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## Total Quality Management and Business Excellence

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### Abstract

All companies around the world aim to reach excellence in their work. Thus, successful companies keep following scientific and technological advancement to improve their business. Thus, new notions must be presented, mainly through vast companies that usually have been inactive and vulnerable to international competition, and are located in states of constant transition. Moreover, companies have to adopt an effective management system that can enhance the company and carry it to sustainability. A system takes into account the quality and stakeholder's satisfaction. Total quality management (TQM) is deemed as a strategic procedure permitting the accomplishment of business excellence (BE). The authors conducted a research on 354 Palestinian companies, by using a questionnaire filled by the managers, to exploring the relationship between TQM and business excellence through employing the structural equation modeling utilizing a statistical package of smart PLS. Findings demonstrate a positive linkage between applying the fundamentals of TQM and business excellence. This result indicates that the execution of TQM principles in a company will improve the performance of the company and increase the ability to excellence their business.

**Keywords:** Total Quality Management (TQM), Business Excellence (BE).

### Introduction

Achieving business excellence is an essential endeavor for all companies around the world. In the age of globalization, science and technology development, quality has become an important factor for achieving competitive advantage. Ionică, Băleanu, Edelhauser, and Irimie (2010) have indicated that quality management represented as a revival in the management of institutions and companies with a concentration on excellence. Since companies want profitable growth, they intend to determine, transmit, and apply, best practices to gain an outstanding performance. This can be done by designing systems to share preferable practices in the company in order to reach business excellence. Moreover, Business Excellence (BE) is deemed as an organized usage of quality management principles and instruments in managing the business, with the target of enhancing the organization performance by using the basics of stakeholder value, customer concentration, and process

management. Accordingly, excellence approaches trace their roots to TQM (Chen & Jang, 2011).

Total Quality Management (TQM) is considered as the most common and continuous concepts of administration or management (Bouranta, Psomas, & Pantouvakis, 2017). TQM as a management process for a quality-focused organization in which all workforces are involved to ensure long-term organizational development and success. This goal may be possible through customer satisfaction. TQM, as a management model, has been accepted by a lot of organizations around the world (Suleman & Gul, 2015). The Quality Movement originated with the Quality Improvement Project in commercial companies around the world. Total quality management is a tactical philosophy, embraced by the company and implemented continuously, even if the company is waiting for the implementation of a novel venture. The culture of total quality differs from firm to firm and from industry to industry (Asad, Chethiyar, & Ali, 2020). Notwithstanding of its differences, it seeks to fulfil the joint objectives: reduce cost, enhance fame and reputation, and increase market portion. By this method, the overall quality goals are efficient, and this demands a continual updating (Dikko, 2013). Consequently, it is clear that embracing of Total Quality Management is the most prominent strategic decisions that can drive to business excellence in the Palestinian firms that are striving to remain and preserve market competitiveness in the countenance of the economic plight. TQM can enhance the performance of the company and increase its ability to succeed.

In developing countries, there is a lack of empirical studies in the TQM (Abu-Aysheh, 2014; Mosadeghrad, 2015; Talib, Asjad, Attri, Siddiquee, & Khan, 2019), and BE studies especially in Palestine that have a lack of effective management system (Dawabsheh, Hussein, & Jermisittiparsert, 2019; Herzallah, Gutierrez-Gutierrez, & Munoz Rosas, 2014). Thus, highlight the need for this study. Accordingly, this study aims to;

- Determine the influence of Total Quality Management on business excellence.

In this study, stakeholder theory was used to study the relationship between TQM and business excellence. Since it is compatible with TQM (Sila, 2018), and business excellence depends on the satisfaction of all stakeholders around the business.

## **Literature Review**

In the present study, the literature review focuses on two dimensions of interest: total quality management and business excellence.

### **Total Quality Management (TQM)**

Total quality management is a strategy used to improve the efficiency and quality of goods and services to increase customer satisfaction (Qasrawi, Almahamid, & Qasrawi, 2017), with the dynamic involvement of the staff of all works and levels within the company. Most large companies use it in practice (Imran et al., 2018). Moreover, TQM strives for continuous improvement in all parts of the company. It has a considerable significance in how companies run their business, which constitutes a prime alteration. Friedman (2008) has indicated that TQM can be complicated and take a long time since the goals of TQM are to terminate squandering, enhance quality, decrease lead times, reduce expenses, improve staff confidence, and continual development.

Various dimensions of TQM were identified by the researchers (Ahire, Golhar, & Waller, 1996). For instance, leadership, process management, supplier management, customer focus,

information & analysis, strategic planning, and human resource management (Sila & Ebrahimpour, 2005).

TQM is the most crucial path to competitive edge. Agus (2011) has emphasized the importance of TQM in assisting the top management in making strategic decisions. In the same context, Juran (1992) has stated that the focus of TQM is on gaining companies competence regarding income growth, market portion, and pure profit. TQM processes should be developed and improved, and the variation should be controlled to guarantee high quality, in a way that enhances the business success.

### **Business Excellence (BE)**

According to Zink (1998), business excellence is considered as a new understanding of the quality system as well as a dynamic participant in the improvement of the quality system and business. Also, BE strategies, and quality systems are essential components of the business concept (Cobb, 2003) that drive to developed business outcomes (Dale, Bamford, & Van der Wiele, 2016). Designing, creating, implementing, and evaluating these strategies requires a rethinking of how companies operate.

According to Arasli (2012), business excellence means superior in doing work and continually improving employee, systems, processes, and companies in a competitive environment. Companies around the world are adopting BE frameworks to guide the strategy of their business and continuous improvement. Moreover, BE is defined as a high level of accomplishment of the company in terms of management and achievement of results. The genuinely excellent companies are those that strive to satisfy their owners with what they achieve, how they perform it, as well as with what they can access, and with the certainty that the results obtained will be preserved in the future. To achieve business excellence, equal importance must be given to both the measurement of non-financial and financial success, rather than focusing on the financial perspective only (Zdrilic & Dulcic, 2016).

Finally, According to Zdrilic and Dulcic (2016), BE is related to the integrated approach to managing the company's performance which leads to the provision of progressive values to clients and stakeholders continuously, hence, participating in firm sustainability, growing firm effectiveness and capacities and organizational and personal learning. Most previous studies (Jankal, 2014; Jankalova, 2013; Stofkova, Strícek, & Stofkova, 2016; Vartiak, 2016) and others indicated that BE should be adopted by any company that wants to succeed because BE represents a crucial concept.

### **Total Quality Management and Business Excellence**

Adebanjo (2001) pointed out that Business Excellence Models (BEMs) are created based on the principles of Total Quality Management, and quality and excellence should live together. Moreover, it has proven that excellence is partly responsible for the increased demand for quality. Other researchers have stated that BEM has expanded the narrow concept of quality-oriented management of total quality into that of comprehensive management (Kim, Kumar, & Murphy, 2010). Indeed, many researchers over the years have proven through their research that adopting models of excellence will help achieve and maintain excellent performance at all levels of the institution (Akyah, Sumerli, & Uygur, 2013).

Total Quality Management (TQM) is currently updated to become a model widely known as the Business Excellence Model (BEM) (Gómez, Martínez Costa, & Martínez Lorente, 2017). Most approaches to excellence go back to the roots of Total Quality Management. The concept of excellence itself, as described in most Business Excellence Models (BEM), is more

comprehensive than previous TQM models. Specifically, business excellence ensures the full integration of improvement activities in the company (Porter & Tanner, 2012).

Generally, a company that adopts Total Quality Management usually benefits from the principles of total quality to fulfil business excellence. In the company, upper, midst, and operational management will work with each other to meet stakeholders' needs.

According to Luqman, Azam, and Aamir (2018), the company's performance positively and significantly influenced by TQM. Moreover, TQM practices have a considerable connection with organizational performance. Total quality management also had a positive and important impact on organizational excellence (Dawabsheh et al., 2019).

Accordingly, the company's performance and business excellence will be significantly influenced. Therefore, the following hypothesis is displayed for examination.

H: There is a significant effect between TQM and business excellence.

### Research Model

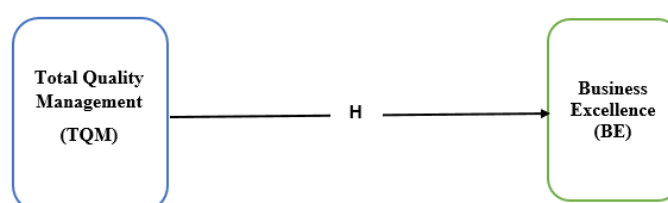


Figure 1: The Research Model

### Research Methods

The present study used a quantitative path. The quantitative path utilized the methodology based on surveys, and the reason for framing the quantitative research design for the current study is that it assists the researchers in examining a vast sample of participants precisely and then generalizes their responses.

### Participants and Sampling Design

Questionnaires were sent to managers of variant kinds of companies operating in Palestine. From 400 questionnaires distributed, 354 managers filled and back their questionnaires. Most of the respondents were top managers. In light of the hypothesis of the current study, researchers have explored the relationship between TQM and business excellence.

### Measures

In this current study, the researcher utilized and employed a 7-point Likert scale that ranged from one (strongly disagree) to seven (strongly agree). The data obtained by surveys were uploaded to Microsoft Excel, IBM SPSS, and Smart-PLS. To measure TQM (50) items were used adapted from (Ahmed & Ali, 2016; Al Shobaki & Abu-Naser, 2017; Rosa & Amaral, 2007; Sayyad, 2017); also, ten items were used to measure business excellence were adapted from (Gourlay & Stevenson, 2017; Tambi, 2000; Vijaya Sunder & Antony, 2018).

### Analysis

PLS-SEM, which is a powerful technique for analyzing data on social matters and problems, was performed as a statistical instrument in the present study. PLS-SEM is a two-step equation and represents two assessments they are the inner model and the outer model assessment (Hair, Hult, Ringle, & Sarstedt, 2016). In Smart-PLS, after gaining the reliability and



validity findings of each construct, the results of the structural model is necessary to test in order to examine the hypotheses. The initial step for data analysis was the inspection of validity and reliability. Composite reliability and Cronbach's alpha were tested. The acceptable value for Cronbach alpha is considered 0.70, and also the threshold level 0.70 as mentioned for composite reliability by Hameed, Basheer, Iqbal, Anwar, and Ahmad (2018). Moreover, the convergent validity and internal consistency were found by analyzing the average variance extracted (AVE), and factor loadings. The values of AVE and loadings factor must be more than 0.5 (Basheer, Siam, Awn, & Hassan, 2019). Additionally, to examine the external consistency, the discriminant validity was used.

**Table 1: Validity and Reliability**

	<b>Cronbach's Alpha</b>	<b>Composite Reliability (CR)</b>	<b>Average Variance Extracted (AVE)</b>
<b>BE</b>	0.972	0.983	0.849
<b>TQM</b>	0.962	0.99	0.912

As shown in table 1, the values of Cronbach's alpha are above the benchmark value of 0.7 for the two constructs, which means that the constructs reached the reliability level. And also the composite reliability was reached. Moreover, the average variance extracted (AVE) values are more than the 0.5; consequently, the convergent validity was confirmed.

The interrelationship between reflective variables and their indicators is examined by using the discriminate validity. The result of evaluating the discriminant validity of this study is displayed in table 2.

**Table 2: Discriminant Validity**

	<b>Business Excellence</b>	<b>TQM</b>
<b>BE</b>	<b>0.922</b>	
<b>TQM</b>	0.129	<b>0.955</b>

According to Compeau, Higgins, and Huff (1999), the average variance shared between each construct and its measure should be higher than the variance shared between the constructs and other constructs. The square root of AVE is tabulated in table 2; all ingredients are lower than square roots of AVE (bold on the diagonal). Thus, the discriminant validity was confirmed with Fornell and Larker's criterion.

### Finding

PLS-SEM bootstrapping was used to analyze the data and test the proposed hypothesis. The results are shown in Table 3.

**Table 3: Direct Effect**

<b>Hypothesis</b>	<b>Relationship</b>	<b>Direct Effect (<math>\beta</math>)</b>	<b>Standard Error</b>	<b>T Stats</b>	<b>P Values</b>
<b>H</b>	<b>TQM <math>\rightarrow</math> Business Excellence</b>	<b>0.116</b>	<b>0.045</b>	<b>2.55</b>	<b>0.010</b>

The results in table 3 shows that  $\beta = 0.116$ ,  $t\text{-value} = 2.55$  and  $p\text{-value} = 0.010$ , showed that hypothesis (H) of the study is supported. Accordingly, the TQM has a considerable and positive effect on BE at 5% level of significance.

### Discussion

The present study discussed the relationship between TQM and BE in a direct correlation. The results emphasized and supported the hypothesis that TQM has a positive influence on BE. This result is consistent with previous studies such as; (Alhih & Tambi, 2020; Dawabsheh et al., 2019; Shafiq, Lasrado, & Hafeez, 2019) and other researchers in the side of TQM and BE. TQM is a system that can improve the implementation of any management system that can lead the company to reach excellence in its work. In reality, continuous improvement, excellent leadership, and the focus on their stakeholders around the company will lead to business excellence. Moreover, business excellence could develop and create a great beneficial impact (Sulaiman, Deuraseh, Ab. Wahab, & Masruki, 2019) in the business environment.

### Conclusion

The present study extends the literature on the relationship between Total Quality Management and business excellence. Total quality management stated as a rebirth in the management of the organization with a concentration on excellence. TQM is not just a philosophy but also a comprehensive management method for the organization that depends on continuous development and improvement to meet explicit and implicit clients and stakeholders' expectancies.

Business excellence is the excellence in all stakeholder-related business practices and performance outcomes validated through evaluations based on specific models that are proven to support the challenging journey towards excellence. In this side Total Quality Management itself is now called business excellence model, BE is the same as TQM. Moreover, TQM models are often called Business Excellence Models. The results of this study indicate that the execution of TQM principles in a company will improve the performance of the company and increase the ability to excellence their business. Finally, as knowledge of the authors, this study is among a few studies on this topic, and it will be useful to managers, experts, researchers, academics, and other decision-makers. Future research can include other factors besides TQM that can effect on business excellence.

This study contributes to the theory of TQM by incorporating the idea of meeting stakeholder requirements and business excellence. Finally, in the Palestinian context, this study lays a base for further studies in this area. The Palestinian companies can achieve better business results and increase their competitiveness.

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