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## AN EXPLORATION OF TOTAL QUALITY MANAGEMENT AND SUPPLY CHAIN MANAGEMENT ENABLERS

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### ABSTRACT

This study investigates the TQM (Total Quality Management) and SCM (Supply Chain Management) enablers in the organization. TQM and SCM both are management philosophies to strengthen their organizational performance. The objective of this paper is to identify the TQM and SCM enablers and then compared. The major finding of this paper is most widely used enablers are top management commitment and customer satisfaction within the organization. The future scope of this study is through the enablers, managers can easily get the information about the business world.

Keywords: TQM, SCM, Enablers, Top Management Commitment, Customer Satisfaction.

### I. INTRODUCTION

In this era quality is not enough for business world supply and cost is the two most important factors for competitive advantages (Chin *et al.* 2004). TQM (Total Quality Management) and SCM (Supply Chain Management) has discovered as two important strategies within the organization, hence mostly organization have adopted TQM and SCM to improve their organizational competitiveness. Organization achieved great benefits by implementing TQM and SCM together. However a simultaneous implementation of system that covers internal functions as well as external operations.

TQM refers to a management process and set of disciplines. TQMengages all divisions, departments and levels of the organization (Varsha *et al.*, 2012), it is act as critical factor for SCM to deliver products to the customers. Bandyopadhaya and Sprague (2003) found that in automotive industry, TQM and SCM approach enhance competitive in a complex supply networks. TQM focuses on enhancing customer satisfaction (Gunasekaran and McGaughey, 2003). Whereas SCM approach improve competitive performance by integration of internal and external operations of suppliers and customers. SCM focuses on time delivery products reproducibly and quality assurance. In addition both TQM and SCM strategies have to manage directly or indirectly by companies in

order to satisfy their customers. Vanichchinchai and Igel (2009) saythat SCM and TQM have similarities such as customer satisfaction, internal and external business partner functions. TQM is a total system approach which works horizontally across functions and a department, involving all employees, top to bottom, extends backwards and forwards to include supply chain and customer chain. SCM takes a vertical view of the relationship between the buyer and suppliers. There is need to study on TQM and SCM enablers are responsible to achieve the goals of the organization by appeasing the customer and keeping the supplier relationship intact for long term.

This paper aims to identify several enablers of TQM and SCM and explored some major enablers in TQM and SCM which are then compared. In next section presents research objective and methodology. In the last section discussion and conclusion includes managerial approach, limitation and future scope of the study.

### **II. OBJECTIVE AND METHODOLOGY**

The objective of this research has twofold:

- 1. To identify TQM and SCM enablers from the previous study.
- 2. To compare the major TQM and SCM enablers for the successfully implementation of an organization.

The literature review methodology was employed in this study and focused on TQM and SCM enablers. This literature has considered out from peer reviewed journals and online database such as Emerald, ProQuest and this research paper published between 2000 and 2013. This study were contained keyword such as "TQM and SCM practices", "QM practices", "TQM practices" and "SCM practices". The major enablers were taken out from these research paper according to their frequency of occurrences in the below Tables 1 and 2.

### **III. TQM AND SCM ENABLERS**

TQM and SCM are more than simple tools or techniques (Khan 2003, Vanichchinchai and Igel 2009) and both are management philosophies. TQM and SCM implemented on large scale system and consist of various sets of practices (Hellesten and Klefsjo 2000, Khanna *et al.* 2003).TQM enabler are long term process commitment in the organization and the successful implementation and adoption of TQM enablers planning, time and requires effort. Innovation of TQM enablers set new direction in the field of research. SCM is linked system which combined the chain that work together efficiently to create customer satisfaction at the end point of the delivery to suppliers (Hines 2004). SCM of physical and digital products can create a clear competitive advantage for your business in today's environment.

SCM is a set of organization directly linked by one or more upstream and downstream flow of products, services, finance or information from source to a customer. SCM could be carries out in an organized way by identifying enabler of SCM. Supply Chain Management enablers uses an 'outside-in' approach to help you think ahead and align your business strategy with your supply chain needs, resulting in measurable near-term gains and long-term transformation improvements.

TQM enablers ensure that processes are followed and customers are satisfied. SCM includes a set of approaches and practices to effectively integrate the suppliers, manufacturing, distributor and customer for improving the long term performance of the individual organization and the supply chain as a whole in a cohesive and high performing business model (Chopra and Meindl, 2001).

	TQM enablers	References
1.	Top management commitment and support	Lee <i>et al.</i> (2003), Sureshchander <i>et al.</i> (2001), Ahire and Ravichandran (2001), Flynn and Saladin (2001), Kaynak (2003), Sadikoglu and Zehir (2010),
2.	CustomerSatisfaction(customersatisfactionorientation,customerrelationship, customer focus)	Zairi (2000), Adam <i>et al.</i> (2001), Zhang (2000), Dimitriades (2006), Siddiqui and Rahman (2007), Khanam <i>et al.</i> (2013)
3.	Empowerment	Page and Curry (2000), Truss (2001), Harrington <i>et al.</i> (2012), Karia and Assari (2006), Jun <i>et al.</i> (2006), Ooi <i>et al.</i> (2007)
4.	Teamwork	Molina and Colleagues (2007), Rezgui (2007), Cabrera and Cabrera (2002), Rungtusanatham (2001), Kossek and Block (2000), Vouzas and Psychogios (2007)
5.	Training	Goetsch and Davis (2000), Talib <i>et al.</i> (2013), Vermeulen and Crous (2000), Goh (2002), Talib and Rahman (2010
6.	Culture Change	Guangming <i>et al.</i> (2000), Corbett and Rastrick (2000), Yusof and Ali (2000), Bose (2004), Ooi <i>et al.</i> (2007b), Ooi <i>et al.</i> (2012)

Table 1: Study on TQM enablers from literature review

Table 2: Study on SCM enablers from literature review

	SCM enablers	References
1.	Customer relationship (support customer	Jabbour et al. (2011), Chandra and
	order, customer focus, customer	Kumar (2000), Kuei et al. (2001),
	satisfaction, customer service	Ulusoy (2003), Koh et al. (2007), Li et
	management, customer needs)	al. (2005)
2.	Information sharing products and targeting	Jabbour et al. (2011), Chandra and
	strategies (employees communication,	Kumar (2000), Chin et al. (2004), Li et
	information sharing, information system)	al. (2005)
3.	Top management leadership (leadership,	Lee and Kincade (2003), Kuei et al.
	participative management, cooperation,	(2001), Burgess et al. (2006), Min and
	culture change)	Mentzer (2004), Koh et al. (2007)
4.	Strategic supplier relationship (supplier	Jabbour et al. (2011), Chandra and
	involvement, supplier quality	Kumar (2000), Li et al. (2005), Kuei et
	management, collaboration)	al. (2001), Ulusoy (2003)
5.	Material flow management (Lean	Chandra and Kumar (2000), Kuei et al.
	practices, JIT delivery, manage stock and	(2001), Koh et al. (2007), Li et al.
	inventory investment, evacuation of waste)	(2005), Chin et al. (2004)
6.	Authentic partnership (partnership, long	Lee and Kincade (2003), Kuei et al.
	lasting relationship, relationship with	(2001), Koh et al. (2007), Chen and
	suppliers)	Paulraj (2004)

## **IV. DISCUSSION AND CONCLUSION**

Author identified set of six enablers of TQM and SCM and they were explored from different 60 TQM and 40 SCM enabler study. As shown in Tables 1 & 2 TQM and SCM enablers were studied by different authors and analyzed which enablers have high frequency of occurrences. Enablers have frequency will be treated as major enabler in the organization. From the Tables depicted many TQM and SCM enabler also have benefits to the business. By comparison of TQM and SCM enabler, author found two major enablers top management commitment and customer focus.

Top management commitment and customer satisfaction are the two most cited enablers in both TQM and SCM strategies. In TQM and SCM strategies top management commitment have another name like leadership, management commitment, role of top management, genuine top management commitment, participative management, cooperation, culture change. Similarly in customer focus also have same name in both strategies such as customer focus, customer orientation, service culture, customer cooperation's, customer citizenship, closer customer relationship, customer perception of quality, customer resources, customer driven quality, support customer border, customer service management, customer needs. Except these two enablers of TQM and SCM strategies, another also found to be important and can be correlated.

The major finding of this study is that TQM and SCM almost have common enablers as found in the table. TQM and SCM will only successes in achieving improved performance in the organization with the continuous support of top management and their efforts towards never ending improvement in customer services and customer satisfaction. In this paper author argued that top management commitment and customer satisfaction should be treated as the base or foundation of TQM and SCM by managers. This study provides TQM and SCM managers with a useful tool for modifying their current TQM and SCM enablers. These enablers help managers in adopting with the conclusion of this study in their organization. Sila *et al.* (2006) concluded a few major enablers in the quality initiative, like involvement of customer and supplier in their organization, therefore enabler focuses on quality to improve and service quality within the organization. Kuei *et al.* (2001) found that organizational performance is associated with the improvements in supply chain management enablers.

Future scope of this study is to top managers can gather important knowledge about how effective TQM and SCM enablers. They have great impact on organizational performance if they are properly implemented. This study is also no free from limitation; it covers only few of TQM and SCM enablers.

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