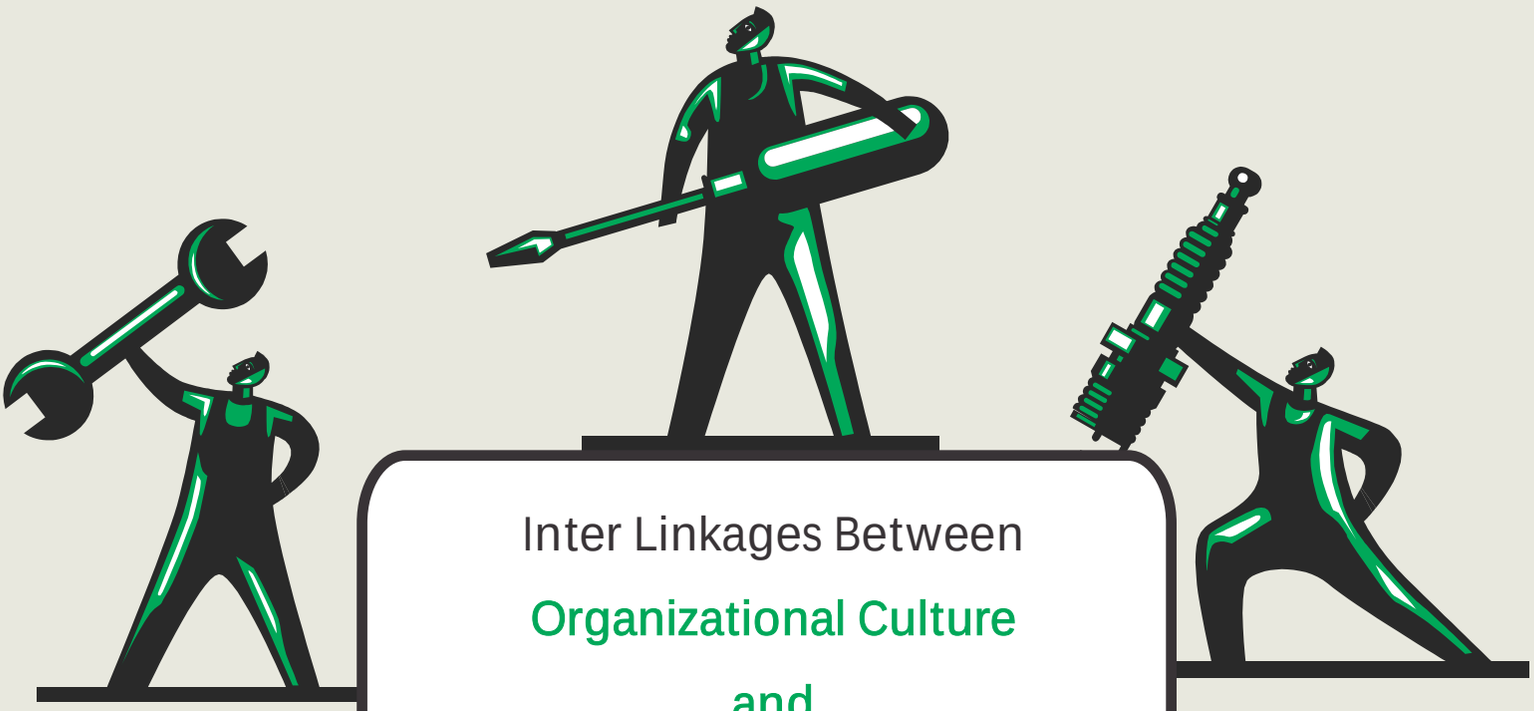

Inter Linkages Between Organizational Culture and Quality Management System: A Study of Small and Medium Enterprises in Indian Auto Component Sector

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ABSTRACT

Indian Auto component sector is one of the fastest growing within the Small and Medium Enterprise (SME) category of industries. This study investigates the relationship between cultural values and implementation of quality management principles in Indian Auto component manufacturing SMEs. Empirical data was collected via a questionnaire survey, and 61 Indian Auto component manufacturing SMEs located in Delhi and National Capital Region were studied. Statistical analysis revealed a significant difference between 'small' and 'medium' enterprises in relation to the prevalence of Cultural values like-Openness, Confrontation, Trust and Pro-action. However, no significant difference was found in the extent of practice on each of Quality Management factors between 'small and medium enterprises. An interesting aspect that has been highlighted is that both small and medium companies have shown a higher level of implementation of all quality principles. The results indicate three cultural dimensions -Openness, Confrontation & Pro-action which exhibited a significant positive association with all the quality management factors. Similarly, Experimentation, Collaboration, Authenticity and Trust exhibited positive significant correlation with most of the Quality Management factors. However, Autonomy is the only cultural dimension which was found to have non-significant low negative correlation with four Quality factors. The findings suggest that the cultural dimensions -Openness, Confrontation and Pro-action should be emphasized more given their association with all Quality Management factors. This paper presents new results evidencing the importance of OCTAPACE values in TQM implementation. Overall, the research findings provide a useful reference for Indian Auto component SMEs in their efforts to sustain global competitiveness.

Keywords: Quality Management, Organizational Culture, Auto Component SMEs

INTRODUCTION

Quality management has been accepted as the key factor for global competitiveness. It has been reported that total quality management help organizations to strengthen their management systems, practices and capabilities and enhance their competitiveness. Quality management methods and tools have been applied in companies as a means to develop improvement actions related to strategic objectives and to monitor results. Effective TQM practices are primarily found in larger and/or multinational organizations. Little has been written on how TQM has been applied in small businesses in South Asia. Therefore, it is significant to study and analyze Quality Management System of Small and Medium Enterprises in Indian Auto component sector, especially because this sector is so important for its job and wealth creation potential. SMEs are often suppliers of goods and services to larger organizations. Increasingly, they have felt the impact of the quality programs imposed on them. The lack of product quality from SMEs adversely affects the competitive ability of the larger organizations. It is because of this reason that larger companies have insisted that their small suppliers adopt TQM of their own (Barrier, 1992; Ghobadian and Gallear, 1996). Pun et al. (2006) investigated the hard and soft criteria of TQM in ISO 9001 certified small and medium enterprises. The results showed that the soft criteria were implemented less than the hard criteria in SME. These findings highlight the need to align SME's prevailing quality culture with Total Quality Management and consider it as one of the focal compliance requirements for future revisions of the ISO 9001:2000 standard.

The spread of TQM among large firms has also changed how business is conducted; they have screened and settled on fewer suppliers who can deliver better quality (Barrier, 1992). The role of smaller firms as suppliers to the larger firms places a substantial burden on the small companies to become world class and embrace the principles of TQM (Simons and Kerr, 1993). TQM is thus more than a way for SMEs to improve the quality of their products and services; it may well be the key to survival.

As part of the unorganized sector, Indian Auto components SMEs are one of the fastest growing within the SME category of industries (D&B, 2006).These units are key contributors to the total production of auto components and also have a significant share in the exports of the industry. They operate in a tier framework, and most of the companies in the SME segment are in the Tier II or below. Few of the suppliers to OEMs are medium scale enterprises.

The SMEs are riding a boom phase, driven by demand from global auto manufacturers. The industry is undergoing a major restructuring and many existing companies are expected to move up in the value chain to a higher tier. Nevertheless, sustenance and survival still remains an issue of concern for these companies as they will have to absorb global best practices in this competitive environment. Increasing competition, cost-cutting by OEMs and technology are among the major challenges for SMEs. The quality-conscious automotive component buyers generally insist upon certain quality management standards. International OEMs or Tier-1 companies may require the supplier to meet either the internationally accepted standards, or the buyer country's standard.

It has been seen that an organization's TQM practices are significantly influenced by the culture it adopts (Ambroz, 2004; Gallear & Ghobadian, 2004; Prajogo & McDermott, 2005; Rad, 2006; Briscoe et al. 2005; Kumar and Sankaran, 2007; Jung et al. 2008; Kaluarachchi, 2010; Kuo and Kuo, 2010; Chung et al. 2010; Baird et al. 2011; Zu et al. 2011; Schroeder et al. 2011; Pun and Jaggernath-Furlonge, 2012). If TQM is to achieve its potential to significantly enhance organizational competitiveness, a change in the quality culture of the organization is required. Since Indian auto component industry is one of the fastest growing within the SME category of industries and show increased level of global integration, this study attempts to study the relationship between cultural values and principles of quality management in Indian Auto component manufacturing SMEs. Simultaneously, the study also highlights the extent of Quality Management principles followed and the prevalence of cultural values across these SMEs.

ITERATURE REVIEW

Many authors and researchers now concede that organizational culture plays a major role in successful TQM implementation. Pun and Jaggernath-Furlonge (2012) signified five core dimensions of culture that would facilitate Quality Management Practices implementation, and their relative importance would be dependent on varying company size. The findings provided some insights in diagnosing cultural dimensions and in developing quality culture in manufacturing organizations. A study by Al-Swidi and Mahmood (2012) tried to examine the extent to which the relationship between total quality management, entrepreneurial orientation and performance is affected by the organizational culture. The findings of this study supported the premises of the contingency and organizational change theories by confirming the significant role of organizational culture. Baird et al. (2011) found three cultural factors, outcome orientation, teamwork/respect, and innovation exhibiting a significant positive association with the extent of use of TQM practices. These findings highlight the importance of the prevailing organizational culture in providing an environment that is conducive to the implementation of TQM practices. Schroeder et al. (2011) further confirmed the importance of quality culture in TQM implementation, particularly in the way that it influences how to customize quality practices to achieve higher performance outcome. Research findings by Chung et al. (2010) highlight that Organizational culture significantly influences execution degree of TQM activities. Based on these findings, authors suggest that in order to significantly enhance execution degree of TQM activities, the firms can improve the implementation of cost leadership and differentiation strategy and combine the characteristics of four cultures- group culture, developmental culture, hierarchical culture and rational culture. A study by Zu et al. (2011) also revealed that cultural profile is a distinguishing factor to explain the difference in quality management implementation among the companies. Kaluarachchi (2010) examined the effect of organizational culture on the TQM practices of a Sri Lankan public sector

hospital and found that supportive culture of the hospital has positively impacted its TQM practices. A study by Kuo and Kuo (2010) supports the findings of prior studies concerning the influence of Corporate Culture on TQM (e.g. Ambroz, 2004; Gallear & Ghobadian, 2004; Prajogo & McDermott, 2005; Rad, 2006). Zu et al. (2010) further investigated how organizational culture influences the implementation of different practices incorporated in Six sigma/TQM. The relationships between four culture types and ten TQM/Six sigma practices were examined. The results revealed the differential effects of the culture types on the implementation of TQM/ Six sigma practices.

Another set of research studies have been conducted to identify an ideal quality culture for TQM Implementation. Pun and Jaggernath-Furlonge (2009) identified that a quality culture constitutes low Power Distance (PD) and Uncertainty Avoidance (UA), with collectivism, feminine and Confucian dynamic (CD) dimensions that would affect Quality Management Practices. Feminine cultures address people-oriented issues (such as employee involvement and participation, absenteeism, well-being and satisfaction and attitude) towards quality on one hand (Pun and Jaggernath-Furlonge, 2009). Moreover, collectivism is characterized by teamwork that is required for Quality Management Practices implementation (Rad, 2006). The core of the TQM philosophy is based on long-term relationships with employees, suppliers and customers (Jung et al. 2008; Pun, 2001). This is in line with Confucian Dynamic (CD) that stresses long-term orientation and examines the degree to which the devotion is embraced (Pun and Jaggernath-Furlonge, 2009).A study by Al-khalifa and Aspinwall (2000) highlighted that the ideal cultural characteristics in the context of TQM can be classified as a group and developmental culture. Its characteristics tend to be flexible and customer oriented which emphasizes participation, innovation, concern for human resource development and an attempt to decentralize decision making. Another study by Corbett and Rastrick (2000) investigated the association between organizational culture (input) and quality performance (output), and suggests that aspects of each are correlated in ways that enhance organizational performance. Based on the findings, authors recommended that managers must aim to have the culture based on constructive style in their organization. Gallear and Ghobadian (2004) identified the necessary conditions (channels) that influence, mould and sustain a desirable cultural orientation required for a total quality management business approach. Ambroz (2004) concluded that only an open and human-oriented corporate culture that is based on the autonomy of the workplace and human resource management can be successful in implementing TQM in all working processes in the company. Cheng and Liu (2007) indicate that an ideal organizational culture for TQM in the Hong Kong construction industry must have the dominant characteristics, organizational leadership, organization glue and criteria of success of a hierarchy culture; the management of employees of a clan culture; and the strategic emphases of an adhocracy culture.

Numerous research studies have been undertaken to explore the relationship between TQM and Organizational Culture. In a similar study, Naor et al. (2008) investigated the relationships among organizational culture, infrastructure and core quality management practices and manufacturing performance. The results contribute to the quality management literature by emphasizing the importance of accounting for culture when making decisions to implement quality management practices to achieve a performance advantage. Jung et al. (2008) found that an organization's TQM practices are significantly influenced by the organization culture. However, each dimension of organization culture is related to TQM in different fashions. For instance, power distance influences all the TQM elements, but masculinity has positive impact on business performance of TQM practice only. Jabnoun and Sedrani (2005) in their study examined the relationship between dimensions of TQM practices and dimensions of corporate culture. Results indicated that the culture dimension of people orientation had the strongest correlation coefficients with most TQM practices. Based on these findings, authors recommend that managers should make more efforts to enhance the culture dimension of people orientation. Another empirical study by Prajogo and McDermott (2005) explored the relationship between total quality management (TQM) practices and organizational culture. Based on research findings, authors discovered that different subsets of TQM practices were determined by different types of cultures. In particular, hierarchical culture was found to have a significant relationship with certain practices of TQM. A study by Yong and Pheng (2008) identified four organizational culture types with their corresponding TQM implementation patterns. It was further highlighted that firms with strong comprehensive culture scored high on implementing the TQM elements of top management leadership, people process, customer and supplier management. Firms with clan driven culture scored high on implementing the element of process management while firms with hierarchy-driven and weak comprehensive culture scored low to moderate on implementing all elements. Based on the findings, authors propose a culture-based TQM implementation strategy.

Some studies were also undertaken to identify critical factors of TQM. In this line of research, a study by Al-Khalifa et al. (2008) revealed that amongst the various critical factors of TQM, leadership and quality culture are the most important factors of total quality management in UK industry. In a similar study, Metri (2005) suggests that quality culture is amongst the proposed ten critical success factors (CSFs) of TQM for construction industry namely, top management commitment, strategic quality management, design quality management, process management, supplier quality management, education and training, empowerment and involvement, information and analysis, and customer satisfaction.

Many researchers have gone further ahead and examined the role of cultural values and assumptions on TQM success. A study by Pun (2001) investigated the linkages of cultural values to TQM practices in Chinese enterprises and found that successful adoption of TQM lies largely in the management of cultural dynamics and organizational complexities in Chinese enterprises. Studies have confirmed the findings by Hellsten and Klefsjo (2000) which suggest that it is important that suitable techniques and tools support the core values in order to establish a quality culture. Based on the findings, Hansson

and Klefsjo (2003) recommend a core value-based model which implies that TQM implementation will start with core values like committed leadership, everybody's commitment and customer orientation. Kujala and Lillrank (2004) in their study found that TQM programs are more likely to succeed if the prevailing organizational culture is compatible with the values and basic assumptions proposed by the TQM discipline. Rad (2006) determined the impact of cultural values on the success of TQM implementation at a university hospital in Iran. The results highlight that TQM requires a quality-oriented organizational culture supported by senior management commitment and involvement, organizational learning and entrepreneurship, team working and collaboration, risk taking, open communication, continuous improvement, customers focus, partnership with suppliers, and monitoring and evaluation of quality. A study by Dahlgaard and Dahlgaard (2006) discussed the challenge of designing a quality strategy for building a company culture, which supports lean production, six sigma and TQM. Based on research findings, authors recommend building quality into people by balancing the development of people's Core Competencies with people's Core Values. A study by Kokt (2009) proposed a model for establishing a quality culture in the company under investigation through the development of a values framework, based on the three- level typology of Schein (1992). A study by Cameron and Sine (1999) identified a framework for Organizational Quality Culture and examined the framework's legitimacy with empirical analyses. The result suggests that a culture promoting quality is required if TQM is to achieve its potential to significantly enhance organizational performance. Kekale (1999) found that best TQM results can be achieved when there's a match between the basic assumptions of an organization's culture and the assumptions in the TQM approach. To achieve this end, the author suggests that an organization about to start a TQM approach should be aware of the basic assumptions of its own culture and how the organization interprets the basic assumptions in the tools and approaches related to TQM.

Several research studies have highlighted organizational culture as essential for success at quality initiatives (e.g. Ally & Schloss, 2003; Briscoe et al. 2005; Zadry, 2005; Kumar and Sankaran, 2007). According to a study by Ally & Schloss (2003), quality culture can help in problem solving, and improving training of employees. Study further confirmed a linkage between quality culture and total quality management. For instance, Briscoe et al. (2005) assert that ISO 9000 implementation could positively influence competitiveness by establishing a quality culture. Zadry (2005) also identified quality culture as an important factor for successful TQM implementation. Furthermore, Kumar and Sankaran (2007) agree that the implementation plan of Quality Management Practices should be customized to organizations with respect to their culture in different industry sectors, countries and regions.

Building on previous studies in this area, it seems appropriate that some research be undertaken to examine this relationship in context of Indian auto component SMEs, which is one of the fastest growing within the SME category of industries. Sustenance and survival of the auto component sector is driven by quality and efficiency. To remain competitive, they will have to absorb global best practices. This trend of the auto component SMEs to absorb quality practices has not been covered extensively in the context of the Indian scenario. Organizational Culture Questionnaire (OCTAPACE Profile) developed by Dr. Udai Pareek has been used to study the cultural values across these Auto component SMEs. In this study, authors have undertaken the study of the extent of Quality Management principles practiced in these Auto component SMEs. Accordingly, following objectives have been pursued in our study:

OBJECTIVES

- To study the extent of implementation of Quality Management principles in small and medium Auto component companies.
- To compare the prevalence of OCTAPACE cultural values in small and medium Auto component companies.
- To examine the relationship between OCTAPACE cultural values and the extent of Quality Management practices in the organizations under study.

HYPOTHESES OF THE STUDY

On the basis of the above objectives, the following hypotheses were formulated:

H01: There is no significant difference in the extent of practice on each of Quality Management factors between small and medium auto component manufacturing companies.

H02: There is no significant difference in the prevalence of OCTAPACE culture values between the small and medium auto component manufacturing companies.

H03: There is no significant correlation between OCTAPACE values with the Quality management factors in small and medium Auto component manufacturing companies.

RESEARCH METHODOLOGY

A questionnaire survey was conducted. The prospective sample of about 100 Indian Auto component manufacturing companies located in Delhi and National Capital Region were randomly selected from the Auto Component Manufacturer's Association (ACMA) member's database. The questionnaire was mailed to the Quality Heads of this sample of 100 companies and follow-up telephone calls were made in case non-response error was observed. Out of 100 questionnaires mailed, 65 filled questionnaires were received. On checking the filled-in questionnaires, it was found that 61 are valid, which comprised of 20 small and 41 Medium companies.

Tools Used

Quality Management Questionnaire

A questionnaire was designed based on review of existing

literature on Quality Management. Content validation of the questionnaire was done through two experts each from academia and industry. Reliability of the questionnaire was also calculated, the value of Cronbach's Alpha is .939.The Questionnaire aims to assess the extent of Quality Management principles being practiced in the organization. It's a thirty six item questionnaire in which each statement is rated on a five point scale ranging from –'never', 'rarely', 'occasionally', 'often' to 'always'. To test the dimensionality of the instrument, items of the Quality Questionnaire were factor analyzed using principal component extraction with varimax rotation. This resulted in seven factors- 1) Employee Involvement, 2) Process & Systems Approach, 3) Top Management Commitment, 4) Mutually Beneficial Supplier relationship, 5) Customer Orientation, 6) Factual Approach to Decision-Making and 7) Continual Improvement. Reliability for each of the seven factors was computed and the Cronbach Alpha coefficients of these seven factors were .833, .883, .837, .808, .705, .673 and .712 respectively (refer Table-1 for factor analysis results & reliability coefficients).These results indicate that these seven factors are reliable.

Table 1: Factor Analysis Results & Reliability Coefficients

Factor-1 Employee Involvement	Cronbach's alpha	0.833
• *Employee involvement in training on quality.* • *Employee encouragement to work in teams.* • *Employee recognition for contribution to quality policy.* • *Kaizen are part of employee's activities.* • *Key performance figures with managers for decision-making.* • *Employee's representation in Quality improvement body.*		
Factor-2 Process & Systems Approach to Management	Cronbach's alpha	0.883
• *Customer satisfaction index.* • *SPC for monitoring production process.* • *Defined outcomes for supplier's practices.* • *Check on Supplier's delivery time* • *Qualifying criteria' for vendor's supply.* • *Customer's need identification through meetings with customers.* • *Customer Satisfaction Index shared & measures taken.* • *Systems evaluation method.* • *Conformance to standards.*		
Factor-3 Top Management Commitment	Cronbach's alpha	0.837
• *Top management emphasizes the quality issues.* • *Employee empowerment for decisions.* • *Motivation by seniors.* • *Top management involvement in setting 'Quality policy'.* • *Training on quality ensured by Top management.* • *Communication of quality targets.* • *Responsibility for managing change.*		
Factor-4 Mutually Beneficial Supplier Relationships	Cronbach's alpha	0.808
• *Work with suppliers for delivery improvement.* • *Regular meetings with suppliers.* • *Regular up gradation of benchmarks.* • *Regular Suppliers audit*		

Factor -5 Customer Orientation	Cronbach's alpha	0.705
• *Regular assessment of Customer needs.* • *New procedure Implementation.* • *Improvement teams in all functions.* • *Regular evaluation of CRM.*		
Factor-6 Factual Approach to Decision Making	Cronbach's alpha	0.673
• *Majority of suppliers ISO 9004:2000 certified.* • *Review of quality policies and processes.* • *Clause in purchase order about raw material quality*		
Factor -7 Continual Improvement	Cronbach's alpha	0.712
• *Efforts to incorporate customer requirements.* • *Appraisals shared with employees to help them improve.* • *Continuous improvement of processes.*		

Organizational Culture Questionnaire (OCTAPACE Profile)

This questionnaire has been developed by Dr. Udai Pareek (2003). Reliability and validity of this questionnaire has already been tested by Dr. Pareek, the split-half reliability of the test as reported is .81. It is a 40 item questionnaire in which each statement is rated on a four point scale. In all eight values of organizational culture are measured through this test. These values are: 1) Openness, 2) Confrontation, 3) Trust, 4) Authenticity, 5) Pro-action, 6) Autonomy, 7) Collaboration and 8) Experimentation.

ESULTS AND DISCUSSION

Identification of the Quality Management System

The mean and standard deviation of the extent of practice of seven factors regarding the Quality Management System in 'small' and 'medium' auto component manufacturing companies, are presented in Table 2.

Table 2: Mean, S.D. and T-test on Factors of Quality Management between Small and Medium Auto Component Companies

Factors of Quality Management	Small N=20		Medium N=41		t-value	p-value
	Mean	S.D.	Mean	S.D.		
Factor-1 Employee Involvement	3.97	.80	4.03	.78	.307	.760
Factor- 2 Process & Systems Approach	4.19	.69	4.19	.69	.004	.997
Factor-3 Top Management Commitment	4.39	.54	4.28	.77	.559	.579
Factor-4 Mutually Beneficial Supplier Relationship	3.90	.72	3.99	.83	.403	.688
Factor-5 Customer Orientation	4.11	.72	4.08	.77	.161	.873
Factor-6 Factual Approach to Decision-Making	4.00	.91	4.10	.79	.429	.669
Factor-7 Continual Improvement	4.25	.82	4.35	.69	.496	.622

In 'small' auto component companies, the Top Management Commitment (M=4.39) is an aspect, which has the highest mean score. This is followed by Continual Improvement (M=4.25), Process & Systems Approach (M=4.19), Customer Orientation (M=4.11), Factual Approach to Decision-Making (M=4.00), Employee Involvement (M=3.97).The mean score is least for Mutually Beneficial Supplier Relationship (M=3.90).

In 'medium' auto component manufacturing companies, the mean score of Continual Improvement (M=4.35) is highest. It is followed by Top Management Commitment (M=4.28), Process & Systems Approach (M=4.19), Factual Approach to Decision-Making (M=4.10), Customer Orientation (M=4.08), Employee Involvement (M=4.03).Again, the mean score for Mutually Beneficial Supplier Relationship (M=3.99) was found least. An interesting aspect that has been highlighted is that both small and medium companies have shown a higher level of implementation of all quality principles.

In order to establish a significant difference between the 'small' and 'medium' companies on the extent of Quality Management practices, the comparison of means is not sufficient. Thus, an independent sample t-test is applied to test the significant differences among the companies under study.

Test of Significance on Difference of Means for Quality Management Factors

The t-statistics (see Table-2) indicate that there is no significant difference in the extent of practice of each of Quality Management factors between small and medium auto component manufacturing companies. Since all factors have exhibited the p-value more than 0.05, meaning the result is not significant. So, we accept the null hypothesis.

Identification of Cultural Dimensions

The mean and standard deviation of eight aspects (OCTAPACE) regarding the culture of 'small' and 'medium' auto component manufacturing companies are presented in Table-3.

In 'small' Auto component companies, the cultural aspect, Pro-action (M=3.03) has the highest mean score. This is followed by Confrontation (M=2.87), Collaboration (M=2.82), Trust (M=2.77), Openness (M=2.74), Experimentation (M=2.71) and Authenticity (M=2.58).The mean score is least for Autonomy (M=2.44).

In 'medium' auto component manufacturing companies, again, the mean score of Pro-action (M=3.43) is highest. It is followed by Confrontation (M=3.25), Openness (M=3.18), Trust (M=3.10), Experimentation (M=2.93), Collaboration (M=2.90) and Authenticity (M=2.73).Again, the mean score for Autonomy (M=2.42) was found to be the least.

It is interesting to note that both 'small' and 'medium' auto component companies have shown highest prevalence of Cultural dimension-Pro-action while both have also exhibited lowest prevalence of Cultural dimension-Autonomy in their respective cultures.

Test of Significance on difference of Means for Organizational Culture Dimensions

An independent sample t-test is applied to test the significant

Table 3: Mean, S.D. and T-test on Cultural Dimensions between Small and Medium Auto Component Companies

Dimensions of Organizational Culture	Small N=20		Medium N=41		t-value	p-value
	Mean	S.D.	Mean	S.D.		
Dimension-1 Openness	2.74	.70	3.18	.47	2.93	.005**
Dimension- 2 Confrontation	2.87	.69	3.25	.50	2.46	.02*
Dimension-3 Trust	2.77	.45	3.10	.44	2.72	.008**
Dimension-4 Authenticity	2.58	.41	2.73	.40	1.38	.172
Dimension-5 Pro-action	3.03	.83	3.43	.49	2.37	.021*
Dimension-6 Autonomy	2.44	.35	2.42	.29	.185	.854
Dimension-7 Collaboration	2.82	.39	2.90	.34	.796	.429
Dimension-8 Experimentation	2.71	.60	2.93	.42	1.64	.106

*(**-Significant at .01 level)*
(-Significant at .05 level)*

difference between 'small' and 'medium' companies on the prevalence of Cultural values. The t-values as shown in the Table-3 show that there is a significant difference between the small and medium auto component companies in relation to the presence of cultural values like Openness, Confrontation, Trust and Pro-action. Therefore, the null hypothesis is rejected.

Relationship between Quality Management Factors and Organizational Culture Values

Using Pearson's correlation, an attempt has been made to explore the relationship between factors of Quality Management and values reflecting Organizational Culture. Results of this test as shown in Table- 4, clearly shows that all significant correlations are positive which shows that in the relationship, the two variables reinforce each other. This is indicative of the fact that an increase in one variable leads to an increase in the other variable. Cultural dimensions like Openness, Confrontation & Pro- action were found to have positive significant correlation with all the Quality Management factors. This suggests that the prevalence of these cultural values help in facilitating the practice of all seven Quality Management factors required for Quality implementation.

It is important to notice that cultural dimension-'Pro-action' was found to have highest correlation coefficient with five Quality Management factors-Employee Involvement, Process & Systems Approach, Top Management Commitment, Factual Approach to Decision-Making and Continual Improvement. This is understandable as action-orientation and initiative taking on the part of employees is the basic pre-requisite for successful implementation of Quality in any organization. Further, cultural dimension- Experimentation was found to have positive significant correlation with six Quality Factors. Collaboration and Authenticity were found to have positive significant correlation with five Quality factors while Trust was found to have positive significant correlation with three Quality factors.

However, it has been observed that Autonomy is the only cultural dimension which was found to have non-significant low negative correlation with four Quality factors namely- Employee Involvement, Top Management Commitment, Mutually Beneficial Supplier Relationship and Continual Improvement. This suggests that increase in freedom given to employees to act independently in their own sphere does not facilitate the practice of Employee Involvement, Top Management Commitment, Mutually Beneficial Supplier Relationship and Continual Improvement for Quality Implementation. Thus, overall results indicate that there is a significant correlation between OCTAPACE values with the Quality management factors in small and medium Auto component manufacturing companies. Hence, the null hypothesis is rejected.

Table 4: Correlation between Factors of Quality Management and Dimensions of Organizational Culture

	Employee Involvement	Process & Systems Approach	Top Management Commitment	Mutually Beneficial Supplier Relationship	Customer Orientation	Factual Approach to Decision-Making	Continual Impro--vement
Openness	398**	.538**	.492**	.366**	.413**	.313*	.379**
Confrontation	.429**	.479**	.505**	.386**	.395**	.265*	.411**
Trust	.285*	.353**	.387**	.234	.236	.141	.212
Authenticity	.305*	.313*	.399**	.179	.390**	.129	.282*
Pro-action	.451**	.578**	.550**	.365**	.412**	.350**	.456**
Autonomy	-.066	.044	-.012	-.005	.093	.005	-.003
Collaboration	.304*	.274*	.491**	.194	.296*	.233	.273*
Experimentation	.358**	.437**	.368**	.369**	.394**	.168	.302*

*(**-Significant at .01 level)*
(-Significant at .05 level)*

ISCUSSION

This study had three objectives. The first objective was to study the extent of Quality Management practices in small and medium Auto component companies. An interesting aspect that has been highlighted is that both small and medium companies have shown a higher level of implementation of all quality principles. This suggests an increasing realization by both small and medium enterprises that TQM is not just an essential tool for them to increase the quality of their product and services but it's actually the key to their survival. Further, the results indicate no significant difference in the extent of practice on each of Quality Management factors between small and medium auto component manufacturing companies. This further suggests that perhaps the small auto component companies have felt the impact of quality programmes imposed on them and therefore, they seem to have gradually embraced the principles of TQM to successfully compete with medium enterprises.

The second objective was to study the level of OCTAPACE cultural in these companies. Results revealed that the various dimensions of the culture exist at varying levels in the companies under study. It is interesting to note that both in

'small' and 'medium' auto component companies the prevalence for cultural dimension- Pro-action was highest and prevalence for Autonomy was lowest in their prevailing cultures. Findings further highlight a significant difference between the small and medium auto component companies in relation to the presence of cultural values like -Openness, Confrontation, Trust and Pro-action.

And the third objective was to examine the relationship between OCTAPACE cultural values and the extent of Quality Management practices in the organizations under study. Specifically, the study examined the association between eight organizational cultural dimensions (Openness, Confrontation, Trust, Authenticity, Pro-action, Autonomy, Collaboration and Experimentation) and the extent of Quality Management practices. The results revealed three cultural dimensions-Openness, Confrontation & Pro-action which exhibited a significant positive association with all the quality management factors. Specifically, the cultural dimension-'Pro-action' exhibited highest correlation coefficient with most of the Quality Management factors. Similarly, Experimentation, Collaboration, Authenticity and Trust exhibited positive significant correlation with most of the Quality Management factors. However, Autonomy is the only cultural dimension which was found to have non-significant low negative correlation with four Quality factors. Accordingly, management needs to be conscious of such associations and attempt to make efforts to enhance the cultural dimension-Pro-action, which had the highest correlation coefficients with all the Quality Management factors. In addition, the findings suggest that the cultural dimensions –Openness and Confrontation should be emphasized more given their association with all Quality Management factors. These findings further reinforce the findings of prior studies that have highlighted the significant role that cultural values play in supporting Quality Management practices.

ONCLUSION

SMEs are often suppliers of goods and services to larger organizations but any compromise on product quality on their part would adversely affect their relationship with the OEMs and the competitive ability of the larger organizations. Because of this reason, the larger companies have insisted that their small suppliers adopt TQM of their own and hence we find that both small as well as medium enterprises are similar in their implementation of quality principles yet prevalence of cultural values vary between small and medium enterprises. One probable cause of difference in prevalence of cultural values between 'small' and 'medium' enterprises could be that most of these small enterprises are either proprietorship concerns or family owned and managed organizations, resulting in a culture which is largely influenced by the values adopted and permeated by a single owner. However, low prevalence of Cultural dimension-Autonomy in both small and medium enterprises suggests that these SMEs still appear to be practicing a traditional and centralized system of management, which signifies reluctance to delegate authority to their employees. Thus, relationship between the size of organization and inherent characteristics of organizational culture can be further taken up as part of the future scope of the work.

Overall the research findings provide a useful reference for the Indian Auto Component industry which has been navigating through a period of rapid changes leading to considerable growth. The role of smaller firms as suppliers to the larger firms places a substantial burden on the small companies to become world class and embrace the principles of TQM. It is important that suitable techniques and tools support the core values in order to establish a quality culture. The study does provide a path for promoting the Quality Initiatives among Indian Auto component SMEs by enhancing values like Openness, Confrontation and Pro-action, in their existing culture. The implementation plan of Quality Management Practices should be customized to organizations with respect to their culture in different industry sectors. It is important to infuse a culture that supports quality intervention in some form or the other to help Indian Auto component SMEs in their efforts to sustain global competitiveness.

CKNOWLEDGMENT

This paper forms part of initiative undertaken by AICTE sponsored Industry Institute Partnership Cell at USMS GGS IP University Delhi, for which the authors are grateful to support from AICTE. The authors are also immensely grateful to CII and ACMA for encouraging the SMEs to participate in the Project.

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