0.387(\text{Continuous Improvement}) + \\ 0.243(\text{Strategically Based}) + 0.246(\text{Total Employee Involvement}) \quad (1)$$

From the Eq. (1), we can conclude that:

- a. Constant value is 50.284, which means there is a positive relationship between independent variable and the dependent variable. If customer focus, continuous improvement, strategically based, and total employee involvement are constant, then the organization performance will increase.
- b. Coefficient of customer focus is 0.189, which means if customer focus increases while a continuous improvement, strategically based, and total employee involvement are remain constant, the organization performance increases.
- c. Coefficient of continuous improvement is 0.387, which means if continuous improvement increases while customer focus, strategically based, and total employee involvement are constant, then the organization performance increases.
- d. Coefficient of strategically based is 0.243, which means if strategically based increases while a continuous improvement, strategically based, and total employee involvement are constant, then the organization performance increases.
- e. Coefficient of total employee involvement is 0.246, which means if total employee involvement increases while customer focus, continuous improvement, are strategically based are constant, then the organization performance increases.

Table 6
Coefficient of Determination Output

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.642 ^a	.412	.405	7.879

a. Predictors: (Constant), TOTAL EMPLOYEE INVOLVEMENT, CONTINUOUS IMPROVEMENT, CUSTOMER FOCUS, STRATEGICALLY BASED

b. Dependent Variable: ORGANIZATION PERFORMANCE

Based on the results of Table 6, the value of the adjusted R-square is 0.405. This means that the influence of customer focus, continuous improvement, strategically based, and total employee involvement on organization performance is 40.5%, while the rest 59.5% is influenced by other factors which are not included in this research.

4.6. Discussion

The result of data processing using SPSS that refer to adjusted R square value shows that the influence of Customer Focus, Continuous Improvement, Strategically Based, and Total Employee Involvement on Organization Performance is 40.5%, while the rest of 59.5% is influenced by other factors which are not included in this research. Therefore, in this study, SMEs service sector in Selangor, Malaysia need to improve the implementation of TQM which is included Customer Focus, Continuous Improvement, Strategically Based, and Total Employee Involvement element in order to improve the Organization Performance of the SMEs. According to the descriptive analysis on this research, TQM of SMEs service sector in Selangor, Malaysia is at a moderate level and tends to reach a high level in which indicated by several elements of TQM as the independent variables in this research. The detailed analysis shows the relatively high average of the four elements of TQM which are, Customer Focus at 3.63, Continuous Improvement at 3.57, Strategically Based at 3.78, and Total Employee Involvement at 3.37. Also, the detailed analysis also indicates the same result on Organization Performance as the dependent variable in this research. Organization Performance in service sector SMEs in Selangor, Malaysia is also at a moderate level and tends to reach a high level, with a relatively high average of 3.76. Hence, service sector SMEs in Selangor, Malaysia especially the owner or manager, need to improve the implementation of TQM especially involving the four, i.e. customer focus, continuous improvement, strategically based, and total employee involvement in order to enhance organization performance.

Based on the analysis of this study, customer focus has a positive and significant effect on organization performance in the service sector SMEs in Selangor, Malaysia. This result is consistent by the results of Cai (2009), where customer focus becomes a significant factor for the success of the organization because it is a starting point of any quality initiative. The results are also in line with Abusa and Gibson (2011),

customer focus has a significant correlation with three performance improvements which are employee morale, sales growth, and export growth. The results from the stepwise regression analysis have also revealed that customer focus is one of four TQM elements that have a significant contribution on both the financial and the operational performance (Abusa & Gibson, 2011).

Continuous improvement has positive and significant influence on organization performance in the service sector SMEs Selangor, Malaysia. The result is in line with several previous studies, among others Li et al. (2016) stated both in manufacturing and service industries, Continuous Improvement (CI) is recognized as the most useful aspect to enhance competitiveness, efficiency, quality, and performance accordingly. Moreover, based on Maletić et al. (2012) found that CI had a positive and significant impact on maintenance performance. The findings also provide empirical evidence that continuous improvement can be an effective way to improve maintenance performance (Terziovski, 2001). The study also concludes that continuous improvement and innovation management strategy and system have a significant impact on SMEs performance. On the other hand, TQM is defined especially as a management philosophy that enlarges an organizational culture, through continuous improvement committed to customer satisfaction (Abusa and Gibson, 2011). Abusa and Gibson (2011) revealed that continuous improvement was significantly correlated with only one performance improvement, which is customer satisfaction.

According to the analysis result also, strategically based has a positive and significant impact on organization performance in the service sector SMEs Selangor, Malaysia. This is in accordance with previous studies conducted among others, by Goetsch and Davis (2002) who stated that organization with TQM implementation had a strategic plan that consists of broad objectives, vision, mission, and also actions program that must be undertaken to achieve the broad objectives. One researcher emphasized that strategic management is an approach to specify the organization objectives, to develop organization's policies, to determine plan in attaining the objectives, and to manage resources for policies and plans implementation, those drive the increase of organization performance highly in line with achieved appropriate organization objectives (Mohamud et al., 2015). Abusa and Gibson (2011) used strategically based as one of the independent variables called top management commitment as the most crucial factor for the success of TQM. The study has revealed that the role of top management commitment comes up as an essential performance predictor for financial performance.

Moreover, the result of the analysis of this study has revealed that total employee involvement had a positive and significant effect on organization performance in the SMEs service sector Selangor, Malaysia. This is supported by several studies including Sofijanova and Chatleska (2013) who stated "Employee involvement is a process of participation and empowerment of employees in order to use their input towards achieving higher individual and organizational performance". The study indicated that using employee involvement effectively has a positive impact on perceived organizational performance. Precisely, employee involvement and employee empowerment, and the utilizing of self-managing teams have a direct and significant correlation with the managerial perception of the organizational performance. The study concludes that the companies are driven to apply for employee involvement programs in enhancing company performance, growth and competitiveness either on the regional or global market. Abusa and Gibson (2011) used the people management as one of the independent variables in which an employee focus is also an essential factor for the success of TQM implementations (Abusa & Gibson, 2011). The study has revealed that people management had a significant correlation with customer satisfaction, employee morale, and production performance improvement. People Management (in this study Total Employee Involvement) is one of the four TQM elements that had a significant contribution on both financial and operational performance (Abusa & Gibson, 2011).

5. Conclusion

This finding of this study assists the management in implementing TQM, especially in service sector of SMEs. Customer focus in this study has received the lowest effect on organization performance compared with the other three independent variables. Furthermore, according to the low response of customer satisfaction indicator, management of SMEs is recommended first to pay more attention on customer by providing the best quality services and providing value-added services for customer satisfaction. The management could also start by measuring and monitoring the level of customer satisfaction, arranging the after-sales strategies, and performing the exact communication and training processes to reach customer satisfaction. The outcomes are believed to contribute in terms of recognizing TQM values with four critical elements of TQM that are utilized in this study, i.e. customer focus, continuous improvement, strategically based, and total employee involvement. The research results sustain and enrich theories about how TQM affects organization performance improvement. Future research is suggested to develop the relationship between TQM and organization performance through factor analysis. Thus the dominant factor and the less dominant factor can be detected by statistical analysis. Moreover, the future researcher has to employ other factors which affect organizational performance such as working environment, company culture, career path, the use of ISO 9001, etc. Furthermore, it is suggested for future research to perform a study with a larger sample which may be possible with the continuous growth of SMEs in Malaysia.

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