

How Total Quality Management Stimulates the Relationship between Entrepreneurial Orientation and SMEs Performance: The Case of Pakistan

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Received for publication: 23 February 2020.

Accepted for publication: 04 April 2020.

Abstract

This study has the aim to know the impact of entrepreneurial orientation (EO) on the performance of small and medium enterprises (SMEs) under the mediating effect of total quality management (TQM). This study has targeted the Small and Medium Industry of Pakistan to know about the effect of entrepreneurial orientation and TQM on performance of the SMEs. Total 242 participants were involved in this study, for whom data has been collected for analysis. Hayes's process macro has been utilized for hypotheses testing analysis. The results of this study showed the positive and significant impact of entrepreneurial orientation on performance of the SMEs, and that the TQM positively and significantly mediated between Entrepreneurial orientation and performance of the SMEs. This study has significantly enhanced the understanding level towards the SMEs for the young entrepreneurs. In future perspective, this study lacks in focusing on the external environment or forces which may cause harm to the performance of SMEs. So, this aspect can be utilized to enhance the work and in addition to this, Innovation can be used as a moderator to see its effect on the relationship between TQM and SME's Performance.

Keywords: Environmental orientation, SMEs performance, Total quality management

Introduction

Entrepreneurial orientation considers as a factor which helps the organizations entailing its strategic practices and also helps the organization to make its goals according to the philosophy of its existence. Entrepreneurial orientation is related each behavior of the firm that is Entrepreneurial in nature and it orients a firm to accomplish its tasks in an effective way (Anderson, Kreiser, Kuratko, Hornsby, & Eshima, 2015). In the case of SMEs, it contributes in making the firm proactive, moreover the business is run with an essence of innovativeness and with the flavor of risk taking. It has been observed that the major focus of SME's is on providing ultimate quality to the customers and minimizing the source of errors. So, these firms worked on the basis of quality management which helps them to flourish in such a competitive market. Entrepreneurial orientation is important as it enhances the activity level of organization to become innovative and works proactively to deal with any kind of quality decreasing factors (Boling, Pieper, & Covin, 2016). However, it is a debate that entrepreneurial orientation might also be disadvantageous for the business if, only the situation of the business does not exactly fit with the application of entrepreneurial orientation. In this way, the SMEs involved in the process of TQM so that they can identify and rectify the issues in the system. Because continuous identification of the issues in a system enables the higher management to reduce those problems (Brouthers, Nakos, & Dimitratos, 2015).

At this stage of fast pace advancement, it is required for the organizations to align the role played by EO to the TQM because operational aspect is one of the most important factors need to be

focused. With each passing day, the need of TQM is increasing because now, it is not about just producing some goods as per needs but to raise the satisfaction of the end-user (Pearson, 2015). So, here TQM can play a positive role even for the enhancement of satisfaction of end-users. Along with operational aspect, production is another important department that has required good conditions to perform effectively (Lages, Silva, & Styles, 2009). The issues in the production can lead towards less effectiveness so here, TQM can contribute by building a manufacturing system that can avoid waste management issues. It has been reported by the previous researches that SME's shows less interest in adopting TQM practices because of which, they have to bear more loss (Konecny & Thun, 2011).

The objective of the current study is to know about the impact of entrepreneurial orientation on the performance of the SMEs and to know about the effect of TQM on the performance of SMEs. In addition to this, the mediating role of TQM for the relationship of entrepreneurial orientation and performance of SMEs also needs to be explained.

Past studies did not emphasize much on the role that, EO plays in enhancing the performance of SMEs and another missing component is, the direction EO in which, it plays its role to enhance the performance of SMEs. In addition to this, the impact of TQM on the performance of SMEs in the presence of EO has not been discussed in an effective manner (Calvo-Mora, Picón-Berjoyo, Ruiz-Moreno, & Cauzo-Bottala, 2015) so there is a need to explain this model properly. There is a need to analyze this model through the latest and different techniques and tools so that validity of the results can be enhanced.

This study will be a valuable addition to the existing literature regarding the importance of EO for the performance of SMEs and regarding the way TQM contributes to the performance of SMEs as well. This study will increase the relational importance of these variables as they are showing the behavior of affecting each other. In addition to this, it will be useful for the SMEs globally because the SMEs are continuously striving for enhanced performance and are struggling with their total quality management (Dar, Ahmed, & Raziq, 2017). Entrepreneurial orientation has definitely become a part of the policies of the organizations that are striving for TQM and enhanced performance.

The current problem on the table is to know about the impact of entrepreneurial orientation on the performance of SME's as it has been observed that large scale businesses are affecting their growth badly. Past studies have not addressed entrepreneurial orientations relationship with the performance of SMEs in the presence of TQM (Dubey & Gunasekaran, 2015). So, this is not only a specific problem but is global as well because SME's are working all over the world. All those SMEs have an urge to know about the factors through which they can enhance their performance and contribute significantly to their TQM systems (Engelen, Gupta, Strenger, & Brettel, 2015).

Literature review

Performance of SME's

The definition of the small and medium enterprises is totally based on the location of the enterprise, size of the enterprise, age of enterprise, number of employees, the value of the assets and sales of that enterprise. It is believed that SMEs are responsible for continuous competition and innovation of any economic sector (Fernández-Mesa & Alegre, 2015). SMEs are important in their own ways as they have their importance in the economic sector because large units of SMEs make the most part of economy of any country. In terms of performance, it has been observed that SMEs are seen to be crossing the large-scale enterprises because of the massive number of their presence and because of their contribution to the gross domestic production (Fonseca, 2015). These firms are

said to be responsible for the enhancement of innovation in the sector and also promoting competitive and economic growth.

SMEs have a large contribution in the economy but this contribution depends upon the policies of a specific country as they have to face the difficulties in terms of their financing and higher fixed cost taxes. On the other hand, if SMEs treated with favorable taxes and given more incentives than large scale enterprises then it can contribute more. However, the previous literature lacks proper details on how SMEs can perform better and also lacking in proper details of pressure and problems which current SMEs are facing (Goktan & Gupta, 2015). SME's have another issue which is related to import of the products. When there is a high frequency of imported products in the market then it would be difficult to stand for the SME's. It has been observed as a common behavior of the customers that they prefer to have imported or branded products instead of locally produced items.

Because of this behavior, SME's have to bear loss so; there is a need to rectify all the concerns which can affect the SMEs in negative manner. SME's are working all over the world which makes these concerns not local but global. So, there is a need to explain the standards which can followed by the organizations and the setup characteristics which can enhance the overall productivity and performance of SMEs.

Entrepreneurial Orientation

By the implementation of entrepreneurial orientation, the firms make sure that it is channeling its strategies, philosophies, and behaviors that are entrepreneurial in nature and is orienting them towards the enhancement of performance of the organization. Nowadays it is becoming the most implemented method in organizations. It has been observed that entrepreneurial orientation contributes significantly in promoting innovation in organization which is becoming a need of time as well (Khalique, Bontis, Abdul Nassir bin Shaari, & Hassan Md. Isa, 2015). With the help of entrepreneurial orientation, the organizations are able to become proactive for the uncertainties or disruptive events taking into account. In addition to this, all of the safety measures and shielding tactics have been adopted to protect the external environment as well. The organizations that work on the principles of entrepreneurial orientation are more likely to become the risk taking ones because an entrepreneurial orientation always brings out innovative ideas that are different from the market as well. These ideas alongside, creating differentiation also puts the organization under great risk of uncertainty.

Entrepreneurial orientation exposes an organization to a great extent of failure. So, according to previous studies, it has been described that entrepreneurial orientation can be disadvantageous for an organization because of the high amount of risk that is associated with it (Khan, 2015). There is another aspect that is related to EO is off, creating competitive advantage. EO has the ability to motivate employees for working according to new conditions prevailing in the market. For this, EO develops a culture for innovation under which employees can work as per their unique and different ideas. This process can ultimately lead towards getting competitive advantage in the market. Each organization struggles to have a strong position in the market so that; it would be possible to handle the competitors effectively. EO can provide an organization with the ability to create innovative ideas that can build a strong customer base and ultimately, a stable position in the market can be achieved.

As per the gaps of previous literature, it can be said that the past literature has not given any direction to the entrepreneurial orientation in specific. The past literature is lacking in detail about the actual role of entrepreneurial orientation and the actual impact on business performance. The role of entrepreneurial orientation is cloudy and it is not clear whether it is advantageous or disadvantageous for the firms. The gap of unclear roles needs to be cleared in the present study so that a standard can be set about the exact role that the entrepreneurial orientation plays for an organization.

Total Quality Management

Total quality management system is a continuous method of checking the processes and finding out the problem that needs to be eliminated or reduced. This system works continuously to streamline the processes of the business so, that all of the functioning of the business goes on in a very streamline and no abrupt errors or changes disturb the normal functioning of the business (M. T. Hassan, Burek, & Asif, 2017). According to the theory, TQM is an approach with which whole of the organization can be maintained and the main purpose of this approach is to improve the quality of every single unit of the business. It is important for an organization to follow the regulations of an industry in which it is working. To meet the regulations, TQM can help an organization by defining the organizational policies which can meet the criteria of industry regulations.

TQM can be applied to every single unit of a firm and in the different departments of an organization. In order to focus on the long term goals of the organization and to fulfill the short term goals in a better way, this system also ensures that each and every employee in the organization is working in the same direction as of goals of the organization. It also works to make sure that all of the departments are functioning in accordance with the big picture provided by the management of the company (M. U. Hassan, Iqbal, Malik, & Ahmad, 2018). TQM is required in every department no matter if it is finance, administration, marketing, production or human resource because, for the achievement of competitive advantage, it is important that each department working would be aligned with the goals of organization.

Entrepreneurial orientation (EO) and the Performance of SMEs

As it is evident by the past literature that the firms make sure about channeling all kinds of strengths of theirs and they are properly utilizing all of the present resources with them in an innovative way (Lumpkin & Dess, 2015). It is discussed before as well that the organizations can differentiate and can survive in the market only when they will produce something that is not being offered by the rest of the market. The products will outstand and will act like a winning thing for the organization only when the organization is thinking outside the box but not in the old and traditional ways of operating (Majid & Yasir, 2017). Innovation always works on higher the risk, higher the return theory. According to it, the organizations will better be able to understand that whether they are up for the implementation of EO or not and what possible return should they expect from the implementation of EO in their systems.

Moreover, the past literature has emphasized the fact that EO has a positive impact on the performance of the firms as the performance has been seen to be increasing in a positive and significant way by the implementation of EO. The organizations are seen to be increasing their profitability in a very significant way and moreover, the processes of vertical and horizontal growth that were witnessed to be very difficult in the past are now seen to become very easy with this approach (Wahga, Blundel, & Schaefer, 2015). However, the actual results are still shady and unclear as well. From the above literature, the hypothesis derived is:

H1: The impact of entrepreneurial orientation has significant and positive on the Performance of SMEs.

Total Quality Management (TQM) and the Performance of SMEs

The aim of the total quality management is to hold every party accountable at its own place so that, all the departments which are involved in anyway, would work to complete their side of the task. All of the internal practices of the business are improved on the basis of continuous improvement. One of the most important purposes of TQM is, to run the business according to the standards set by the industry (Yazdani, Attafar, Shahin, & Kheradmandnia, 2016). The industry standards include the number of laws implemented by the specific authorities and all the regulations which as-

sure that performance of the business should be smooth. TQM makes sure that all of the standards of the industry are being followed by the business so that overall performance of the organization can be enhanced (Konecny & Thun, 2011). Total quality management enhances the performance of an organization by making each employee accountable for the role he/she has to perform for the enhancement of effectiveness in the process which ultimately can positively affect the organizational performance. On the basis of above discussion, second hypothesis has been derived:

H2: The impact of Total Quality Management is significant and positive on the Performance of SMEs.

Mediating role of TQM between EO and Performance of SMEs

The impact of TQM according to the past literature is discussed to be an effective factor to enhance and maintain the overall performance of the firm. As far as SMEs are concerned, they face more challenges than others in terms of their size, target market, areas of operations, policies and the competition with the rivals (Mehralian, Nazari, Rasekh, & Hosseini, 2016). In the context of all these factors, it is even more important that the SMEs keep a check and balance on their overall system for its maintenance and for the enhancement of performance. In the implementation of EO, it is very useful that TQM plays its role because; TQM has the ability to check all the areas for correction of any defective action or any malfunctioning. In TQM, the defects are sensed and rectified which will be needed in the successful implementation of EO because TQM will make sure that all of the processes are defect free and the operations of the business are smooth. This ultimately contributes to the enhancement of organizational performance (Tennant, 2017). The third hypothesis proposed is that:

H3: The mediating role of TQM between EO and performance of SMEs is significant.

Hypothetical Model

The hypothetical model of the study is given below in which EO is the independent variable, performance of SMEs is the dependent variable and TQM is the mediating variable in this study. The model is given as:



Methodology

Population and Sample Design

The study was conducted to know the impact of entrepreneurial orientation on the performance of the SMEs with the mediating effect caused by total quality management. The study was conducted in the “manufacturing SMEs of Pakistan”. These firms have been taken from Gujranwala, Lahore, Faisalabad, and Sialkot which are considered as main industrial cities. The purpose to select these firms as the biggest part of GDP has been produced by service sector in Pakistan. The positivism approach has been utilized to assure less involvement in terms of biasness. The method of this study was quantitative so that questionnaire has been utilized for data collection. A convenient sampling technique has been used because of time and resource constraints.

Participants

For the purpose of this study, 242 participants from the manufacturing SMEs of Pakistan were selected and the questionnaires were filled by them. The responses of the participants have Openly accessible at <http://www.european-science.com>

been stored in the form of quantifiable data. On the basis of responses collected, there were 181(74.8%), male participants, while the female participants were 61(25.2%). There were about 75(31%) respondents who were in the range of 20-25 years while 61 (25.2%) were in the range of 26-35 years and there were 106(43.8%) respondents who were above 35 years of age. Out of 242, there were 116(47.9%) respondents have 2-4 years of experience while 56(23.14%) have 4-7 years of experience and there were 70(28.9%) respondents who have more than 8 years of experience.

Instrument and data collection

A questionnaire has been designed for data collection which consists of two divisions. One part of questionnaire is about the demographics and the other part is about items that will be used to analyze the relationship of understudy variables including EO, TQM, and Performance of SMEs. The tool that was used for the purpose of data collection in this study was a questionnaire and it includes 30 items for the purpose of "TQM" which has been adapted from the study of (Shafiq, Lasrado, & Hafeez, 2019) that were leadership, strategy, people, resources and process. The questionnaire includes 13 items for entrepreneurial orientation following the study of (Boso, Cadogan, & Story, 2012) which included innovation, risk taking and proactiveness. The questionnaire included 9 items for measurement of SMEs' performance which included financial performance, strategic performance, and satisfaction (Aziz, Hasnain, Awais, Shahzadi, & Afzal, 2017). This study has adopted the technique of survey and data has been collected through questionnaires. For data collection, on-line form has been filled by 125 respondents while for remaining 117 different SMEs of Pakistan have been visited to collect data.

Results and Discussion

After the thorough collection and screening of the useful data, the data were analyzed through SPSS. Alpha chrome has been calculated to know about the reliability of variables while the descriptive analysis has been done. In addition to this, to analyze the direct and indirect effect among the variables of this study, the researcher has used the process macro by (Preacher & Hayes, 2008).

Reliability of an instrument is important to be known because of analysis based on the scales. Internal consistency can be demonstrated by using Cronbach alpha. It is important that the values should be equal to or more than 0.7. Below mentioned values of each construct show that the instrument has strong reliability as all the constructs have valued above 0.7.

Table 1. Reliability Statistics

Variable	N	Cronbach Alpha
Performance of SME'S	242	.833
EO	242	.876
TQM	242	.864

We performed analysis in process macro by using model 4 to test the mediating effect of TQM for the relationship of EO and Performance of SMEs. The first part of analysis is of TQM which shows value of R^2 for the model is .319 and p-value is less than 0.001. It is shown in table 2

Table 2. Model Summary-TQM

R	R-sq	MSE	F	df1	df2	p
.565	.319	.477	89.03	1.000	240.000	.000

Table 3. Model – Outcome: TQM

	coeff	se	t	p	LLCI	ULCI
constant	.909	.272	3.33	.001	.372	1.445
EO	.747	.079	9.43	.000	.591	.903

The second part is of Performance of SME's which is showing that value of R^2 is .641 and p-value is 0.000. it is shown in table 4.

Table 4. Model Summary - Performance

R	R-sq	MSE	F	df1	df2	p
.800	.641	.232	224.9	2.000	239.000	.000

Table 5. Model – Outcome: Performance

	coeff	se	t	p	LLCI	ULCI
constant	-.899	.170	-5.283	.597	-.425	.245
TQM	.223	.054	4.083	.000	.115	.331
EO	.820	.069	11.747	.000	.682	.958

In order to have a clear scenario, interpretation needs to be mentioned as per hypothesis, the first one is about “EO has a positive and significant effect on Performance of SME's”. Table 5 has a description for the positive and significant relationship of EO and performance of SME's as the value of the coefficient is 0.820 ($t=11.747$, $p<0.05$). The results show that organizations when implement entrepreneurial orientation in their strategies and processes ultimately enhances the performance of SMEs. This positive and significant relationship has also been reported by the (Hernandez-Perlines, 2018; Thanos, Dimitratos, & Sapouna, 2017). It has been reported by (Hayes, 2015) about process macro that the significance of relationship can be decided on the basis of upper limit and the lower limit as if both of these values depicts same direction or same sign then it proves the significance of relationship and vice versa. In the case of EO and Performance of EO, values for the LLCI and ULCI are similar i.e., positive. On this base, first hypothesis H1 has been accepted.

The second hypothesis is “TQM has a positive and significant impact on Performance of SME's”. Table 5 has a clear picture of the relationship between TQM and Performance of SMEs as it is significant and positive with the coefficient value of 0.223($t=4.083$, $p<0.05$). As per results, it can be described that the implementation of TQM on the processes of each department can enhance the overall performance by rectifying the shortcomings and decreasing the chances of waste in the process. Previously conducted studies have also reported a significant and positive relationship between TQM and performance of SMEs (Claver & Tari, 2008; Imran, Hamid, & Aziz, 2018). On the other hand, the values of LLCI and ULCI show similar and positive values on which basis, it can be described that the relationship between TQM and performance of SMEs is positive and significant. On the base of this discussion second hypothesis H2 has been accepted.

Table 6. Indirect effect of X (EO) on Y (Performance)

Mediator	Effect	SE	LLCI	ULCI
TQM	.167	.046	.214	0.025

The third hypothesis is about mediation “The mediating effect of TQM between the relationship of EO and Performance of SME's”. The values mentioned in table 6 shows that TQM depicted

a significant but inverse mediating effect as the value of mediating coefficient is 0.167 and the values of LLCI and ULCI has positive and similar sign. All of the values described in above table show that TQM has a significant mediation for the relationship of EO and performance of SMEs. Individual effects shown by EO and Performance both were positive with the values 0.223 and 0.820. The standard error under discussion has a value of 0.046 while the effect has a value of 0.167 with a positive sign. These values explained the relationship of TQM mediation for EO and performance relationships. The mediation of TQM for EO and Performance relationship has been supported by previous studies of (Al-Dhaafri, Al-Swidi, & Yusoff, 2016; Sahoo & Yadav, 2017)

Conclusion

The purpose to conduct this study was, to know about the impact of EO and TQM on the performance of SMEs in Pakistan. Moreover, the objective was also to know about the mediating role of total quality management which has been played by it for SMEs' performance in Pakistan. For the purpose of this study, 242 participants from the manufacturing SMEs of Pakistan were selected and the questionnaires have been used to collect data. EO is one of the most important factors regarding swiftly changing conditions of business world locally and internationally. The performance of an organization needs innovative solutions and unique processes so that different and inimitable procedures can be implemented. Because this is only path to face the highly advance and technological conditions prevailed in business.

This study has identified the direct role of total quality management for the enhancement of SME's performance. Results show that there is a positive and significant effect of total quality management on performance. It shows that an organization has to involve the process of checking in the procedures because the main issue prevailed in the performance of SMEs is the efficiency because there is always lots of wastage in the processes which ultimately decrease the value and worth of the product. Instead of this, an organization that has a vision for total quality management can overcome the issue of wastage by introducing more effective process so that the value of the product can be enhanced.

This study has also discussed the mediation of total quality management for the relationship of Entrepreneurial Orientation and performance of manufacturing SMEs in Pakistan. Total Quality management can play a smart role which will not only enhance the performance of an organization but also support to build a strong position in the market by creating competitive advantage. This study has covered the gap to identify the mediating role of total quality management in a much defined way. An organization that is in the process of development cannot improve its process until the implementation of total quality management. Because it is important that each process of a company should be checked for the rectification of issues prevailed in it. On the other hand, it is also important that each employee should be accountable for the role he has given to perform for the achievement of organizational goals.

Limitations and Future Recommendations

Each research has some limitations which actually provide a path for the new ways and advancements. The first drawback and limitation lie in the constraint of time which was available to conduct the study. Quality research requires time and resources so that the data collection should be done at a saturated level. Because of time constraint, only questionnaire has been used to collect data. For future research, it has been suggested that mixed research needs to be conducted so that more validated results can be compiled. The second constraint is that of the sample as it was just of 242 participants so for future research, it has been encouraged to conduct research based on a bigger

sample so that the research generalizability can be enhanced. There is another problem that needs to be mentioned is that this research is only conducted in Pakistan. So for future researchers, it is needed to conduct in different countries so that the behavior of the variables in different cultures and economic conditions can be tested. This will ultimately enhance the validity of the results and provide the different behaviors of variables. This model has a limitation that it does not test the moderation for the relationship of Entrepreneurial orientation and performance so; there is a need to test innovation as a moderator for the relationship of Total quality management and performance of SMEs.

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