DEVELOPING AND VALIDATING THE TQM FRAMEWORK IN THE SULTANATE OF OMAN AGRICULTURE AND FISHERIES CONTEXT

Rashid Hamdan Rashid Al Shehhi,
S. M. Ferdous Azam
Postgraduate Centre (PGC),
Management and Science University,
University Drive, Off Persiaran Olahraga,
40100 Shah Alam, Selangor,
Malaysia

Abstract:
In the current time, the business environment is far away from being static since it is continuously going through and experiencing changing situations. Therefore, a company needs to perform multiple tasks to produce the products or services they offer. One individual cannot perform this. Therefore, the entire operation depends on the combination of the right people with the right qualification to do the job well. Hence, the primary objective of this study was to investigate the dimensions of TQM in the Sultanate of Oman Agriculture and Fisheries context. A self-administered questionnaire was developed basing on the literature review. A random sampling method was used to select the samples for this study. All the questions were tested for reliability, validity and unidimensionality through confirmatory factor analysis. Finally, SEM analysis was carried out to test the proposed model for TQM. This study proposed five sub-constructs for TQM. Therefore, proper TQM policies need to identify which will lead any organisations towards success.

JEL: O13; Q10; Q15; O10

Keywords: TQM strategy, employee retention, employee assessment, employee management, and TQM developments

1. Introduction

In recent time, TQM is seen as “the available qualities and energies of people who are available to an organisation as potential contributors to the creation and realisation of the organisation’s mission, vision, strategy and goals” (Boselie et al., 2009, p. 464). Gardner and Wright (2009) have termed TQM as “the pattern of planned quality management developments and activities
intended to enable an organisation to achieve its goals.” (p. 58). A further study conducted by Nishii and Wright (2008) have noted TQM as “a general approach to the management of quality management by the intentions of the organisation on the future direction it wants to take. It is concerned with long term people issues as part of the management processes of the business.” (p. 226). According to Deb (2006), “TQM is the process by which an organisation ensures that it has the right number and right kind of people, at the right place, at the right time, capable of effectively and efficiently completing those tasks that will help the organisation achieve its overall objectives.” (p. 76).

The need for management of quality and experts in the organisation is imperative (Azam and Moha Asri, 2015; Tham et al., 2017; Udriyah et al., 2019). Project management (PM) has as of late been the objective of expanding intrigue and is thought to be a strategy by which organisation can meet the requests that are connected with expanded multifaceted nature (Nilsson & Ellström, 2011). Employees with specific knowledge or experts in their field of knowledge are considered qualified individuals (Haque et al., 2014; Rachmawati et al., 2019; Tarofder et al., 2019). Initiatives to retain them in organisational must be put high consideration by the top management.

Top management has a vital role in determining the loyalty of an individual in an organisation. Project management is considered as one of the five critical areas faced by quality management’s profession (Vaiman, Scullion & Collings, 2012). Hence, quality management needs to identify the potentials and the capability of employees that can benefit the organisation for competitive advantage. When these qualified individuals are overlooked, they might be hired by their competitors in the same area of business which can cost the organisation dearly (Azam et al., 2014; Haur et al., 2017; Tarofder et al., 2017; Katukurunda et al., 2019). Challenges currently facing in retaining the workforce have brought the management of top companies and organisation to project management. Values and money had been significantly invested in recruiting, retaining and developing qualified individuals in order for significant contribution to performance.

In many of research in the area of project management, scholars have paid attention to several key areas (Jayasuriya and Azam, 2017; Dewi et al., 2019; Nguyen et al., 2019). Issues that are focused on such as quality conceptualisation, project management degree of inclusivity, demand and supply of quality forecast, project management and business strategy alignment and project management and total quality management differences. There are still many gaps in addressing the area of project management as in various industries; the focus might be different either on a specific issue or multiple issues at one time. The government agencies, as well as the private companies, have lots of responsibilities to adhere to project management principles in order to increase not only the profits but also human capital development.

From this fact, the investment in quality management became an essential part of the organisations’ strategies in order to be able to compete globally (Maghfuriyah et al., 2019; Pushpakumara et al., 2019). Therefore, it is necessary to pay attention to the qualified human elements in contemporary organisations as it is the most critical
elements of excellence and success. Besides, changes and developments in technology and economy create new issues in the field of quality management as the organisation alone cannot deal with these challenges without considering an investment in qualified human capital.

2. Literature Review

Organisations realise that intellectual capital or corporate quality is a valuable asset that can be managed as effectively as physical assets in order to improve performance (De Silva et al., 2017; Kuruwitaarachchi et al., 2019; Pambreni et al., 2019). The focus of project management is connecting people, processes and technology to leverage corporate quality. The database professionals of today are the quality managers of the future, and they will play an integral role in making these connections possible. With the help of this study, a further contribution to better success assessments of project management should be supplied.

Project management is the most important new concepts in management field. Project management is the process of acquisition, career planning and retaining through attracting, selecting, rewarding, developing and retaining employees. Organisations have given more attention and focus on the project management concept in order to develop and increase the skills, knowledge and abilities of their employees. The importance of this study rests on addressing the relationship between TQM and project management that increases organisational success in Oman.

Fundamentally, a company needs to perform multiple tasks to produce the products or services they offer (Glaister et al., 2017; Haur et al., 2017; Tarofder et al., 2017; Katukurunda et al., 2019). One individual cannot perform this. Instead, group efforts are needed to accomplish that task. Therefore, the entire operation depends on the combination of the right people with the right qualification to do the job well (Hassan, 2007). Thus, the HR department has a significant role to play here. Basing on the situation, the HR department then divides these activities into two functions namely of job analysis and job design to build team spirit among employees (Hutzschenreuter, 2009).

Any organisation is responsible for employees’ training activities to develop employees’ efficiency that is needed for the overall development of the organisation (Cadwallader et al., 2010). Thus, organisations strive toward upholding the goal of ensuring that organisations do train every employee in developing their skills that increase their commitment towards the organisation (Cania, 2014). This ensures that the newly skilled and qualified quality management will satisfy the managerial needs which are ensured by providing adequate training and development opportunity to the employees of the organisation (Cassoni, & Labadie, 2013). However, what sorts of training and developments are needed entirely depends on the organisation’s needs and wants (Maloney, 1997). Therefore, based on the requirements and future needs, organisations do decide the specific training and developments for their employees.
For companies, the measures of employee performance are focused on how employees are performing their jobs despite different categories. Despite the merits of the financial and accounting measures, in evaluating any industry employee performance, it is more on cost-based and regressive looking for providing the industrial motivation (Mittelman, 1991). The top management takes steps to adjust income with expenses to make a balance between them which is heavily demanded supporting resources and lowering price to increase the competitive levels (Longenecker & Fink, 2012). This might consider the undertaking of continuous improvement programs for enhancing organisational value (Mohamad & Lo, 2009). With this understanding, employee performance can be analysed, which applies to any industry.

As such, they are taking care of the employees can improve their performance that will ultimately improve organisational performance both in terms of financial and non-financial performance (Yeung & Berman, 1997). Effective staff management can generate information about how to utilise its quality management towards improving the financial position and performance of organisations (Cania, 2014). Hence, top management should be careful in improving staffs’ performance by providing various incentives regularly (Rhee, Zhao & Kim, 2014; Zhu et al., 2008). Hence, TQM is responsible for the overall management of the employees who ensure employees are updated on their work knowledge to keep up with the ever-increasing needs and demands to satisfy the customers. Based on the above discussion, the identified critical elements of TQM are tabled below (Table 1).

<table>
<thead>
<tr>
<th>Author</th>
<th>Key Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noe et al., 2010; Silva, 2014; Paauwe, 2009; Wood, 2009; Yeung &amp; Berman, 1997; Haque et al., 2014; Rachmawati et al., 2019; Tarofder et al., 2019</td>
<td>TQM Strategy</td>
<td>Hiring and firing the right number and right kind of people, at the right place, at the right time</td>
</tr>
<tr>
<td>Alagaraja, 2013; Bashir &amp; Khattak, 2008; Boxall &amp;Macky, 2014; Boxall &amp; Purcell, 2008</td>
<td>Employee Retention</td>
<td>Keeping the right people whose service is required by the company</td>
</tr>
<tr>
<td>Cadwallader et al., 2010; Cheng &amp; Robertson, 2006; Cokins, 2009; Hassan, 2007; Huselid, 2011; Sheehan, 2014</td>
<td>Employee Assessment</td>
<td>Ensuring the right compensation and benefits for employees through proper employee performance assessment</td>
</tr>
<tr>
<td>Dave &amp; Wayne, 2005; Dearden et al., 2006; Lin &amp; Chen, 2007; Boselie et al., 2009; Nankervis et al., 1999</td>
<td>Employee Management</td>
<td>Efficiently manage employees in completing their tasks that are needed to achieve the organisation’s overall objectives</td>
</tr>
<tr>
<td>Leopold &amp; Harris, 2009; Purcell &amp; Kinnie, 2007; Raj &amp; Kothai, 2014; Rhee et al., 2014; Youndt et al., 1996; Haque et al., 2014; Rachmawati et al., 2019</td>
<td>TQM Developments</td>
<td>Manage the entire quality management and other activities to develop the entire organisation</td>
</tr>
</tbody>
</table>
3. Methodology

A self-administered questionnaire was developed basing on the literature review. However, few items were also being adapted from the existing scales on TQM. After adapting, all the items were modified according to the study requirements to make those fit for Oman context. The target respondents were the employees working at different Agriculture and Fisheries industries in Oman. A random sampling method was used to select the samples for this study. Before that, the respondents were asked their willingness to participate in this survey, and only those who voluntarily agreed were given the questionnaire.

All the questions were tested for reliability through a pilot study (Sekaran & Bougie, 2016). Respondents were asked to correct or suggest any needed changes in the items to ensure that all the items are readable and understandable by the respondents. Besides, experts were asked for their suggestions on the items to achieve content validity. Finally, the output from the pilot study was compared with existing scales to achieve criterion validity. All scaled items were in interval scales. This study used a five-point Likert scale. The questionnaire was divided into two sections. The first section consisted of questions to obtain information on the demographic background of the respondents. Section two consisted of the items to discover the dimensions of TQM. This study used Cronbach’s alpha as a measure of reliability and to calculate the consistency of the research items and to exclude the extreme responses. By doing so, it helped to determine whether the respondents’ feedback is reliable or not. Secondly, construct reliability assessed through confirmatory factor analysis (CFA).

3.1 Data Analysis

The data collected from the respondents were run into SPSS to do the analysis, and all the results have been presented in this section. This section gives a clear picture of all the analysis, which has been conducted and testing the hypothesis that has been formulated for this study.

From the total respondents, 62.6 per cent of respondents were male while female respondents answered 37.4 per cent of the questionnaires. The result showed the distribution between male and female respondents. Base on the question answered, 6.7 per cent of the respondents come from respondents aged between 0 to 25 years old. Another 37.7 per cent come from people aged between 26 to 35 years old. 39.1 per cent of respondent fall between the age of 36-45 and the rest 16.5 per cent falls in the age of 46 and above. Base on the question answered, 20.2 per cent of the respondents is unit heads. Another 71.7 per cent are line managers, and the rest 8.1 per cent belongs to the top management. The questionnaire in this study had been distributed among the locals as well as to the foreigners who are living in Oman. The majority of the respondents are locals. Out of the 297 respondents, 64.6 per cent of them is locals. Foreigners consist of 35.4 per cent that includes respondents from many different countries. This reflects the popularity of Oman to the foreigners as a preferred job location.
Descriptive analysis was carried out for all the attributes of TQM, project management and organisational success. To achieve the discriminant validity, this study first needed to conduct measurement modelling. In order to be significant, the inter co-relationship among variables should be less than 0.85 (Hair et al., 2010). Furthermore, SEM analysis was carried out to test the proposed model for TQM. Output indicates that all the TQM sub-constructs’ path value is higher than 0.20. Besides, the goodness of fit for the TQM model shows that it has achieved the required fitness value \[\text{Incremental fit (CFI) = .952, (GFI) = .939; Parsimonious fit (ChiSq/df) = 3.334; and Absolute fit (RMSEA) = .044}\]. Thus, it ensures that all the sub-constructs are significant indicators of TQM.

The finding also supports the empirical evidence on the relationship between TQM and project management. Many authors also identified that it is better to manage the entire quality management and other activities to develop the entire organisation (Cadwallader et al., 2010; Deb, 2006; Gardner & Wright, 2009; Ian et al., 2004; Leopold & Harris, 2009; Purcell & Kinnie, 2007; Raj & Kothai, 2014; Youndt et al., 1996). Nishii and Wright (2008) noted that TQM is the way to guide its people towards achieving the organisation’s future goal. Therefore, this is a job of TQM to efficiently manage employees in completing their tasks that are needed to achieve the organisation’s overall objectives.

The finding of this study supports past evidences (Guthridge et al., 2008; Minbaeva & Collings, 2013; Nilsson & Ellström, 2011; Vaiman et al., 2012; Whelan et al., 2010) where the authors argued that qualified individuals are considered to deliver and perform or believed to have to deliver on higher contribution to the organisation compared with other employees, in whatever position or sector in any industry. However, as this study was conducted on the Agriculture and Fisheries in Oman where the employees consist of different backgrounds and expertise, hence, managing quality in this type of diverse industry with thousands of staffs will be very challenging. Moreover, the next section will be discussing other perspectives as well.

4. Conclusion

This study proposed five sub-constructs for Total quality management (TQM) namely; TQM strategy, employee retention, employee assessment, employee management, and TQM developments. All the constructs were extracted based on the literature review. Those were found most suitable for the Saudi Agriculture and Fisheries. The primary objective of this study was to investigate the relationship between TQM and project management towards organisational success in the Oman Agriculture and Fisheries context. Katou (2008) pointed out that identifying the exact mechanisms is crucial to understand the relationship between TQM practices and organisational success. This is because business strategies are defined in line with organisational goals and objectives (Vermeeren et al., 2014). Therefore, proper TQM policies need to identify which will lead any organisations towards success.
However, in larger organisations, it is not an easy task to manage its employees. This will have a more significant variation in the output compare to a smaller organisation. This is because large organisations may be more likely than small ones to have well-developed TQM policies. Also, capital intensity, industry and degree of unionisation also influence the values and development of the organisation. Hence, these elements will help to better understanding the linkage between TQM and its subconstructs in the Oman Agriculture and Fisheries context.

In modern time, the importance behind the assessment of success evaluation has heightened as a result of globalisation and its effects. Globalisation has indeed drastically increased competition between organisations and traditional industries specifically in well-built Agriculture and Fisheries markets. Therefore, this particular study intends to analyse and acquire a detailed insight in regards to the relationship between TQM and PM in the Oman Agriculture and Fisheries. Notably, this study holds the purpose of gaining a detailed understanding of the relationship that is taking place between TQM and PM that leads to the success of organisations. It anticipates investigating which determinant is the most important when it comes to organisational success. The potential implications and recommendations of this study are discussed from methodological, empirical, and practical standpoints.

From the practical viewpoint, this study has collected data from the employees working in different Agriculture and Fisheries companies in Oman and further tested through structural modelling. This empirical evidence has significantly contributed to the understanding of the relationship between TQM and project management towards organisational success. Every company should understand that project management is the most important concepts in management that deals with the acquisition, career planning and retaining through attracting, selecting, rewarding, developing and retaining employees. Hence, organisations should give more attention and focuses on the project management concept in order to develop and increase the skills, knowledge and abilities of their employees. The importance of this study rests on addressing the relationship between TQM and project management that increases organisational success in Oman through the structural modelling that has been presented in this study. Hence, empirically, this study tested the proposed model; thus, contributed to the development of a new framework on the relationship between TQM and TM that increases organisational performance in the Oman Agriculture and Fisheries perspective.

Methodologically, there is a lack of a proper mechanism by which TQM is related to project management (Treblay et al., 2010; Yeung & Berman, 1997). Therefore, this study filled this research gap in the Oman context. This study has developed a reliable and valid measurement tool to measure TQM and its relation to project management and organisational success. This study has provided such guidance to the academics as well as to the practitioners.

From the practical posture, the outcome of this particular research intends to provide the academics and management authorities working in the Agriculture and
Fisheries companies in Oman with an opportunity and strategy for adequately managing and handling their quality management and turning them into their success factors. At the same time, it will also facilitate the managers in creating and modifying their organisational policies and rules regarding quality management recruitment, selection, training and development. As such, the findings will serve as an essential guideline for TQM for ameliorating employee motivation and also retaining employees with high potential and quality, in the setting of Oman.

References


