Project to improve knowledge management and key business results through the EFQM excellence model

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Abstract

There is a growing interest in knowledge management as a strategic weapon, although the debate continues over which are the most effective models for its implementation. In this context, the main objective of this study is to analyse the potential of the EFQM Excellence Model to design and implement a knowledge management project (KMP) which improves the key results of the business. To reach the objective, a sample was used which consisted of 225 companies with experience in EFQM evaluations. The partial least squares structural equation modelling approach was used to test the model. The results show how the EFQM Excellence Model can be a valid framework upon which to implement a KMP. In addition, the use of process methodology and the involvement of suppliers and partners are key factors for KMP to have a significant impact on the key results of the business.

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1. Introduction

The economic and business reality has changed much over the last decade. As Bueno Campos (2009) indicates, we are in the era of knowledge, in which this resource is the most important productive factor that organisations must manage. Their survival depends, to a large extent, on the knowledge that they possess and their ability to generate, retain, transfer and operate the capabilities of people; that is, to manage knowledge. In this context, organisations have the need to implement systems to manage their knowledge with the objective of increasing their competitive capacity. A knowledge management system (KMS) is a set of infrastructures and tools that support knowledge management activities (Alavi and Leidner, 2001). They are something more than information systems, since they must provide a context that facilitates the creation, transfer and application of knowledge. Meso and Smith (2000) differentiate between technical infrastructure (information technologies) and that of a social and cognitive nature (organisational structure, human resources and culture). In practise, the implementation of KMS is not free from obstacles (Lee and Choi, 2003) as it requires important organisational and technological changes. In this sense, it can be appropriate for organisations to use other management systems that have already been consolidated, such as those of total quality, which serve to support initiatives of knowledge management (KM) (Adamson, 2005; Ju et al., 2006).

Total quality management (TQM) is a comprehensive management philosophy oriented towards achieving excellent results in relation to stakeholders (Prajogo and McDermott, 2005). In order to attain these results, it is crucial to be able to count on the commitment and involvement of all the people within the organisation, as well as the use of certain management tools, techniques and practises (Din et al, 2011; Rahman, 2004).

Different frameworks exist to implement the principles and practises of TQM. Yusof and Aspinwall (2000) differentiate three types: (1) those based on experts or gurus of quality (Deming’s 14 principles, Juran’s Quality Trilogy, and Crosby’s Absolutes of Quality Management Principles); (2) the excellence models or quality awards (Deming Prize, the Malcolm Baldrige National...
Quality Award—MBNQA, or the European Quality Award—EFQM model; and (3) those extracted following theoretical and/or empirical research or measurement studies (Anderson et al., 1994; Flynn et al., 1994; Saraph et al., 1989), Bou Llussar et al. (2009) and Calvo-Mora et al. (2014a) point out how the use of the excellence model guarantees that the management practises employed, form a coherent system.

In Europe, the EFQM Excellence Model is the best-known and most widespread reference when introducing and improving a TQM system. This model establishes the organisation’s strategy and allows the managers to understand the cause–effect relationships which exist between what the organisation does (enablers’ criteria), and the results that it achieves (results’ criteria).

The aim of the EFQM Excellence Model is to support organisations to achieve business excellence through continuous improvement, learning and innovation. This involves using a mixed methodology which includes self-assessment and external evaluation processes (undertaken by independent experts) to give validity to the initial diagnosis made by the organisation itself. Information is gained from these processes about what the organisation is doing to achieve its objectives, how its plans, planned programmes and processes are developing, what resources and alliances it has to reach its objectives, as well as the impact that its actions have had on its principal stakeholders (EFQM, 2003). The level of excellence can only be diagnosed by the contextualisation and detailed analysis of the information, which is the starting point for the production of the action, improvement and learning plans.

The implementation of the EFQM Excellence Model allows knowledge to be obtained about the degree of development, effectiveness and efficiency of the internal management processes (Calvo-Mora et al., 2014a; Weske, 2007). Furthermore, it favours the implementation of a methodology for the monitoring, control and improvement of the processes in a systematic manner (Asif et al., 2013; Molina et al., 2007; Ooi, 2009). Performance improvement also depends on the indispensable strengthening of the external alliances and relationships which the organisation has with suppliers, distributors, customers and other strategic partners. These alliances and relationships generate synergies and increase the opportunities for the exploitation and exploration of new ideas and knowledge (Daud and Yusoff, 2011; Ju et al., 2006; Molina et al., 2007). The information about the previously mentioned factors (Knowledge, Process methodology and management, Supplier/partner management and Key results) cannot be obtained by means of the traditional or vertical analysis of the EFQM Excellence Model, that is to say, by analysing each criterion independently when these factors are related to other criteria of the Model in a horizontal or transverse manner. The horizontal Reading of the EFQM Excellence Model through the transversal axes is not as obvious as the vertical, but it is a powerful tool for analysing concepts important to the organisation (Fernández-Santos et al., 2010). Within the present study this horizontal or transverse perspective is used to analyse the possible start-up of a knowledge management project (KMP). This will begin with the information and knowledge that the organisation obtains from its internal processes and from its main partners and external collaborators. Finally, the effectiveness of the KMP is examined through the impact on the key results of the business, both operational and strategic.

The literature contributes evidence of relationships between quality management and KM practises. These relationships have been analysed taking as reference the ISO 9000 family of standards (Lin and Chuni, 2005; Marcus and Naveh, 2005; Molina et al., 2004; Tang and Tong, 2007) and some TQM principles and practises (Honarpour et al., 2012; Hsu and Shen, 2005; Ooi, 2009; Ribière and Khorraramshahgol, 2004). However, there is a lack research that empirically analyses the suitability of the EFQM Excellence Model as a reference framework for a KMP implementation. Neither have studies been identified that use the horizontal reading of the EFQM Excellence Model as a basis for making a diagnosis about KM and the later development of improvement and strengthening plans.

For that reason, the present study poses the following research questions:

1. Can the organisations which institute TQM develop a KMP using the experience provided by assessment through the horizontal reading of the EFQM Excellence Model?
2. Are the critical factors of process, supplier and partner management of TQM useful for strengthening a KMP start-up?
3. Does the KM process, in the EFQM Model framework, affect the key strategic and operational results of organisations?

In order to answer the proposed questions, this paper is organised as follows. Firstly, the literature on KM and EFQM Excellence Model is analysed. Secondly, the research model and the hypotheses are presented. This is followed by the research method and results. Finally, the conclusions are presented and the limitations and further research of the study are described.

2. Theoretical background and hypotheses

2.1. The EFQM Excellence Model

Organisations need to establish an appropriate management system to achieve success, irrespective of the sector, size or structure. Here, the EFQM Excellence Model sets out a practical and non-prescriptive management system that allows organisations to (Suárez et al., 2014): (1) prepare a basic structure for the design, implementation and improvement of a comprehensive management system; (2) evaluate their position on the path towards excellence, identifying their strengths and weaknesses as a starting point for the establishment of strengthening and improvement plans; (3) prepare a common framework and language that favours effective communication within the structure and (4) systematically integrate the strategic planning and interest group orientation into their management.