



Relation between Total Quality Management Practices and Business Excellence: Evidence from Private Service Firms in Jordan

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ABSTRACT

This study examines the extent of total quality management (TQM) practices implemented by private service firms and their impact on organisational excellence. Its importance derives from the major contribution of the private sector to the economy. TQM practices concerning leadership, human resource focus, process management, customer focus, and information and analysis found to have a positive effect on organisational excellence in the firms surveyed. This is the first study to examine the case of private sector firms offering specialized services, focusing on the King Abdullah II Award for Excellence for the Private Sector. It will thus provide a model for private firms to improve their performance and motivate them to adopt TQM practices. It also provides a conceptual model for use by other researchers.

Keywords: Total Quality Management Practices, Excellence, Private Service Firms, King Abdullah II Award for Excellence, Competitiveness
JEL Classification: Z00

1. INTRODUCTION

All levels and sectors of the Jordanian economy have been negatively impacted by regional conflicts and instability in the Middle East following the Arab Spring of 2011. Markets were lost and economic growth slowed to 2.4% in 2015 compared with 3.1% in 2014, while unemployment rose to 13.0% in 2015. Jordan has a mixed economy in which the private sector plays an important role, employing 55% of the national labour force, so to boost economic growth it is essential to nurture an enabling environment in which private-sector responsiveness and competitiveness can improve. The King Abdullah II Award for Excellence for the Private Sector (KAAEPS) was established in 1999 as the country's highest standard of quality and excellence recognition. Its aim is to improve the competitiveness of Jordanian businesses by promoting quality awareness and performance excellence King Abdullah II Centre for Excellence (2017). This study examines the implementation in the private service sector of total quality management (TQM) practices as a tool for excellence, intended to enhance the competitiveness of the private sector. A review

of the relevant literature affirms a positive relationship between firm excellence and TQM practices in areas such as leadership, human resource focus, process management, customer focus, strategic planning and information and analysis (Kaynak, 2003; Bayazit and Karpak, 2007). This study aims to shed light on the importance for the Jordanian private sector of TQM practices, particularly those covered by the KAAEPS, and to use statistical analysis to investigate the relationship between TQM practices and organisational excellence.

2. LITERATURE REVIEW

Huq (2005) defines quality as a change effort that targets improvements in many parts of the organization. TQM is an organisational strategy to improve performance by delivering high quality products and services (Mosadeghrad, 2014; Nawelwa et al., 2015; Pandi et al., 2009). A high level of organisational performance can be achieved through teamwork, customer-driven quality and improvements in inputs and processes (Mosadeghrad, 2006). Garvin (1987) identifies seven different components of

quality: Performance, suitability, reliability, endurance, utility, aesthetic and credit, while Nawelwa et al. (2015) stated that the key elements of TQM are synergistic relationships, continuous improvement and self-evaluation, a system of ongoing process and leadership. Niu and Fan (2015) observed that adopting quality management programmes in any business can be affected by internal and external factors, along with the characteristics of the enterprise. Internal factors include predicted income/revenue, strategy, employees' competencies and other material resources (Miller and Hartwick, 2002), while examples of external factors are competition, market pressure and customers' preferences. The implementation of quality programmes can also be affected by factors such as social pressure (Westphal et al., 1997), legal requirements and business regulations (Pil and Rothenberg, 2003; Qui and Tannock, 2010).

Quality management and excellence are straightforward programs where both require organisations to implement or adopt specific principles and practices (Brown, 2014). Dahlgaard et al. (2013) stated that the most dominating business excellence models that are widely adopted by many countries as a ward programs have been disseminating quality management. Business excellence rests on five mutually necessary pillars: Process management, project management, change management, knowledge management and resource management, according to Harrington (2005), who adds that organisations must focus on these in order to achieve enduring change. Attaining excellence is highly dependent on organisational structure (Brown, 2014). The two most commonly adopted structures are the organic and mechanistic models (Spencer, 1994). Furthermore, organic structures support teamwork, problem solving and change, which lead ultimately to sustainable quality and excellence. Vora (2013) argues that the implementation of business excellence requires proper change management, whereas the prerequisites identified by Bolboli and Reiche (2013) are organisational integration, suitable strategy, availability of external resources and knowledge, human factors and organisational adaptability. An alternative and longer list of the factors on which the adoption of a business excellence model offered by Spring Singapore (2010). These factors are top management support and commitment, open communications, proper change management, staff readiness, teamwork, disciplined and determined staff, appreciation and recognition, and a continuous improvement culture. Ringrose (2013) proposes an organisational excellence framework based on the analysis of the four-most common excellence award frameworks, which are the European Foundation of Quality Management (EFQM) excellence model, the Malcolm Baldrige National Quality Award (MBNQA) Program in the USA, the Australian business excellence framework and the Canadian quality and healthy workplace criteria. Very recently, there were around 100 business excellence models worldwide (Talwar, 2011), the majority of them are inspired by either the MBNQA or European Foundation for Quality Management frameworks (Escrig and de Menezes, 2016). Many scholars examined business excellence models and investigated the relationship between quality management and performance where they found a positive relationship (Hendricks and Singhal, 2001; Boulter et al., 2013; Corredor and Goni, 2011). While other scholars have considered the relationship between business excellence and TQM. For

instance, Dahlgaard-Park (2011) asserts that they are essentially interchangeable and Adebajo (2001) states that "business excellence" has been used as an alternative term to TQM since the mid-1990s, whereas Wang and Ahmed (2011) argue that they are distinct despite their similarities. During the last two decades, there has been substantial research and case studies such as Talwar (2011), Blazey (2011), and Mohammad et al. (2011) showing how business excellence models can impact organisational strategy, and how top management in many organisations are using business excellence models results in their planning process to identify areas of improvements. Studies on business excellence models tend to focus on developed countries with little concern on developing economies Arumugam et al. (2008). Since it has been shown that business excellence performance can change according to national economy (Haffer and Kristensen, 2008).

3. HYPOTHESES AND THE PROPOSED MODEL

One of the key elements of the EFQM' model is leadership (Terouhid and Ries, 2016; Calvo-Mora et al., 2015) an effective leadership style is one that leaders use to motivate employees and therefore increase their competitiveness (Bass and Rigio, 2006; Luftman, 2004). An effective leadership style is necessary to promote standards of excellence in the professional development of the members of an organisation (LaRue et al., 2006). The top leader attitude and behaviour has been considered and proved as one of the key drivers towards achieving total quality and enhancing organisational performance (Juran, 1986; Puffer and Macarthy, 1996). Rao (2016) commented that companies should explore the role of soft leadership in achieving organisational excellence and effectiveness. Therefore, the researchers have come up with the following hypothesis:

H₁: Leadership has a significant positive effect on organisational excellence.

The level of competitiveness has increased for most organisations in recent years because of globalisation, so in order to survive they must find ways of managing their people to improve their performance in the marketplace (Busienei, 2013). It is widely believed that performance is improved by adopting various HRM practices such as resourcing activities, job design, employee participation and empowerment, team-based production systems, extensive employee training and performance-contingent incentive compensation (Busienei, 2013; Dessler, 2008; Knoke and Kalleberg, 1994). The broad consensus among previous studies is that employees must be well trained to improve their proficiencies. Effective training will augment employees' knowledge and their ability to learn, thus strengthening their loyalty to the firm, their motivation and their work performance, which will enhance organisational performance and boost customer satisfaction, although some researchers report negative or insignificant results Rungtusanatham et al. (1998). To be effective, training must cover operational performance Kaynak, (2003), Phan et al. (2011), inventory management performance (Phan et al., 2011), employee performance (Fuentes et al., 2006; MacKelprang et al., 2012),

innovation performance (Phan et al., 2011; Kim et al., 2012), customer results (Das et al., 2000; Phan et al., 2011), market and financial performance, Fuentes et al. (2006) and aggregate firm performance (MacKelprang et al., 2012). Wirtz et al. (2008) found that human resource management practices in the form of superior recruitment and selection process, extensive training and retaining, reward and recognition programs enabled Singapore airline's company to deliver successful service excellence. Terouhid and Ries (2016) argued that organisational excellence can be achieved through human resource development and training that enhances organisational capability. Therefore, and based on the aforementioned literature, the researchers assume that people management is one of the main factors affecting quality performance and can facilitate the implementation of business excellence in Jordanian firms. Hence, the second hypothesis is:

H₂: Human resource management has a significant positive influence on organisational excellence.

Organisational excellence is linked to good process management to ensure that processes are aligned with the organisation's strategic goals. Good process management is the starting point for good performance. Improving business process management is highly adjacent to quality management practices such as TQM and business process re-engineering (Bahar, 2016). The relationship between operations and results has been explored by many scholars, and in view of the business excellence models as frameworks for enhancing quality and performance, this relation has been confirmed by different frameworks adopted. For example, researchers who concentrated on EFQM, Bou et al. (2009) and Heras et al. (2012), whereas, others focused on MBNQA Karimi et al. (2014) and He et al. (2011), but both found a strong association between process/operations management and excellence. Harrington (2005) regarded process management as the first pillar of the five key pillars suggested of organisational excellence. Thus, the researchers come up with the third hypothesis, which is:

H₃: Process management has a significant positive effect on organisational excellence.

Customer focus is a major concern for most organisations. Sharma and Kodali (2008) stated that organisations, which targeted at customer satisfaction where all tasks, actions and procedures, are driven towards achieving customer happiness, which is unlike classical companies where cost and efficiency are dominant. It is essential to maximize the quality of the products and services offered, so firms must be obsessed with quality. This can be ensured by planning well for quality and by knowing the customers' needs. Customer loyalty and customer value are mediated by customer satisfaction (Flint et al., 2011; Hüttinger et al., 2012; Lam et al., 2004). Therefore, in order to achieve high performance and excellence, organisations must pay attention to their customers' satisfaction first and identify what needs to be done internally, such as investigating and measuring customer satisfaction, enhancing a customer responsive culture, implementing a reliable feed-back loop and continues evaluation to ensure its success (Peters, 1988; Steeples, 1992). In their study on a theoretical

framework for service excellence model, Sekhon et al. (2015) stated that innovation and customer are important antecedents for service excellence in retail banking products. Based on the above-mentioned importance of customer satisfaction towards achieving organisational excellence, it is obvious that there is a relationship between customer focus and performance. Thus, the fourth hypothesis is created:

H₄: Customer focus has a significant positive effect on organisational excellence.

Juran and Gryna (1993) define strategic quality planning as "a structured process for establishing long-range quality goals, at the highest levels of the organisation, and defining the means to be used to reach those goals," while Krumwiede and Charles (2006) reiterate the importance of top management's involvement in strategic planning, which allows firms clarify their priorities for action and resource allocation. Business strategies must fit with the organisation's goals and objectives in order to achieve competitive advantage and enhance high performance (Ross, 1999). Zott and Amit (2008) have found that strategy typically aims at increasing organizational performance.

The TQM practitioner must appreciate the leadership's future vision, translate this into strategy development, and then turn strategy into reality (Sila and Ebrahimpour, 2005). The MBNQA model of TQM addresses strategic planning by noting the need to take account of organisational sustainability and competitiveness (NIST, 2010). The Baldrige model also postulates a positive association between strategic planning for quality on one hand and quality information and analysis on the other (Wilson and Collier, 2000). Many studies were conducted to investigate the relationship between business strategy and organisational performance such as; Parnell (2010); Kim et al. (2004) who found a positive correlation between business strategy and organisational performance. Afthonidis and Tsiotras (2014) found that strategic plan helps enterprise to survive and strengthen its position in the market and regarded it as appropriate technique for attaining business excellence. Likewise, Aladwan and Forrester (2016) examined the challenges that face leaders in the public sector in Jordan when implementing programs in business excellence. They found that poor strategic planning, poor integration, shortage of financial resources, and lack of employee empowerment are the main challenges that face leaders when implementing business excellence. Therefore, the researchers have set the following hypothesis to investigate the relationship between business strategy and organisational performance within the context of the current research.

H₅: Strategic planning has a significant positive effect on organisational performance.

Data and information are very important in a competitive marketplace, both internally and externally. It is vital for an organisation to gain access to information resources and to collect useful data. Of equal importance to the development of excellence is the appropriate and accurate analysis of the data that have been gathered (Makadok, 2001; Barney, 2002; Russo and Fouts, 1997).

Loke et al. (2010) argued that decision making in manufacturing is highly contingent on quality and timely information. Moreover, Teh et al. (2009c) confirmed this and argued that timely and accurate and reliable information can minimize conflict among employees and reduce ambiguity. From knowledge sharing perspective, Tan et al. (2010) identified high-level correlation between quality and knowledge sharing between employees. TQM focused organisations are expected to adopt and use new technologies to facilitate the process of information efficiently (Chong et al., 2010). Therefore, and based on the above, the researchers assume that there is a relationship between information analysis and excellence in the studies firms, thus they have formed the sixth hypothesis.

H₆. Information and analysis have a significant positive effect on organisational excellence.

Figure 1 shows the roles of the above hypotheses in the proposed model of the relationship between TQM practices and organisational performance.

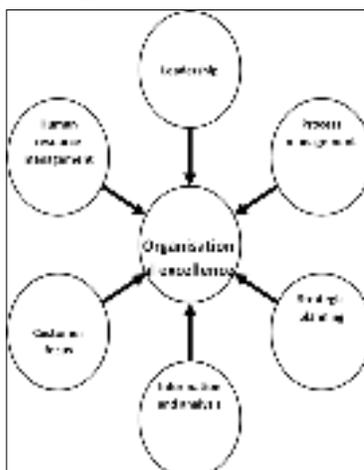
4. RESEARCH METHODS

This study targeted employees of private sector service firms in Jordan, which practised TQM and held TQM certificates. The researchers personally contacted 23 such firms and encouraged them to participate in the study. The 14, which agreed to participate, were small, medium and large firms, with 50-800 employees each, offering services in industries including banking, healthcare, education and telecommunications. The total of 5760 employees of these participating firms formed the final study population. The researchers personally selected the study sample and distributed questionnaires to the 450 randomly selected employees. Of the 324 questionnaires, which were returned, 38 were discarded for missing data, leaving 286 questionnaires usable as a representative sample for the statistical analysis.

4.1. Measurement of Variables

Following Sit et al. (2009) and Lau and Idris (2001), the survey instrument measured TQM practices on six dimensions, namely leadership, human resource focus, process management, customer focus, information and analysis, and strategic planning.

Figure 1: Research model



focus, strategic planning, and information and analysis. Each of these practices was represented by 5 items, giving a total of 30 statements with which respondents had to express their degree of agreement. The measurement of organisational excellence was derived from a review of previous studies.

(Harrington, 2005; Mele and Colurcio, 2006). Fifteen items were developed to measure the main themes under this construct, such as excellence in organisational structure, culture, employees, leadership and strategy.

5. RESULTS

5.1. Respondent Profile

Demographic data shows that 60.8% (n = 174) of respondents were male and 39.2% (n = 112) were female, which reflects a relatively strong representation of females in private service firms, since the overall female contribution to the workforce in Jordan is only 17% (www.esc.jo). Most of the respondents (n = 240) were under the age of 40. As to length of service, 59.3% had worked for their current employer for <10 years, while 40.7% had more than 10 years' service. A large majority (82.9%, n = 237) had bachelor level qualifications or higher. Finally, 28.8% of respondents were managers or heads of division in these services firms.

5.2. Statistical Description of Variables

The mean scores for research variables 1-7 listed in Table 1 indicate that on the whole, the service firms included in this study practiced high levels of three TQM factors (leadership, customer focus and strategic planning) and scored above the mid-point in the remaining three (human resource focus, process management, and information and analysis).

Table 1 also shows the correlation (r-value) between research variables. The results indicate that there was a positive and significant correlation between these variables. It is important to note that if the correlation between independent variables exceeds 0.90, there is a multicollinearity problem (Hair et al., 1998). Here, the highest correlation value (between leadership and information and analysis) was 0.69; therefore, there is no multicollinearity problem in these data. Internal consistency reliability was assessed by means of Cronbach's alpha, the highest value of this coefficient being 0.94 for organisational excellence and the lowest 0.72 for customer focus, which indicates that Cronbach's alpha values for all scales used in this study were acceptable (Sekaran, 2003).

6. TESTING OF HYPOTHESES

Table 2 shows the results of multiple regression of the effect of TQM dimensions on organisational excellence.

Before using multiple regression test, variance inflation factor (VIF) was conducted to examine multicollinearity, the values of (VIF) for our data ranged from 1.13 to 1.63. This result indicated that multicollinearity did not exist in our data. The results in Table 2 show that TQM dimensions had a strong positive and significant effect on organisational excellence in private services

Table 1: Mean, SD, correlation and Cronbach's alpha for research variables

| Variables | Mean±SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---------------------------|-----------|--------|--------|--------|--------|--------|--------|--------|
| Leadership | 3.89±0.79 | (0.87) | | | | | | |
| Human resource focus | 3.65±0.70 | 0.44** | (0.82) | | | | | |
| Process management | 3.45±0.75 | 0.68** | 0.47** | (0.77) | | | | |
| Customer focus | 3.83±0.72 | 0.60** | 0.51** | 0.68** | (0.72) | | | |
| Strategic planning | 3.92±0.71 | 0.52** | 0.48** | 0.71** | 0.69** | (0.78) | | |
| Information and analysis | 3.58±0.91 | 0.69** | 0.47** | 0.74** | 0.58** | 0.62** | (0.85) | |
| Organisational excellence | 3.70±0.81 | 0.75** | 0.63** | 0.74** | 0.71** | 0.72** | 0.75** | (0.94) |

**Correlation is significant at the 0.01 level; Cronbach's alpha values in parentheses. SD: Standard deviation

Table 2: Multiple regression results

| Variables | Organisational excellence coefficient (β) | t-value | Significant (P) |
|--------------------------|---|---------|-----------------|
| Leadership | 0.265 | 3.620 | 0.000 |
| Human resource focus | 0.251 | 7.009 | 0.000 |
| Process management | 0.218 | 4.280 | 0.000 |
| Customer focus | 0.133 | 2.135 | 0.034 |
| Strategic planning | 0.061 | 0.735 | 0.463 |
| Information and analysis | 0.249 | 5.023 | 0.000 |
| F- value | 143.112** | | |
| R ² | 0.75** | | |

n=286, **P<0.001

firms in Jordan. Together, these dimensions explain 75% of the variance in organisational excellence in these firms. In more detail, the results support five of the six hypotheses.

H₁, which predicts that leadership has a positive effect on organisational excellence in private services firms in Jordan, is supported by the results ($\beta = 0.265$, t-value = 3.620, $P < 0.001$). These results confirm that leadership does have a strong positive influence on organizational excellence in service firms in the private sector in Jordan.

Similarly, H₂ predicts that human resource focus has a significant positive effect on organisational excellence. The results confirm this by revealing a strong positive regression coefficient ($\beta = 0.251$, t-value = 7.009, $P < 0.001$). Therefore, H₂ is supported: The focus on human resources in private firms in Jordan has a positive influence on their organisational excellence.

H₃ implies that there is a significant positive effect of process management on organisational excellence in private service firms in Jordan. The results confirm that process management ($\beta = 0.218$, t-value = 4.280, $P < 0.001$) has a positive effect on service firms. Thus, H₃ is supported. It seems that process management fosters organisational excellence in the service firms.

H₄, which asserts that customer focus has a significant positive effect on organisational excellence in private service firms in Jordan, is also supported by the results ($\beta = 0.133$, t-value = 2.135, $P < 0.001$). This means that the organisational excellence of service firms in the private sector in Jordan is indeed promoted by their focus on customers.

Finally, H₆ predicts a significant positive effect on organisational excellence of information and analysis, which is supported by the findings ($\beta = 0.249$, t-value = 5.023, $P < 0.001$). The results confirm that information and analysis had a strong positive influence on

organisational excellence in service firms in the private sector in Jordan.

The remaining hypothesis is not supported by the results, however. H₅ predicts a significant positive effect of strategic planning on organisational excellence, but the results ($\beta = 0.061$, t-value = 0.735, $P > 0.001$) disconfirm this prediction and H₅ is rejected. Strategic planning in private firms in Jordan is not shown to have a significant positive influence on organisational excellence.

7. CONCLUSIONS

The main aim of this study was to investigate the effect of TQM practices on organisational excellence within the context of Jordanian private service firms. The findings in the firms surveyed, showed a positive effect by TQM practices on organisational excellence. This effect is pertinent to leadership, human resource focus, process management, customer focus, strategy and information and analysis. It is clear from the results that excellence in private service firms can be achieved when their leaders accurately make the right management decisions and when they commit to the implementation of quality practices and programmes. With regards to HR focus, the results indicate that focusing on HRM will enhance organisational excellence in private service firms. This result highlights the need for such firms to nurture excellence by ensuring that their HRM practices are effective. This effectiveness could be attained by robust recruitment and selection Wirtz et al. (2008), training and development (Terouhid and Ries (2016). The findings also show that organisational excellence requires proper process management practices of TQM in service firms; process management is a key driver of excellence. A fourth critical factor in promoting organisational excellence in private service firms in Jordan is shown to be customer focus. Finally, the information and analysis dimension was found to be a predictor of organisational excellence. It seems that aspects of this construct such as knowledge management and performance

management contribute to the achievement of organisational excellence. Theoretically, the results highlight the role of TQM practices in enhancing organisational excellence in private service firms in Jordan. Thus, this study contributes to knowledge and to the existing literature in the field of organizational excellence and TQM practices in developing countries.

The study provides valuable information, which will help decision makers in private-sector service firms in Jordan to recognize TQM practices that promote organisational excellence. Decision makers and practitioners should pay close attention to the roles of leadership, human resources, information and analysis, process management and customer focus in achieving excellence in service firms. Furthermore, in order to maintain excellence once achieved, these practices should be exposed to regular revision and improvement.

8. LIMITATIONS AND FUTURE RESEARCH

This study has several limitations that should be noted. First, it employed across-sectional design. The relationships between variables may change over time; therefore, a longitudinal design is suggested for further studies to validate the present results. Second, participation in the study was limited to private service firms holding a TQM certificate. Future research should cover firms in other industries such as manufacturing and organisations in the public sector. A third feature of this study was its broad focus on all managerial levels. Future researchers may consider examining the views of top managers in particular, to gain further insight into the role of TQM practices in organisational excellence. Finally, the study depended on a questionnaire survey to obtain information. Future research should use observation and interviews to minimise the reporting bias inherent in using a questionnaire only.

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