

Implementing the Modern Management Systems in TQM Companies and the Surveillance Companies Performance

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Abstract

The purpose of the present study is to investigate the issues associated to the modern management systems in the performance of TQM companies and the surveillance companies. This research also discusses the mediators' roles existed between the relationship of TQM and surveillance companies. This qualitative research aims at investigating the previous works done completely on the TQM methods in learning and the surveillance companies' performances. This research anticipates that TQM supports both aspects of learning and surveillance companies' performances. The further researches should be guided in a way that validates the empirical analysis or change the proposed suggestions of this research.

Keywords: TQM, CRM, EFQM.

Introduction

In today's industrialized world, according to the serious problems existing in the inspection companies and the problem of the current practices of national standard organization of Iran as well as the variables influencing supervision process, the methods of modern management system have been integrated with each other such as TQM implementation, CRM, EFQM, and software VENSIM PLE. The aim of this project in a few short lines was to investigate the customer satisfaction after this system and reduce complaints of customer and authorities of organizations and also write reports and services.

Due to the increase of companies and industries and competition for attach to more share from the market as well as the enhancement of the quantity rather than quality, different companies need to control inspection.

Aria Company was produced management system standards by taking into account the customer relationship. The ability to record customer information, file information, call records and communications and analyze them lead to the reduction of cost and increase of market share.

Information system, known as information technology management which includes planning and implementation of software, has a significant impact on the standard inspection. What is the effect of using VENSIM PLE new system software of management on standard inspection?

How challenging is faced with the management new system?

What is the outcome of management new system on standard inspection?

The study in term of the goal was an applied one. The study was done on Rahavard Sanat Alboz Company as case study and hypotheses were compared in this company and library and filed methods and statistical observations were used to obtain information.

Conceptual model

The variables in the form of a conceptual model and their description are as follows:

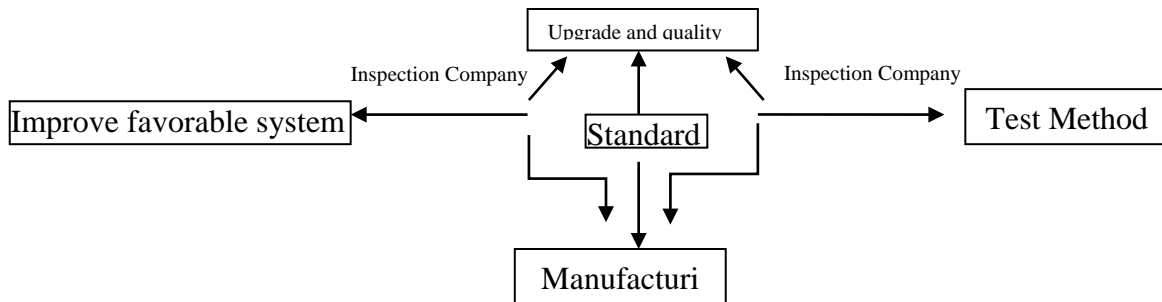


Figure 1: Conceptual model of the study

Theoretical Foundations

Today, in international trade, a product or guarantee in terms of quantity, quality and packaging for shipping before sending from the exporting country to the importing country under specific terms and conditions of governance in order to achieve and ensure its authenticity according to explain the contract between buyer and seller by inspections institutions of private sector with control and monitor governmental organizations placed.

The control, and monitor and verify the explanation on the authenticity of goods ordered from the customer in accordance with the purchase agreement, the PRE-SHIPMENT INSPECTION is called. In other words, inspection before shipment is an activity done directly by an importer (government agency, company or person) or by the importing country in order to control the importing of specific goods.

Inspection

After negotiations, signing a trade agreement between the buyer and seller, and opening the letters of credit (LETTER OF CREDIT / LC), the inspection agency plays a role in the inspection before shipment, particularly the conformity of the goods according to the specifications mentioned in the Performa and or credit chosen by the buyer.

Inspection agency to receive information about the product through letters of credit and Performa and any supplementary information requested in the survey domain by the employer to establish contact with the seller, time and place of the inspection to coordinate. It is obvious, as is necessary the samples of the goods will be tested. Representative of the inspection to the warehouse ready to shop, visit and by sampling and send it to the relevant laboratory in order to verify the characteristics of the product, will take action the terms of the purchase contract.

Inspection procedures

1. The customer's order can be inspected at the point of production, packaging, vendor customs storage or vendor of origin, customs or port, or the machine is installed.

2. Place and date of inspection as the purchase contract / letter of credit are not clearly printed, the inspection is done at the source and the period before the start of the shipment and issued a bill of lading or delivery product to the carrier.

3. Inspection domain should be clear and transparent in the purchase agreement and the text of the letter of credit and the order record entered.

4. Inspection domain should be implemented and agreed upon by the buyer and seller and may include one or more of case.

(A) - Appearance inspection and physically from a set of goods, equipment, facilities

(B) Sampling. Testing of the finished product

(C) - monitoring inspection, sampling, and quality control tests by the manufacturer or seller

(D) - examined the documents in the case of raw materials and tests conducted by the manufacturer and seller and accredited laboratory tests or third party companies in the production process and complete product.

(E) - Monitoring to the production process from inspection of raw materials to final product test, evaluate the competence of the manufacturer or supplier in order to verify the quality of inspection subject in two ways:

(1) Inspections of facilities, equipment, quality control system of process and production methods.

(2) Evaluate the certificate of quality assurance the manufacturer or suppliersuch as product quality certification, quality system certification of management, and so on.

NOTE: If it do not clear and complete lack the inspection domain in the purchase contract or letter of credit and record documents and order and purchase order of contract inspection, inspection current customs before common standards shipment and will be used by the manufacturer or seller.

Iran Standard National organization

The institute, responsible for controlling and monitoring on the quality of domestic manufactured goods and imported goods to the country based on the developed criteria is responsible. All decisions of the Supreme Council including the ministers are related to the Institute of Standards procedures and monitoring.

Standards Institute offices in all provinces of the country especially the points of entry to the country together with close cooperation with the Customs Administration of the Islamic Republic of Iranian the quality of imported and exported goods either directly or indirectly supervise and using multiple labs under or colleagues according to national standards and or international quality assessment of products perform.

According Institute Policy of Standards and Industrial Research of Iran (based on legal obligations), the quality of the goods imported into the country and some export should be codified criteria that the same national and international standards is evaluated and if the validity of the require permits issued. This practice (Evaluation of the quality of goods) much of it to the private sector means the international inspection companies and the country has been granted in accordance with the criteria specified inspection before shipment in order to export or import product as well.

Methodology

The aim of this study was to investigate issues related to the implementation of the new management system in the standard inspection companies, the relationship between total quality management (TQM) and performance inspections. In this study, inspection Company needs to mediate the relationship between TQM and company performance of inspection means the learning of organization argues. Conceptual paper aims to a complete survey of the relevant literature to the statement develop about the practices of TQM, learning and organization inspection company performance. Paper predicts that TQM both aspect of learning and performance of organization inspection companies will support. Future research should be directed towards that empirical analysis and or change the recommendations made in this article has been validated. This study based on the purpose applied and in term of the characteristics of the subject is description and method of conducting the survey-field work. Given that the statistical population all directors, deputies and staff offices and inspection company of Rahavard Sanat Alborz and their number is 30 and the size of the study population is limited and low therefore, the size of the population under study is considered the same, ($N = n = 30$) Since some members of the study population at the time of data collection are not available or in some cases questionnaires distributed, was not returned, finally the 24 questionnaires collected and was used to test the hypothesis.

The aim of the study

In the standard system which is particularly important from a disorder and disharmony to harmony and specifically system is needed to the new management system.

Goal: Change manpower will be than attitude and performance of individual.

Specific goals are as short-term control the change of system and in preserving the original framework is to avoid fragmentation which creates a new attitude according to a new management approach to control.

Applications: a goal that we can operated and use it in the services phase, control and supervision.

Research questions

Q1. Is the implementation of new management system in the standard inspection company effective?

Q2. Is the implementation of EFQM new management system in the standard inspection company effective?

Q3. Is the implementation of CRM new management system in the standard inspection company effective?

Q4. Is the implementation of MIS new management system in the standard inspection company effective?

Research hypotheses

H1. The implementation of new management system effect on the standard inspection.

H2. The performance of new management system effect on the standard inspection improvement.

H3. The performance of new management system effect on the standard inspection motivation.

H4. The performance of new management system effect on the standard inspection satisfaction.

The reliability of the study

To calculate Cronbach's alpha coefficient, at first variance of any subset of questionnaire questions (or under test) and the total variance are calculated. Then, the following formula is used to calculate the amount of alpha coefficient.

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum_{i=1}^k S_i^2}{\sigma^2} \right)$$

Where in:

K: The number of sub-questions in the questionnaire or test

S₂ k: variance sub - test k-th

S₂: total variance of test (questionnaire)

Using data obtained from this questionnaire and by helping the SPSS software with the distribution of the first 20 questionnaire, reliability coefficient of the questionnaire containing 20 questions which was calculated to be 0.789.

Data Analysis

In this section, we look at the demographic status of statistics sample.

Table 1: Distribution of frequency and the percentage of statistical sample responses in terms of education

Answer type, Answer quantity	Frequency	Percentage
Associate Degree	2	9
Bachelor	15	71
Graduate	4	20
Total	21	100

Based on data from the study sample No. 2 patients (9% of the statistics sample), with associate's degrees and 15 patients (71% of the statistics sample) had a bachelor's degree, 4 patients (20% of statistics sample) Degree is a graduate.

Table 2: Frequency distribution and the percentage of statistical sample responses in terms of age

Answer type, Answer quantity	Frequency	Percentage
30 years and under	12	57
30 to 40	4	20
40 to 50	3	14
50 and above	2	9
Total	21	100

According to information obtained from the age shown as observed 12 patients (57%) of respondents 30 years or less, 4 patients (20%) of respondents between 30 and 40 years and 3 patients (14%) of respondents in the age group 40 to 50 years and 2 patients (9%) of respondents over 50 are located.

Table 3: Frequency distribution and the percentage of statistical sample responses in terms of work experience

Answer type, Answer quantity	Frequency	Percentage
Under 5 years	11	53
Under 10 years	3	14
10 to 20 years	5	24
20 years	2	9
Sum	21	100

According to information obtained from the work experience of statistics sample, number of 11 patients (53% of the statistics sample) under 5 years old, 3 patients (14% of the statistics sample) under 10 years, 5 patients (24% of statistics sample) between 10 to 20 years and 2 patients (9%) over 2 years have work experience.

Based on information obtained in terms of gender, 12 patients (57% of statistics sample) are women and 9 patients (33% of the statistics sample) are man.

Table 4: Frequency distribution and the percentage of statistical sample responses in terms of work experience

Answer type, Answer quantity	Frequency	Percentage
Men	12	57
Woman	9	33
Sum	21	100

Kolmogorov – Smirnov test

To examine the normality of variables, the Kolmogorov - Smirnov test was used. The results are as follows:

Table 5: Results of the Kolmogorov – Smirnov test

Variables	Significant level
Implementation of new management system	0.861
Improve the standard inspection	0.826
Performance of new management system	0.441
New management system on the excitation	0.864
Satisfaction contracting companies	0.637

Table 5 shows the results of the Kolmogorov-Smirnov test, in the first column, the statistics value of Kolmogorov-Smirnov test and the second column shows the significant level, since significant level value of test for all variables is more than acceptable error rate ($0.05 = \alpha$), it can be said that these variables are normal. Therefore, the parameters test used to evaluate the assumptions and for variables normality to respond to hypotheses.

Table 6: Summary of hypothesis results ($0.05 = \alpha$)

Hypothesis	Description	Correlation coefficient	Sig.	Result
1	Implementation of new management system - Improved standard inspection	0.701	0.000	Accept
2	Performance of new management system - Improved standard inspection	0.584	0.000	Accept
3	Performance of new management system on the excitation - improve the standard inspection	0.554	0.000	Accept
4	Performance of new management system - the satisfaction of the contracting companies	0.730	0.000	Accept

The results of testing the four hypotheses are as follow:

H1: Implementing the modern management systems has an impact on the improvement of standard surveillance

For testing the first hypothesis, the significant level was 0.000 and the amount of error type 1 was $\alpha=0.05$. So, it can be said that the null hypothesis, H_0 will be rejected at the significant level of $\alpha=0.05$. In other words, with the confidence level of 95%, we can say that there is a significant relationship between the implementation of the modern management systems and the improvement of standard surveillance.

H2: The performance of modern management systems has an impact on the improving the standard surveillance

For testing the second hypothesis, the significant level was 0.000 and the amount of error type 1 was about: $\alpha=0.05$. So it can be said that the null hypothesis, H_0 will be rejected at the significant level of $\alpha=0.05$. In other words, with the confidence level of 95%, we can say that there

is a significant relationship between the modern management systems and improvement of the standard surveillance and with regard to the fact that the Pearson correlation coefficient was about 0.584, and its value was positive, it can be obtained that there is a positive significant relationship between the modern management systems and improvement of the standard surveillance.

H3: Performance of modern management systems has an impact on the people's motivation for the improvement of Standard surveillance review.

For testing the third hypothesis, the significant level was 0.000 and the amount of error type 1 was $\alpha=0.05$. So, it can be said that the null hypothesis, H_0 will be rejected at the significant level of $\alpha=0.05$. In other words, with the confidence level of 95%, we can say that there is a significant relationship between the Performance of modern management systems and people's motivation for the improvement of Standard surveillance review.

H4: the performance of modern management system has an impact on the satisfaction of the contracting companies

Like previous hypotheses, the significant level was 0.000 and the amount of error type 1 was $\alpha=0.05$. So, it can be said that the null hypothesis, H_0 will be rejected at the significant level of $\alpha=0.05$. In other words, with the confidence level of 95%, we can say that there is a significant relationship between the performance of modern management system and the satisfaction of the contracting companies; and with regard to the fact that the Pearson correlation coefficient was about 0.730, and its value was positive, it can be obtained that there is a positive significant relationship between the performance of modern management system and the satisfaction of the contracting companies.

Practical recommendations

According to the obtained results, the following suggestions can be proposed:

- According to the first hypothesis, The amount of implementation of the modern management systems has a positive effect on the standard surveillance improvement which must be taken into considerations by the surveillance companies at all the time and pay attention to its improvement predictions.
- According to the second hypothesis, it can be pointed out that for improving Standard on the modern surveillance management system increases.
- According to the third hypothesis, for increasing the improvement of standard surveillance, it is sufficient that Modern systems management has increased the motivation of the inspection companies.
- According to the fourth hypothesis, as much as it can increase the performance of the new management system to the same extent and in the same direction also obtained the consent of the contracting companies.

Future Suggestions

- It is suggested that this investigation be studied in the other surveillance companies.
- It is suggested that the non-statistical methods of optimization be applied for further researches.
- It is suggested that new variables for implementing the modern management system has been taken into considerations.
- It is recommended to check with each other to compare several companies compared with statistical methods and optimization.

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