



## A study on the implementation of TQM practices in the automobile industry: With special reference to perfect Honda

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### Abstract

Total Quality Management (TQM) is a regularly used term in discussions concerning quality. The global and national aggressive environment is subject to the influences of globalization of markets and the accelerated interdependence of economic agents. These dynamics have brought elevated demands on the agencies' competitiveness and customers have gained a central role in the groups focus. TQM is an important management philosophy, which helps corporations in their effort to obtain assent customers. However, there exist several examples of failed or badly performed implementation processes of TQM. This is a troublesome phenomenon, which negatively impacts businesses in their improvement in the direction of commercial enterprise excellence and sooner or later survival in a competitive environment. Furthermore, there are several different perspectives of researchers involving the proper benefits of TQM. The issues related to the necessary success and barrier elements of TQM implementation, when considering the incentives for the giant organizational change a TQM implementation implies, is important. The tendencies associated with Indian companies, concerning the presence of products and services, want to be examined on a comparative international scale. It is, therefore, integral for the Indian car sector to recognize and analyze the complicated interactions and the dynamics of factors affecting TQM, and factors which are the effect of TQM over a longer time horizon. This will enable India to evolve an improvement graph via the integration of all the recognized dominant elements interacting or being acted upon. The existing research focuses on assessing TQM implementation initiatives in selected Indian automotive industries to explain and identify similarities and variations in the implementation approach, advantages achieved, essential success and barrier factors of TQM implementation

**Keywords:** TQM, Interdependence, troublesome, comparative, horizon

### Introduction: Background of the Study

Globalization – integration of markets- makes many business corporations reflect upon considering the world as their marketplace. With the developing world's competition, excellent administration is becoming imperative to the management of firms. Thus, for goods and services produced and provided to enter into the world market, there is the necessity to adhere to global standards. The emergence of global standards, specifically the ISO 9000 series, allows companies which are most capable of adopting these rising standards to succeed, while those that can't will be relegated to the less suited markets. Therefore, the importance of achieving and adhering to standards lies in the inevitability of competing in the global market. The "total quality" idea is a universal philosophy of administration which goes well past the marketing; customer-perceived view of nice through which includes all key necessities that make a contribution not solely to customer-perceived quality, but also patron pleasure.

### Statement of the Problem

Many corporations have difficulties in TQM implementation, i.e., figuring out obstacles and indispensable success factors of TQM implementation. The growing demand for excellence has reached numerous developing countries. It is appropriate, therefore, for research in TQM implementation to be performed for the benefit of managers in the developing countries, the place, the want, is confounded through the lack of information

about TQM and the problem in its implementation. Therefore, the findings of such systematic research will promote new methods of questioning regarding TQM implementation in a range of contexts. Managers and specialists disagree over how to most accurately put in force TQM in their organizations. There is a lack of empirical agreement about TQM implementation. The bulk of the complete quality administration literature is based on non-public experiences and anecdotal evidence. The lack of empirical research can be attributed to the following reasons: the current theoretical base of TQM to assist research on complete quality is now not sufficient; TQM is a highly current philosophy outside Japan and the beginning of TQM lies outside the tutorial world. In a Japanese survey, fifty seven out of 138 respondents agreed that they do now not understand what is required to introduce and put into effect TQM, even though they understood its concepts. This reflects the complete first-class paralysis described via Oakland (1993) and Kanji (2000), where organizations trying to implement TQM are careworn where to start. This is due to the fact they are overwhelmed by so many concepts, principles, models and prescriptions high-quality management of the corporation

### Significance of Research Work

Although several studies have been undertaken in TQM implementation in a variety of industries and managers performance, however in the Indian context, none has been undertaken to suit the medium corporations in particular.

Therefore, an apparent want for a large study in relation to this region of Indian economic system was felt. From the studies, it has been realized that the characteristics related with Automobile enterprise are most proper for successful TQM implementation. The TQM adoption with the aid of FCI can also enhance the financial development of United States of America because in the current context, the study was in the Automobile enterprise due to the fact TQM has proved to be a value introduced element to distinctive financial systems all over the world.

### Objectives of the Study

1. To evaluate the level of implementation of TQM practices at Perfect Honda
2. To study the awareness of employees on quality improvement tools
3. To examine the obstacles for the successful implementation of TQM practices in Perfect Honda
4. To analyse the impact of TQM practices on service quality

### Scope of the Study

This study mainly concentrated with the total quality management of Automotive industry. The study covered the Perfect Honda show room in Thiruvananthapuram District.

### Literature Review

Ozdan Bayazit, (2003) carried out a study on TQM practices in Turkish manufacturing industry based on a survey among 100 large companies. The key finding from the research is that a growing number of companies in Turkey are willing to implement TQM to generate competitive advantages. It was also found that important factors for a successful implementation process are upper management support, employee involvement and commitment, customer focus, quality education and training, team work and use of statistical techniques.

Salaheldin Ismail Salaheldin, (2003) conducted a study on implementation of TQM strategy in Egyptian manufacturing firms. The study aims to explore the critical resisting and driving forces that inhibit or promote the implementation of total quality management (TQM) strategy in Egypt, in an attempt to determine whether TQM can be implemented effectively in this developing country. A force-field analysis was used for identifying the salient factors affecting TQM implementation in Egypt. The findings indicated that forces that promote or prohibit TQM implementation obtained in one developing country might be generalizable to another less developed country. The investigation identified some driving forces that promote the implementation of TQM strategy by the Egyptian manufacturing firms.

G. Karuppusami and R. Gandhinathan, (2006) <sup>[13]</sup> identified critical success factors of total quality management by using Pareto analysis. The authors discussed that even though there have been many articles published related to TQM in the last few decades, only a very few articles focused on documenting the critical success factors (CSFs) of TQM using statistical methods. An examination of 37 such TQM empirical studies resulted in the compilation of 56 CSFs. Implementation difficulties exist to operationalize such a large number of CSFs in organizations. The study analyzed and 74 sorted the CSFs in descending order according to the frequency of occurrences using the quality tool "Pareto analysis". A few vital CSFs were identified and reported.

### Research Methodology

#### Primary Data

A structured questionnaire used to be administered to top management and common employees of the organizations, executives from more than a few departments such as HR, sales and marketing, finance, manufacturing, etc. have been taken into consideration. All subjects were made to undergo face to face interviews where possible.

#### Secondary Data

- Secondary records provide an exact starting factor for research and helps to outline research issues and objectives. Secondary information gathered from:
  - Online databases like EBSCO, ProQuest, etc. for literature review.
- Industry reports as available.
- Newspapers, Books, Journals and Magazines.

#### Hypothesis for the study

The following hypotheses had been developed and examined in this study:

H1: Greater the extent of the modern-day practice of leadership, higher is the level of high-quality overall performance in provider sector.

H2: Greater the extent of the cutting-edge practice of strategic planning greater is the level of fantastic performance in provider sector

H3: Greater the extent of the modern-day exercise of patron focus, greater is the degree of pleasant performance in service sector

H4: Greater the extent of the modern exercise of measurement, analysis & knowledge management, greater is the degree of first-class performance in provider sector

H5: Greater the extent of the cutting-edge practice of human resource focus, greater is the level of fine overall performance in carrier sector

H6: Greater the extent of the cutting-edge practice of market focus, higher is the degree of satisfactory performance in provider sector

#### Sampling Plan

The interview questions were prepared in mild for both the theoretical and experimental aspects. People chosen for interviews were from deferent degrees of the company's organizational structure. A structured questionnaire was administered to pinnacle management and common employees of the organizations, executives from a variety of departments such as HR, income and marketing, finance, manufacturing etc. have been taken into consideration. All tries had been made to behavior face to face interviews at any place possible.

#### Data Collection Procedure

The procedure for the carrying out the survey is one of the important steps in the research techniques and it comes after the survey has been designed. The researcher administrated two kinds of questionnaire one is for the pinnacle management and some other is for prevalent employees to the true scenario of TQM implementation. □

#### Sample Design

##### Universe of the study

The study has been carried out at an Automobile enterprise (Perfect Honda Thiruvananthapuram)

Population: Employees of Perfect Honda

**Sample frame**

Sample frame or source listing is the frame from which the pattern is drawn for the study. It represents the total population. Here the pattern includes the employees of Automobile industry.

**Sample size**

The sample measurement accrued for the study from Automobile enterprise (Perfect Honda Thiruvananthapuram)

**Sampling technique**

The simple random sampling approach was used for the principal data collection. Simple random sampling is the fundamental sampling method where we select a group of subjects (a sample) for study from a large team (a population).

**Data analysis Techniques**

The data is analyzed through simple analysis technique. The data tool is percentage method, chi-square test. T-test, Correlation and regression.

**Data analysis**

Ho: Greater the extent of the current practice of leadership, higher is the level of quality performance in service sector.

**Correlations**

		<b>QP</b>	<b>LEA</b>
QP	Pearson Correlation	1	.832(**)
	Sig. (2-tailed)		.000
	N	100	100

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

**Analysis**

The above correlation matrix illustrates the relationship between current practice of leadership and of quality performance. There is a high positive relationship between two variables. The correlation is 0.832. Since the P value is more than 0.05, we can accept the null hypothesis. It can be interpreted that greater the extent of the current practice of leadership, higher is the level of quality performance in service sector.

Ho: Greater the extent of the current practice of Strategic planning, higher is the level of quality performance in service sector

**Correlations**

		<b>QP</b>	<b>SP</b>
QP	Pearson Correlation	1	.782(**)
	Sig. (2-tailed)		.000

**Analysis**

The above correlation matrix illustrates the relationship between current practice of Strategic planning and of quality performance. There is a high positive relationship between two variables. The correlation is 0.782. Since the P value is more than 0.05, we can accept the null hypothesis. It can be interpreted that greater the extent of the current practice of Strategic planning, higher is the level of quality performance in service sector.

Ho: Greater the extent of the current practice of Customer focus, higher is the level of quality performance in service sector.

**Correlations**

		<b>QP</b>	<b>CF</b>
QP	Pearson Correlation	1	.824(**)
	Sig. (2-tailed)		.000
	N	100	100

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

**Analysis**

The above correlation matrix illustrates the relationship between customer focus and of quality performance. There is a high positive relationship between two variables. The correlation is 0.824. Since the P value is more than 0.05, we can accept the null hypothesis. It can be interpreted that greater the extent of the current practice of Customer focus, higher is the level of quality performance in service sector.

Ho: Greater the extent of the current practice of Measurement, Analysis and knowledge management, higher is the level of quality performance in service sector.

**Correlations**

		<b>QP</b>	<b>KM</b>
QP	Pearson Correlation	1	.897(**)
	Sig. (2-tailed)		.000
	N	100	100

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

**Analysis**

The above correlation matrix illustrates the relationship between current practice of Measurement, Analysis and knowledge management and of quality performance. There is a high positive relationship between two variables. The correlation is 0.897. Since the P value is more than 0.05, we can accept the null hypothesis. It can be interpreted that greater the extent of the current practice of current practice of Measurement, Analysis and knowledge management, higher is the level of quality performance in service sector.

Ho: Greater the extent of the current practice of Human resource focus, higher is the level of quality performance in service sector.

**Correlations**

		<b>quality performance</b>	<b>Human resource focus</b>
quality performance	Pearson Correlation	1	.806(**)
	Sig. (2-tailed)		.000
	N	100	100

**Analysis**

The above correlation matrix illustrates the relationship between current practice of Human resource focus and of quality performance. There is a high positive relationship between two variables. The correlation is 0.806. Since the P value is more than 0.05, we can accept the null hypothesis. It can be interpreted that greater the extent of the current practice of Human resource focus, higher is the level of quality performance in service sector.

Ho: Greater the extent of the current practice of Market focus, higher is the level of quality performance in service

sector.

**Correlations**

		QP	Market focus
QP	Pearson Correlation	1	.765(**)
	Sig. (2-tailed)		.000
	N	100	100

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

**Analysis**

The above correlation matrix illustrates the relationship between current practice of Market focus and of quality performance. There is a positive relationship between two variables. The correlation is 0.7656. Since the P value is more than 0.05, we can accept the null hypothesis. It can be interpreted that greater the extent of the Market focus, higher is the level of quality performance in service sector.

**Regression Analysis**

Ho: There is no relationship between current practice of leadership and level of quality performance in service sector

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832(a)	.693	.690	.71263

a Predictors: (Constant), LEA

**Analysis**

R square is a goodness of fit measure for linear regression model. It is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination or the coefficient of multiple determinations. Here the R Squared value is 0.693. It indicates that the model explains 69.3% variability of the response data around its mean.

**Anova (b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	112.254	1	112.254	221.044	.000(a)
	Residual	49.768	98	.508		
	Total	162.022	99			

a Predictors: (Constant), LEA

b Dependent Variable: QP

**Analysis**

It can be seen from the above that the significant value is 0.000 (p=0.000) which is below 0.05 and, therefore there is a statistical difference between the variables. It means that there is relationship between current practice of leadership and level of quality performance in service sector.

**Coefficients (a)**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.394	.207		1.900	.060
LEA	.902	.061	.832	14.868	.000

a Dependent Variable: QP

**Analysis**

The equation shows that the coefficient for leadership is 0.832. The coefficient indicates that leadership plays a very important role in quality performance in service sector

Here the P value is less than 0.05 and it indicates that leadership and quality performance in service sector is associated. There is a significant relationship between leadership and quality performance in service sector.

Ho: There is no relationship between current practice of Strategic planning and level of quality performance in service sector.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782(a)	.611	.607	.80181

a Predictors: (Constant), SP

**Analysis**

Here the R Squared value is 0.611. It indicates that the model explains 61.1% variability of the response data around its mean.

**Anova (b)**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	99.019	1	99.019	154.021	.000(a)
Residual	63.003	98	.643		
Total	162.022	99			

a Predictors: (Constant), SP

b Dependent Variable: QP

**Analysis**

It can be seen from the above that the significant value is 0.000 (p=0.000) which is below 0.05 and, therefore there is a statistical difference between the variables. It means that there is relationship between current practice of Strategic planning and level of quality performance in service sector.

**Coefficients (a)**

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.406	.246		1.653	.101
	SP	.873	.070	.782	12.411	.000

a Dependent Variable: QP

**Analysis**

The equation indicates that the coefficient for strategic planning is 0.782. The coefficient indicates that Strategic planning plays a very essential position in pleasant performance in provider sector. Here, the P price is less than 0.05 and it suggests that Strategic planning and satisfactory performance in provider area is associated. There is a sizable relationship between two Strategic planning and quality performance in provider sector.

Ho: There is no relationship between current practice of Customer focus and level of quality performance in service sector.



**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.824(a)	.678	.675	.72927

a Predictors: (Constant), CF

**Analysis**

Here the R Squared value is 0.678. It indicates that the model explains 67.8% variability of the response data around its mean.

**Anova (b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	109.902	1	109.902	206.645	.000(a)
	Residual	52.120	98	.532		
	Total	162.022	99			

a Predictors: (Constant), CF

b Dependent Variable: QP

**Analysis**

It can be seen from the above that the significant value is zero (p=0.000) which is beneath 0.05 and, consequently there is a statistical distinction between the variables. Its ability that there is relationship between modern-day exercise of customer focus and stage of satisfactory overall performance in service sector

**Coefficients (a)**

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.478	.209		2.291	.024
	CF	.869	.060	.824	14.375	.000

a Dependent Variable: QP

**Analysis**

The equation shows that the coefficient for customer focus is 0.824. The coefficient indicates that customer focus plays a very important role in quality performance in service sector

Here the P value is less than 0.05 and it indicates that customer focus and quality performance in service sector is associated. There is a significant relationship between customer focus and quality performance in service sector.

Ho: There is no relationship between current practice of Measurement, Analysis and knowledge management and level of quality performance in service sector

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.897(a)	.804	.802	.56868

a Predictors: (Constant), KM

**Analysis**

Here the R Squared value is 0.804. It indicates that the model explains 80.4% variability of the response data around its mean.

**Anova (b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	130.330	1	130.330	403.006	.000(a)
	Residual	31.693	98	.323		
	Total	162.022	99			

a Predictors: (Constant), KM

b Dependent Variable: QP

**Analysis**

It can be seen from the above that the significant value is 0.000 (p=0.000) which is below 0.05 and, therefore there is a statistical difference between the variables. It means that there is relationship between current practice of Measurement, Analysis and knowledge management and level of quality performance in service sector.

**Coefficients (a)**

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.268	.161		1.664	.099
	KM	.948	.047	.897	20.075	.000

a Dependent Variable: QP

**Analysis**

The equation shows that the coefficient for customer focus is 0.897. The coefficient indicates that current practice of Measurement, Analysis and knowledge management plays a very important role in quality performance in service sector Here the P value is less than 0.05 and it indicates that customer focus and quality performance in service sector is associated. There is a significant relationship between current practice of Measurement, Analysis and knowledge management and quality performance in service sector.

Ho: there is no significance difference between quality performance and current practice of Measurement, Analysis and knowledge management in service sector.

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	649.372(a)	165	.000
Likelihood Ratio	304.037	165	.000
Linear-by-Linear Association	79.635	1	.000
N of Valid Cases	100		

**Analysis**

The above table presents the results of chi-square along with their significance level. If the p value is less than 0.05, then the variables are associated. Chi-square result reveals that Here the p value is 0.000. So, we accept the null hypothesis. It means that there is no significant difference between quality performance and current practice of Measurement, Analysis and knowledge management in service sector.

**Findings**

The findings of the learn about are the following.

1. Greater the extent of the modern exercise of leadership, greater is the degree of fine performance in provider sector.
2. Greater the extent of the modern practice of Strategic planning, higher is the stage of fantastic performance in

- carrier sector.
3. Greater the extent of the modern practice of Customer focus, higher is the level of nice performance in carrier sector.
  4. Greater the extent of the modern practice of modern-day practice of Measurement, Analysis and expertise management, higher is the degree of exceptional performance in carrier sector.
  5. Greater the extent of the modern exercise of Human resource focus, greater is the degree of best performance in service sector.
  6. Greater the extent of the Market focus, higher is the level of high-quality overall performance in carrier sector.
  7. There is a relationship between contemporary practice of management and stage of best performance in provider sector.
  8. There is a great relationship between management and great overall performance in service sector.
  9. There is a relationship between cutting-edge exercise of Strategic planning and degree of nice performance in carrier sector.
  10. There is a full-size relationship between Strategic planning and great performance in carrier sector.
  11. There is a relationship between modern-day practice of Customer focal point and degree of first-class performance in service sector.
  12. There is a widespread relationship between customer center of attention and satisfactory overall performance in service sector.
  13. There is a relationship between contemporary practice of Measurement, Analysis and understanding management and level of fine overall performance in provider sector.
  14. Among the elements affecting fantastic performance in service quarter it can be interpreted from the above that the suggest fee of strategic planning is the highest.
  15. The widespread deviation was once high for first-rate overall performance and the equal strategic planning used to be the lowest.
  16. The descriptive static evaluation indicates that all the factors are negatively skewed.
  17. There is no importance distinction between exceptional overall performance and current practice of leadership in service sector.
  18. There is no magnitude difference between high-quality performance and contemporary practice of Strategic planning in carrier sector
  19. There is no importance distinction between quality performance and exercise of Customer focus in provider sector.
  20. There is no value distinction between first-class overall performance and modern practice of Measurement, Analysis and information administration in provider sector.

### Suggestions

1. It is necessary to furnish the chance to the personnel of the organization to categorical their thoughts or whatever they choose to express.
2. To Management must clear their imaginative and prescient mission and dreams towards the personnel in the organization.
3. To Management need to involve the people

- representatives in managerial things to do so that the transparency may want to be maintained and thru this they can win the self-belief of the employees.
4. Management have to provide due significance to mental rest & social cultural development of an employees who strives challenging for the company.
5. To Reward or Praise/appreciation works as magic for an individual and motivates them for work.
6. To Role readability of every role ought to be defined and primarily based on that men and women can design their work accordingly.
7. To Self-potential machine be encouraged.
8. To There are everyday evaluation two and contrast of contemporary & past performance to become aware of gradual deterioration in the strategy.
9. To Proper cooperation have to be quintessential in the company

### Conclusion

In the subject of whole good management, confusion arose international with the scope of TQM idea and the effects of TQM implementation. In fact, plenty lookup dealing with the notion of TQM has been conducted. Researchers have adopted exceptional definitions of TQM; for that reason, it has come to mean exclusive matters to one of a kind people. After the survey of literature related to TQM implementation in Indian manufacturing firms, it grew to become evident that no case find-out about lookup dealing with the implementation of TQM in automobile enterprise had been systematically conducted. Thus, conducting a case find-out about lookup on TQM implementation in car enterprise is timely and fills the research gap. In order to fulfill the lookup objectives, the following strategies for amassing records had been adopted: survey, structured interview, documentation and observation. The end result of current research indicates that agencies are actively propagating TQM through a variety of training and instructional programs. TQM has proved to be an imperative ingredient for success, and now has its permanent roots in the "mission and vision" of the Indian automobile sector. This study concluded that TQM practice in Automobile industry is common

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