



A STUDY ON TOTAL QUALITY MANAGEMENT (TQM) PRACTICES AND ORGANIZATIONAL PERFORMANCE OF SMEs IN COIMBATORE DISTRICT

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Abstract

Total Quality Management (TQM) is often regarded as a philosophy that aims to achieve customer satisfaction through continuous improvement and teamwork. The transformation towards TQM is coupled with its spread, from the manufacturing to the service sector, large scale industries to the small and medium scale industries. The correlation analysis indicates that TQM practices and organizational performance of SMEs are highly associated with each other. The regression analysis reveals that supplier relationship, top management commitment, customer focus and employee involvement and empowerment are positively and significantly influencing non-financial performance of SMEs. The results show that there is significant difference between performance of ISO certified and non ISO certified SMEs. Therefore, it is concluded that if TQM policies and practices are applied in true essence in SMEs, it will contribute in their performance in terms of quality and profitability.

Key Words: *Organizational Performance, SMEs, Total Quality Management.*

1. Introduction

Small and Medium Enterprises (SMEs) play significant role in developing countries especially in India. It is a type of business activity that contributes to the economic growth of our country. SMEs generate employment opportunities, increase exports and also act as suppliers to large companies in the industry (Larimo, 2013). It is also playing a greater role not only as an impetus, but also as a key driver of growth in order to achieve an inclusive and balanced growth (Abdulsaleh and Worthington, 2013). As a new basis for the activities of the private sector, SMEs are very imperative in the process of economic transformation. SMEs also promote innovation activities and act as the stabilizer of growth during the economic slump. Therefore, it is vital to develop robust, competitive and resilient SMEs to face the challenges that arise, including pressure from market liberalization.

Total Quality Management (TQM) is often regarded as a philosophy that aims to achieve customer satisfaction through continuous improvement and teamwork. The transformation towards TQM is coupled with its spread, from the manufacturing to the service sector, large scale industries to the small and medium scale industries (Chin et al 2002). TQM has been considered as a basis to the productivity improvement, profitability and customer satisfaction for an organization. Even so, the market competition factor, cost, and consumer demand has prompted the organization to innovate. Effective quality management enables the organizations to have an edge over their competitors.

SMEs have to understand that quality management practices are not necessarily only suitable to be practiced by large companies and specific industries. The implementation of TQM can be adjusted and practiced and by SMEs (Yunoh and Ali, 2015). Therefore, it is necessary to study the Total Quality Management (TQM) practices and organizational performance of SMEs in Coimbatore district.

2. Methodology

Coimbatore district has been purposively selected for the present study. The 300 employees of SMEs have been selected for the present study by adopting random sampling technique and the data and information pertain to the year 2015-2016. In order to examine the socio-economic profile of employees of SMEs, the frequency and percentage analysis have been worked out. In order to study the relationship between TQM practices and organizational performance of SMEs, the correlation analysis has been carried out. In order to examine the influence of TQM practices on non-financial performance of SMEs, the multiple linear regression has been employed. In order to study the difference between performance of ISO certified and non ISO certified SMEs, the ANOVA test has been applied.

3. Results and Discussion

3.1. Socio-Economic Profile of Employees of SMEs

The socio-economic profile of employees of SMEs was analyzed and the results are presented in Table-1. The results show that about 65.67 per cent of employees are males and the rest of 34.33 per cent of employees are females. It is observed that about 49.00 per cent of employees belong to the age group of 31 – 40 years followed by 21 – 30 years (24.67 per cent),



41 – 50 years (14.00 per cent) and above 50 years (12.33 per cent). The results indicate that about 33.67 per cent of employees are educated up to secondary education followed by higher secondary (22.33 per cent), primary (21.00 per cent), diploma (17.33 per cent) and graduation (5.67 per cent). It is clear that the percentage of involvement of employees in TQM implementation is 26-50% claimed by 38.33 per cent of SMEs followed by 76-100 % (29.27 per cent), 51-75 % (17.00 per cent) and less than 25 % (15.00 per cent). The results reveal that about 70.67 per cent of SMEs have a separate quality assurance department, while, the rest of 29.33 per cent of SMEs do not have a separate quality assurance department.

Table-1. Socio-Economic Profile of Employees of SMEs

Socio-Economic Profile	Frequency	Percentage
Gender		
Male	197	65.67
Female	103	34.33
Age Group		
21 – 30 years	74	24.67
31 – 40 years	147	49.00
41 – 50 years	42	14.00
Above 50 years	37	12.33
Educational Qualification		
Primary	63	21.00
Secondary	101	33.67
Higher Secondary	67	22.33
Diploma	52	17.33
Graduation	17	5.67
Employees Involved in TQM Implementation		
Less than 25%	45	15.00
26-50%	115	38.33
51-75%	51	17.00
76-100%	89	29.67
Presence of Separate Quality Assurance Department		
Yes	212	70.67
No	88	29.33

3.2. Relationship between TQM Practices and Organizational Performance of SMEs

In order to study the relationship between TQM practices and organizational performance of SMEs, the correlation analysis has been carried out and the results are presented in Table-2.

Table-2. Relationship between TQM Practices and Organizational Performance of SMEs

Particulars	TMC	CF	SR	EIE	WE	OP
TMC	1.00					
CF	0.54**	1.00				
SR	0.49**	0.53**	1.00			
EIE	0.12	0.08	0.09	1.00		
WE	0.41**	0.56**	0.64**	0.33**	1.00	
OP	0.63**	0.68**	0.76**	0.65**	0.73**	1.00

Note: ** indicates significant at one per cent level

The results show that the correlation coefficient between Organizational Performance (OP) and Top Management Commitment (TMC) is 0.63, which is positively and highly associated with each other at one per cent level of significance. The results indicate that Organizational Performance (OP) and Customer Focus (CF) are also positively and highly correlated with each other with the value of 0.68, which is significant at one per cent level. Besides, the correlation coefficient between Organizational Performance (OP) and Supplier Relationship (SR) is 0.76, which is positively and highly associated with each other at one per cent level of significance.

The results reveal that the correlation coefficient between Organizational Performance (OP) and Employee Involvement and Empowerment (EIE) is 0.65, which is positively and highly associated with each other at one per cent level of significance.



The results indicate that Organizational Performance (OP) and Work Environment (WE) are also positively and highly correlated with each other with the value of 0.68, which is significant at one per cent level.

3.3. Influence of TQM Practices on Non-Financial Performance of SMEs

In order to examine the influence of TQM practices on non-financial performance of SMEs, the multiple linear regression has been employed and the results are presented in Table-3. The TQM practices are considered as independent variables and non-financial performance is considered as dependent variable.

The results indicate that the coefficient of multiple determinations (R^2) is 0.73 and adjusted R^2 is 0.71 indicating the regression model is good fit. It is inferred that about 71.00 per cent of the variation in dependent variable (Non-Financial Performance) is explained by the independent variables (TQM Practices). The F-value of 27.583 is statistically significant at one per cent level indicating that the model is significant.

Table-3. Influence of TQM Practices on Non-Financial Performance of SMEs

TQM Practices	Regression Co-efficients	t-Value	Sig.
Intercept	1.021**	6.215	.000
Top Management Commitment (X_1)	.356**	4.963	.000
Customer Focus (X_2)	.312**	4.254	.000
Supplier Relationship (X_3)	.429**	5.102	.000
Employee Involvement and Empowerment (X_4)	.242**	3.780	.000
Work Environment (X_5)	.139	1.763	.085
R^2	0.73	-	-
Adjusted R^2	0.71	-	-
F	27.583	-	.000
N	300	-	-

Note: ** Significance at one per cent level

The results reveal that supplier relationship, top management commitment, customer focus and employee involvement and empowerment are positively and significantly influencing non-financial performance of SMEs at one per cent level. Hence, the null hypothesis of there is no significant influence of TQM practices on non-financial performance of SMEs is rejected.

3.4. Difference between Performance of ISO Certified And Non ISO Certified SMEs

In order study the difference between performance of ISO certified and non ISO certified SMEs, the ANOVA test has been applied and the results are presented in Table-4.

Table-4. Difference between Performance of ISO Certified and Non ISO Certified SMEs

TQM Practices	F-Value	Sig.
Top Management Commitment	20.682**	.000
Customer Focus	28.390**	.000
Supplier Relationship	48.154**	.000
Employee Involvement and Empowerment	19.985**	.000
Work Environment	21.658**	.000

Note: ** Significance at one per cent level

The F-values are significant at one per cent level indicating that there is significant difference between performance of ISO certified and non ISO certified SMEs. Therefore, the null hypothesis of there is no significant difference between performance of ISO certified and non ISO certified SMEs is rejected.

4. Conclusion

The present study shows that majority of employees of SMEs are males and most of them belong to the age group of 31 – 40 years. Majority of employees are educated up to secondary education and the percentage of involvement of employees in TQM implementation is 26-50% claimed by more than one third of SMEs. Besides, more than two-third of SMEs have a separate quality assurance department. The correlation analysis indicates that TQM practices and organizational performance



of SMEs are highly associated with each other. The regression analysis reveals that supplier relationship, top management commitment, customer focus and employee involvement and empowerment are positively and significantly influencing non-financial performance of SMEs. The results show that there is significant difference between performance of ISO certified and non ISO certified SMEs. Therefore, it is concluded that if TQM policies and practices are applied in true essence in SMEs, it will contribute in their performance in terms of quality and profitability.

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