ISSN:2229- 6247

A Theoretical Perspective View on the Relationship between the EFQM Excellence Model and Innovation Activities in the Public Sector in the United Arab Emirates

Hamzah Altamony
(DBA Candidate, Excellence & OD Advisor, and EFQM Trainer)
SBS Swiss Business School. www.hamzaaltamony.com

Abstract

This research proposes a theoretical perspective on the relationship between the EFQM Excellence Model and innovation activities, based on an extensive literature review. The outcomes suggest that the EFQM framework for innovation activities describes the success criteria for innovation activities and maps them to the EFQM Excellence Model, which ensures a balanced and comprehensive method to enforce the organization's strategy. In addition, innovation activities are the essential element for an organization to gain knowledge in this new century. Innovation activities can enhance the efficiencies and effectiveness of production. While EFQM model practices are correlated with innovation, technological abilities and learning also further mediate the relationship.

Keywords: EFQM, Excellence Model, and Innovation

1. INTRODUCTION

Nowadays, growing competition in manufacturing sectors creates unprecedented challenges for both international and domestic businesses. This is due to an extremely competitive environment, which has dramatically changed because of enhanced technology and globalization trade. Consequently, each attempt at organizational excellence and innovation plays a critical role in establishing the enterprise as demonstrating sustainable, competitive advantages (Alshurideh et al., 2012; Kanaan & Gharibeh, 2013; Hajir et al., 2015; Vratskikh et al., 2016). However, much of the existing research fails to consider the mediator effect in their analyses. Current research explores the connection between business excellence, innovation and overall performance of the enterprise primarily based on innovation activities. While excellence is essential, it is nevertheless inadequate in today's industry (Hoang et al., 2006). Moreover, the key factor many corporations use to measure sustainable, aggressive benefit has been modified from excellence to innovation (Soreshjany & Dehkordi, 2014). Consequently, innovation is considered one of the most important criteria to implementation (Al-Dhaafriand & Al-Swidi, 2016). Nevertheless, several researchers consider the information technology (IT) and its flexibility as an enabler to achieve the desired competitive advantages, and as a crucial support to operational and strategic business processes (Shannak & Akour, 2012; Masa'deh, 2013; Kateb, et al., 2015; Maqableh, et al., 2014, 2015; Almajali, et al., 2016; Tarhini et al., 2016). With each technological and human measurement, EFQM practices enhance the organizational culture and environment to better support innovation (Soreshjany & Dehkordi, 2014). Therefore, it is essential to adopt EFQM practices to create an environment for innovation and develop new services and products to meet clients' requirements (Soreshjany & Dehkordi, 2014). It is also essential to analyze these innovations to more clearly distinguish between EFQM practices and a commercial enterprise's overall performance and ability to compete in the worldwide marketplace. To determine the impact of the mediating variables, the EFQM Excellence Model is used as a framework for studying an organization's innovation activities.

The graphic structure of the EFQM model (Gómez et al., 2015) indicates that enablers' criteria influence the results criteria. The reasons and impact for this relationship are clear. Garcia-Bernal et al. (2004) suggest that organizations must recognize that in order to improve economic performance, the interrelationship of the involved factors must to be taken into consideration. Therefore, an improvement to only some criteria does not necessarily result in an improvement in performance. However, an improvement to all criteria would enhance performance. Similarly, Naylor (1999) indicates that attaining fulfillment in only specific areas is not always sufficient to provide excellence. In recent years, few works have addressed this concern, analyzing (in entirety or partially) relationships in the EFQM version (Gómez et al., 2015).

Some empirical studies about EFQM or excellence methods analyze the relationships amongst their distinctive dimensions (Gómez et al., 2015). Despite the plethora of studies in this area, the conclusions are indecisive, and in most cases, other relationships that were not considered within the theoretical models were identified (Gómez et al., 2015). The paper is divided into seven main sections. Section one offers an introduction. Section two highlights the research background. Section three discusses the practices based on the EFQM model. Part

four analyzes the main principles of innovation. Section five outlines the EFQM framework for innovation activities. Section six discusses the research methodology, and the final section offers conclusions and areas for future research.

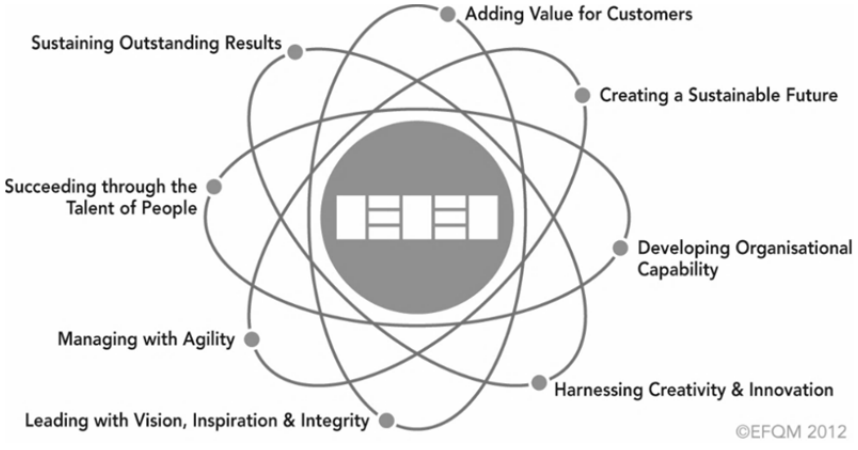
2. THE PRACTICES IN THE EFQM MODEL

The EFQM Excellence Model was industrialized in 1990 to provide a framework for companies to determine the effectiveness of their methods for improvement and implementation (Gómez et al., 2015). It is not always a checklist; it is non-prescriptive and may be implemented by any employer, regardless of how long the business has existed. The latest version has been reviewed over recent years to incorporate new thoughts and ideas, legislative and regulatory updates, and to adapt to the constantly changing economic, social and political environment. The benefit of the model is that any company, no matter their longevity within a sector (Gómez et al., 2015), can take into account different standards. It offers common language that allows members to better understand the influences of the actions of the business, both outside and inside the enterprise.

The model contains a set of three components:
1. The fundamental concepts that outline the underlying principles that form the foundation for reaching sustainable excellence in any enterprise (EFQM, 2017).
2. A framework to help companies convert fundamental concepts and RADAR thinking into practice (EFQM, 2017).
3. Use of RADAR as an effective tool for systematic development in all areas of the enterprise (EFQM, 2017).

2.1The Fundamental Concepts of Excellence

The key concepts of excellence define the inspiration for achieving sustainable excellence in any business. They also may be used to explain the attributes of unique organizational subcultures (Gómez et al., 2015). Additionally, these concepts serve as an important, unifying language. There are eight fundamentals standards:
1. Including cost for customers: outstanding businesses always upload costs for customers by using their expertise, and looking forward to and gratifying desires, expectations and possibilities (EFQM, 2017).
2. Developing a sustainable future: top companies have a powerful impact on the sector around them with the goal of improving their overall performance at the same time as simultaneously advancing the financial, environmental and social conditions within the groups they reach (EFQM, 2017).
3. Developing organizational capability: outstanding organizations enhance their skills by successfully dealing with unanticipated events within and beyond the organizational boundaries.
4. Harnessing creativity and innovation: top-notch facilities generate extended resources and ranges of performance via continual improvement and systematic innovation. By harnessing the creativity of their stakeholders (EFQM, 2017).
5. Leading with imaginative and prescient thought and integrity: high-ranked enterprises have leaders who shape the company's destiny and make it happen, personally demonstrating its values and ethics.
6. Handling with agility: the best organizations are widely regarded for their capacity to discover and reply effectively and efficiently to opportunities and threats.
7. Succeeding via the skills of people: remarkable businesses value their employees and create a lifestyle of empowerment for the fulfillment of organizational and personal goals (EFQM, 2017).
8. Sustaining excellence outcomes: extraordinary establishments reap continued effects that meet both the immediate and long-term needs of all their stakeholders, within the context of their work surroundings (EFQM, 2017).

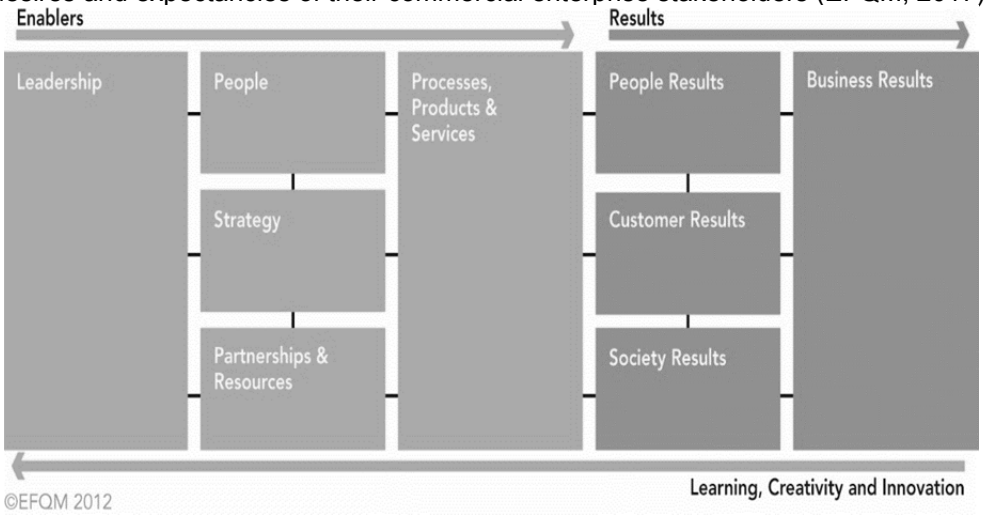


Graph1. Fundamental concepts. This figure illustrates the concepts of excellence effectively. (EFQM, 2017)

2.2 The Criteria

The EFQM Excellence Model allows people to recognize the reason and impact of what their enterprise does, the enablers who contribute to it (EFQM, 2017), and the outcomes it achieves (EFQM, 2017). An organization needs strong management and a clear strategy to maintain sustained achievement. They want to develop and improve their human resources, partnerships, and strategies to supply value-added products and services to their clients. If the proper techniques are carried out, they may attain the effects they, and their stakeholders, expect.

1. Leadership: successful organizations have leaders who articulate its future and make it manifest (EFQM, 2017), demonstrating its values and ethics at all times. They must be flexible, enabling the company to anticipate and react in a timely way to achieve on-going fulfillment of the organization.
2. Strategy: high-quality establishments enforce their mission and vision through growth and deployment of stakeholder-centered strategy (EFQM, 2017). Regulations, plans, targets, and techniques are developed and implemented to supply the program.
3. People: extraordinary firm's value their people and create a subculture that permits jointly beneficial fulfillment of organizational and personal dreams. They invest in the talents of their people and promote equity and equality. They take care of, communicate, reward and anticipate, in a way that motivates employees, (EFQM, 2017), builds dedication, and allows them to apply their abilities and expertise to the growth of the organization.
4. Partnerships and sources: successful firms plan and regulate vendors, suppliers, and private sources who support the methods, policies, and the efficient operation of strategies.
5. Processes, products, and services: top businesses design, control and enhance strategies to generate growing profits for clients and different stakeholders.
6. Customer results: great companies gain and preserve those outcomes that meet or exceed the needs and expectations of their customers (EFQM, 2017).
7. People results: top corporations reap and maintain extraordinary results that meet or exceed the wishes and expectancies in their people.
8. Society results: first-rate companies attain, and maintain high-level outcomes that meet or exceed the needs and expectancies of relevant stakeholders (EFQM, 2017).
9. Business results: the best establishments reach and sustain high-quality results that meet or exceed the desires and expectancies of their commercial enterprise stakeholders (EFQM, 2017).

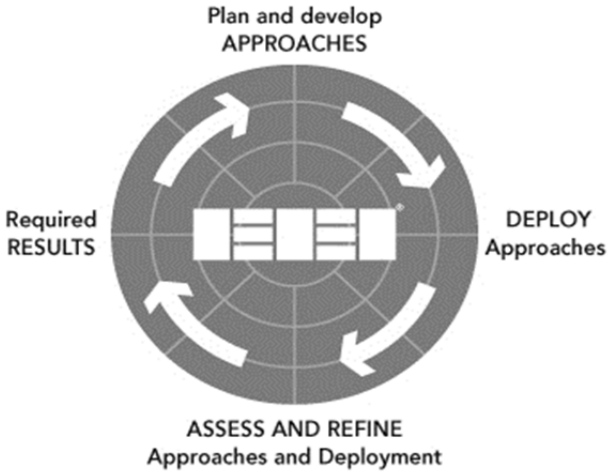


Graph 2. The Model Criteria. This figure illustrates the criteria of excellence. (EFQM, 2017)

2.3 The RADAR

RADAR logic is a dynamic evaluation framework and useful management tool (EFQM, 2017) that provides a structured approach to questioning the overall performance of an enterprise. At the highest level, RADAR logic states that a firm should:

1. Determine the outcomes it aims to achieve as part of its approach;
2. Plan and increase a defined set of established techniques to deliver the required results now and in the future (EFQM, 2017);
3. Deploy methods in a systematic way to ensure successful implementation of goals (EFQM, 2017);
4. Assess and refine these methods based on monitoring and analysis of the outcomes achieved, and through on-going learning activities (EFQM, 2017).



Graph 3. RADAR logic. This figure illustrates RADAR logic elements. (EFQM, 2017)

3. INNOVATION

Usually, change can help firms to create a new market phase, and improve their manufacturing tools and methods to innovate new products and services that will improve consumers' daily lifestyle (Kanji & Wallace, 2000; Alkalha et al., 2012; Altamony et al., 2012; Masa'deh, 2012; Obeidat et al., 2012, 2013; Masa'deh et al., 2015). Innovation can be classified into two categories: product innovation, and technique innovation (Hipp et al., 2000). Product innovation is defined as improvements in new merchandise or providers (Thi et al., 2014). Launching a new product can result in a back-and-forth dialogue between a client's demand, and the necessary technological capacity required to meet consumer expectations, which ultimately may result in an innovative idea (Long et al., 2015). Customers' expectations are met, and the agency produces a great, first-rate, new product (Damanpour, 1991). Business enterprise product innovation may reflect the organization's culture (such as their styles of strategies, management, overall performance, operations, human resources, and communication), or external influences (such as regional environment and industry) (Kafetzopoulos et al., 2015). The majority of companies, however, fail to produce innovation because of inconsistent products, and poor communication with workers (Damanpour, 1991). Previous studies have found major differences in the effect of governmental variables on innovation adoption among different kinds of governments. For example, Miller and Friesen (1982) found that commercial firms showed significantly advanced degrees of governmental discrimination, and heterogeneity than old-school firms, and they found that the level of innovation adoptions is notable in commercial than in old-school firms. For its part, Hull and Hage (1982) stated the association between innovativeness and organizational variables to varies among old-style, organic, and mixed organizations.

Innovation can be defined as implementation and modifications in approaches to generating services or products (Harrington, 1991). Procedure innovation tries to remodel or enhance the business process to be able to improve enterprise efficiency and client satisfaction (Bi K X et al., 2006). For this reason, it addresses new and advanced work methods to improve techniques (Thi et al., 2014). This could lead the firm to maximize their benefits through improved approaches to production via modifications in the tool, software or method (Leonard & Waldman, 2007). However, it additionally must adjust to the current or newly created system (Fotopoulos & Psomas, 2007). This may center on enhancing the effectiveness and efficiencies of production (Štefanić et al., 2012). This increases awareness regarding efficiency, employees' satisfaction, bottom line enhancement and productivity; and can reduce the cost without requiring a change to process (Dahlgaard & Dahlgaard, 2010).

Further, innovation plays an important role for an organization developing in this new century (Masa'deh & Shannak, 2012; Dalsgaard & Dalsgaard, 2014). Technique innovation is an important function of the management of an enterprise (Camisón & Puig-Denia, 2015). However, there is limited research that looks at the capacity of technique innovation to enhance and create aggressive benefit for financial business performance (Corredor & Goñi S, 2015). The practices of excellence management are not directly affecting the process innovation, but technological skills and learning are ultimately mediate the connections (Corredor & Goñi, 2015).

4. EFQM FRAMEWORK FOR INNOVATION ACTIVITIES

The EFQM framework for innovation activities describes the achievement standards for innovation activities and maps them to the EFQM Excellence Model (EFQM, 2017). This ensures a complete and balanced approach to enforcing an enterprise's approach to excellence. This summary highlights factors that are critical to any evaluation of innovation activities, based on the INNO-Partnering Forum mission (European Commission, 2014). Key points are taken directly from the EFQM excellence version, and their inclusion demonstrates the unique nature of innovation activities, in addition to issues critical to their management (European Commission, 2014). The resulting list of factors mirrors approaches and effects consistent with an outstanding European innovation organization (European Commission, 2014).

4.1 Leadership

Excellence innovation activities can be expected to provide a framework for the following:

1. Set and communicate a clear course and strategic cognizance; they unite their people to share and follow the enterprise's assignment, vision, and goals (European Commission, 2014).
2. Outline and use a balanced set of consequences to review progress, offer a view of long-and-short- term priorities and anticipate the expectations of the key stakeholders (European Commission, 2014).
3. Capture and increase the underlying abilities of the company (European Commission, 2014).
4. Maintain accountability to their stakeholders and society for their overall performance, and ensure their employees act ethically, responsibly and with integrity (European Commission, 2014).
5. Encourage people, and create a subculture of involvement, ownership, empowerment, development and accountability through their actions, behaviors, and efforts (European Commission, 2014).
6. Create culture, which supports the generation of current ideas and new ways of thinking to encourage innovation and organizational improvement (European Commission, 2014).
7. Involve and solicit help and contributions from all relevant stakeholders for adjustments necessary to create sustainable fulfillment of the employer (European Commission, 2014).

4.2 Strategy

Excellence innovation activities could be predicted to do the following:

1. Address stakeholder needs and expectations for input to the improvement and review of their approach and supporting regulations; alert them to any modifications (European Commission, 2014).
2. Compare their overall performance with relevant benchmarks to ascertain their relative strengths and areas for development (European Commission, 2014).
3. Create policies to achieve the challenges, goals, and values of the corporation (European Commission, 2014).
4. Discover and recognize the important outcomes necessary to gain their confidence and guide them toward their vision and strategic dreams (European Commission, 2014).
5. Translate their techniques into aligned approaches, initiatives, and organizational systems (European Commission, 2014).

4.3 People

Great innovation activities could be predicted to do several of the following:

1. Align people with the organizational approach, the organization chart, new technology (European Commission, 2014), and relevant methods.
2. Define the abilities, skills, and people performance ranges required to achieve challenge, vision and strategic goals (European Commission, 2014).
3. Create an ethos of creativity and innovation across the enterprise, ensuring employees have an open mindset and can respond quickly to challenges they face (European Commission, 2014).
4. Communicate clear path and strategy to ensure that people understand and exhibit their contribution to the organization's on-going success (European Commission, 2014).
5. Encourage people to engage in improvement and innovation, and recognize their efforts and achievements (European Commission, 2014).
6. Promote a lifestyle that recognizes and cares for individuals and groups.

4.4 Partnerships and Resources

Great innovation activities could be predicted to offer some of the following:

1. Select partners and suppliers based on the agency's approach, and adopt proper guidelines and procedures for working together that are in step with requirements for fair governance (European Commission, 2014).
2. Design the economic stability of the organization, at the same time securing accountability and transparency (European Commission, 2014).

3. Use techniques, regulations, and processes for dealing with buildings, equipment, and materials in a financially and environmentally sustainable manner (European Commission, 2014).
4. Manage a technology portfolio, e.g. ICT systems (European Commission, 2014), that supports the enterprise's standard method.
5. Manage resources, e.g. ICT structures, in a manner that supports the corporation's common strategy.
6. Ensure that their leaders are supplied with accurate and sufficient statistics to aid them in well-timed decision-making (European Commission, 2014).

4.5 Processes, Products, and Services

Excellence innovation activities can offer the following:
1. A framework of fundamental techniques to enforce the corporation's strategy (European Commission, 2014).
2. Increased mix of technology performance indicators and measures, enabling the assessment of performance and effectiveness of the critical tactics and their contributions to the strategic goals (European Commission, 2014).
3. Innovate and creative value for their customers, providing them and different stakeholders, with new and innovative products, services and studies (European Commission, 2014).
4. Understand whom their various client companies are, both current and future, and anticipate their different needs and expectations (European Commission, 2014).
5. Evaluate their performance with relevant benchmarks and study their strengths and possibilities for improvement as a way to maximize the value generated for customers.
6. Screen and evaluate the reports and perceptions of their clients and make certain that approaches are aligned to respond to any comments (European Commission, 2014).

4.6 Customer Results

Client results using innovation activities can consist of measures and indicators of:
1. Customer comments on product and service cost, and the picture of the enterprise (European Commission, 2014)
2. Product and service delivery, e.g., throughput instances (European Commission, 2014)
3. Measures of customer-base configuration, e.g., numbers of latest clients (European Commission, 2014)
4. Complaints management (European Commission, 2014)

4.7 People Results

People results in excellence innovation activities can include measures and indicators of:
1. Humans satisfaction, motivation, and empowerment
2. Comments on management and leadership, as well as on education and career development
3. Teaching and career development activities (European Commission, 2014)
4. Staff turnover and achievement of recruitments
5. Sickness leaves
6. Equality and equity

4.8 Society Results

Society results in excellence innovation activities can include measures and indicators of:
1. Image of the enterprise among the primary stakeholders, media and public (European Commission, 2014)
2. Awards and recognitions
3. Impact of corporation's activities on identified social challenges, e.g. sustainability
4. Internal environmental protection and sustainability activities (European Commission, 2014)
5. Activities in the nearby network

4.9 Business Results

Business results in excellence innovation activities can consist of measures and indicators of:
1. The character, importance, consequences, and influences of supported projects.
2. Outcomes of effect evaluation studies and econometric research (European Commission, 2014).
3. Strategic allocation of funds to sectors most relevant to national regulations.
4. Inner efficiency and effectiveness (European Commission, 2014).

5. RESEARCH METHODOLOGY

This paper reviews a range of literature relevant to the EFQM Excellence Model and innovation activities. Databases referenced include: Emerald, Science Direct, Springer, Google Scholar, IEEE; and keyword searches were related to the practices or implementation of EFQM and innovation. Some other related papers were also used to review the references listed in the literature. The process for reconsiderations was studied and identified in the research design of the EFQM model (EFQM, 2017).

Bogdan and Taylor (1975) suggest that two, important theoretical views influence social technology. The origins of positivism are linked to social theorists of the nineteenth and 20th centuries. The positivists look for social phenomena within the data, without regard to the subjective states of people. The second theoretical angle is interpretive, in which the theorist is concerned with rational human behavior from the agent's frame of reference. Moreover, in step with the positivist paradigm, researchers typically use a deductive process wherein theory is defined by looking for motive and effect associations among observations. However, interpretivism uses an inductive technique, in which the information or the researchers' observations produce grounded ideas (Crotty, 2007). Qualitative and quantitative methods are rooted in the twentieth century, wherein researchers attempt to find the truth (Perry et al., 1999). Smith (1983) stated that quantitative studies are related to the traditional, positivist, experimental or empiricist paradigm, while qualitative studies are associated with the constructivist technique, or the naturalistic, the interpretative, humanistic, and present day views.

Creswell (1998) described quantitative studies as "an inquiry right into a social or human problem, based totally on testing an idea composed of variables, measured with numbers, and analyzed with statistical methods, in order to fix whether or not the predictive generalizations of the notion hold authentic"; whereas a qualitative observation is "an inquiry manner of expertise a social or human hassle, based on constructing a complicated, holistic photograph, fashioned with phrases, reporting individual views of informants, and carried out in a natural putting". Further, Strauss and Corbin (1990) argued that qualitative research is, in general, any study that produces findings not arrived at with the aid of statistical approaches or a different manner of quantification. While quantitative researchers look for causal determination, prediction, and generalization of findings, qualitative researchers search for illumination, information, and extrapolation of comparable conditions.

On the one hand, quantitative studies check principles deductively from present information, via hypothesized relationships and proposed consequences, to supply a valid scientific solution. As a result, hard information and action are generated. Alternately, qualitative research is a philosophical approach that is more concerned with the nature, or "quality," of the meaning versus the objective meaning that results from the quantitative analysis. (Burns & Grove, 1997; Shannak et al., 2010). Qualitative strategies have been used over the long term within the social sciences (Mays & Pope, 1996) and are valuable for research questions regarding reviews, mind, perceptions, expectancies, motives, and attitudes. Qualitative research can, therefore, be applied to the development of standards that assist in knowledge, or other subjective phenomena, and offers more detailed attention to the meanings, reviews, and views of all participants.

Considering that both single technique methods (i.e. qualitative and quantitative) have strengths and weaknesses, the combination of such methods (i.e. using special methods including observations, interviews, and survey questionnaires) may be used to reinforce the validity of research (Nau, 1995). Indeed, Jick (1979) defined triangulation as a vehicle for validation, when two or more approaches are found to be congruent, and yield new thoughts and similar findings. Also, Das (1983) highlighted triangulation as a mixture of methodologies for studying a similar phenomenon. Moreover, Denzin and Lincoln (1998) said that no single technique always appropriately solves the aggravate of rival causal elements; and because each method shows multiple aspects of empirical fact, more than one method must be employed. Indeed, research is defined as "the systematic process of collecting and studying records to be able to growth our information of the phenomenon about which we are involved or interested" (Leedy & Ormrod, 2005, p.4). The first difficulty with this definition is that this examiner will observe a scientific methodology to reap its benefits. The method has been described as "the stairs to be taken so as to derive reliable and legitimate solutions to the one's questions and … defines the appropriateness of a given research device" (Ellis & Levy, 2008). Consequently, this suggests quantitative statistics can be supplemented using a qualitative survey. First, the quantitative research can be used to examine the hypotheses of the review derived from the literature review and the conceptual framework. After that, qualitative studies using employing semi-structured interviews can better determine the relationship between the variables to the study.

6. CONCLUSION

The EFQM Excellence Model and innovation activities are well-known for contributing to the sustainability of an organization. Adopting innovation activities through the EFQM model will contribute to successes in public sector organizations in the United Arab Emirates. The EFQM framework for innovation activities describe the achievement standards for innovation activities and maps them to the EFQM Excellence Model. This is necessary for the planned and pre-implemented completion and balanced approach to enforcing the enterprise's approach. Implementation and post- implementation consequences encourage a variety of views that contribute to achieving organizational goals. Also, based on earlier reviews, the EFQM Excellence Model, and innovation activities are critical issues for innovation management system implementation. Moreover, a collection of articles addresses the EFQM Excellence Model and innovation by explaining to the necessity of innovation management system implementation, the way to do it effectively, best practices, successful experiences, and appropriate innovation management strategies.

The current study is limited to theoretical perspectives; therefore, there is a need to conduct more empirical research and studies on the impact of the EFQM Excellence Model on innovation management.

REFERENCES

Al-Dhaafri, H., & Al-Swidi, A. (2016). The Impact of Total Quality Management and Entrepreneurial Orientation on Organizational Performance. International Journal of Quality & Reliability Management, 33 (5), 597-614.

Alkalha, Z., Al-Zu'bi, Z., Al-Dmour, H., & Alshurideh, M. (2012). Investigating the Effects of Human Resource Policies on Organizational Performance: An Empirical Study on Commercial Banks Operating in Jordan. European Journal of Economics, Finance and Administrative Sciences, 51, 44-64.

Almajali, D., & Tarhini, A. (2016). Antecedents of ERP Systems Implementation Success: A Study on Jordanian Healthcare Sector. Journal of Enterprise Information Management, 29 (4), 549-565.

Alshurideh, M., Masa'deh, R., & Alkurdi, B. (2012). The Effect of Customer Satisfaction on Customer Retention in the Jordanian Mobile Market: An Empirical Investigation. European Journal of Economics, Finance and Administrative Sciences, 47, 69-78.

Altamony, H., Alshurideh, M., & Obeidat, B. (2012). Information Systems for Competitive Advantage: Implementation of an Organizational Strategic Management Process. Proceedings of the 18th IBIMA Conference on Innovation and Sustainable Economic Competitive Advantage: From Regional Development to World Economic, Istanbul, Turkey, 9th-10th May.

Bogdan, R., & Taylor, S. (1975). Introduction to Qualitative Research Methods. New York: Wiley.

Burns, N., & Grove, S. (1997). The Practice of Nursing Research: Conduct, Critique and Utilization. Philadelphia, PA: WB Saunder Co.

Bi, X., Sun, D., Zheng, F., & Li, Z.(2006). The Construction of Synergetic Development System of Product Innovation and Process Innovation in Manufacturing Enterprises‖ Proceedings of the International Conference on Management Science and Engineering (ICMSE) (P.R. China)

Crotty, M. (2007). The Foundation of Social Research: Meaning and Perspective in the Research Process. Sage Publications.

Camison, C., & Puig-Denia, A. (2015).Are Quality Management Practices Enough to Improve Process Innovation?,International Journal of Production Research,1–20.

Corredor, P., & Goñi, S. (2011).TQM and Performance: Is the Relationship so Obvious?. Journal of Business Research,30–38.

Creswell, J. (1998). Qualitative Inquiry and Research Design: Choosing Among Five Traditions, Thousand Oaks, CA: Sage Publications

Dahlgaard-Park, M., & Dahlgaard, J. (2010). Organizational Learnability and Immovability: A System for Assessing, Diagnosing and Improving Innovations. International Journal of Quality and Service Sciences, 53-74.

Damanpour, F. (1991). Organizational Innovation: a Meta-Analysis of Effects of Determinants and Moderators. Academy of Management Journal, 555−590.

Das, T. (1983). Qualitative Research in Organizational Behavior. Journal of Management Studies, 20 (3), 308-318.

Denzin, N., & Lincoln, Y. (1998). The Landscape of Qualitative Research: Theories and Issues. Thousand Oaks: Sage Publications.

European Commission, (2014). EFQM Framework Innovation Agencies. [Online] Available at: https://ec.europa.eu/easme/sites/easme-site/files/EFQM-Innovation-Agencies-presentation.pdf [Accessed 12 Feb. 2017].

EFQM, (2017). EFQM Excellence Model/. [Online] Available at: https://itunes.apple.com/us/book/efqm-excellence-model/id1004514859?mt=11&ign-mpt=uo%3D4 [Accessed 3 Feb. 2017].

Ellis, J., & Levy, Y. (2008). Framework of Problem-Based Research: A Guide for Novice Researchers on the Development of a Research-Worthy Problem Informing Science .International Journal of an Emerging Trans discipline, 17-33.

Fotopoulos, C., & Psomas, E. (2009). The Use of Quality Management Tools and Techniques in ISO 9001:2000 Certified Companies: The Greek case.Int. J. Productivity and Performance Management. 564-580.

Garcia-Bernal, J., Gargallo-Castel, A., Pastor-Agustin, G., & Ramírez-Aleson, M. (2004). Total Quality Management in Firms: Evidence from Spain. Quality Management Journal, 20-34.

Gomez- Gomez, J., Martinez- Costa, M., & Martinez-Lorente, A. (2015). An in-Depth Review of the Internal Relationships of the EFQM Model. The TQM Journal, 486 -502.

Hajir, J., Obeidat, B., & Al-dalahmeh, M. (2015). The Role of Knowledge Management Infrastructure in Enhancing Innovation at Mobile Telecommunication Companies in Jordan. European Journal of Social Sciences, 50 (3), 313-330.

Harrington, J. (1991). Business Process Improvement: The Breakthrough Strategy for Total Quality, Productivity and Competitiveness (New York: McGraw-Hill).

Hipp, C., Thether, B., & Miles, I. (2000).The incidence and effect of innovation in services. International Journal of Innovation Management,417-53.

Hoang, T., Igel, B., & Laosirihongthong, T. (2006).The Impact of Total Quality Management on Innovation: Findings from a Developing Country. International Journal of Quality & Reliability Management, 1092–1117.

Hull, F., & Hage, J. (1998). Organizing for innovation: Beyond Burns and Stalker's organic type. Sociology, 16 (1982), pp. 564–577

Jick, T. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action. Administrative Science Quarterly, 602-611.

Kafetzopoulos, D., Gotzamani, K., & Gkana, V. (2015). Relationship Between Quality Management, Innovation, and Competitiveness. Evidence from Greek companies. Journal of Manufacturing Technology Management, 177-200.

Kanaan, R., & Gharibeh, A. (2013). The Impact of Knowledge Sharing Enablers on Knowledge Sharing Capability: An Empirical Study on Jordanian Telecommunication Firms. European Scientific Journal, 9 (22), 237-258.

Kanji,K., & Wallace, W. (2000). Business Excellence Through Customer Satisfaction. Total Quality Management,79-98.

Kateb, M., Swies, R., Obeidat, B., & Maqableh, M. (2015). An Investigation on the Critical Factors of Information System Implementation in Jordanian Information Technology Companies. European Journal of Business and Management, 7 (36), 11-28.

Leedy, D., & Ormrod, E. (2005). Practical Research: Planning and Design. Upper Saddle River. Prentice Hall. NJ. USA.

Leonard, A., & Waldman, C. (2007). An Empirical Model of the Sources of Innovation in the U.S. Manufacturing Sector. Business Economics, 33-45.

Long, C., Abdul Aziz, M., Kowang, T., & Ismail, K. (2015). Impact of TQM Practices on Innovation Performance Among Manufacturing Companies in Malaysia. South African Journal of Industrial Engineering, 75–85.

Maqableh, M., & Karajeh, H. (2014). Job Scheduling for Cloud Computing Using Neural Networks. Communications and Network, 6 (3), 191.

Maqableh, M., Rajab, L., Quteshat, W., & Khatib, T. (2015). The Impact of Social Media Networks Websites Usage on Students' Academic Performance. Communications and Network, 7 (4), 159-171.

Masa'deh, R. (2012). The Impact of Management Information Systems (MIS) on Quality Assurance (QA): A Case Study in Jordan. International Journal of Information, Business, and Management, 93-110.

Masa'deh, R. (2013). The Impact of Information Technology Infrastructure Flexibility on Firm Performance: An Empirical Study of Jordanian Public Shareholding Firms. Jordan Journal of Business Administration, 204-224.

Masa'deh, R., & Shannak, R. (2012). Intermediary Effects of Knowledge Management Strategy and Learning Orientation on Strategic Alignment and Firm Performance. Research Journal of International Studies, 112-128.

Masa'deh, R., Obeidat, B., & Tarhini, A. (2016). A Jordanian Empirical Study of the Associations among Transformational Leadership, Transactional Leadership, Knowledge Sharing, Job Performance, and Firm Performance: A Structural Equation Modelling Approach. Journal of Management Development, 35 (5), 681-705.

Masa'deh, R., Tayeh, M., Al-Jarrah, I., & Tarhini, A. (2015). Accounting vs. Market-based Measures of Firm Performance Related to Information Technology Investments. International Review of Social Sciences and Humanities, 129-145.

Mays, N., & Pope, C. (1996). Qualitative Research in Health Care.British Medical Journal,London: Publishing Group.

Miller, D., & Friesen, Y. (1998). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. Strategic Management Journal, 3 (1982), pp. 1–25

Nau, D. (1995). Mixing Methodologies: Can Bimodal Research be a Viable Post-Positivist Tool?" The Qualitative Report, 1-5.

Naylor, G. (1999). Using the Business Excellence Model to Develop a Strategy for a Healthcare Organization. International Journal of Health Care Quality Assurance, 37-44.

Obeidat, B., El-Rimawi, S., Maqableh, M., & Al-Jarrah, I. (2013). Evaluating the Profitability of the Islamic Banks in Jordan. European Journal of Economics, Finance and Administrative Sciences, 56, 27-36.

Obeidat, B., Sweis, R., Zyod, D., & Alshurideh, M. (2012). The Effect of Perceived Service Quality on Customer Loyalty in Internet Service Providers in Jordan. Journal of Management Research, 4 (4), 224-242.

Perry, C., Riege, A., & Brown, L. (1999). Realism is Role among Scientific Paradigms in Marketing Research. Irish Marketing Review, 16-23.

Santos-vijande, M., & Alvarez-gonzalez, L.(2007). TQM and Firms Performance: An EFQM Excellence Model Research-Basedsurvey. Int. Journal of Business Science and Applied Management, 21–42.

Shannak, R., & Akour, M. (2012). Knowledge Management Strategy Building: Literature Review, European Scientific Journal, 8 (15), 143-168.

Shannak, R., Obeidat, B., & Almajali, D. (2010). Information Technology Investments: A Literature Review. Proceedings of the 14th IBIMA Conference on Global Business Transformation through Innovation and Knowledge Management: An Academic Perspective, Istanbul-Turkey, 23rd-24th June, pp.1356-1368.

Smith, K. (1983). Quantitative Versus Qualitative Research: An Attempt to Clarify the Issue. Educational Researcher, 12, 6-13.

Soreshjany, A., & Dehkordi, J. (2014). Cost of Total Quality Management (TQM), Innovation and Improvement of Financial Performance. UmaÉtica Para Qantas?, 1–7.

Štefanic, N., Tosanovic, N., & Hegedic,M. (2012). Kaizen Workshop as an Important Element of Continuous Improvement Process. International Journal of Industrial Engineering and Management, 393-398.

Strauss, A., & Corbin, J. (1990). Chapter 1: Introduction. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage Publications, 23–32.

Suarez-Barraza, F., & Smith, T., (2014). The Kaizen Approach Within Process Innovation: Findings from a Multiple Case Study in Ibero-American Countries. Total Quality Management 2–25.

Tarhini, A., Mohammed, A., & Maqableh, M. (2016). Modeling Factors Affecting Student's Usage Behaviour of E-Learning Systems in Lebanon. International Journal of Business and Management, 11 (2), 299.

Thi, T., Hanh, H., & Siengthai, S. (2014). The Impact of BPR, TQM, OL and Ownership Structure on Product Innovation in Vietnamese Equitized Firms. Asian Journal of Management Research, 361–377.

Vratskikh, I., Al-Lozi, M., & Maqableh, M. (2016). The Impact of Emotional Intelligence on Job Performance via the Mediating Role of Job Satisfaction. International Journal of Business and Management, 69-91.