

DETERMINANTS OF TQM IN THE IRANIAN AUTOMOTIVE INDUSTRY: A THEORETICAL APPROACH

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Abstract: This paper presents a model to conduct an empirical study in Iranian automotive industry in order to improve their performance. The quality culture plays a vital role in determining the performance in Iranian manufacturing industries. In this research, a model has been developed that includes the factors of Total Quality Management and quality culture to study their effect on the performance of Iranian automotive industry. It is hoped that this paper can provide an academic source for both academicians and managers due to investigate the relationship between Total Quality Management, Quality Culture, and Performance in a systematic manner to increase successful rate of Total Quality Management implementation.

Keywords: Total Quality Management; TQM; TQM Determinants; Quality Culture; Performance Improvement

1. INTRODUCTION

Global competition has increased during the past few decades. According to Nkechi Eugenia (2010), since the quality of goods is determined by customers thus customers are the only factor that can create competition among organizations. Further, this makes factories to focus more on quality. Nowadays, gaining competition has become a matter of knowing customers' needs and wants. In fact, customers have become the starting point rather than the end point in any successful business. Nkechi Eugenia (2010) mentions that organizations in order to survive need to create new management based on total quality management.

Demirbag, Tatoglu, Tekinkus, and Zaim (2006) stated quality management is one of the most important factors in every organization. Successful enterprises understand the dominant influence customer-defined quality can have on business (Reid & Sanders, 2007). Hence, many competitive companies constantly enhance their quality standards (Reid & Sanders, 2007). If the company does not consider the quality, the customer will be dissatisfied. The outcomes of such an approach are lost customers and opportunities for rivals to catch benefit of the market need (Reid & Sanders, 2007). Therefore, paying serious attention to customers' needs made quality a priority. As Reid and Sanders (2007) stated "It means meeting and exceeding customer expectations by involving everyone in the organization through an integrated effort". This integrated effort is named Total Quality Management.

According to Demirbag et al., (2006) TQM is a factor that can improve quality and a holistic approach in continuous improvement in all organizations. TQM, as a management philosophy, is necessary tool for each organization to survive in a competitive environment. Total quality management is identified as an origin of innovation, competitive advantage, and organizational culture (Irani, Beskese, & Love, 2004). Therefore, if each company served poor quality in organization the customer will be dissatisfied. (Demirbag et al, 2006)

According to Kumar, Choisine, Grosbois, and Kumar (2009), Improvement in quality decreases waste, reduces costs, and raises productivity. Further, companies that have good quality they can improve their market share, and profitability. Kumar et al., (2009) pointed out that since global trade in manufacturing sector is growing; therefore it is essential that a viable manufacturing base to be developed and maintained by implementing proper quality practices. In the same way, Saizarbitoria (2005) stated that firms which have high quality will achieve greater customer satisfaction, improve profitability, and increase market share.

One of the fundamental building blocks of TQM is performance measurement. Performance measurement is recognized as an important factor by some researchers many years ago (Phusavat, Anussornnitisarn, Helo, & Dwight, 2009). This factor includes financial and non-financial indicators (Wilson, Hagarty, & Gauthier, 2003). According to Phusavat et al. (2009), performance measurement can be considered as a significant factor in failure and success of each quality

effort of the organization. All in all, based on the above, this study attempts to improve the performance through TQM perspective.

2. PROBLEMS FACED BY AUTOMOBILE INDUSTRY IN IRAN

The Iranian automobile industry began in the early 1960s. Khodro established by some Iranian experts in early of 1962. The first automobile was produced as a national car (Paykan) for many years and this car was produced from 1979 to 2005. Paykan was very popular among Iranian people. At the moment, Iran khodro and Saipa are two of the biggest producers of automobile in Iran (Abedini & Peridy, 2009). Iran Khodro, The largest Iran automaker, had 60 percent market share whereas Saipa occupied 35 percent of Iran's market share in 2003 (Afsharipour & Afshari & Amin, 2006). Currently, Iran is the twentieth largest automaker in the world and the biggest among Middle East countries. According to Abedini and Peridy (2009), there are many advantages in Iranian Automobile Industry. Automobile industry is the second most active industry in country after oil and gas. According to Abedini and Peridy (2009), the capacity in this industry is very high. The other most important advantage is easy accessibility to Middle East market due to Iran's geographical position. Despite these advantages, the products of Iran automakers have not been widely exported yet because they are not able to compete with their rivals on quality. Low quality in production is the biggest problem faced by industry of the country.

Haeri (2005) addressed lack of strong and capable leaders as the main problem faced by Iranian automobile industry. The leadership is a key issue because leadership is one of the most important factors of total quality management (Haeri, 2005). Leaders who really want to commit to making fundamental changes. One of the important roles of management leadership is increasing quality and but leadership can also improve profit; satisfy customers, and promote market share. In the same way, Rad (2006) cited numerous organizations and firms had difficulties in performing TQM. According to Rad (2006), lack of strong leadership was one of their main failure factors in TQM implementation.

Haeri (2005) also mentioned that the training is another critical success factor in TQM implementation of the Iranian Automobile Industry. Education and

training has crucial role in automobile industry because people who are working in this industry must be able to work in many sections and they must be familiar with new systems. Rad (2006) pointed out that education & training is a very significant tool for enhancing and improving skills related to an organization's beliefs and values. This helps organizations to turn their cultures based on quality issue. Unfortunately, training and education issue surrounded Iranian Automobile Industry.

The other most important quality aspect in Iranian automobile industry is customer focus. The main aim of customer focus is satisfying customers and providing their requirements. Some of the companies are very successful because they have established a strong relationship with customers in order to use customer's suggestion in the process of making decision. Consequently, customers can have a close relationship with other sections of organization. As Haeri (2005) stated customers' feedback can be applied in manufacturing line. Satisfying customer is an essential task for pursuing customer focus efforts (Haeri, 2005 & Rad, 2006).

During the past years, Iranian car manufacturing companies have produced various products to some extent. In spite of all their efforts, it seems that have taken place; they are still behind global car industry standards. As demonstrated by Sanayei, Dolatabady and Shafeai (2008) and Ilias (2009), several investigations show that production capacities of the Iranian manufacturers are not economical and manufacturing devises are not in a proper operation condition. According to their study, the market is rather exclusive and the capacity of automobile manufacturing technology in the country still seems to be unutilized. Sanayei (2008) further states that the offered prices are somewhat high and customers were being served poorly. Rad (2006) pointed out that process management is an approach that can solve these problems. It is because process management cannot only improve quality but can also reduce the price of automobiles in Iran. Moreover, other benefit of this approach is to promote service design in order to embrace continuous improvement. Further, Shahbazipour (2008) stated that proper process management is a key to engage organization employees in taking responsibility for satisfying the customers.

Shahbazipour (2008) emphasized on human resource management as another problem faced by Iranian automating Industry. This critical issue is one of

the most manageable problems that help achieve goals and provide motivation for employees and increase employee satisfaction. The tight relationship between human resource and quality improvement made it a viable discussion on TQM practices for Iran automakers. Another major problem in Iranian Automobile Industry is quality fluctuation among products. According to automakers' statements, the cause is linked to supply chain management. A qualified supplier can increase the quality of manufactured products. Supplier quality evaluation has been recognized as a comprehensive management paradigm for enhancing quality of automobiles and enforcing competitive advantage. Forouzan and Mirassadallahi (2009) stated that suppliers had significant impact on success of TQM program in Iranian Automobile Industry.

According to Forouzan and Mirassadallahi (2009), the most important concern for Iran's auto industry is the quality of products. As Iran makes move to stimulate WTO accession talks, the quality will become more important issue to Iran automobile industry in order to compete with international competitors (Forouzan & Mirassadallahi, 2009). Indeed, if they do not consider quality issue, they will lose their market share in a competitive market. However, due to economic sanctions, protectionist approach of government, and several other reasons the quality of the products of Iran's auto industry is on a downwards trend because of the lack of competition in domestic market (Forouzan & Mirassadallahi, 2009).

3. TOTAL QUALITY MANAGEMENT

Kumar et al. (2009) defined Total Quality Management (TQM) as a comprehensive process to improving quality, productivity, and competitiveness in the international marketplace. Yang (2005) provided more details in which total quality management is a general section of management which this factor emphasize on competitive advantage, quality improvement, customer requirements. According to Yang (2005), total quality management has positive impact on facilitating solving problem and decision-making process. TQM also has an important role in continuous improvement of organization (Kumar et al, 2009).

According to Rad (2006), TQM cannot only help organization to increase customer satisfaction but also

help firms to form an effective culture. There is a general agreement that TQM is a way to manage an organization for developing its overall effectiveness to compete internationally (Easton and Jarrell, 1998; Handfield, Ghosh and Fawcett, 1998; Hendricks and Singhal, 1997; Anderson, Rungtusanatham & Schroeder, 1994; Kanji and Tambi, 1999; Kunst & Lemmink, 2000).

According to Al-khalifa and Aspinwall (2008), the level of awareness and knowledge of TQM has been increased considerably during last decade. Many studies have investigated such Critical Success Factors (CSFs) of TQM implementation.

Some CSFs such as leadership, HRM, and customer focus were widely addressed by Karuppusami and Gandhinathan (2006) and Al-khalifa et al. (2008). Some other CSFs like top management support, training and education, process management, supplier quality management, and customer centric were investigated by Saraph, Benson and Schroeder (1989), Black and Porter (1996), Motwani (2001), Antony, Leung, Knowles and Gosh (2002), and Sila and Ebrahimpour (2005). These studies were carried out through many disciplines involving review of the literature, case studies and empirical researches (Karuppusami & Gandhinathan, 2006).

The advantages of total quality management are to increase profit, to satisfy customer, to develop market share, and to create competitive advantage (Rad, 2006). However, sometimes TQM implementation cannot end with these advantages (Seetharaman, Sreenivasan & Boon, 2006). This is why Critical Success Factors of TQM implementation should be investigated for each country and industry separately. This idea is enforced when many of the literatures were reviewed. According to review of literatures in TQM discipline, majority of the empirical researches were conducted in countries such as USA, Canada, and UK. However, there are no sufficient studies in developing countries (Thiagarajan and Zairi, 1998), and especially among the Middle East countries (Najeh and Kara-Zaitri, 2007).

4. QUALITY CULTURE

Quality culture is one of the most important factors for improving performance. According to Ehlers (2009), without proper quality culture company cannot be successful in enhancing its performance. Ehlers (2009) and Rad (2006) indicated that quality culture is related to many factors such as technology, organizational

culture, service design, process management, business strategy, and decision making of organization. Ehlers (2009) believed that quality culture can be effective in performance improvement and this factor is vital for successful TQM implementation. This is also supported by Fotopoulos and Psomas (2009).

According to Fotopoulos and Psomas (2009), quality culture can help in problem solving, and improving training of employees. They also found a linkage between quality culture and supplier quality management. According to Rad (2006) and Zadry (2005), quality culture is an important factor for successful TQM implementation. Al-Khalifa et al. (2008) aimed to determine the impact of total quality management implementation on United Kingdom industries. According to this study, the factors of TQM were leadership, measurement and feedback, improvement tools and techniques, continuous improvement, quality management, systems and processes, human resource management, resources, education and training, and quality culture. The result showed that leadership and quality culture are the most important factors of total quality management in UK industry. This study also motivated employees to create a quality culture. Quality culture was studied by many researchers included Oakland et al. (1995), Kanji et al. (1997) and Al-khalifa et al. (2001). According to these studies, quality culture is a powerful factor in TQM implementation.

5. TQM AND QUALITY CULTURE

According to Hansson and Klefsjo (2003), the components of total quality management consist of supplier management, leadership, customer focus, service design, HRM. These components shaped the TQM. However, TQM can be successfully implemented through quality of culture (Zadry, 2005). Similar to Zadry (2005), Al-Nofal, Zairi, and Ahmed (2004) stated that quality culture can have positive influence on TQM implementation. In contrast, Kanopathy (2008) claimed that top management commitment or leadership is the most important factor in implementing TQM. However, many researchers stated that leadership not only applied as a supporting factor for quality culture but also was very effective in improving performance of such organization. Hence, it can be stated that quality culture has positive impact on performance improvement. Lai (2003) conducted a study about TQM implementation in

manufacturing industries in Spain. As Lai (2003) stated, education and training as one of the TQM dimensions can be efficient in changing and developing quality culture during TQM implementation. According to Lai (2003), in order to succeed in TQM implementation, Spain's manufacturing industries need to pay serious attention to quality culture as mediate success factor. However, quality culture does not change in a short time because for changing this factor, the company needs a long-term process.

6. PERFORMANCE AND QUALITY CULTURE

Deming (1982, 1986) and Juran (1982) believed that quality can have positive impact on improving performance. The linkage between quality and performance improvement was widely investigated by Prajogo and Sohal (2006), Hendricks and Singhal (1997, 2001), Kaynak (2003), Easton and Jarrell (1998), Powell (1995), Samson and Terziovski (1999). The relationship between quality and performance improvement was addressed for manufacturing firms by Motwani, Mahmoud and Rice (1994) and Christiansen and Lee (1994), for service organizations by Kanji and Tambi (1999) and Brah, Wong and Rao (2000) or a combination of manufacturing and service firms by Powell (1995), Hendricks and Singhal (1997), and Easton and Jarrell (1998). According to these studies, effective quality implementation leads to performance improvement. In line with these studies, Terziovski, Power and Sohal (2003) carried out a research on 400 of Australian companies. According to this study, they found quality culture as a significant factor that had positive impact on performance. Similar to above researchers, Demirbag et al (2006) and Kaynak (2003) emphasized on positive impact of quality on performance improvement.

Abdullah et al. (2008, 2009) studied the relationship between TQM, quality, and performance measurement. Abdullah et al. (2008, 2009) identified six critical success factors that influenced performance improvement. Similar to Abdullah et al. (2008, 2009), Ahire and Golhar and Waller (1996) stated that quality culture can be used as a mediator between total quality management and performance. Lai (2003) represented the development process of a quality culture. According to Lai (2003), all components of an organization must be integrated within a quality culture. According to

Abdullah et al. (2008), there is a positive connection between TQM and quality culture. On the other hand, there is a positive connection between quality culture and performance measurement. Hence, quality culture can be considered as intervening variable between TQM and performance measurement.

Rad (2006) indicated the influence of quality culture on the success of TQM in Iranian industries. This survey carried out among Iranian managers and employees. The survey’s findings represented that the elements of TQM (customer focus, process management, leadership, and human resource

management) had a positive impact on the performance of Iranian industry. This study also mentioned that total quality management needs a quality culture for supporting its factors. In fact, quality culture should be compatible with the values and the fundamental principles of TQM approach. TQM needs a new culture. According to Rad (2006), quality culture is an important factor for successful TQM program among Iranian industries. Further, total quality management is successful when this factor is related to quality culture (Rad, 2006).

Table 1: The Seven TQM

TQM	SOURCE	MODEL
Management Leadership	Salaheldin (2009) Qatar; Brah and Lim (2006) Singapore; Kozak et al. (2007) Turkey;	SEM, MR, MR
	Al-Khalifa et al. (2008) UK; Hayat M.Awan et al (2008) Pakistan;	MR , MR
	Demirbag et al. (2006) Turkey; Manuela S.Macinati (2008) Italy;	SEM, MR
	Zulnaidi Ya Acob (2008) Malaysian; Arawati (2005) Malaysian; Abdullah et al(2007,2008) Malaysian; Fryer et al (2007) UK; Li et al. (2003) China.	SEM, SEM SEM, MR, MR
	Ou et al. (2007) Taiwan; Conca et al.(2004) Malaysian; Sila (2007) USA; Hale Kaynak (2003) USA; Nair (2006) USA; Kumar et al. (2009) Canada;	SEM,MR SEM, SEM,MR,MR
	Karuppusami et al (2006) India; Nofal et al. (2005) Malaysian; Zehir et al. (2010) Turkey; Zadry (2005) Malaysia; Jung et.al (2009) USA	MR, MR MR, MR, SEM
	Tari et al. (2006) Spain; Sila (2005) USA	SEM, SEM
Education and Training	Al-khalifa et al. (2008) UK; Demirbag et al. (2006) Turkish; Conca et al. (2004) Malaysia	MR, SEM, MR
	Hale kaynak (2003) USA; Abdullah et al. (2007,2008) Malaysia	SEM, SEM
	Karuppusami et al. (2006) India; Fryer et al. (2007) UK; Zadry (2005) Malaysia	MR, MR, MR
	Nofal et al. (2005) Malaysian; Salaheldin (2009) Qatar; Antony et al. (2002) Hong kong;	MR, SEM MR
Customer Focus	Hayat M. Awan et al (2008) Pakistan; Al-khalifa et al. (2008) UK; Brah and Lim (2006) Singapore	MR, MR,MR
	Conca et al. (2004) Malaysia; Ou et al. (2007) Taiwan;	MR, SEM
	Sila (2007) USA; Nair (2006) USA; Zulnaidi Ya Acob (2008) Malaysia;	SEM, MR, SEM
	Arwati (2005) Malaysia; Li et al (2003) China; Abdullah et al. (2007) Malaysia	SEM, MR, SEM
	Karuppusami et al. (2006) India; Zehir et al. (2010) Turkey; Zadry (2005) Malaysia	MR, MR, MR
Nofal et al. (2005) Malaysia; Tari et al. (2006) Spain; Sila (2005) USA	MR, SEM, SEM	
Process Management	khalifa Al-khalifa (2008) UK; Demirg et al. (2006) Turkish; Brah and Lim (2006) Singapor	MR, SEM, MR
	Conca et al. (2004) Malaysia; Ou et al. (2007) Taiwan; Sila (2007) USA	MR, SEM, SEM
	Manuela S. Macinati (2008) Italy; Hale Kaynak (2003) USA; Nair (2006) USA	MR, SEM,MR
	Karuppusami et al. (2006) India; Fryer et al. (2007) UK; Nofal et al (2005) Malaysia; Zehir et al. (2010) Turkey; Abdullah et al. (2007,2008) Malaysian;	MR, MR, MR, MR, MR
	Jung et.al (2009) USA; Tari et al. (2006) Spain; Sila (2005) USA	SEM, SEM, SEM
Service Design	Li et al. (2003) China; Karuppusami et al. (2006) India; Hale Kayank (2003) USA; Zadry (2005) Malaysia; Salaheldin (2009) Qatar; Zulnaidi Ya’ Acob(2008) Malaysia; Arawati (2005) Malaysia	MR, MR, SEM,MR,SEM, SEM,SEM
Human Resource Management	Hayat M. Awan et al (2008) Pakistan; Tari et al (2006) Spain; Sila (2005) USA; Sila (2007) USA; Zulnaidi Ya Acob (2008) Malaysian; Khalifa Al-Khalifa (2008) UK; Ou et al. (2007) Taiwan; Brah and Lim,2006 Singapor; Karuppusami et al. (2006) India	MR, SEM, SEM, SEM, SEM, MR, SEM, MR,MR
Supplier Quality Management	Salaheldin (2009) Qatar; Ou et al (2007) Taiwan; Sila (2007) USA; Zadry (2005) Malaysia; Demirbag et al (2006) Turkey; Sila (2005) USA; Sanchez-Rodriguea & Marbirez-lorente (2004) Spain; Karuppusami et al(2006) India; Hale kaynak (2003) USA; Arawati (2005) Malaysia; Zulnaidi Ya’ Acob (2008) Malaysia; Tari et al (2006) Spain; Abdullah et al (2007, 2008) Malaysian; Manuela S. Macinati (2008) Italy	SEM, SEM, MR, MR, SEM, MR,MR SEM, SEM, SEM, SEM SEM, SEM

7. TQM AND FIRM'S PERFORMANCE

Fotopoulos et al. (2009) stated that total quality management is a main factor for performance improvement. According to Fotopoulos et al. (2009), leadership, process management, service design, human resource management, customer focus, Education and Training, and supplier quality management are critical success factors in TQM implementation. Fotopoulos et al. (2009) stated that these CSFs are efficient in improving quality, profitability, customer satisfaction, market share, decreasing defects, and price reduction. The role of TQM in improving performance and increasing customer satisfaction also was addressed by Waldman (1994), Karuppusami and Gandhinathan (2006), and Kumar, Grosbois, Choisne and Kumar (2008). This is because TQM is a philosophy, which emphasizes on the key role of customers and suppliers. The TQM also involves employees to achieve continuous improvement (Kumar et al, 2008). In Addition, according to Kumar et al (2008), performance measurement includes customer satisfaction, profit, and market share. In the same way, Kumar et al (2009) and Demirbag et al. (2006) pointed out that total quality management enables firms to improve their performance. The same result also referred in study of Awan, Bhatti and Bukhari (2007). According to Awan et al. (2007), some researchers discovered eight critical success factors of TQM that had positive impact on performance improvement. In another study, Anderson et al. (1994) through Deming management method examined the impact of seven factors of TQM such as management leadership, resource management, service design, quality management, customer focus, training, and process management on performance improvement. According to their study, there was a positive significant relationship between these seven factors and performance improvement. The Table 1 abstracted all literatures that reviewed the role of these seven factors under TQM concept.

As reviewed above, some problems faced by Iranian Automotive Industry were addressed. These problems were crucial for successful implementation of TQM.

Hence, according to the above addressed problems, which will be important for automobile industry in Iran, the current study will be continued with the following research questions and objectives.

8. RESEARCH QUESTIONS

The main research questions of this study are as below:

- What are the effect determinants of total quality management on quality culture and performance in Iranian Automobile Industry?
- What is the relation between the seven soft factors of TQM and quality culture in Iranian Automobile Industry?
- What is the relation between quality culture and performance in Iranian Automobile Industry?
- What is the direct and indirect effect of TQM on performance in Iranian Automobile Industry?

9. RESEARCH OBJECTIVES

The general objective of this research is to describe the influence of total quality management on quality culture and performance in Iranian Automobile Industry. The specific objectives of this research study are as below:

- To evaluate the effect of total quality management on quality culture and performance;
- To discover the relationship between the seven soft factors of TQM and quality culture;
- To find out the relationship between quality culture and performance and;
- To identify the direct and indirect effects of TQM on performance

10. RESEARCH METHODOLOGY

This research tries to employ quantitative survey in order to fulfill research hypotheses for Iranian Automobile Industry. However, in this paper we only focused on theoretical aspect of the research topic. There are three reasons that Iranian Automobile Industry was selected: 1) Iranian Automobile Industry is the largest manufacturing sector in Iran; 2) this industry creates a high percent age of employment; and 3) It contributes heavily in country's economic growth. The Population consists of all managers and employees of SAIPA and IRAN KHODRO. The SIAPA and IRAN KHODRO are selected because they are largest car manufacturers in Iran.

A surveyed questionnaire is used to collect respondents' answers. In order to examine research hypotheses Structural Equation Modeling is used through SPSS AMOS.

10.1 Theoretical Model

This model was shaped from three comprehensive variables including TQM, quality culture, and performance. The TQM is represented by many observed variables including customer focus, leadership, HRM, training, service design, process management, supplier management. Performance measurement is shown by three variables including customer satisfaction, market share, and profit. However, quality culture is not determined by any variable. These variables extracted from review of academic literatures. Furthermore, the linkages between variables are developed based on the theoretical framework.

Various authors were empirically tested some variables of Total Quality Management. According to reviewing literatures, these authors including Ou et al (2007) (customer focus, HRM, Leadership, Supplier quality management, and process management); Sila (2007) (Leadership, customer focus, HRM, process management, Supplier quality management); Macinat (2008) (leadership, supplier quality management, process management); Ya'acob (2008) (leadership, customer focus, HRM, quality management, service design); Al-khalifa et al. (2008) (leadership, customer focus, education and training, process management, HRM); Karuppusami et al. (2006) (leadership, customer focus, Supplier quality management, HRM, process management, education and training, service design); Demirbag (2006) (leadership, quality management, education and training, process management); Salaheldin (2009) (leadership, education and training, service design, quality management); Fryer, Antony and Douglas (2007) (leadership, quality management, process management, education and training); Sila (2005) (leadership, customer focus, HRM, process management, quality management); Tari, Molina and Castejon (2006) (leadership, HRM, customer focus, quality management, process management) and Brah and Lim (2006) (customer focus, HRM, process management, leadership).

On the other hand, there were many authors that were empirically examined variables of company's performance. The authors included Demirbag et al.

(2006) (market share); Liao (2005) (market share, profit); Ou et al. (2007) (Customer satisfaction, and profit); Kumar, Smart, Maddern and Maull (2008) (profit, Market share, and customer satisfaction); Chi, Kilduff and Gargeya (2009) (profit, Market share); Brah and Lim (2006) (customer satisfaction, market share); Awan et al. (2007) (profit); Willson et al. (2000) (customer satisfaction, market share, and profit); Sila (2007) (market share, profit); Kayank (2003) (profit, market share); Ya'acob (2008) (customer satisfaction and profit); Arawati (2005) (market share, profit); Rahman and Bullock (2005) (customer satisfaction); Fuentes-Fuentes, Albacete-Saez and Liorens and Verdu (2004) (profit, customer satisfaction, and market share); Zehir and Sadikoglu (2010) (customer satisfaction, market share); Zhang (2000) (customer satisfaction, profit).

It can be seen that all variables of this theoretical model is strongly supported by different research studies. The theoretical model of this study is unique when quality culture is added as mediating factor. As Abdullah et al. (2009) stated the quality culture is a fundamental element in such research model. According to review of earlier studies, there was no sufficient study to investigate the role of quality culture as a mediate variable between TQM and Companies' performance in Iranian Automobile Industry. Hence, the current study attempts to use quality culture as an intervening variable in order to investigate its pivotal role between TQM and Performance. The Figure 1 portrayed the theoretical model of the current study.

Kanapathy (2008) addressed the positive relationship between leadership and quality culture. Furthermore, management leadership plays an important role in encouraging companies to achieve quality culture. Hence, Leadership is a fundamental factor in creating a quality culture within the organization. On the other hand, Tari (2005) represented the relationship between customer focus and quality culture. According to Tari (2005), customer focus is one of the most important factors that include tools and techniques for quality culture. In the same way, education and training is a factor that can improve skills in an organizations and this factor is very effective in changing the culture of a company Rad (2006). Supplier quality management is described as a comprehensive paradigm for enhancing organizations and competitiveness. Flynn et al (1994) cited quality management as an important factor that influences quality culture. A qualified supplier can increase the quality of manufactured products.

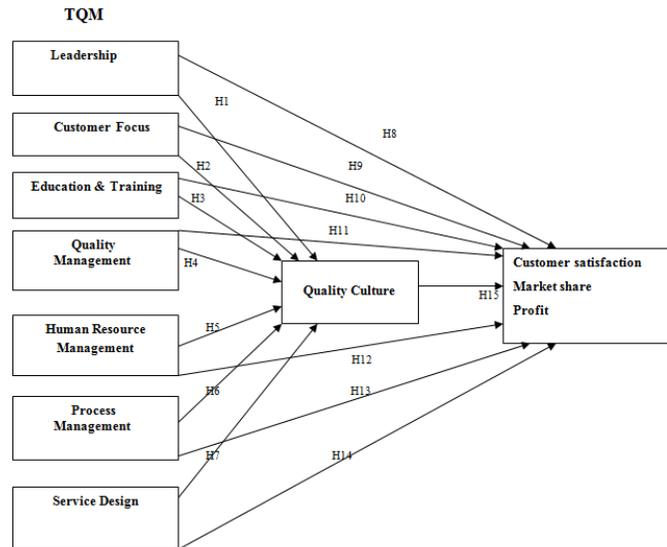


Figure 1: The Theoretical Model

Flynn et al (1994) also addressed the relationship among human resource management, process management, and service design with quality culture.

10.2 Hypotheses Development

The hypotheses of this study are developed as following:

- H1: Management leadership is positively related to quality culture
- H2: Customer focus is positively related to quality culture
- H3: Education & training is positively related to quality culture
- H4: SQM is positively related to quality culture
- H5: HRM is certainly connected to quality culture
- H6: Process management is certainly connected to quality culture
- H7: Service design is positively related to quality culture
- H8: Leadership is positively related to performance measurement
- H9: Customer focus is positively related to performance
- H10: Education & training is positively connected to performance
- H11: SQM is directly connected to performance measurement
- H12: HRM is positively and directly connected to performance
- H13: Process management is positively related to performance measurement

H14: Service design is positively related to performance measurement

H15: Quality culture is positively related to performance

11. CONCLUSION

The aim of this paper was to carry out a theoretical study on the determinants of Total Quality Management in the Iranian Automotive Industry. The main contribution of this paper was to persuade managers to take a serious attention on the relationship among TQM determinants, quality culture, and performance improvement in the Iranian Automotive Industry. Investigating the relationship led us to lucrative outcomes. Iranian automobile industry has particularly been chosen for several reasons. First, automotive industry is the second most active industry in Iran after oil and gas sector. Second, it has a major contribution to the country's GDP growth. Third, the sector directly employs 2.3% of country's workforce. Fourth, the industry is looking forward to export its products to global markets. Due to cutthroat competition, turbulent business environment, increasing customers' expectation, and increasing demands Iranian Automotive Industry must consider TQM, which is a serious problem faced by the sector.

Due to lack of studies on above addressed problem in the country, attempts were made to investigate the

determinants of TQM in Iranian Automotive Industry. This study theoretically reviewed prior literatures on same problem in other countries. The aim was to shed some light on the research problem. A survey is designed in order to conduct an empirical research for

examining survey's hypotheses. It is hoped that the important facts addressed in this paper will be a means whereby managers and researchers will be able to investigate the TQM problem in Iranian Automotive Industry with better awareness.

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