

THE EFFECT OF TOTAL QUALITY MANAGEMENT ASPECTS ON ORGANIZATIONAL PERFORMANCE IN IRAN'S OIL INDUSTRY

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Abstract

The objective of this research is to study the influence of quality management on productivity improvement and customer satisfaction in Iranian oil industry. The statistical population was consisted one staff in Iranian oil industry that by means of simple random sampling, 400 individual were chosen and there were 350 questionnaires that were analyzed. Data collection tool was a questionnaire that calculated by Cronbach's alpha formula. Computer software LISREL was utilized for information analysis and hypotheses examination. Due to studies on hypotheses testing, it is specified that leadership, public management and customer-orientation have positive effect on productivity improvement and customer satisfaction, strategic planning and information analysis are positively effective on productivity improvement but they do not affect customer satisfaction and process management has positive influence on productivity improvement and customer satisfaction.

Keywords: TQM, Productivity, Customer Satisfaction, Organization Performance, Oil Industry

Introduction

One of the interesting preliminary issues of each enterprise or organization should be satisfying provision of quality in products and their services. In modern competitive world, quality has become the most important issue for manufacturers and suppliers. One of the important features in recent years is globalization of affairs and development and movement toward standardization of systems and activities. Total quality management is management method on the basis of providing high quality services from customer's point of view. This method is a quality-oriented, customer-oriented method which is based facts and team work that senior managers lead the procedure of work to achievement of essential strategic principals during a continuous development, final service providing and ultimate quality management. ISO 9000 has been noticed by different societies and enterprises so that has modified the basics of national standards. Acceptance of standards by European society is possibly one of the reasons why they are accepted comprehensively. Also, World Trading Organization recommends to set international standards especially ISO 9000 (Amiran, 1997).

Accelerated and turbulent conditions of business in modern world have made many of the trading enterprises that have special position in the market of their activity field, to be threatened by rivals that are far away from them; while it is hard to assume one filed for activity of an organization by information technology growth. Experts of trade and management sciences try to find an explanation and interpretation for business conditions in this changing setting and to offer solutions for improving the competitive situation of organization and in this way; they give new ideas, combine and improve existed concepts.

Problem Statement

Quality management is defined as a modern method of thinking about organizations' management and a comprehensive method for quality improvement and total performance of organization. Management, leads the activities with standards of total quality management, processes the information, and guides many other issues that are in the field of implementing total quality management. So, theoretically and experimentally, they focus on these issues that are valuable for managers. Experimental studies on literature of this issue suggest that variables would be noticed in total quality management performance that are as dependant as performance and are used as dependent variables. It also indicates the studies of relationships between total quality management and productivity and achieving a world class due to a powerful base is found. As it is said the goal of this research is testing the relationship between quality management and operating of two key performances i.e. productivity improvement and achieving customer satisfaction. According to results of researches it is determined that conducting quality management can have a positive and noticeable effect on productivity and achieving customer satisfaction (Farsijani, 2007).

It was possible to improve productivity in an organization if a stimulation attitude is used on continuous improvement activities, also it would be effective if service performances were in the same direction with trading duties and culture development based on the flexibility of staff and when education and multi skilling were utilized (Farsijani, 2007).

Conceptual Framework of Research

In this research, it is attempted to study the relationship between quality management and productivity improvement and customer satisfaction. It seems that productivity is so essential for development of organization and due to this, we were trying to find the subject by means of backup article and researching popular articles; so, it was possible to implement this research in culture and environments of Iran by localizing the subject and to recommend necessary facilities for effectiveness of relationship between integrated variables to develop the organization.

Research Hypotheses

- H1. Public management has positive effect on customer satisfaction.
- H2. Public management has positive effect on productivity improvement.
- H3. Leadership has positive effect on productivity improvement.
- H4. Leadership has positive effect on customer satisfaction.
- H5. Strategic planning has positive effect on productivity improvement.
- H6. Strategic planning has positive effect on customer satisfaction.
- H7. Data analysis has positive effect on productivity improvement.
- H8. Data analysis has positive effect on customer satisfaction.
- H9. Customer-orientation has positive effect on productivity improvement.
- H10. Customer-orientation has positive effect on customer satisfaction.
- H11. Process management has positive effect on productivity improvement.
- H12. Process management has positive effect on customer satisfaction.
- H13. Customer satisfaction has positive effect on organization performance.
- H14. Productivity improvement has positive effect on organization performance.

Research Goals

In this research goals are study of effect of implementing quality management on productivity improvement in Iranian oil industry, study of effect of implementing customer satisfaction on productivity improvement in Iranian oil industry and also finding the significant relationship

between effective variables of quality management on productivity improvement and customer satisfaction.

Research Importance and Necessity

Quality is undoubtedly an effective factor for globalization. It plays the main role in development process of industry and trading, integration of global economic and market growth and is considered as the most important factors of organization competition and its success in national, regional and global markets. Globalization process, markets and the necessity of being powerful for competition creates new patterns of quality management. Total quality management is a philosophy, theory and a new methodology in quality management and its derived systems. In fact, fulfillment and utilization of total quality management is considered as one of the results of development and internationalization of quality management during past years. Despite of the fact that total quality management is generalized in all fields, it is only used in factories and some of the service careers.

Total quality management is a simple method for conducting an organization which is based on quality and participation of all members of organization and its goal is to achieve long-term success by customer satisfaction and providing benefits of all beneficiaries. This international standard encourages the organization to choose a process approach during development, establishment and improvement of effectiveness of quality management system to increase customer satisfaction by providing customers' requirements.

However an organization wants to perform effectively, it should manage and determine relevant and several activities. Each activity or set of activities that use some resources and manage them in order to transform input to output can be considered as a process. Due to this, in this research the effect of quality management on productivity improvement and customer satisfaction will be studied and then the influence of these variables will be considered in order to achieve world class in Iranian oil industry and the importance of quality management is reviewed in continuous improvement of productivity and customer satisfaction from standardization of processes and integration of organization objectives for achieving long-term goals of organization.

Research Background

Total quality means productions and services that fulfill the expectations of customers or exceed them. Elements constituting total quality model include customer satisfaction, planning, development of staff and leadership participation, managing the improvements, process management. Total quality includes various elements that they are given below:

1. Development of staff and leadership participation: management of an organization should train all staff has a powerful leadership and by leading the organization to a common goal, prepares himself for future.
2. Managing and solving problems: this element is supply of one accurate, effective and organized method for correcting processes and managing services and new products and its correct fulfillment help to move toward perfect productions and services.
3. Planning: quality improvement and planning for future is the best way for indication and implementation of management commitment to customers and staff. Undoubtedly, planning is the most important process in all organizations.
4. Achieving mental demand of customer: includes all activities that are required for making customers happy, content and excited.
5. Process management: process management provides daily and accurate management of fundamental processes that as a result efficiency and capabilities of predicting the processes is possible inside the organization and also in relationship with trading partners This means an inexpensive and efficient organization.

Definition of customer satisfaction that is accepted by most of the scholars is that customer satisfaction is a result obtained from comparison of expected performance before purchase with understood real performance and paid cost (Beerli et al., 2004).

Blanchard and Halloweell (1996) believe that customer satisfaction is concluded from customer understands in a transaction or value relationship; so that the price equals with the ratio of quality to price and customer's costs.

Aggregation customer satisfaction is total evaluation of customer from all experiences of purchase and consuming a product or a service in a long period. While exchanging satisfaction provides information about an individual's experience of a product and a special service about a special case. Total satisfaction is a more appropriate index about past, present and future performance of enterprise. The reason of this importance is that customers decide about their repurchase due to all their experiences of one brand at the present time not due to a purchase in a special time and place (Beerli et al., 2004).

Customers are people or activities that consume a product or results of one performance or they need them and utilize them. As each performance in one organization has surely one goal; so, it has some customers (Brinkerhof, 1998).

Finally, customers can be divided into two groups: external and internal customers. External customers are out of the organization and buy its services or products. Against external customers, each organization has also some internal customers that are as important as external customers. There is always an internal customer in all phases and processes of organization that receives a product or service and instead, provides a product or service (Jafari et al., 2000). Traditional obstacles will be removed by gathering staff as customer and suppliers together and each of the staff provides something for his colleague that because of that thing one would be considered as internal supplier and the other would act as an internal customer. Reinforcement of this type of relationship makes a network of relations between supplier-customer that has great effect on improvement of quality of services provided for external customers (Rampersad, 2001). Needs and expectations of customers: Caplall and Nortool consider the customer's point of view the most important view in evaluation of organization performance and Peters and Waterman state that successful organizations know about needs of customers and also from systematic standpoint the study and the extent to which customers are satisfied and loyal is considered as most important indexes of organizational health (Jabari, 2000).

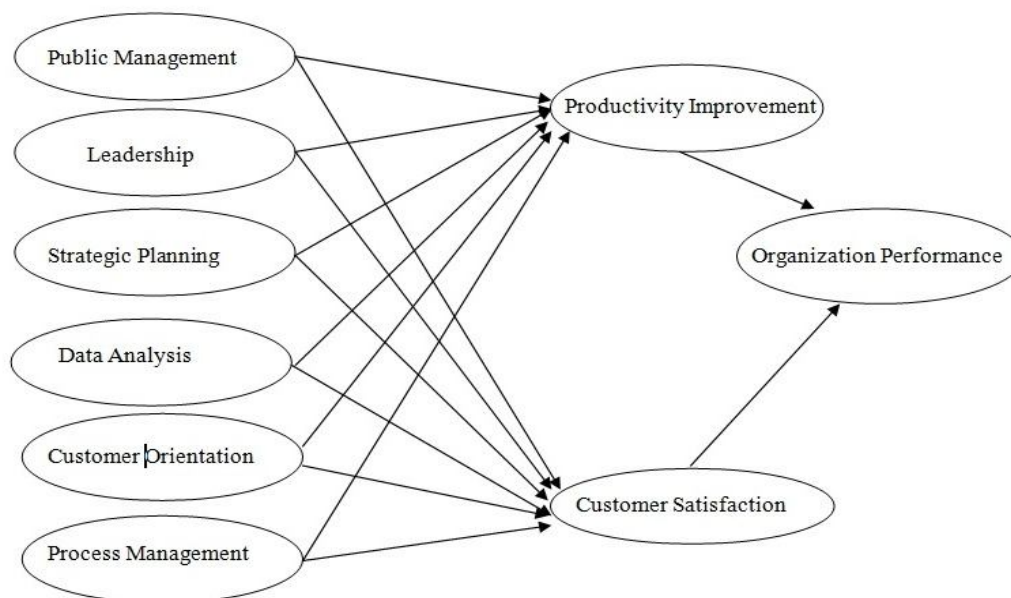
Ghafarizadeh (2011) has studied the effect of organizational citizenship behavior with approach of total quality management on organizational performance and the results indicated that organizational citizenship behavior by total quality management has significant effect on organizational performance.

Due to studies done in hypotheses testing of this research it is specified that organizational citizenship behavior has positive effect on individual management of organization, organization leadership, focus on customer needs, planning, process management and data analysis. Therefore, it can be mentioned that organizational citizenship behavior has positive and direct influence on quality management and causes an improvement in quality management of organization. By affecting quality management in organization it has indirect influence on organizational performance and improves the organizational performance. Amongst effective factors of quality management on organizational performance, process management, focus on customer and organization leadership has positive and direct effect on organizational performance while individual management, planning and data analysis are not influential on organizational performance and can not affect organizational performance by their changes. It can be concluded that organizational citizenship behavior can indirectly affect organizational performance by means of process management, focus on customer and organization leadership that are subsets of quality management.

Eini (2010) has studied the impact off values of personal services on loyalty and customer satisfaction and according to the results of hypotheses testing and positive and direct effect of personal services value on customer satisfaction and loyalty and also positive and direct influence of customer satisfaction on their loyalty, it can be concluded that personal services value increases customer loyalty directly and indirectly; directly, one unit increase in personal services value, increases loyalty for 0.38 unit and indirectly, by positive and direct effectiveness on customer satisfaction and increasing customer satisfaction, rises customer loyalty because it is proved in third hypothesis that customer satisfaction has positive and direct influence on customer loyalty. Therefore, it can be said that, higher social value, financial integration, better social relationship, coordination of customers' needs with bank services, special respect from others, enjoyable and relaxed life caused by personal services value of Saderat bank services make satisfaction and loyalty of bank customers, increased.

Conceptual Model of Research

Figure1. Conceptual model of Research (Mileter Ziorski, 2006)



Research Methodology

Based on the category, this research is of applicable ones because it obtains some results about statistical population by utilization of theories and some of the management and statistics sciences. These results are applicable for enterprises and organizations that are in statistical population field. However, based on method, this research is a causal one because it studies the effect of quality management on organization performance (case study: Iranian oil industry); in this regard, structural equations statistical technique which studies basically the relationship between variables, is used. Also according to suggestion of James Stivens (1996) and Bentler and Cho (1998), researchers can reduce the size of sample group to 5 items in order for estimation of each parameter in SEM analyses. So, the sample size can be selected by this method:

$$Q^*5 < \text{Sample Size} < Q^*15$$

$$40^*5 < \text{Sample Sizes} < 40^*15$$

In this research, structural equations technique is used so, in order to get reliable results from mean of quantities above, minimum and maximum quantity of interval above was selected as

sample size i.e. 400 questionnaires were distributed that 350 of them were given back. In this research, simple random sampling is used. Required data were obtained from statistical population so, data collecting tool was collectable. Standard questionnaire is the most common too for data collection in field researches. So, data collection tool in this research is a questionnaire including 35 questions. All questions are designed according to 5-point Likert scale and numeral value of 1 to 5 was chosen for choices (1= too much, 2= much, 3= average, 4= little, 5= too little).

Data Analysis

In this research confirmatory factor analysis especially path analysis is used and structural equations technique is utilized for hypotheses testing related to conceptual model. After collecting the questionnaires, the results were taken and then were given to computer and by means of software SPSS statistical tables and diagrams were provided and then information analysis and definition was done by structural equations model and software LISREL and the relationship between mentioned factors were evaluated by exploration of causal relations between latent variables and observable variables or research questions. For testing this model, lisrel method was used because this method makes it possible to use several observable variables as reagents of a latent variable and this makes the evaluation of latent variables more effective. In this research, model of linear structural relationships is used for data analysis (Houman, 2005).

The Research Finding

The Research Finding state that :

- According to results for first hypothesis testing it can be mentioned that there is a positive and significant relationship between leadership and customer satisfaction and this hypothesis is not rejected.
- According to results for second hypothesis testing it can be mentioned that there is a positive and significant relationship between leadership and productivity improvement and this hypothesis is accepted.
- According to results for third hypothesis testing it can be mentioned that there is a positive and significant relationship public management and productivity improvement and this hypothesis is accepted.
- According to results for forth hypothesis testing it can be mentioned that there is a positive and significant relationship public management and customer satisfaction and this hypothesis is accepted.
- According to results for fifth hypothesis testing it can be mentioned that there is a positive and significant relationship strategic planning and productivity improvement and this hypothesis is accepted.
- According to results for sixth hypothesis testing it can be mentioned that there is a positive and significant relationship strategic planning and customer satisfaction and this hypothesis is accepted.
- According to results for seventh hypothesis testing it can be mentioned that there is a positive and significant relationship data analysis and productivity improvement and this hypothesis is accepted.
- According to results for eighth hypothesis testing it can be mentioned that there is a positive and significant relationship data analysis and customer satisfaction and this hypothesis is accepted.

- According to results for ninth hypothesis testing it can be mentioned that there is a positive and significant relationship customer-orientation and productivity improvement and this hypothesis is accepted.
- According to results for tenth hypothesis testing it can be mentioned that there is a positive and significant relationship customer-orientation and customer satisfaction and this hypothesis is accepted.
- According to results for eleventh hypothesis testing it can be mentioned that there is a positive and significant relationship process management and productivity improvement and this hypothesis is accepted.
- According to results for twelfth hypothesis testing it can be mentioned that there is a positive and significant relationship process management and customer satisfaction and this hypothesis is accepted.

Conclusion

According to results and hypotheses examination it can be said that total quality management has positive and direct effect on satisfaction and productivity improvement in the organization and it should be implemented in the organization in order to increase customer satisfaction because total quality management affects customer satisfaction positively through leadership, public management, customer-orientation and process management and increases customer satisfaction in organization. Total quality management improves productivity through leadership, public management, customer-orientation, process management, data analysis and strategic planning and one of the requirements for increasing productivity improvement in organization, is total quality management. If manager could make staff interested to their career, there would be no need to control and supervise them, continuously. So, it is required to behave everyone due to his inner personality and mentalities and also make working enjoyable for staff by means of encouragement, asking their opinion about various affairs, providing educations for increasing self-confidence and self-assurance and so on. Managers should be employer-oriented and attempt to make staff a group by building a relationship between staff. They are recommended to plan for long-term use of information technology and data analysis in order to achieve financial success in their organizations and gain benefits of investment in information technology in the future.

Suggestions

According this research results, managers should plan according to organization facts and do not have short-term planning for goals that are beyond their capabilities, determine their objective in long-term planning in order to try for achieving organization goals with help of staff, also give priority to customer-orientation in organization because customers buy the products and provide income for organizations. Satisfied customers are benefit resource for organizations. Enterprises that can not satisfy their customers, won't survive for a long time. Managers should use process management for increasing quality and improving the methods and determine the accurate process of tasks in order to implement the plan, in this way the plan would be implemented according to previously determined process. Its better managers improve the plans in organizations. By improving or changing, organization creates a continuous flow of products and services. For improvement of all projects, it is suggested to use PDCA improvement cycle because it provides an organized improvement process. The advantage of PDCA improvement cycle is that it offers a possibility for management in each improvement cycle and helps to recognize basic reason of problems and to remove it. Managers should always emphasize on providing the best services and products by means of optimal processes. This emphasis on implementation of ISO standards, increases customer satisfaction

and loyalty and has positive effect on raise of share and profit in market and this influence increases the quality of services and products of that organization.

Resources

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