

	<h1 style="color: green;">GOMAL UNIVERSITY</h1> <h2 style="color: purple;">JOURNAL OF RESEARCH</h2> <p>Gomal University, Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan  ISSN:1019- 8180 (Print) <span style="float: right;">ISSN: 2708- 1737 (Online)</span></p>				
Website	<a href="http://www.gujr.com.pk">www.gujr.com.pk</a>	HEC Recognized	Social Sciences	CrossRef	DOI:10.51380

## A HYBRID STRATEGY APPROACH IN BUSINESS PERFORMANCE EMPLOYING TOTAL QUALITY MANAGEMENT AND ENTREPRENEURIAL LEADERSHIP IN THE PAKISTANI SMEs

Altaf Hussain<sup>1</sup>, Muhammad Asad Khan<sup>2</sup> & Itbar Khan<sup>3</sup>

<sup>1</sup>Department of Commerce and Management Sciences, University of Malakand, KP, Pakistan

<sup>2</sup>Department of Technology Management & Business, Universiti Tun Hussein Onn, MALAYSIA

<sup>3</sup>Department of Education, The University of Malakand, Khyber Pakhtunkhwa, Pakistan

KEYWORDS	ABSTRACT
<p>Total Quality Management, Hybrid Strategy, Business Performance, SEM</p>	<p>This research is concentrated on the adoption of total quality management and entrepreneurial leadership in the manufacturing sector to examine its impact on the organizational performance. The research has been carried out in manufacturing sector of small medium enterprises (SMEs). A primary data with self-administered questionnaire was employed to gather data from the respondents. 450 survey items were distributed randomly among respondents, out of which 306 were returned and then subsequently 300 employed in the analysis. The collected data was analyzed with the help of the structural equation modelling technique. However, very little research provides a conceptual model to show such relationship based upon the suggestions of the theoretical literature. Hence, this research addresses a gap in the context of SMEs in Pakistan regarding the disparity in the present literature as well. Thus, findings are also crucial to design interventions like total quality management on the entrepreneurial leadership attributes for enhancing organizational performance. Findings of current study signifies both the theoretical and practical contribution for the policy makers and practitioners.</p>
Article History	<div style="text-align: center;">  <p>© 2022 Gomal University Journal of Research</p> </div>
<p>Date of Submission: 17-02-2022  Date of Acceptance: 23-03-2022  Date of Publication: 31-03-2022</p>	
<p>Corresponding Author: <a href="mailto:altafhussain@uom.edu.pk">altafhussain@uom.edu.pk</a>  DOI: <a href="https://doi.org/10.51380/gujr-38-01-06">https://doi.org/10.51380/gujr-38-01-06</a></p>	

### INTRODUCTION

Various companies across the world have designed strategies in order to cope with competitors and found to have strong effect on business excellence. More precisely, most of them are using some innovative strategies and practices that are total quality management and entrepreneurial leadership that emphasize on integrated quality and approach which leads to organizational performance (Sutrisno, Effendy & Prathivi, 2019). As the trend of the globalization and quality management enhances, total quality management has been earning global value in the business

management. However, there is connection between entrepreneurial leadership (EL) and total quality management (TQM) but still gap exists in research which needs to be explored (Barbosa, Gambi & Gerolamo, 2017). Most of the researchers found significant relationship of EL, TQM and organizational performance through mediation or moderation but still very limited studies have been conducted to test such relationship empirically in the context of SME's in Pakistan. However, few studies highlighted the effect of the entrepreneurial leadership on organizational performance. Consequently, this is imperative research to identify the effect of both TQM and EL on organizational performance in SMEs of Khyber Pakhtunkhwa (KP) and provides in-depth empirical results. This study provides useful analytical results to deal with such hurdles in the future.

SMEs are determined as most effective tools for enhancing economic and social advancements (Sawaeen & Ali, 2020). It is big source of offering employment possibilities to young generation, motivate technological advancements, assists entrepreneurial activities and promote productivity (Haroon & Shariff, 2016). In recent days SMEs are facing new challenges and pressure to cope competitors properly. Hence, there is an intense need to focus on the abilities and skills of the workforce for survival of SME's and their long-term development (Yang, 2018). Now managers of the SME's require comprehending how entrepreneurial leadership and TQM can influence the organizational performance (Sawaeen & Ali, 2020). In this connection, the entrepreneurial leadership enables managers to re-organize their institutions in the way that could make them able to grab the new opportunities and enhance their capability to compete in an unpredictable milieu (Huang, Ding & Chen, 2014). Entrepreneurial leadership and TQM could be used as a hybrid approach with the management philosophy in order to enhance the productivity of the organization. These practices are now taking the lead in the management philosophy to improve the performance of SME's and other organizations (Haroon & Shariff, 2016; Sawaeen & Ali, 2020).

Earlier studies showed that the failure of various SMEs in developing world is often caused by managerial problems. In response to current challenges and to ease firms in getting high level of quality, many organizations are adopting TQM approach and quality initiatives for reaching the constant competitive advantage and improved organizational performance (Talib, Rahman & Qureshi, 2010). In this connection, the literature review shows that no research has examined an integrated approach of these variables as predictor of organizational performance (Abdullah, Razm, & Tan, 2014). The TQM practices are often used in the manufacturing sector and very little focus has been given on relationship of TQM and EL (Nekoueizadeh & Esmaeili, 2013), and its impact on organizational performance. A number of scholars examined association of TQM and organizational performance and found mix results of such relationship like positive, negative and no significant relationship (Nekoueizadeh & Esmaeili, 2013). The previous studies have known relationship of worker engagement with organizational performance, transformational leadership and the visionary leadership with the organizational performance (Mishra & Misra, 2017).

## LITERATURE REVIEW

The philosophy of TQM and organizational performance is widely practiced in manufacturing sector but very minimal focus has been made on its implementation and its impact upon the organizational performance. SMEs are of the great importance specifically in developing nations especially in Asia region (Haroon & Shariff, 2016). SMEs are found as a greater contributor to

the country economic development. SMEs are linked with creating the job prospects, enhance technological innovation and support entrepreneurial activities. This century shifted its focus on EL and TQM approach to encounter challenge of organizational effectiveness (Mishra & Misra, 2017).

### **Entrepreneurial Leadership – Organizational Performance**

A great deal of studies has argued that entrepreneurial leadership has the ability to influence their subordinates to adopt the strategy of entrepreneurship orientation which further leads to business performance. Studies on EL opens gate way especially for SMEs because it comprises of the clear goal setting, generating opportunities and empowering employees for achieving organizational effectiveness (Mishra & Misra, 2017). In this connection, due to the significance of entrepreneurship leadership, some scholars tried to expose its impact on the organizational excellence especially in SMEs. In this linking, it is referred to as a leadership which produces visionary environment that are employed to organize and mobilize a supportive culture for the participants (Rahim et al., 2015). This style of leadership is much needed and an effective one for business performance. In this construction, organizational performance is the capability of an institution to exist and get definite goals and objectives with an appropriate balance of the outcomes and costs. Organizational performance is also considered as the level of success of an organization (Sandybayev, 2019). In this connection, this is a standard way of identifying the common indicator of the economic effectiveness of managerial work. If the outcome is near to the set standard, this effect could be positive and vice versa (Simpson, Padmore & Newman, 2012).

It is termed as a level which the operation accomplishes the performance goals and satisfies the expectations level of the customers. Each firm set economic indicators to reach certain targets (Sandybayev, 2019). Certainly, there are two main types of the organizational performance i.e., operational performance and financial performance. According to Mishra and Misra (2017), the association between EL and organizational performance is of vital significance because this concept is deemed fit in the current business environment categorized by speedy change and ambiguity. This style may give a direction to advance firms to seek tomorrow's opportunities and the level of entrepreneurial traits to change themselves to compete with rivals. Numerous earlier scholars have coined the concept of understanding the important factors that influences the organizational performance in which entrepreneurial leadership termed to be one of the most effective factors (Cascio, Mariadoss & Mouri, 2010; Rahim et al., 2015). An entrepreneur leader behavior can stimulate increasing role of workforce in getting organizational goals and objectives. Few identified link between entrepreneurial leadership and organizational performance being positive and significant (Rahim et al., 2015; Huang et al., 2014; Mgeni, 2015, Nguyen, Huynh, Lam & Nguyen, 2021). Thus, on the basis of above literature, the following hypothesis is developed:

H1: Entrepreneurial leadership has a positive and significant relationship with organizational performance

### **Total Quality Management – Organizational Performance**

TQM is a broad philosophy that involves set of elements encompassing critical success factors, techniques and practices. Altogether these practices assist organization in formulating holistic slant of organization culture to deliver high quality outcome and earning customer satisfaction in their operational process (Salim, Sundarakani & Lasrado, 2019). It is extensively reported in

literature that organizations implementing a quality driven strategy have accomplished greater performance (Akgun et al., 2014; Salim et al., 2019). In this connection, TQM concerns models that specify and establish the profound diversity in the quality today. Its core effect is that all individuals comprising employees, suppliers and customers with the firm contribute to quality management (Salim et al., 2019). A quality award model can give a stringent tool via which a firm may enhance their performance as well as their efficiency in order to create outstanding output.

There are various TQM practices that have been underscored in literature that can affect the organizational performance (Nekoueizadeh & Esmaili, 2013). In general, TQM is management approach that emphasizes on quality issues and motivates employee's participation to attain a long-term success in business (Shan, Ahmad & Nor, 2016). The quality management plays an essential role in any institution, where it has important effect to enhancement of organizational performance for two decades. Kaynak (2003) investigated that TQM result into organizational quality performance and has been significantly correlated to both the financial and operational performance. In same way, Singh, Kumar and Singh (2018) reported that TQM practices leads to better business outcomes. A number of researchers have found the significant and positive correlation amid TQM and organizational performance (Shafiq, Lasrado & Hafeez, 2019; Kaynak, 2003; Tan, 2013; Singh et al., 2018, Yas, Almaghrabi & Othman, 2021). Hence, we hypothesize that:

- H2: TQM has a positive and significant relationship with organizational performance  
H2a: TQM has a positive and significant relationship with the operational performance

### **Total Quality Management - Quality Performance**

TQM and quality management are interdependent. All levels in firms can be improved by quality management system. Output of TQM adoption shows success in enhancing firm's performance in terms of the financial accomplishment and product quality. In other words, it also achieved customer satisfaction (Nekoueizadeh & Esmaili, 2013). TQM supporters also propose that it will produce greater quality products when it comes to implementation in a better way. Quality is also one of the basic factors of success in competitive environments (Deming, 1986; Pucik, 2005). Thus, there is sufficient existing literature that underlined the connection between TQM and quality performance, but still very nominal research is known about the impact of TQM on quality performance. In this linking, So, it is imperative to study such correlation as it provides the theoretical and practical platform to the different sectors including the SMEs in order to get competitive edge (Nekoueizadeh & Esmaili, 2013). In this connection, previous researchers suggested that TQM is a quality-oriented approach which has significant impact on the quality performance (Nekoueizadeh & Esmaili, 2013; Zehir et al., 2012; Prajogo & Sohal, 2003; Prajogo, 2005).

- H2b: TQM has a positive and significant relationship with quality performance

### **Entrepreneurial Leadership - Total Quality Management**

The entrepreneurial leadership and TQM is a combine strategy that is vital for SMEs to attain competitive edge. This hybrid approach logically infers that having entrepreneurial managers have a greater tendency to adopt innovative and high-quality management strategies (Al-Swidi & Mahmood, 2012). In nutshell, businesses that are based on entrepreneurial leadership would have extra eager to implement TQM practices. Thus, the impact of such kind of leadership style

on TQM can lead into better SME's excellence (Ali & Sawaeen, 2019). The adoption of TQM idea will have various hindrances if entrepreneurial leadership is not adopted by the respective managers. This notion is supported by earlier results of Al-Swidi and Mahmood (2012), which denotes that EL and TQM are two things that cannot be dealt separately to construct a viable organizational performance in SMEs. Consequently, indirect relationship between entrepreneurial leadership and TQM has been found by Ali and Sawaeen (2019), and the direct association between these variables is still in question. Previous literature showed mix results about such relationship.

This study is an attempt to test the direct effect of entrepreneurial leadership on TQM. There is clear association between entrepreneurial leadership and TQM, but still there is gap in literature which needs to be addressed about such relationship (Barbosa et al., 2017). In this connection, a number of the studies have revealed a strong positive effect of TQM and EL on organizational performance in the western context (Panuwatwanich & Nguyen, 2017; Qasrawi, Almahamid & Qasrawi, 2017, Yas, Alsaud, Almaghrabi, Almaghrabi & Othman, 2021). In this linking, TQM is accepted globally as effective management approach to develop quality but recent literature also shows that entrepreneurial leadership do effect and energize TQM practices. In this regard, Though, there is less number of empirical studies having been carried out on SMEs in the Gulf countries particularly (Arunachalam, Zwet & Snailum, 2018). Consequently, it was hypothesized that:

H3: Entrepreneurial leadership has a positive and significant relationship with TQM

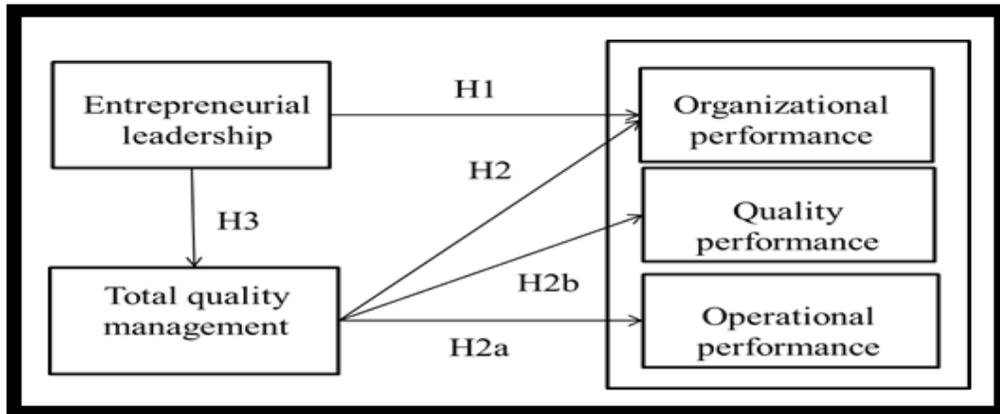
### **Theoretical Framework**

It is clear from past studies that entrepreneurial leadership impact the performance of SMEs and this is especially significant for the different reasons. The resource-based view (RBV) of Wernerfelt, (1984), is considered as the principal agent for the research. This theory proposes that organizational success is identified through its internal resources. This model is supported by the aforementioned theory support in a way that organizational success is determined by organizational internal resources i.e. TQM and EL. Internal and external resources both play a key role to enhance organizational success. Resource based view theory urges on compatibility between the opportunities at hand and the potential of the SME's. So, the main focus of RBV is to ponder the full usage of internal resources to make the core organizational competencies that purpose to get and maintain organizational effectiveness (Sutrisno, Effendy & Prathivi, 2019). The resources can be in the form of either physical and non- physical form or competencies i.e., knowledge and skills. The resource-based theory urges on the availability of opportunities and potential of the firms (Sutrisno et al., 2019). Consequently, this study was also supported by Dynamic-Capabilities theory of Teece et al. (1997) that was an extension of RBV theory of the organization.

This theory investigates how organizations assimilate, build and reconfigure their implicit and explicit organization specific abilities into the new opportunities that align with their unsettled milieu (Olepein, 2015). Dynamic capabilities are erudite and established forms of behavior via which organizations systematically produces and modifies its method of doing things, consequently which can become more effective. The theoretical model has been adapted from the studies of (Ali & Sawaeen, 2019; Nekoueizadeh & Esmaeili, 2013; Shafiq, Lasrado & Hafeez, 2019; Rahim et al., 2015). A total of five constructs are examined in research framework on basis of extensive support from the literature. These variables are EL, TQM and organizational performance with

having quality performance and operational performance. Both the theories fully support study model as entrepreneurial leaders strive to improve quality management and achieve excellence which in turn improves the organizational performance leading to both quality and operational performance.

**Figure 1**  
*Research Framework*



**RESEARCH METHODOLOGY**

Descriptive and multiple regression analysis based on co-variance techniques were tested in this research. This research has chosen 20 SMEs out of which 10 have taken part in the survey with a response rate of above 50%. This study used a survey using standard questionnaire as a basic data collection method. 300 respondents participated in the research by using the simple random sampling. Respondents were divided into two categories i.e., managers and employees of various SMEs located in KP, Pakistan. Five-point Likert scale ranges from strongly disagree to strongly agree was used. The primary data were examined using SPSS to remove the outliers and missing values. Established items were used for data collection from participants. These questionnaires comprised of three major variables to measure perception of the managers and employees like TQM, entrepreneurial leadership and organizational performance (OP) involving operational performance and quality performance. A four number of items were adapted from study of [Chen \(2007\)](#) to measure EL construct. TQM was measured with five items adopted from [Slavkovic and Babic \(2013\)](#). OP was also measured by taking seventeen items along with quality and operational performance from the study of [Slavkovic and Babic \(2013\)](#) and [Truong et al. \(2014\)](#). Reliability and validity of constructs used in study are found above cut-off value of 0.70.

**Assessment of Model Fit**

Various model fit indices (ChiSq/df, GFI, CFI, TLI, NFI, RMSEA & RMR) were used to measure the fitness of model ([Fotopoulos & Psomas, 2010](#)). In this connection, the value of Chi-square/degree of freedom must be less than 3, GFI, CFI, and NFI values should be greater than or equal to 0.9. In this connection, while the values of RMSEA and RMR lies in the range of ≤ 0.08 ([Teo & Khine, 2009](#)). In this drive, table 1 show all goodness-of-fit indices are in acceptable limit.

### Validity and Reliability

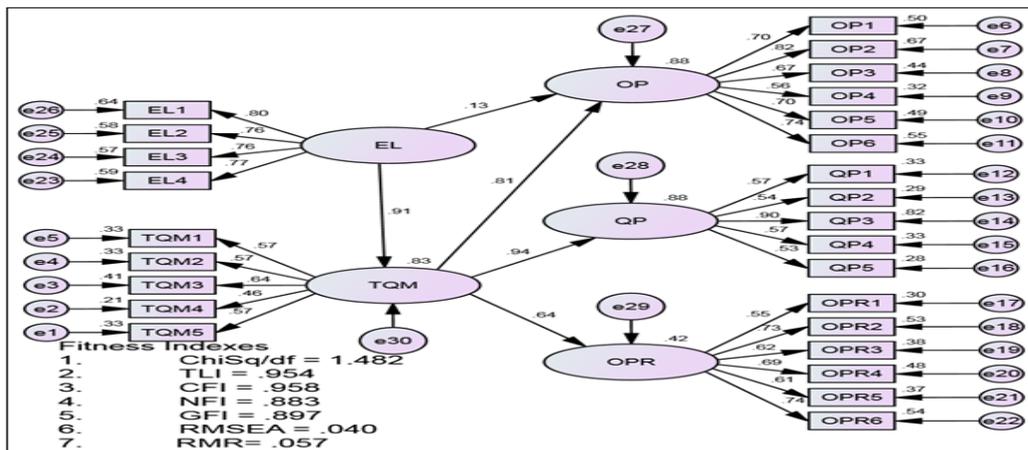
The factor loadings of any variable should be not less than 0.50 (Hair et al., 2010). All items in study have qualified minimum acceptable value. The average variance extracted and composite reliability values of current study are above minimum level of 0.50 and 0.70. Results verify the construct validity and reliability. The table 2 shows values of AVE, CR and factor loadings in detail.

### RESULTS AND DISCUSSION

SEM-AMOS was used to test the hypothesis. Figure 2 and Table 3 presents the standardized regression coefficients of proposed relationships and SEM analysis. H1 indicates relationship of entrepreneurial leadership and organizational performance. The beta estimate,  $\beta = 0.13$  at a significant level,  $P < 0.001$  shows that entrepreneurial leadership does affect the organizational performance. The results are in congruence with earlier studies of (Rahim et al., 2015; Huang et al., 2014; Mgeni, 2015) regarding such relationship. Resultantly, H1 was supported by the empirical data. While, H2, H2a, H2b and H3 hypotheses were supported by the empirical data. The beta estimate and P-value ( $\beta = 0.81$ ,  $P < 0.001$ ) of H2 indicates that TQM has a positive and significant relationship with the organizational performance. The findings are in line with the earlier studies of the (Shafiq, Lasrado & Hafeez, 2019; Kaynak, 2003; Tan, 2013; Singh et al., 2018).

H2a hypothesis was confirmed by the empirical data having beta estimate = 0.64 at significant level of  $p < 0.001$ . The results of this hypothesis are consistent with the past studies of (Kaynak, 2003; Singh et al., 2018). Similarly, H2b was also accepted by data having ( $\beta = 0.94$ ,  $P < 0.001$ ). This hypothesis is consistent with the studies of previous scholars (Nekouezadeh & Esmaeili, 2013; Zehir et al., 2012; Prajogo & Sohal, 2003; Prajogo, 2005). In H3, the current research has hypothesized positive and significant association between entrepreneurial leadership and TQM. Values achieved after analysis are significantly accepting hypothesis ( $\beta = 0.91$  and  $p < 0.001$ ). The findings are in congruence with studies of (Ali & Sawaeen, 2019; Panuwatwanich & Nguyen, 2017; Qasrawi, Almahamid & Qasrawi, 2017). Summary of hypotheses can be seen in Table 3 in detail.

**Figure 2**  
Structural Model



**Table 1**  
*Model Fit Statistics*

Chi -square (CMIN)	435.779
Degree of freedom (DF)	294
CMIN/DF	1.482
Goodness of fit index (GFI)	.897
Root mean square error of approximation (RMSEA)	.040
Residual mean square residual (RMR)	.057
Normed fit index (NFI)	.883
Comparative fit index (CFI)	.958
Tucker Lewis index (TLI)	.954

**Table 2**  
*Factor loadings, CR & AVE*

Constructs	Items	F-Loading	SMC (R2)	(CR)	(AVE)
Entrepreneurial leadership	EL1	.80	.64	.85	.59
	EL2	.76	.58		
	EL3	.76	.57		
	EL4	.77	.59		
Total Quality Management	TQM1	.57	.32	.76	.51
	TQM2	.57	.32		
	TQM3	.64	.41		
	TQM4	.45	.20		
	TQM5	.57	.33		
Organizational Performance	OP1	.82	.50	.85	.50
	OP2	.71	.67		
	OP3	.67	.44		
	OP4	.56	.32		
	OP5	.70	.48		
	OP6	.74	.55		
Quality Performance	QP1	.58	.33	.77	.52
	QP2	.54	.29		
	QP3	.90	.82		
	QP4	.57	.33		
	QP5	.53	.28		
Operational Performance	OPR1	.55	.30	.82	.53
	OPR2	.73	.53		
	OPR3	.62	.38		
	OPR4	.69	.48		
	OPR5	.61	.37		
	OPR6	.74	.54		

**Table 3**  
*Summary of Hypotheses*

Hypotheses Statement of Path Analysis	Estimate	P-value	Results
H1: Entrepreneurial leadership has a positive and significant relationship with organizational performance.	0.13	0.001	Supported

H2: TQM has a positive and significant relationship with organizational performance.	0.81	0.001	Supported
H2a: TQM has a positive and significant relationship with operational performance.	0.64	0.001	Supported
H2b: H2b: TQM has a positive and significant relationship with quality performance.	0.94	0.001	Supported
H3: Entrepreneurial leadership has a positive and significant relationship with TQM.	0.91	0.001	Supported

## CONCLUSIONS

The main stake of this study was to see at impact of TQM and EL on performance of SME's, departing from perceptive theories of Resource base view, TQM and EL which are pondered as one of most influential resources that can assist SME's in enhancing organizational performance (AL-dhaafri & Yusoff, 2013). Based on phenomenon of ambiguity in findings of some earlier studies about such relationship, this study needs to be carried out to empower trust in hybrid approach in accelerating SME's performance particularly in developing countries. Where, the role of entrepreneur largely supports the country economic growth. In developing nations like Pakistan, an integrative approach of entrepreneurial leadership and TQM is necessary to give support to small and medium enterprises. This research has sought a positive and significant correlation among the construct under debate. Based on the results, it can be summed up that SMEs should grip entrepreneurial leadership and TQM enhance their entrepreneur orientation so as to cultivate their capabilities, competitive edge, and overall performance. This research proved that entrepreneur leadership provides the development of the various activities such as innovation strategy, methods and used skills to get advantage from the innovative prospects. The findings signify that the TQM process expand the quality, operational and organizational performance. So, this philosophy should be strengthened in the SMEs for better outputs in the long-term.

These results encouraged the demand for SME's leaders to conceive strategies that emphasize on entrepreneur leadership to be more entrepreneurial in their work to improve TQM, which in respond can result into positive organizational functionality. Entrepreneurial leadership is still a contemporary concept in developing countries and presently not well understood. Therefore, this research will bridge this gap and open new ways for researchers to explore this area as well. This study embarks a conceptual framework which is not only drawing the attention of scholars but will also be fruitful for the academia. In addition, the output of current research has some beneficial implications for both the owners and leaders of firms particularly SMEs in order to assist them in making their organizations effective and could earn high level of sustainability. This study only takes on the entrepreneurial leadership and TQM to apprehend their role in improving the organizational performance. This research has sought a positive and significant correlation among the construct under debate. Nonetheless, the future researcher may use other leadership styles that can have effect on the organizational performance. Future scholars may come up with longitudinal study to achieve more subtle findings. Future studies can examine the same framework in the different contexts and settings to generalize the findings. The future practitioners may also consider the role of the mediation or moderation concept among these constructs.

## REFERENCES

- Abdollahi, H., Razm, K., & Tan, H. (2014). TQM and market orientation's impact on SMEs & performance. *Management Science Letters*, 4(5), 887-892.
- Akgün, A. E., Ince, H., Imamoglu, S. Z., Keskin, H., & Kocoglu, İ. (2014). The mediator role of learning capability and business innovativeness between total quality management and financial performance. *International Journal of Production Research*, 52(3), 888-901.
- Ali, K. A. M., & Sawaeen, F. (2019). The Impact of Entrepreneurial Leadership, TQM Practices, and Innovation Management on Organizational Performance of SMEs in Kuwait.
- Al-Swidi, A. K., & Mahmood, R. (2012). Total quality management, entrepreneurial orientation and organizational performance: The role of organizational culture. *African Journal of Business Management*, 6(13), 4717-4727.
- Arunachalam, S., Zwet, A., & Snailum, N. (2018). TQM Model for Manufacturing SMEs in the Middle East. *I manager's Journal on Management*, 12(4), 32-40.
- Barbosa, F. M., Gambi, L. N., & Gerolamo, M. C. (2017). Leadership and quality management—a correlational study between leadership models and quality management principles. *Gestão & Produção*, 24(3), 438-449.
- Cascio, R., Mariadoss, J., & Mouri, N. (2010). Impact of management commitment alignment on sales persons' adoption of sales force automation technologies: An empirical investigation. *Industrial Marketing Management*, 39(2010), 1088-1096.
- Chen, M. (2007). Entrepreneurial leadership and new ventures: Creativity in entrepreneurial teams. *Creativity and Innovation Management*, 16(3), 239-249.
- Cho H, Pucik V. (2005). Relationship between innovativeness, quality growth, profitability and financial performance. *Indian Marketing Management Journal*, 26, 555-75.
- Fotopoulos, C. B., & Psomas, E. L. (2010). The structural relationships between TQM factors and organizational performance. *The TQM Journal*, 22(5), 539-552.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: a global perspective*. Englewood Cliffs, NJ: Prentice-Hall.
- Haroon, U., & Shariff, M. N. M. (2016). The interplay of innovation, TQM practices and SMEs performance in Pakistan: moderating effects of knowledge inertia and external environment. *Economics and Law*, 9(2), 57-62.
- Huang, S., Ding, D., & Chen, Z. (2014). Entrepreneurial Leadership and Performance in Chinese New Ventures: A Moderated Mediation Model of Exploratory Innovation, Exploitative Innovation and Environmental Dynamism. *Creativity and Innovation Management*, 23(4), 453-471.
- Kaynak, H. (2003). The relationship between total quality management practices and their effects on firm performance. *Journal of operations management*, 21(4), 405-435.
- Mgeni, T. O. (2015). Impact of entrepreneurial leadership style on business performance of SMEs in Tanzania.
- Mishra, P., & Misra, R. K. (2017). Entrepreneurial leadership and organizational effectiveness: A comparative study of executives and non-executives. *Procedia computer science*, 122, 71-78.
- Nekoueizadeh, S., & Esmaili, S. (2013). A study of the impact of TQM on organizational performance of the Telecommunication Industry in Iran. *European online journal of Natural and Social Sciences*, 2(3 (s)), pp-968.

- Nguyen, P. V., Huynh, H. T. N., Lam, L. N. H., Le, T. B., & Nguyen, N. H. X. (2021). The impact of entrepreneurial leadership on SMEs' performance: Mediating effects of organizational factors. *Heliyon*, 7(6).
- Olepein, R. E. (2015). Quality Management Systems and Organization Performance. MBA Thesis. Thesis. Kenyatta University.
- Panuwatwanich, K., & Nguyen, T. (2017). Influence of Total Quality Management on Performance of Vietnamese Construction Firms. 7th International Conference on Engineering, Project, and Production Management. *Procedia Engineering*, 182, 548 – 555.
- Prajogo, D. I. (2005). The comparative analysis of TQM practices and quality performance between manufacturing and service firms. *International Journal of Service Industry Management*, 16(3), 217-228.
- Prajogo, D. I., & Sohal, A. S. (2003). The relationship between TQM practices, quality performance, and innovation performance. *International Journal of Quality & Reliability Management*, 20(8), 901–918.
- Qasrawi, B., Almahamid, S., & Qasrawi, S. (2017). The impact of TQM practices and KM processes on organisational performance: An empirical investigation. *International Journal of Quality & Reliability Management*, 34(7), 1034-1055.
- Rahim, H. L., Zainal Abidin, Z., Mohtar, S., & Ramli, A. (2015). The effect of entrepreneurial leadership towards organizational performance. *International Academic Research Journal of Business and Technology*.
- Salim, T., Sundarakani, B., & Lasrado, F. (2019). The relationship between TQM practices and organisational innovation outcomes: Moderating and mediating the role of slack.
- Sandybayev, D. (2019). Impact of Effective Entrepreneurial Leadership Style on Organizational Performance: Critical Review. Bagheri, A.(2017). Impact of entrepreneurial leadership on innovation work behavior and opportunity recognition in high-tech, 47-55.
- Sawaeen, F., & Ali, K. (2020). The mediation effect of TQM practices on the relationship between entrepreneurial leadership and organizational performance of SMEs in Kuwait. *Management Science Letters*, 10(4), 789-800.
- Shafiq, M., Lasrado, F., & Hafeez, K. (2019). The effect of TQM on organisational performance: empirical evidence from textile sector of a developing country using SEM. *Total Quality Management & Business Excellence*, 30(1-2), 31-52.
- Shan, A. W., Ahmad, M. F., & Nor, N. H. M. (2016, November). The mediating effect of innovation between total quality management (TQM) and business performance. In IOP Conference Series: Materials Science and engineering (Vol. 160, No. 1, p. 012011). IOP Publishing.
- Simpson, M., Padmore, J., and Newman, N. (2012). Towards a new model of success and performance in SMEs. *International Journal of Entrepreneurial Behavior and Research*, 18(3), 264-285.
- Singh, V., Kumar, A., & Singh, T. (2018). Impact of TQM on organisational performance: The case of Indian manufacturing and service industry. *Operations Research Perspectives*, 5, 199-217.
- Slavković, M., & Babić, V. (2013). Knowledge management, innovativeness, and organizational performance: Evidence from Serbia. *Economic annals*, 58(199), 85-107.
- Sutrisno, T. F., Effendy, J. A., & Prathivi, M. D. (2019). Hybrid Strategy Study: The Role of Entrepreneurial Orientation and Total Quality Management in MSMEs. *Jurnal Manajemen Dan Kewirausahaan*, 7(2), 124-131.

- Talib, F., Rahman, Z. and Qureshi, MN (2010), "The relationship between total quality management and quality performance in the service industry: a theoretical model", *International Journal of Business, Management and Social Sciences (IJBMS)*, MultiCraft, 1(1), 113-128.
- Talib, F., Rahman, Z., & Qureshi, M. N. (2010). The relationship between total quality management and quality performance in the service industry: a theoretical model.
- Tan, Boon-In. (2013), "TQM adoption and organisational performance of family owned businesses: a literature review and proposed structural model." *International Journal of Modelling in Operations Management*, 3,1: 1-19.
- Teo, T., &Khine, M. S. (2009).Structural Equation Modeling in Educational Research: Concepts and Applications. Retrieved 08 October 2010, from Sens Publisher.
- Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 5, 171–180.
- Yang, C. C. (2018). The effectiveness analysis of the practices in five quality management stages for SMEs. *Total Quality Management and Business Excellence*, 0(0), 1–23.
- Yas, H., Alsaud, A., Almaghrabi, H., Almaghrabi, A., & Othman, B. (2021). The effects of TQM practices on performance of organizations: A case of selected manufacturing industries in Saudi Arabia. *Management Science Letters*, 11(2), 503-510.
- Zehir, C., Ertosunb, O. G., Zehir, S., &Müceldillid, B. (2012). Total Quality Management Practices Effects on Quality. *Social and Behavioral Sciences*, 41, 273-280.