



British Journal of Economics, Management & Trade
5(4): 408-418, 2015, Article no.BJEMT.2015.034
ISSN: 2278-098X



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The Effects of Total Quality Management and Market Orientation on Business Performance of Small and Medium Enterprises in Pakistan

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/BJEMT/2015/14226

Editor(s):

(1) Chen Zhan-Ming, School of Economics, Renmin University of China, Beijing, China.

Reviewers:

(1) Anonymous, Universiti Sains Islam Malaysia, Malaysia.

(2) Anonymous, COMSATS Institute of Information Technology, Abbottabad, Pakistan.

Complete Peer review History: <http://www.sciencedomain.org/review-history.php?iid=810&id=20&aid=6937>

Original Research Article

Received 23rd September 2014

Accepted 22nd October 2014

Published 15th November 2014

ABSTRACT

The small and medium enterprises (SMEs) play a significant role in the economic development and progress of the country. There are number of factors that contribute to the success of SMEs. This study investigates the effects of total quality management, market orientation on business performance of small and medium enterprises in Pakistan. Target population of the study was SMEs. Sample size of this study was 183 SMEs operating in Rawalpindi/Islamabad. Questionnaire protocol was used to collect the data. SPSS 20 software was used for analysis. This study adds to the literature by proposing the model to examine the relationships between TQM, MO and business performance of SMEs in Pakistan. The study concludes that both TQM and MO significantly contribute for higher business performance of SMEs.

Keywords: Total quality management; market orientation; business performance; SMEs.

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1. INTRODUCTION

The Small and Medium Enterprise (SME) sector is considered the economic backbone of a country. SMEs have the ability to generate employment with minimum cost. Due to their flexible nature, they have the ability to adapt to customer's needs better than larger firms [1,2]. Consistent with the above argument, [3] also emphasize that SMEs play a vital role in the economic growth and industrial development of a country. 90% of the world's firms are classified as SMEs [4]. They contribute significantly to the national economy by providing substantial employment, increasing production and introducing innovation [5].

The economy of Pakistan is composed mainly of SMEs. Approximately 3.2 million enterprises are considered as SMEs in Pakistan. According to Small and Medium Enterprise Development Authority (SMEDA's) definition, SME is defined as an enterprise employing up to 250 employees or having a paid-up capital of up to Rs. 25 million, or annual sales not exceeding Rs. 250 million [6]. [7] suggest the existence of a positive correlation between the health of the SME sector and overall strength and growth of the economy of a country. They observe that SME sector's performance in Pakistan has been deteriorating consistently. It is one of the main reasons for the poor performance of the country's economy. According to [8] it is essential to implement concrete measures for the improvement of SMEs in Pakistan in order to achieve substantial growth of the economy.

Study of extant literature shows that the adoption of quality practices by SMEs has been minimal [9]. In addition to badly affecting the production of SMEs, it affects the performance of large businesses adversely since the latter outsource a significant part of their production to small businesses [7]. In order to be competitive and to survive successfully in contemporary economic environment, firms must rapidly adapt to changes in the marketplace [10,11].

TQM is a business strategy to involve individuals at all levels and functions of an organization to meet customer needs and expectations and enhance the enterprise performance [12]. According to [13] TQM is a holistic approach to run the organization to create competitive advantage. In a similar vein, [14] argued that improving product quality translates to a decrease in cost of product, fewer number of

manufacturing mistakes, reduced delays in production and more efficient use of resources. TQM primarily focuses on the concept of continuous improvement in the operation of an enterprise. It is carried out in a consistent, integrated and systematic way by involving everyone and everything in the organization so as to achieve satisfaction of both internal and external customers [15].

According to [16,17,18,19] research on TQM was previously carried out only in industrialized countries such as USA, Japan and some European countries. The demand for quality products is no longer limited to customers in the developed world. They have pointed out that globalization of world trade has resulted in escalation in demand for quality products and services by the customers in developing countries as well. Hence, the latter have also started to focus on improvements in product quality. Now researchers have started studying TQM in developing countries [20]. Several researchers such as [21,22,23,24] noted that proper implementation of total quality management can help SMEs improve and achieve better performance in a competitive marketplace.

Studies of extant literature reveal that no single strategy can extract the best performance from SMEs. TQM alone may not improve its performance in an evolving marketplace. Studies have pointed out some additional determinants that impact SME growth. [25] emphasized in a study that TQM is not the sole criterion that leads to improvement in the performance of a firm. There are additional complex relationships that need to be addressed and there are other constructs that need to be integrated as major antecedents of SME performance. Market orientation (MO) is one such determinant whose involvement as a strategic orientation affects the competitiveness of SMEs [26]. Hence, if TQM is implemented coupled with MO strategy, it may yield better business performance. [26] argued that MO is the strategy adopted by SMEs in order to look for customers and seek new ways to position and promote their products and services. MO plays a vital role in development of SMEs and preserving their high growth rate [27]. MO has been examined by several researchers from different aspects. [28] classify MO as a resource. [29] considers it to be a decision-making instrument, while [30] describe MO as a set of actions and behavior of the SME. [31,32,33] delineated MO, as organization culture

variable. Similarly, some other researchers such as [34] define MO as a culture which creates behaviors that are necessary for the generation of superior values which are required to create competitive advantage and improved business performance.

Researchers and organizations worldwide have increasingly investigated the impact of MO on a firm's performance. It is considered to be the most significant factor for creating competitive advantage in a firm. Several empirical studies such as those by [35,36,37] support the view that MO has a significant effect on a firm's performance. MO focuses more on customer retention than on acquisition [36]. Studies indicate that market orientation and TQM are complimentary business philosophies in a competitive marketing environment [38]. Both MO and TQM focus on customer satisfaction [39].

TQM practices operate from within the organization whereas MO tends to be externally oriented [40]. All these criteria lead to the same objective i.e. customer satisfaction. By using the theoretical lens of RBV this study has contributed to the current literature. RBV theory suggests that firms must align their strategies to improve performance. It was expected that these two different management strategies, i.e. TQM and MO when implemented together will enhance the business performance of SMEs. The findings of this study will help the policymakers of Pakistan in particular and will also assist and guide other developing countries in general to devise and implement strategies to enhance SMEs performance.

2. LITERATURE REVIEW

2.1 Total Quality Management and Business Performance

In current competitive business environment quality is considered as a strategic tool to create competitive edge and success for firms [41]. Increased quality results in reduced costs, improved market share and higher profits [42,43]. According to [44] organizations of all types and size, either large or small, production or service and public or private cannot afford to ignore the quality initiatives such as total quality management (TQM) for their growth and enhanced performance. TQM is a holistic approach that seeks to integrate all organizational functions to focus on meeting

customer needs and organizational objectives [45]. TQM has continued to evolve over the past two decades and lot of effort has been done on understanding the TQM practices that lead to superior quality and overall business performance [46].

According to [47,48] TQM emphasis on the entire organization and all its employees, it involves continuous improvement in all processes to provide high quality products and services. Studies by several researchers, such as [49,50,51,40] have yielded favorable conclusion on the effect of TQM and organization performance results such as waste reduction, fewer process mistakes, financial improvements and overall improvement of the quality of the product or the service. [52] suggested that TQM is not only a management tool for producing quality products and services but also a process that leads to increased productivity and a more favorable competitive position. [53] stated that TQM would generate improved products and services, reduced costs, more satisfied customers and employees and improved financial performance. Research conducted on TQM by different scholars showed that there are lot of studies done about TQM implementation in the perspective of large firms but not enough attention and consideration has been given to implementation of TQM in SMEs [54,55,56,57].

SMEs play a very crucial role to the economies of most emerging nations from the viewpoint of generating employment and economic growth. SMEs account for more than half of the employment and added value in most countries. Some of the previous researchers in their literature though explained the successful utilization of Total Quality Management but have not given forth the actual realities in adopting quality initiatives faced by SMEs businesses. Despite of the benefits of TQM adoption, study of the past literature showed that SMEs due to unnecessary managerial involvement are less comfortable with the formal approaches of TQM, therefore slow in adopting quality initiatives [58,59]. [60] based on their study conducted on 52 SMEs in Ethiopia identified that due to lack of resources, business planning practices and unclear vision create main obstacles in TQM adoption by SMEs. [61] carried out an empirical research on 112 SMEs of China, identified many obstacles in TQM implementation such as the lack of resources, lack of knowledge and ineffective quality training and poor employee involvement.

However, empirical evidences supported an important association amid the adoption of TQM and improved firm performance [62,63,64,51]. [63] suggested that SMEs know quality management is the main factor for gaining sustainable competitive advantage. From the above discussion, it is evident that formal TQM tools and practices are important to contribute to the performance of small medium enterprises. Researchers such as [65,66] pointed out that the firms that adopt TQM have edge over non-TQM firms.

Various researchers such as [40,46] in their studies reported a positive relationship between TQM and performance. In a similar vein, [25] carried out an empirical study on 135 Portuguese SMEs and concluded that there is direct relationship between TQM practices and firm performance. On the contrary, [67,68] revealed that there is no affect of TQM on various performance measures. Moreover, [69,70] stated negative relationship of TQM with firm performance. Based on an in-depth literature review, following hypothesis is formulated,

H1: Total quality management has a significant relationship with business performance.

2.2 Market Orientation and Business Performance

In the view of competitive global economic environment, market orientation (MO) is known as an important business strategy. According to [29] market-orientation refers to generating, disseminating and taking actions in response to market intelligence by the participation of variety of departments in the organization. [30] described MO, a behavior and actions, whereas [31,32,71] proposed that MO is organization culture variable. On the other hand [33] defined MO as part of a firm's culture that supports required behaviors to create higher value for customers and enhanced business performance. [72] argued that organization's operations must be customer oriented. In the same vein, [73] emphasized that the customer is the reason for the organization's existence. Market orientation is regarded as a main source of competitive advantage and higher performance. [74] suggested that there is a relationship between market orientation and business performance. [75] noted that market-oriented firms perform better and achieve higher profits compared to non-market oriented firms.

Researchers generally are supportive on positive outcome of MO on performance. Literature illustrates that MO significantly contributes and rejuvenates growth and success of business performance. Market orientation is meant to attain customer satisfaction and to improve the performance of a firm [38,76,77,78,79,31,80]. It is widely contended and highlighted that market orientation is significant to firms and it positively affects the business performance [81]. Similarly research conducted by [82,83] also revealed a significant link amid MO and performance of a firm. Moreover, empirical studies on MO conducted by [35,36,84] contended that market orientation affects firm performance.

However, most of the earlier studies emphasized on implementation of MO in large organizations. It seems that researchers were ambiguous on the appropriateness of the adoption of the market orientation construct by SMEs [85]. Only recently researchers have begun to conduct studies on the outcome of MO in small and medium enterprises [86,87]. SMEs should be more customer focused, monitor the competitive trends of competitors and respond appropriately to market intelligence in order to survive in the challenging business environment. [88] contended that MO allows the firm to become aware of opportunities and discovers customer's current and latent needs and convert this information to develop new and higher value products for customers.

[89] argued that SMEs should implement market orientation in their firms to enhance their performance. SMEs are less formal, less structured, have reduced organizational layers and are closer to customers, hence, MO if implemented provides a potential competitive advantage to small and medium over large firms [87]. It is appropriate to say that SMEs are more able to anticipate and respond to customer's needs more quickly and effectively. Study of extant literature showed inconclusive findings of the effect of MO on performance [83]. [33,90] noted a positive relationship between MO and business performance. Whereas, [91] found no association, on the other hand [82] solicited mixed results. The above discussion leads to the following hypothesis,

H2: Market orientation has a significant relationship with business performance.

2. RESEARCH METHODOLOGY

This study is a correlational study to assess the relationship amongst the variables. 5-Likert scale was used to measure the responses. Items of survey questionnaire were adopted and modified from well established previous researchers work. TQM items were adopted from [92,93,94,39] and MO items were adopted from [33] and Business Performance items were taken from [95,96,82]. A self-administered questionnaire method was utilized to distribute the questionnaires to 300 SMEs operating in Rawalpindi/Islamabad region randomly chosen from the Directory of Rawalpindi chamber of commerce and industries (2013). In this study single informant approach was used. Unit of analysis was the SME firm as TQM and MO are important strategies which are deeply rooted in firms. Therefore, questionnaire was addressed to either the CEO or Owner of the chosen SMEs. 183 SMEs returned back the filled and complete questionnaires. Total response rate was 61%. SPSS 20 was used for data analysis. Descriptive statistics including percentages and frequencies was used to summarize the data.

2.2 Reliability Analysis

Data collected was coded and entered into SPSS 20 to test the reliability by using alpha scores for each of the construct variables. Cronbach's Alpha measures the internal consistency items in a survey instrument to determine its reliability. Table 1 depicts the test results. It was found that most of the cronbach's alpha values for independent variables lie above 0.7 cut off value. The alpha value of independent variables TQM is 0.81 and MO is 0.78 and of dependent variable business performance is 0.67 which is in acceptable range.[97] provided the rule of thumb that alpha values of greater than 0.50 were suggested as being satisfactory and acceptable to test for the reliability of constructs. Moreover,[98] suggested that the minimum advisable level of 0.7 would be adequate for the modest reliability of a construct.

2.3 Regression Analysis

To test the hypotheses of this study multiple regression analysis was employed to examine the effect of predicting variables on criterion variable. Table 2 depicts that value of Adjusted R square is .698. Adjusted R square is coefficient of determination which tells the extent of variance in the dependent variable due to

changes in the independent variable. Hence, the value of Adjusted R square 0.698 means 69.8% variance in performance is explained by two independent variables TQM and MO. The value of R correlation coefficient is .836 showing a strong positive relationship amid the variables.

Table 1. Reliability Analysis

Variable	No of items	Cronbach alpha
Total quality management	20	.81
Market orientation	15	.78
Business performance	6	.67

Table 2. Model Summary

Model	R	R square	Adjusted R square	Durbin-Watson
1	.836	.700	.698	1.655

From Table 3 it is inferred that TQM ($\beta=.260$, $t=6.801$, $p=0.00$) and MO ($\beta= .642$, $t= 16.773$, $p=0.00$) are significant with business performance supporting the hypotheses 1 and 2 regarding these two variables. The findings prove that both TQM and MO significantly contribute towards measurement of business performance.

Table 3. Estimated Results of Multiple Regression

Variables	β	t	Sig
Total quality management	.260	6.801	0
Market orientation	.642	16.773	0

3. CONCLUSION

SMEs significantly contribute to the economic development and growth of a country by poverty alleviation, creating and providing jobs to urban and rural workforce. In today's increasingly globalized economy, it is significant to study the impacts of different strategies on the business performance of SMEs. Managers/Owners of SMEs and policy makers should focus to implement different organization strategies to enhance the business performance of enterprise. Over the past few years, stream of research highlighted the significance of strategic orientations. To grow and sustain profitability in competitive business environment with demanding customers, it is therefore necessary that firms of all sizes and nature are required to acquire different strategic orientations.

The significant positive results of TQM ($\beta=.260$, $t=6.801$, $p=0.00$) supports the previous researchers arguments who have reported that TQM is positively linked with performance of a firm [40,46]. Similarly, the significant positive results of MO ($\beta=.642$, $t= 16.773$, $p=0.00$) with business performance are in line with the studies conducted by several researchers such as [81,82,83]. The ever growing competition and shortened life cycle needs firms to stay close to customers and competitors to ensure the profitable survival. The results proffer and support the argument that both TQM and MO generate higher business performance. The results also indicated that it is crucial for SMEs to implement strategies such as TQM and MO, as these would act as supporting system to respond to competitive environment and later can lead to higher performance. This can be done by offering quality products or new enhanced products in the market by utilizing the resources available in the market. This research contributes to the existing literature on positive outcome of TQM, MO and business performance relationship in the context of SMEs of developing country Pakistan.

The findings of this paper suggests that owner/managers should take more dynamic approach towards implementing TQM and MO to prepare their firms to meet future challenges. They should update and equip themselves with current knowledge, skills and capabilities which could benefit their firm. The sample of this study was specifically confined to Rawalpindi and Islamabad region so it does not represent the whole SMEs sector of Pakistan. A wider sample from other parts of Pakistan with multiple responses from different individuals and management levels can be used for any future study. The study can also be extended by including moderating variable such as organization culture.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDIX

Model summary^b

Model	R	R square	Adjusted R square	Std. error of the estimate	Change statistics					Durbin-Watson
					R square change	F change	df1	df2	Sig. F change	
1	.836 ^a	.700	.698	.23541	.700	423.952	2	364	.000	1.655

Coefficients^a

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.	Correlations			Collinearity statistics	
	B	Std. error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	-.746	.194		-3.853	.000					
AVGT	.400	.059	.260	6.801	.000	.684	.336	.195	.564	1.773
AVGM	.787	.047	.642	16.773	.000	.813	.660	.482	.564	1.773

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