

Training Module Development for Industrial Employees in TQM

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ABSTRACT

TQM provides the overall concept that fosters continuous improvement in an organisation. The TQM philosophy stresses a systematic, integrated, consistent, organisation-wide perspective involving everyone and everything. It focuses primarily on total satisfaction of both internal and external customers within a management environment that seeks continuous improvement of all systems and processes. TQM is a necessity. It is a journey that never ends. It is the way to survive and succeed. It is the totally integrated effort for gaining competitive advantage by continuously improving every facet of an organisation's activities. In this Phase –II the objectives of the study are a) To know the effectiveness of Training related to TQM. b) To know employees opinion about the Training methodology. c) To compare employees knowledge about TQM between Pre and Post evaluation. For the above objectives the researcher selected 50 employees randomly. Questionnaire method is used to collect the data. The questionnaire is used to measure the employees knowledge about TQM after attending training and also the researcher take steps to know the employees attitude about Training Program (including methodology). Based on the above need phase II is conducted. Primary data is used and it is collected by using questionnaire and interview method. Secondary data were collected from the industry records, books, magazines and web sites. The responses were scored as per the scoring key of the respective questionnaire. Then the results were tabulated, analysed and discussed. The collected data were analysed using appropriate statistical techniques. The descriptive statistics such as mean and S.D, SE_M , t-ratio were computed. Result shows that after attending the training program employees gain knowledge about TQM and also they have positive attitude about the organisation and also they are satisfied about the training methodology.

KEYWORDS: Training Model, TQM and Employees

I. INTRODUCTION

It is a management approach that tries to achieve and sustain long-term organisational success by encouraging employee feedback and participation, satisfying customer needs and expectations, respecting societal values and beliefs, and obeying governmental statutes and regulations. Product, process, system, people and leadership form the five pillars of TQM.

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PROBLEM AND DEFINITION

Problem

The statement of the problem of this research is “ Effectiveness of Training related to TQM among the employees ”. For that the researcher conducted the research in two phases. In phase – I, the researcher made an attempt to measure the employees attitude and awareness about TQM. In phase-II, the necessary training module is prepared and trained the employees related to TQM and measure whether the employees attained knowledge and also measured the level of satisfaction about the Training.

Definition

The dictionary has many definitions of quality. A short definition that is widely accepted is: Quality is customer satisfaction. Quality is a relative term, generally used with reference to the end-use of a product. For example, the gear used in the sugarcane juice-extracting machine may not possess good surface finish, tolerance and accuracy as compared with the one used in the headstock of a lathe. Yet, it may be considered as having good quality. Quality should be aimed at the needs of the consumer, present and future (Edwards Deming). According to ISO 8402, quality is “the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs”.

II. OBJECTIVES OF THE STUDY

The objectives of the study are described below:

1. To know the effectiveness of Training related to TQM.
2. To know employees opinion about the Training methodology.
3. To compare employees knowledge about TQM between Pre and Post evaluation.

HYPOTHESES OF THE STUDY

- Employees do not differ in their opinion about training related to TQM on the basis of age.
- Employees do not differ in their Knowledge of TQM on the basis of age
- Employees do not differ in their opinion about training related to TQM on the basis of designation.

- Employees do not differ in their Knowledge of TQM on the basis of designation.
- Employees do not differ in their opinion about training related to TQM on the basis of income.
- Employees do not differ in their Knowledge of TQM on the basis of income.
- Employees differ in their knowledge about TQM between Pre and Post Training

NEED OF THE STUDY

The present research aimed to measure the employees' opinion about the training related to TQM and also to know the employees' level of knowledge about TQM after attending the training. Based on the result, Phase II is to be continued. In Phase II, training related to TQM is to be conducted and the post evaluation is to be processed.

III.METHODOLOGY

Research Design

Research design is purely and simply the framework or plan for a study that guides the collection and analysis of the data. The research design indicates the methods of research i.e. the method of gathering information and the method of sampling.

Sample Size

The researcher circulated 50 questionnaires randomly to the employees using stratified random sampling.

Data collection

Primary data were collected by using a structured schedule. All the respondents were asked the same questions in the same fashion and they were informed the purpose of the study. Secondary data were collected from the company records, books, magazines and web sites.

Research Instrument

The instrument used for collecting was a data structured schedule constructed for this study. A questionnaire to collect data on beliefs, feelings and attitudes from the respondents is being used and also the researcher has contributed these efforts in framing the questionnaire. Using the Tool, the researcher collects the data relevant to employees' opinion about the training program and methodology and materials used. Also, the researcher tried to compare the knowledge between pre and post training. The purpose of the study is explained clearly to the respondents. So, nothing about the purpose of the study is concealed from the respondents. A questionnaire to collect data on beliefs, feelings and attitudes from the respondents is being used and also the researcher has contributed these efforts in framing the questionnaire. The purpose of the study is explained clearly to the respondents. So, nothing about the purpose of the study is concealed from the respondents.

Method of Data Collection

The investigator personally distributed the questionnaires to each member of the randomly selected sample. They were requested to answer the items in the booklet as per the instructions provided at the beginning of each questionnaire. Confidentiality of response was assured. The employees were co-operative and took one hour to fill the information in all the questionnaires. The questionnaires were collected by the investigator from the employees. The

responses were scored as per the scoring key of the respective questionnaire. Then the results were tabulated, analysed and discussed.

Sampling

“Sampling may be defined as the selection of an aggregate or totality on the basis of which a judgement of reference about the aggregate of totality is made”.

Analysis of the Data

The present research aimed to measure the employees knowledge about TQM and also to know the employees level of satisfaction about training process related to TQM. Further comparison also made by the researcher. Based on the result of the Phase II implications to be given for the organisation.

Data Processing

The collected data were analysed using appropriate statistical techniques. The descriptive statistics such as Mean and S.D were computed. In order to study the functional dependencies to indicate the likelihood of causal relationships between the variables, inferential statistical techniques of product moment correlation, t-test and ANOVA analysis were computed.

IV. ANALYSIS AND DISCUSSION

Table 1

Showing F-ratio for employees opinion about training related to TQM on the basis of age

Age	N	Mean	SD	F-ratio	Level of Significance
20 – 30	25	4.2	0.90	1.36	Significant
30 – 40	14	4.4	0.89		
Above 40	11	4.1	0.79		

Hy: Employees do not differ in their opinion about training related to TQM on the basis of age.

The above table shows the mean, S.D. scores for employees opinion about training related to TQM on the basis of age. From the table, it is seen that employees who are in the age group of 20-30 obtained mean value of 4.2, and the employees who are in the age group of 30-40 scored the mean value 4.4 and above 40 years of age group employees scored mean value 4.1. When comparing these mean values, there is no significant difference. The calculated F-ratio (1.36), which is not significant at 1% and 5% level. It indicates that there is no significant difference in the employees opinion about training related to TQM on the basis of age. So the stated hypothesis is accepted. Based on the mean values majority of the employees are satisfied about the training.

Table 2
Showing F-ratio for employees knowledge about TQM
on the basis of age after training

Age	N	Mean	SD	F-ratio	Level of Significance
20 – 30	25	4.84	1.21	1.75	Not Significant
30 – 40	14	4.71	1.03		
Above 40	11	4.92	1.01		

Hy: Employees do not differ in their knowledge about TQM on the basis of age

The above table shows the mean, S.D. Scores for employees knowledge about TQM on the basis of age. It is observed from the table all the employees scored the mean value of more than 4. It indicates that they acquired enough knowledge after attending the training. This is statistically proved by the obtained F-ratio which is not significant. Hence the stated null hypothesis is accepted. Therefore all the employees gained knowledge after attending the training programme

Table 3
Showing F-ratio for employees opinion about training related
to TQM on the basis of designation

Designation	N	Mean	SD	F-ratio	Level of Significance
Skilled	12	4.24	1.75	1.89	Not Significant
Semi skilled	10	4.34	1.01		
Supervisor	11	4.39	1.81		
Executives	8	4.41	1.27		
Managers	9	4.30	1.65		

Hy: Employees do not differ in their opinion about training related to TQM on the basis of designation.

The above table shows the mean, S.D. scores for employees opinion about training related to TQM on the basis of designation. From the table, it is seen that irrespective of their designation all the employees are attained knowledge about TQM after attending the training programme. This is statistically confirmed by the obtained F-value which is not significant. Hence the stated null hypothesis is accepted/. Therefore the training related to TQM is very important to develop knowledge among the employees.

Table 4
Showing F-ratio for employees knowledge about TQM on
the basis of designation after training

Designation	N	Mean	SD	F-ratio	Level of Significance
Skilled	12	3.98	1.21	1.35	Not Significant
Semi skilled	10	4.32	1.89		
Supervisor	11	4.56	1.32		
Executives	8	4.15	1.43		
Managers	9	4.62	1.57		

Hy: Employees do not differ in their knowledge about TQM on the basis of designation.

The above table shows the mean, S.D. Scores for employees knowledge about TQM on the basis of designation. It is observed from the table all the employees scored the mean value of more than 4. But the skilled employees scored the mean value of 3.98. It indicates that they acquired enough knowledge after attending the training. This is statistically proved by the obtained F-ratio which is not significant. Hence the stated null hypothesis is accepted. Therefore all the employees gained knowledge after attending the training programme.

Table 5
Showing t-ratio for employees knowledge about TQM before and after training.

Group	N	Mean	SD	t-ratio	LS
Before	50	2.52	0.65	2.13	Significant
After	50	4.69	1.98		

Hy: Employees do not differ in their knowledge about TQM before and after training programme.

The above table shows that employees gain knowledge after attending the training programme. Because the mean value is higher than the before training. This statistically proved, since the obtained t-value (2.13) which is significant. hence the null hypothesis is rejected. So employees differ in their knowledge before and after training.

Table 6
Showing inter correlation for employees demographic variables and their opinion about training related to TQM

Demographic variables	Awareness of TQM
Age	0.42**
Designation	0.71**
Monthly income	0.66*

** . Correlation is significant at the 0.01 level

* . Correlation is significant at the 0.05 level

The above table exhibits the correlation between employees demographic variables and opinion about TQM. It is inferred from the above table that employees age is positively and significantly correlated and designation is also positively and significantly correlated and monthly income is positively and significantly correlated with their opinion about TQM. Among the variables, designation is highly correlated. So designation is more influencing variables.

Table 7
**Showing inter correlation for employees opinion about **
training and their Knowledge of TQM

	knowledge of TQM
Attitude towards training related TQM	0.55**

** Significant at 1%

It is evident from the table that employees attitude about training related TQM is positively correlated with knowledge of TQM (0.55). Therefore attitude is direct relationship with knowledge development. If the employees having positive attitude about the training and shows their real interest in attending the training, they definitely gain more knowledge.

IV. CONCLUSION

The present study aimed to know the employees opinion including attitude about training related to TQM and knowledge about total quality management related to job. The questionnaire is prepared and the same one is circulated to the employees. The sample size is 50. They are selected randomly. Some objectives and hypotheses are also framed by the researcher. To test the hypotheses, certain statistical tools such as ANOVA, t-test and Correlation are applied. From the research analysis it is found that employees are more satisfied about the training programmed and they also gained knowledge about TQM. The main result arrived from the research that the employees gain knowledge after attending the training. This should be proved before and after attending the training programme.

V. REFERENCE

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