

## TQM: A tool for Sustainable Competitive Advantage for Small Enterprises

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**Abstract:** Total quality management could be a comprehensive and structured organizational management approach that focuses on the continuous improvement of the quality of products and services through constant feedback on victimization. Total quality management, or TQM, is used as a process throughout the company to guarantee the quality of the product or service. In fact, because TQM focuses on customer satisfaction, specifically on their needs and wants, perhaps TQM is easier in the world of small businesses. TQM's challenge for business owners is to understand market participation, learn to listen to customers and know when to make changes. If TQM is implemented correctly, small businesses can use the process to make changes in a product or service to the demand of the customer and the market.

*This research is an empirical type of research i.e. there is a way to gain knowledge through direct and indirect observation. The record of one's direct observations or experiences can be analysed quantitatively or qualitatively.*

*Total Quality Management has a specific meaning within many sectors. It not only focuses on quality of product/services but also changing demand of customers to sustain in the competition. One of the most important decision for any organization is to pay attention towards quality management. The results inferred from this research is almost every small enterprises are using quality improvement methods knowingly or unknowingly to increase their profits and to gain competitors advantage to sustain in the competition. Customer focus is the prime factor which has to be consider to improve organizational performance. There are similarities between importance of performance parameters for all three sectors except one parameter which is communication within employees, courier services finds this parameter highly important rather than both two sectors. Impacts of implementation of TQM practices for all three sectors are mostly on customer satisfaction, customer feedback and organizational performance.*

**Key Words:** Total Quality Management, Competitive Advantage, Sustainable Competitive Advantage, Small Enterprises.

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### I. Introduction:

TQM means total quality management. The definition of total quality management (TQM) describes the management approach for long-term success through customer satisfaction. In a TQM effort, all members of an organization improve processes, products, services and the culture in which they work.

The total quality management originated in the industrial zone of Japan (1954). Since then, this concept has been developed and can be used for almost all types of organizations, such as schools, highway maintenance, hotel and church management. Nowadays, total quality management is also used in the e-business area and assumes quality management from the client's perspective. The purpose of total quality management is to fix things over and over again for the first time. This saves the time necessary to correct the organization and correct the product and service implementation (such as warranty repair).

For a set of standards with an organization, total quality management can be established separately, for example, the International Organization for Standardization (ISO) in the ISO 9000 series. Total quality management uses strategies, data and communication channels to integrate essential quality principles into the activities and culture of the organization.

Total quality management could be a comprehensive and structured organizational management approach that focuses on the continuous improvement of the quality of products and services through constant feedback on victimization. Total quality management, or TQM, is used as a process throughout the company to guarantee the quality of the product or service. The objective of this process is the complete satisfaction of the client, which is achieved through the analysis and improvement of the products and processes within the company.

## **II. Literature Review**

Total quality management is an approach that focuses on improving the effectiveness of the organization, the efficiency and the ability to respond to customers and others needs of the interested parties through the active use of the skills and competences of the people in the search to achieve a sustained competitive advantage. Although it is generally he accepted that Total Quality Management (TQM) can generate a competitive advantage, surprisingly, little research has been done developing countries. Most of the literature that supports this has come from developed countries. In developing nations like Kenya, small and medium scale. Industries (SMEs) play a vital role in creating jobs and boosting Economy of the country. The objective of the study was to identify critical success. factors that contribute to the competitive advantage in the SMEs of Nairobi and to establish a guideline that the administration can use to improvise the competitive advantage of your company above its competitors.

This study included a questionnaire survey where small and medium enterprises they intend to adopt total quality management practices in their governance structure were interrogated. From the results, the study aimed to deduce that the content of TQM. It is capable of producing a competitive advantage for SMEs.

Results showed a relationship between total quality factors competitive advantage. The results of the questionnaire questionnaire are that SMEs in Nairobi are trying to deal with new quality management practices to increase productivity. Of the results, the study SME recommends the establishment and improvement of quality management systems Quality management programs to ensure the effective implementation of TQM for the overall success of the company.

The inferred results of the questionnaire survey is that the small and medium scale companies in Nairobi are trying to cope with the new quality management practices for increase productivity. The study also satisfies the results of various investigations. Academics on the application of TQM in SMEs in other parts of the world. In general terms, it can be said that the leadership and vision of top management pave the way. For quality practices to be executed in companies with a clear quality policy. The triumph of a quality improvement program depends to a large extent on the commitment of the superior. The management and its vision to implement them. Management must clearly communicate your quality objectives to your employees and make them understand how to achieve the objectives clearly. Clear planning is essential for management implement these quality improvement programs in your organization. These programs and planning increases the cost of production marginally, but can ultimately lead to better performance of the firm.

Customer service is also vital for SMEs to achieve and maintain a competitive advantage, and proper care must be taken to provide adequate service and receive feedback from the client. Continuous improvement programs with recognition and incentives for employees are also the first consideration of the administration that showed the survey, but at the same time that SMEs are falling behind with factors such as employee development and training / empowerment of employees.

The above factors should be given more stress to improve the productivity of the companies. The results indicate that total quality management is the key to achieving competitive advantage in the SMEs of Nairobi (WANJIKU, NOVEMBER 2015).

## **III. Research Methodology**

### **Objectives**

The general objective of this research is to study TQM practices implemented by the Small Enterprises. Thus, this study specifically attempted to address the following objectives:

1. To study TQM practices implemented by the Small Enterprises.
2. To study how TQM provides sustainable competitive advantage to Small Enterprises.
3. To study how TQM practices impacts on performance of Small Enterprises.

### **Research design including sample design**

The study adopted an empirical cross sectional design. Both qualitative and quantitative were deployed to address the research objectives. The qualitative research was conducted to understand the problem in inventory management by conducting a structured interview. The quantitative research design includes survey research and comparative research. This data would help to address the research to the textile industries.

This study is conducted on two textile manufacturing firms.

### **Data collection**

Data collection is a method of collecting information from all the relevant sources to seek out answers to the research problem, check the hypothesis and judge the outcomes. There are two methods of data collection: Primary method of data collection and secondary method of data collection.

In this study the data is collected through both primary and secondary method of data collection.

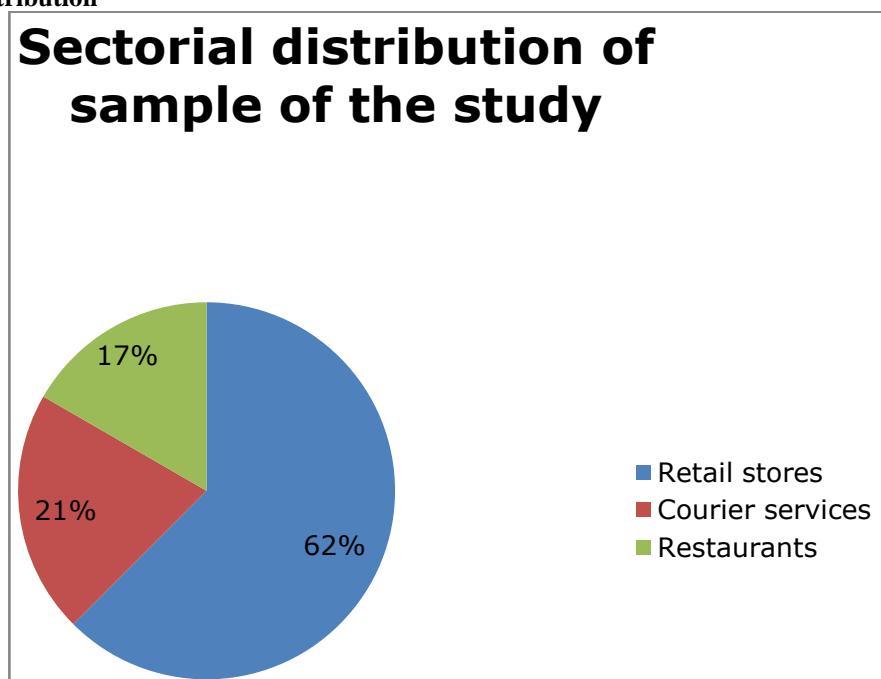
For the primary data collection questionnaire is prepared according to objective of study. This questionnaire includes different questions, some of the questions are yes or no type and some questions having rating. The questionnaire was designed in a simple table format and a five-point scale was employed for scoring responses. These factors were put on 5 point “Likert Scale”. The sample size is 24 service organisations in which 15 are retails, 5 are couriers and 5 are restaurants. The survey is conducted by visiting to various service organisations like retails, restaurants, couriers and interview method is used. The questionnaire is filled by management of the organisations. In this way the primary data are collected.

The secondary data is collected from studying some research paper, books ,journal, Internet.

This study utilized primary data. Data was obtained using questionnaires developed by the researcher. The questionnaire contains questions and statements based on the research objectives. The questions were structured in such a way that they are easy to administer and analyze as well as aided the researcher obtain in depth responses on the survey.

#### **IV. Data Analysis/Present Work**

##### **Sectorial Distribution**



**Fig. 4.1**

The above chart shows that the sample size of the small enterprises in percentage in service sector which has taken into consideration for the study. This study considers the three service sectors in small enterprises as retail stores, courier services and restaurants.

In which retail stores are 62%, courier services are 21% and restaurants are 17%. In this study all the factors and data is considered for small enterprises in these three sectors.

**Overall Analysis:  
ISO Certified**

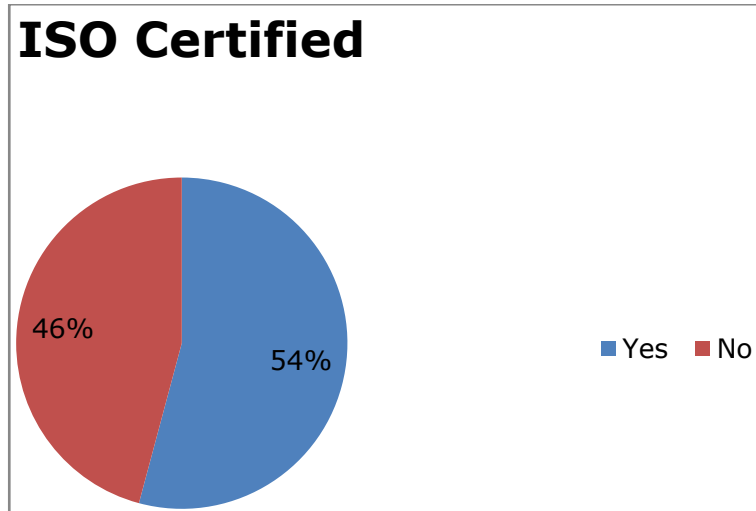


Fig. 4.2

Figure 4.2 shows that, 54% of the small enterprises are ISO certified and 46% are non ISO certified.

#### TQM Department

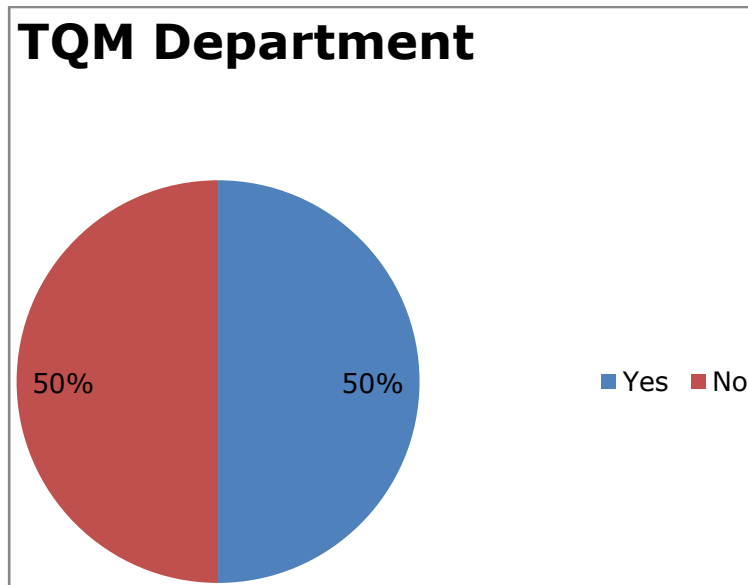


Fig. 4.3

Figure 4.3 shows that, 50% of small enterprises have TQM department and 50% do not have TQM department.

#### Importance

For the following data analysis the rating is between 1 to 5. 5 is very important and 1 is not important and 3 is neutral.

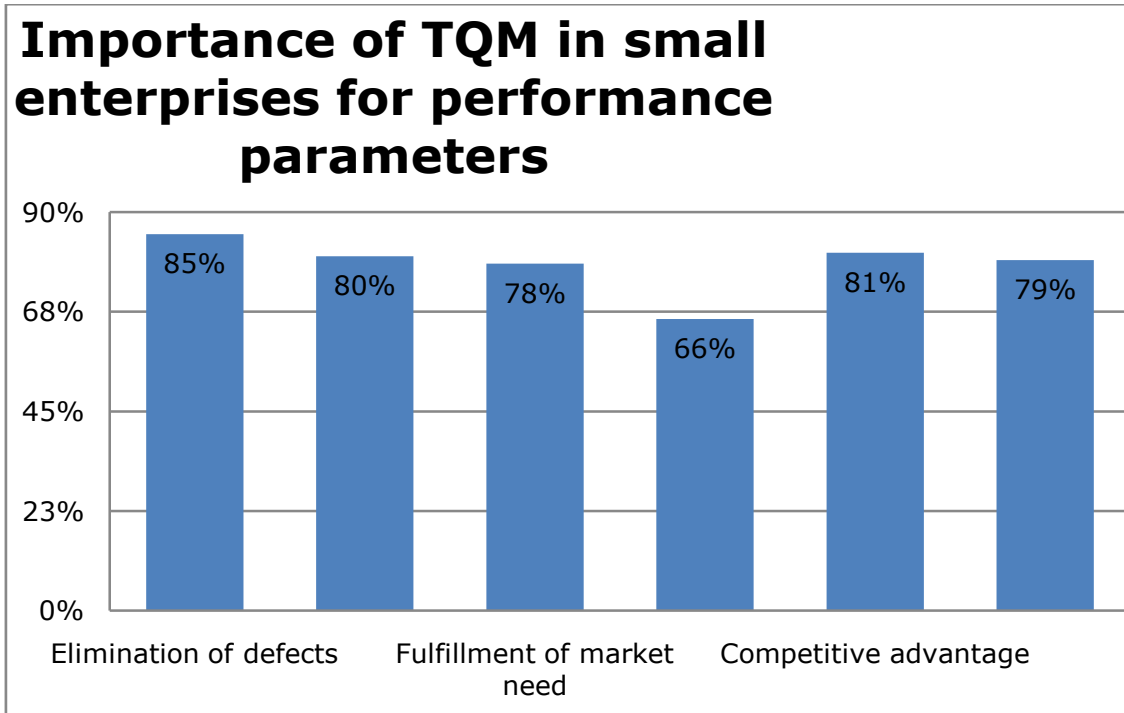


Fig. 4.4

Figure 4.4 shows the importance of TQM on the performance of the small enterprises which is shown in percentage for all the mentioned performance parameters.

From the above graph it is observed that, TQM is important tool for elimination of defects which is followed by competitor's advantage and increase in profit. IF TQM is implemented by the small enterprises it gives competitive advantage as compared to their competitors and improves the profit of small enterprises. TQM is not that much important for communication. Implementation of TQM does not show any changes in communication within employees.

Impacts For the following data analysis the rating is between 1 to 5. 5 is very high and 1 is very low and 3 is neutral.

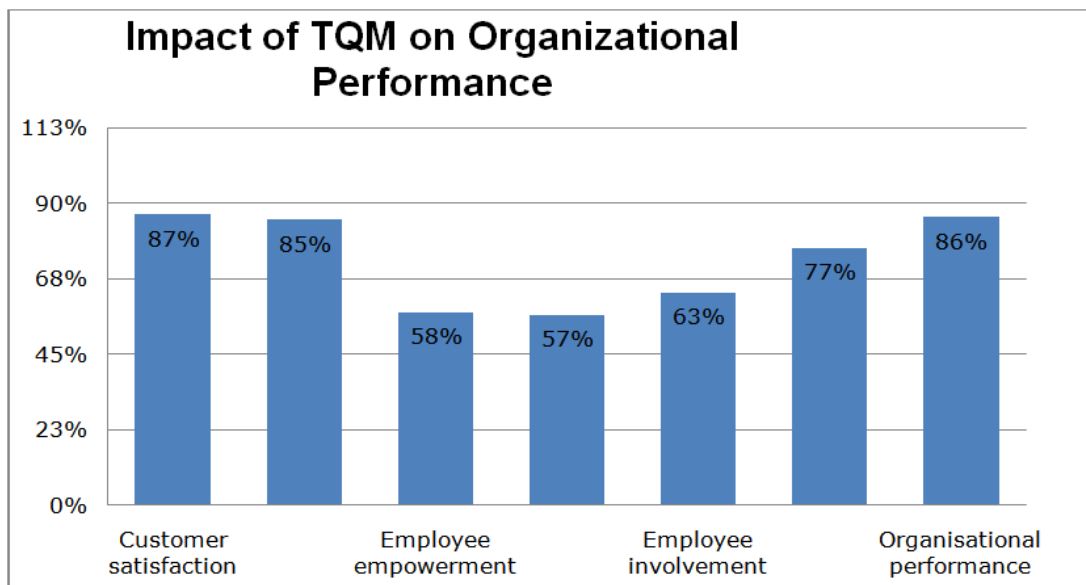


Fig. 4.5

Figure 4.5 shows the impact of TQM practices after their implementation on above parameters in small enterprises.

From the above graph it is observed that, implementation of TQM practices highly impacts on customer satisfaction, customer feedback, innovation performance and organizational performance. Implementation of TQM practices in a right manner results in customer satisfaction which will result in customer retention and gives the organization competitive advantage to sustain in the competition and also improves the organizational performance.

Factors such as employee empowerment and rewards to employees remain unaffected by the implementation of TQM practices as their impact is neutral. Even if TQM is an integrated process it does not affect employees actions in small enterprises.

### Challenges

For the following data analysis the rating is between 1 to 5. 5 is very high and 1 is very low and 3 is neutral.

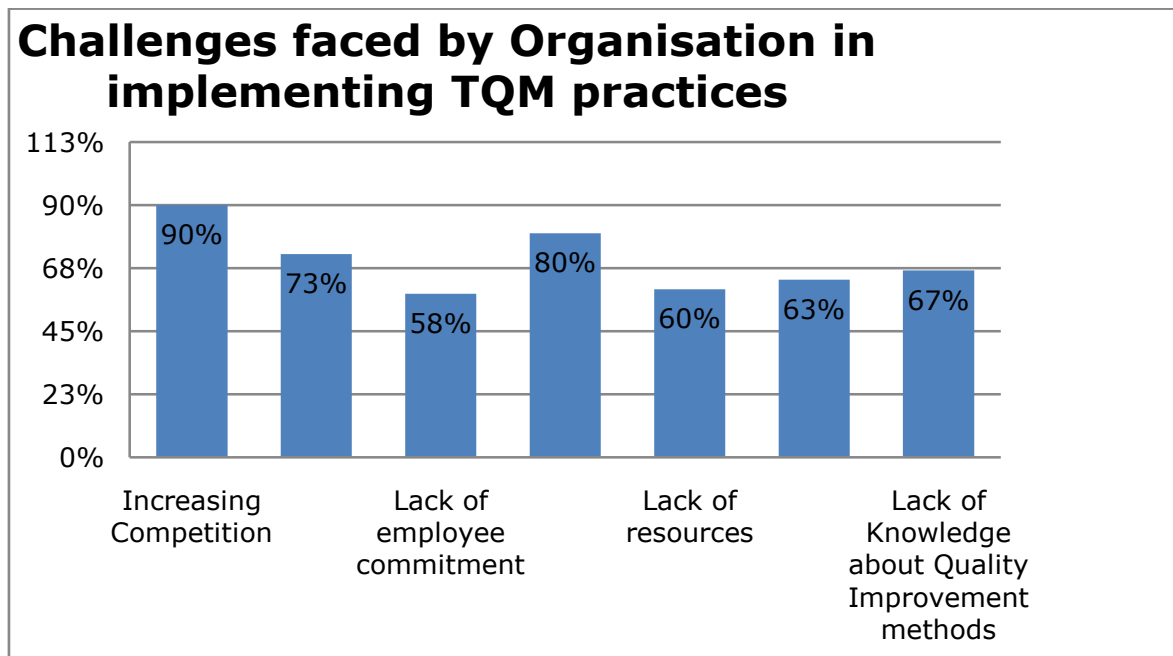


Fig. 4.6

Figure 4.6 shows the percentage of challenges faced by TQM department.

From the above graph it is observed that, challenges which are highly faced by TQM department in small enterprises are increasing competition and customer needs which are 80% to 90%. To sustain in the competition every small enterprises should improve their quality according to customer needs. One of challenge for TQM department is technology upgradation which is 73% nearly to high challenge. Many of the small enterprises do not have separate TQM department which is result in lack of knowledge about quality improvement methods and poor training.

Other challenges such as lack of employee commitment and lack of resources are somewhat faced by TQM department.

### Importance

For the following comparative data analysis the rating is between 1 to 5. 5 is very important and 1 is not important and 3 is neutral.

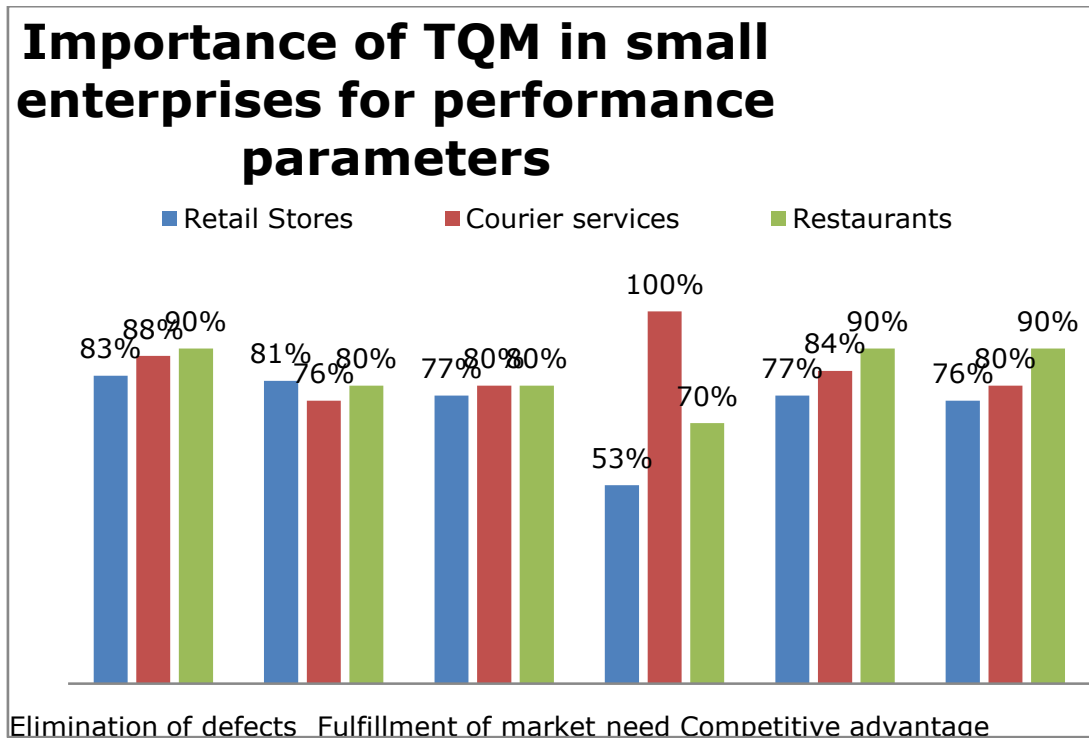


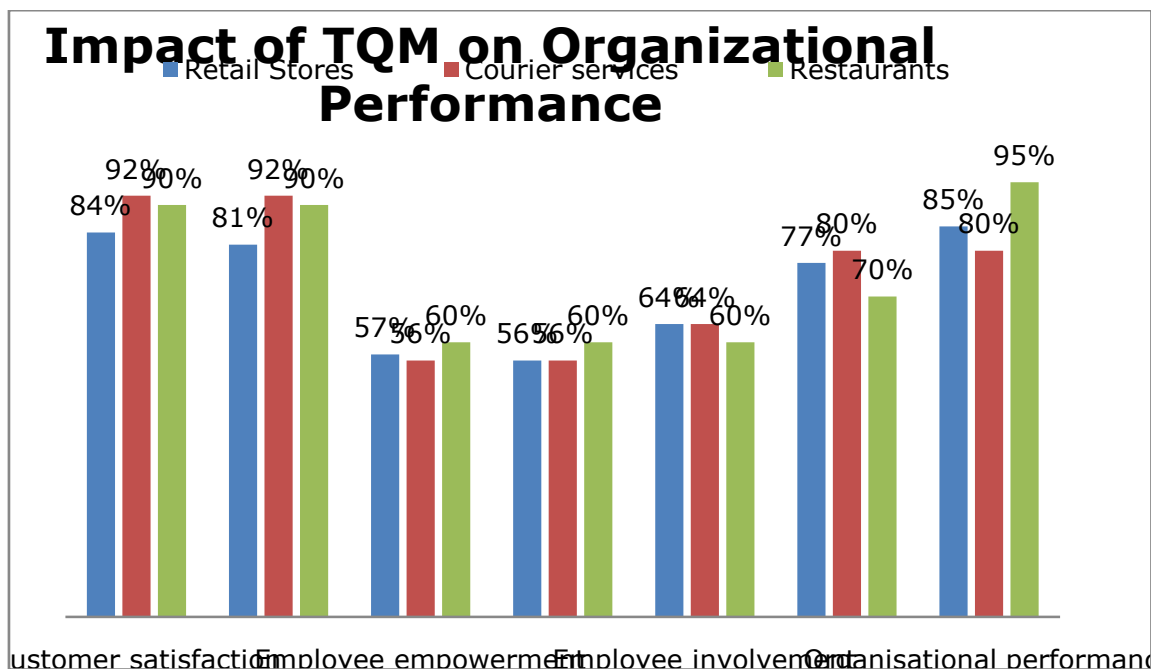
Fig. 4.7

Figure 4.7 shows the importance of TQM on the performance of the small enterprises which is shown in percentage for all the mentioned performance parameters.

In analysis it is observed that, all the three sectors finds some of the performance parameters highly important. For restaurants parameter such as elimination of defects, competitors advantage and continuous improvement is very highly important which is 90% as compared to retail stores which is 76% to 83% and for courier services it is 80% to 88%. Retail stores and restaurants find TQM as tool to increase profit more than courier services. All the three sectors think that to fulfill the markets needs TQM is equally important. TQM is not that much important for communication within employees in retail stores and restaurants but highly important for courier services which is 100% where communication plays an important role in their every day to day work.

### Impacts

For the following data analysis the rating is between 1 to 5. 5 is very high and 1 is very low and 3 is neutral.

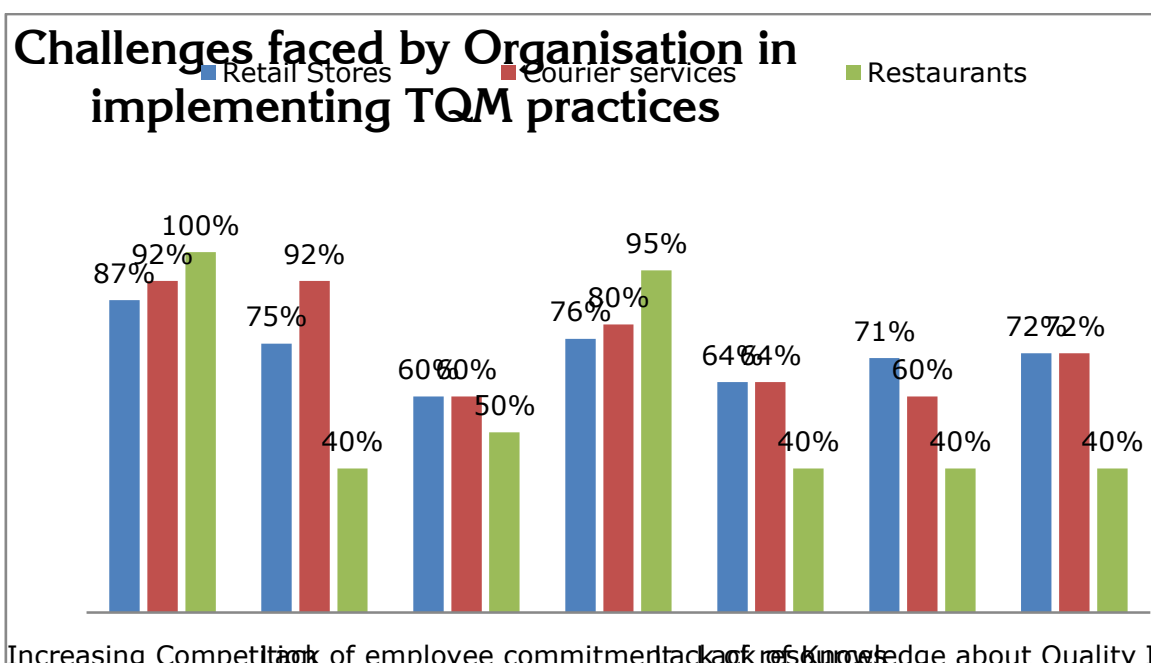


**Figure 4.8** shows the percentage impact of TQM practices on above parameters.

In analysis it is observed that, for all three sectors implementation of TQM practices impacts almost equally on customer satisfaction, customer feedback and organizational performance which is highly impacted. Implementation of TQM practices does not affect employee empowerment, rewards to employees and employee involvement.

**Challenges**

For the following data analysis the rating is between 1 to 5. 5 is very high and 1 is very low and 3 is neutral.



**Figure 4.9** shows the percentage challenges faced by TQM department. Every TQM department in small enterprises faces the above challenges.

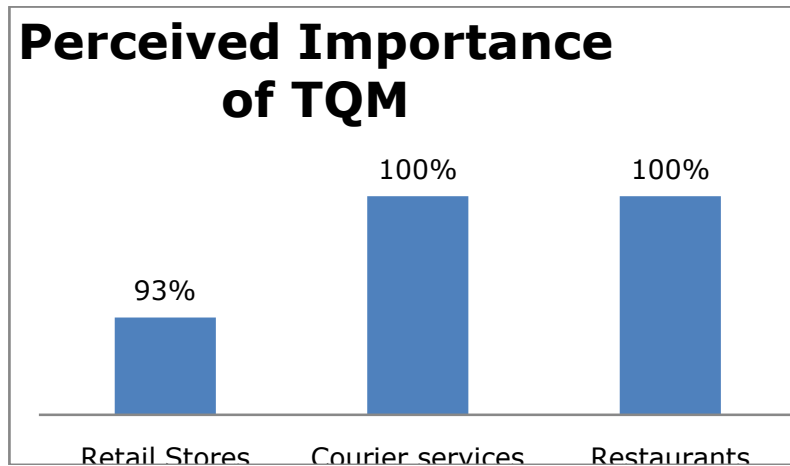


In analysis it is observed that, challenge which is highly faced by TQM department is customer needs and increasing competition for restaurants which is 95% to 100% as compared to other and it is little bit lesser in retail stores (76% to 87%) and courier services (80% to 92%). Upgradation of technology is highly challenging for courier services which is above 90% as compared to other sectors, as a contradictory up gradation of technology do not affect working of restaurants which is only 40%.

Challenges such as lack of resources, poor training and pack of knowledge about quality improvement methods are equally faced by retail stores and courier services but not a challenge for restaurants.

**Relevance:**

For the following data analysis the rating is between 1 to 5. 5 is very important and 1 is not important and 3 is neutral.



**Fig. 4.10**

**Figure 4.10** shows the relevance of TQM practices in retail stores and courier services.

From the above graph it is observed that, relevance of TQM practices in retail stores is 93% and in courier services and restaurants is 100%.

**Hypothesis**

The hypothesis was tested using the Pearson’s correlation coefficient.

Pearson's correlation coefficient (r) is a measure of the strength of the association between the two variables. The first step in studying the relationship between two continuous variables is to draw a scatter plot of the variables to check for linearity.

Karl Pearson based his formula on following basic assumptions:

- (A) Two variables are affected by many independent causes and form a normal distribution.
- (B) The cause and effect relationship exists between two variables.

The assumption that there is no significant impact of implementation of TQM practices on the overall performance of small enterprises is tested using the Pearson’s correlation coefficient.

**Correlations**

		Customer Satisfaction	Employee Involvement	Continual Improvement	Organizational Performance
Customer Satisfaction	Pearson Correlation	1	.627**	.642**	.630**
	Sig. (2-tailed)		.001	.001	.001
	N	24	24	24	24
Employee Involvement	Pearson Correlation	.627**	1	.640**	.593**

	Sig. (2-tailed)	.001		.001	.002
	N	24	24	24	24
Continual Improvement	Pearson Correlation	.642**	.640**	1	.834**
	Sig. (2-tailed)	.001	.001		.000
	N	24	24	24	24
Organizational Performance	Pearson Correlation	.630**	.593**	.834**	1
	Sig. (2-tailed)	.001	.002	.000	
	N	24	24	24	24

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Since, it is observe that Sig. (2-tailed) value for all three variables is 0.001, 0.002 and 0.000 is less than 0.05. Because of this, we can conclude that there is a statistically significant correlation between TQM principles and organizational performance in small enterprises. And there is high degree of positive correlation between TQM principles and organizational performance. It means increase or decrease in all this three principles can affect performance of organization. Therefore the null hypothesis (Ho) is rejected and the alternate hypothesis is accepted here.

The above table shows that the Pearson correlation between customer satisfaction and organizational performance is 0.630 which is a positive correlation. Thus it can be inferred that customer satisfaction affects organizational performance of small enterprises.

The above table shows that the Pearson correlation between employee involvement and organizational performance is 0.593 which is a positive correlation. Thus it can be inferred that employee involvement affects organizational performance of small enterprises.

The above table shows that the Pearson correlation between employee involvement and organizational performance is 0.834 which is a high degree of positive correlation. Thus it can be inferred that employee involvement affects organizational performance of small enterprises.

## V. Conclusion

Total Quality Management has a specific meaning within many sectors. It not only focuses on quality of product/services but also changing demand of customers to sustain in the competition. One of the most important decision for any organization is to pay attention towards quality management. The results inferred from this research is almost every small enterprises are using quality improvement methods knowingly or unknowingly to increase their profits and to gain competitors advantage to sustain in the competition. Customer focus is the prime factor which has to be consider to improve organizational performance. Those organizations who are ISO certified and implementing TQM practices are gaining more competitors advantage. There are similarities between importance of performance parameters for all three sectors except one parameter which is communication within employees, courier services finds this parameter highly important rather than both two sectors. Impacts of implementation of TQM practices for all three sectors are mostly on customer satisfaction, customer feedback and organizational performance in average it is 89%, 88% and 87% respectively.

Highly faced challenge by any organization in implementing TQM practices is increasing competition and customer needs. This study shows that, biggest challenge for restaurants is increasing competition which is 100% and it is true because restaurants segment is increasing day by day. Customer needs is one of the biggest challenge, so to be in a competition every organization needs to implement. TQM practices to provide quality products and services. Courier services are mostly facing challenges like increasing competition and technology upgradation because of the changing needs of customers and competitors advancement in their services.

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