

Chapter One

Introduction

CHAPTER 1

Introduction

1.0 Introduction:

Organizations make great efforts to attain success and achieve quality and excellence in their professional lifetime. This means there is a real need to develop more effective and efficient institutional management practices (Steed *et al*, 2005)¹. In order to reach this goal, many organizations are adopted the total quality management models such as the "Excellence model" of The European Foundation for Quality management (EFQM) and standardization systems as an effective and practical tools to attain improvement opportunities.

Giad Industrial Group Background

The idea of Giad was developed as integrated Production Industries and integrated Services Complex. The project Technical and Feasibility studies were undertaken in June 1996. The Foundation Stone had been set on March 1997 and the actual operation has begun on July 1997. The City opening was celebrated on 26 October 2000.

Giad Industrial City is located on the western bank of the Blue Nile, 50 kilometer south of Khartoum, in Kamleen Province, Jazeera State and the city area is about 15 kilometers square. The Industrial City consists of Metallurgical Manufacturing Sector and Automotive Sector along with the Administrative and Services Sector and has some business units located out the area of industrial city.

The number of labors in Giad Industrial City is about 1450 of the unit-shift labor and the number is expected to increase to about 3500 in the future.

¹ Steed, C.; Maslow, D.; Mazaletskaya, A. (2005). "EFQM Excellence Model for deploying Quality management.

Giad Industrial Group is of interest to the author as he is working in a head of the group, The overall purpose of the study is to evaluate the applying of approaches and methodologies used to implement the EFQM Excellence Model to Giad Industrial Group companies as strategic planning, developing key performance indicators, benchmarking, identifying good management practice and for the achievement of sustainable improvement in all aspects of performance.

After the establishment of Giad Industrial Group (GIG) at Khartoum in the year 1994, the group has adopted the application of total quality management systems in most business units since the year (2007).

Quality In Giad Industrial Group (GIG):

Based on deep believe that offering outstanding services requires development for quality and industry performance, GIG established Quality department at the head of GIG at the year 2007. This department aims to promote industrial efforts as well as developing administrative and services aspects at Giad units. The Quality department oversees the publication of quality culture and quality systems at Giad units by organizing workshops, seminars, conferences and supervising with the high consultants of the standardization systems. Giad units succeeded to obtain the international quality certificate ISO 9001 - 2008, and awarded to the most Giad units which have the quality management system compliant with this International Standards. Giad Industrial Group was considered as the one of the first industrial complexes in Sudan obtained ISO certificates at many fields.

Excellence in Giad Industrial Group (GIG):

Giad Industrial Group adopted as well as the application of the European System of Excellence in the year 2009 and established “Giad Award of Excellence” in the

same year. Many business units participated in Giad Award of excellence, and the results of the evaluation have been hold by well qualified assessors.

The department of quality at Giad Group headquarter' have a full supervision of the organizing "Giad Award of Excellence" so far, five rounds were organized since 2009.

Towards this end, Giad Industrial Group strives to:

- Open new majors based on local and regional job markets.
- Develop a performance of the technical's and engineers and administrative staff.
- Expand and modernize the electronic industrial products.
- Maintain strong relations with local and international partners through which mutual benefits could be achieved.

Giad Industrial Group (GIG) seeks to improve the quality of its industries and services through guiding its staff to the technical, managerial and financial means to develop the people skills and knowledge through a higher level of training.

Cooperation agreements:

GIG has signed several cooperation agreements with the central and local governments and universities and external organizations to support the industry field, such as: a. Ministry of industry b. Khartoum and Korari universities c. Sudanese Engineering Council in Khartoum. d. Korean and Chinese industries e. EFQM organization.

Achievements:

1. Reevaluate questionnaires of employees and engineers and established self evaluation forms.
2. Organized several workshops and seminars about Quality.

3. Provide concerned quality departments of Giad units' with recommendations.
4. Establish sub committees for quality at Giad units.
5. Attend many courses and conferences related to quality of industry held by internal and external associations.

Aspirations:

1. Fortify the role of Quality unit as a main reference for Giad units.
2. Achieve the planned vision in order to develop the industrial process.
3. Form a strategic plan for the coming years.
4. Take part on quality conferences.
5. Share experiences with other organizations in the rounds of Giad Award of Excellence.

1.1 Problem statement

Since early of 2005 most of Giad Industrial Group (GIG) units succeeded to obtain the international quality certificate ISO 9001 and it works hard towards achieving the excellence by implementing the EFQM Excellence Award.

In this regard GIG should improve its work activities to meet the EFQM criteria.

In 2009 Giad Industrial Group adopted the implementation of European Excellence Model and established Giad Awards of Excellence and five rounds of the Award of Excellence were organized and explored different results.

This study tries to focus on to what extent Giad Industrial Group applies a definite approaches and methodologies to implement the EFQM Excellence Model.

The problem can be concluded as: " What is the approach deployed in Giad business units and its impacts on excellence results achieved when the EFQM Excellence Model implemented?"

1.2 Research questions:

The main question is: What is the approach deployed in Giad business units and its impacts on excellence results achieved?

In order to clarify this main research question it is useful to define the key words in it:

Approach" covers which approaches selected and used so as to implement the excellence model in the companies".

Davies. J., (2007)¹ turned to dictionary definitions and then related these to the effective implementation of the EFQM Excellence Model:

Implement" is to carry into effect (Oxford English Dictionary Online, 2003).

To carry out or put into effect (Words myth Online Dictionary, 2003). Or to put a plan or system into operation (Cambridge Advanced Learner's Dictionary, 2003).

Sub-questions:

- What is the most approach deployed when the business units decide to implement the Excellence Model?
- To what extent do these deployed approach is sound?
- To what extent do the deployed approach is integrated?
- To what extent do the deployed approach is implemented?
- To what extent do the deployed approach is measured?
- What are the impacts of the internal success factors activities of the deployed approach on the excellence results achieved in Giad units?

¹John, D., (2007). **Integration; is it the key to effective.**

1.3 Research Variables:

From the deployed approaches to implement the EFQM Excellence Model the dependent and independent variables were obtained.

1.3.1 Independent variables:

The deployed approach in GIG companies to implement the Excellence Model.

1.3.2 Dependent variables:

The impacts of the deployment of these approaches on the performance and results achieved when implementing the Excellence Model.

1.4 Objectives of the Research:

- To identify the ideal deployed approach and the success factors indicators when implementing the Excellence Model in Giad Industrial Group.
- To explore and analyze the deployed approaches when implementing the Excellence Model in Giad units.
- To examine the impacts of the deployed approaches on the excellence results achieved at Giad units when implementing the EFQM Excellence Model.

1.5 Research Hypothesis

Main hypothesis (1): The deployed approach is well defined and has positive impacts on the excellence results achieved when participated in Giad Award of Excellence.

Sub-hypothesis: There is a significant effect that the implementation of the EFQM Excellence Model in Giad Group Business units based on well defined approach.

- There is a significant effect of perceptions of the approach' criteria: soundness, clear rationale on deployed approach of business units.

- There is a significant effect of perception of supportive strategy' criteria on deployed approach of business units.
- There is a significant effect of perceptions of the approach' criteria: sequential, systematic manner, structured, flexibility, agility, and the commitment of leadership on deployed approach of business units.
- There is a significant effect of the perceptions of approach' criteria: effectiveness and efficiency' of deployed approach of business units.

Main hypothesis (2): The internal success factors of performance indicators of deployed approach have positive impacts on the excellence results achieved.

1.6 limitation of Research:

This study is delimited to Giad industrial Group, mainly for the units that participated in Giad Excellence Award through the period (2009 to 2013); therefore, the researcher has focused solely on six cases for this study .This study is further delimited and to the extent of implementation of EFQM Excellence Model within Giad Industrial Group in Sudan.

1.7 Previous Studies:

1. Khogali, A. G., (2014)¹. Impacts of EFQM Model on the Performance of Giad Industrial Group:

Purpose: To examine the impact of EFQM Excellence model on the performance of Giad Industrial Group

Findings: The adoption of EFQM Excellence model in Giad Industrial Group has positive impacts on customer satisfaction as a leading indicator for organizations' performance.

- The Excellence Model provides a holistic framework that systematically addresses a thorough range of organisational quality issues and also gives attention to impacts through the 'results' criteria.
- Scoring' can provide an organisation with an internal benchmark for its next self-assessment, in order to capture trends. It can also be used among organisations for some external benchmarking and comparison.

Conclusions and recommendations:

- The researcher would recommend that Giad Industrial Group extensively continue the practices and application of EFQM Excellence Model through the actions and practices of Giad Excellence Awards so as to improve the performance of their organizations through excellent sustainable results for People, customer, society and business.
- The researcher also recommends for other Sudanese Organizations to adopt and apply the EFQM Excellence Model and start the journey of

¹ Khogali. A. G, (2014). "Impacts of EFQM Model on the Implementation of the EFQM Excellence Model".

Excellence so as to achieve their strategic goals and to improve their performance.

- It is observed from the results of customer satisfaction that most of the companies are still lacking in putting targets for their measures and did not make comparison with best in class companies, the researcher is recommended these observations as an area of improvement for Giad Industrial Group.

2. John, D., (2004)¹. The Implementation of the European Foundation for Quality Management's (EFQM) Excellence Model in Academic Units of United Kingdom Universities.

Purpose: The general purpose of this study is to construct a guidance framework for EFQM Excellence Model implementation in UK University academic units.

Objectives: To identify the issues that impact on the implementation of the European Foundation for Quality Management's (EFQM) Excellence Model in the UK University academic environment based on knowledge of the model's implementation in other sectors, knowledge of the UK University sector and on established good practice in implementing similar quality programmes, such as Total Quality Management (TQM). These issues will be identified through a comprehensive literature review.

To assess the effectiveness of the implementation of the EFQM Excellence Model in the case study organizations, i.e. in which ways has the use of the EFQM Excellence Model become part of the normal management activities of the institutions involved? In order to assess the effectiveness of the implementation the possible uses of the EFQM Excellence Model will be identified in the literature.

¹ John, D., (2004). The Implementation of the European Foundation for Quality Management's (EFQM) Excellence Model.

- To explore and analyze the approaches used in attempted implementation of the EFQM Excellence Model in a number of UK University case studies in order to discover the critical issues for effective implementation.
- To explain why the implementation of the EFQM Excellence Model was effective or ineffective in a number of cases in UK University academic units by reference to the theoretical framework.

Contributions of the Research: The intention of this study was to contribute to the body of knowledge on the implementation of the EFQM Excellence Model in the UK Higher Education sector by attempting to bridge the gap between existing theories, knowledge and approaches of EFQM Excellence Model implementation and that required for guiding effective implementation in UK university academic units.

3. Paul, W., (2002)¹. United Kingdom: Implementing the European Foundation for Quality Management Excellence Model.

Purpose: The paper is to establish how the European Foundation for Quality Management model (EFQM) can provide a means of implementing Total Quality Management.

FIELD RESEARCH: Research was conducted upon fifty companies via a structured questionnaire; this was done to test the theoretical advocated advantages of EFQM Excellence Model application. The results of the research show that the majority of sampled companies found that the Model was simple, holistic, dynamic, and flexible. They also agreed that the model could enhance the understanding of TQM among senior management and enable the identification of

¹ Paul, W., (2002). "United Kingdom: Implementing the European Foundation for Quality Management Excellence Model". Washington, D.C. USA, April 19-26 2002

a company's strengths and weaknesses. The main reason offered by the sampled companies for applying the EFQM approach to quality was self-assessment. This empowered organizations to achieve a top quality performance in all areas, in other words, to achieve TQM within their organization. The research results established that most of the theoretical advantages relating to the benefits derived from the application of the Model could be achieved in practice. The research also established some problems that construction firms could face during implementation and these are addressed below.

Result: The EFQM Excellence Model is a non-prescriptive framework based on nine criteria – 5 'Enablers' and 4 'Results'. It can be used to assess an organization's progress towards excellence. The Model provides a non-prescriptive framework to guide a construction company to achieve a top quality performance via the attainment of a sustainable competitive advantage. Within the non-prescriptive framework, certain fundamental concepts underly the Model.

4. Radoslav. J., (2013)¹. **The role of innovation in the assessment of the excellence of enterprise subjects.**

Conclusion:

The standard ISO 9004 (which provides guidance to support the achievement of sustained success for any organization in a complex, demanding, and ever-changing environment, by a quality management approach) deals with innovations in a separate part – Improvement, innovation and learning, where innovations are dealt with from several points of view (ISO, 2009).

It can be said on the grounds of the analysis that innovations have been gradually included to all mentioned approaches to a larger or lesser extent. The performed research confirmed the assumption that all addressed enterprises, without regard to

¹ Radoslav. J., (2013). **The role of innovation in the assessment of the excellence of enterprise subjects.**

the sector of business activity, consider innovations to be a significant factor related to the success of the company and app. 80% deem it even to be the key factor of success and does not doubt its significance, even despite the fact that part of enterprises (4%) neglects this area. It can be therefore said that the role of innovations for assessing the excellence of business subjects is indisputable and this is understood not only by composers and performers of various approaches to assessing the excellence, but also by enterprises themselves.

1.8 Importance of the Research:

This study is a contribution to Giad Industrial Group need to identify the deployed approaches and methodologies required to implement the EFQM Excellence Model in Giad units. The importance of this study is attributable to the following reasons:

- This study shall provide important information in the library of the university to researchers in the field that has not been addressed before; the effects of deployed approaches of EFQM Excellence Model on business results.
- This study shall enhance quality concepts in Giad units which will lead to increase the productivity of the companies and industries.
- The study shall help Giad Industrial Group and any other organizations to put a guideline framework for implementing the Excellence Model.
- This study shall provide and discover important and critical success factors for effective implementation of EFQM Excellence Model at Giad Industrial Group business units in the field that has not been addressed before.

CHAPTER 2

Theoretical Review

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2.1 Total Quality Management Concepts:

EFQM, (2013)¹ explained that the EFQM Model is a non-prescriptive framework that recognizes there are many approaches to achieving sustainable excellence. Within this non-prescriptive approach there are some Fundamental Concepts which underpin the EFQM Model. These are expressed below and are based on well-established Total Quality Management (TQM) principles (the model's original title was 'The European Model for Total Quality Management' (Porter and Tanner, 2004)². There is no significance intended in the order of the concepts. The list is not meant to be exhaustive and they will change as excellent organizations develop and improve.

2.2 Evolution of Total Quality Management according to Idris (2012)³.

1924 – Statistical Process Control.

1930 – Tables for Acceptance Sampling.

1940 - Statistical Sampling Technique.

1950 – Quality Assurance /TQC.

1970 – Quality Assurance in Service.

¹ EFQM, (2013), EFQM Excellence Model, version 2013, Brussels'.

² Porter and Tanner, (2004). Assessing business excellence: a guide to business excellence and self-assessment Linacre House, Jordan Hill, Oxford OX2 8DP 200 Wheeler Road, Burlington, MA 01803 Second edition 2004.

³ Elsheikh Idris. M, (2012). Quality and Excellence.

2.3 Basic Principles of TQM:

Quality is defined as "the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs" (ISO 8402-1986).

It Include the continual improvement, Competitive benchmarking, Employee empowerment, Team approach, Decisions based on facts, Knowledge of tools, Supplier quality, Champion, Quality at the source and suppliers and it represent the following principles:

1. Concentrate on customer, (Customer focused).
2. Does it right (Do things right first time), (Constantly improves), (Quality is an attitude not inspection process).
3. Communicate and educate (Tell staff what is going on), (Educate and train),
Mersha, T. (1997)¹ argued that: "TQM success is unthinkable without the full and active involvement of all employees".
4. Measure and control, (Measure the work).
5. Do it together, (Involve top management and empower staff), (Introduce team working), (Organize by process, not by function).

2.4 Responsibility of TQM:

It include the following elements: Top management, designing the work, procurement and human resources management, production/operations, planning, processes and procedures of work, marketing and sales and customer service.

¹ Mersha, T. (1997). "TQM implementation in LDCs: driving and restraining forces", *International Journal of Operations & Production Management*, Vol. 17 No. 2, pp. 164-83.

2.5 Designing Approach in TQM:

Included the following procedures: To find out what the customer wants, design a product or service that meets or exceeds customer wants, design processes that facilitates doing the job right the first time, keep track of results and extend these concepts to suppliers.

2.6 Limitations of TQM:

The limitations include the Lack of the company-wide definition of quality, Strategic plan for change, customer focus, real employee empowerment, strong motivation, time to devote to quality initiatives, leadership, poor inter-organizational communication, view of quality as a “quick fix”, emphasis on short-term financial results and internal political and “turf” war.

The total quality management is aiming to improve the effectiveness Flexibility and competition of the business as a whole. It involves all the Companies getting organized in every department in every activity, with Every single person at all levels, so as to achieve the essentials which are grouped under the word quality, these **are**: Reduce defects (reduce errors or mistakes), Improve productivity (produce greater output for the same level of cost), Improve customer (satisfy and delight customer) and Innovation, competitors' always offering customer newer and better product we need to match the rate of innovation.

2.6.1 The lack of empirically sound Total Quality implementation models:

Thiagaragan, T., Zairi, M. and Dale, B.G. (2001)¹ identified that the literature is full of "everything you need to know about TQM implementation", but most of the information is based on personal experiences and anecdotal evidence.

2.6.2 The lack of success in implementing Total Quality Management (TQM) initiatives in organizations:

According to (*Vracking, 1995*)² the main issue in implementation was how the best possible chance can be created to ensure that the implementation of intended innovations takes place. Thiagaragan, T., Zairi, M. and Dale, B.G. (2001)³ stated that unsuccessful TQM implementation attempts are not uncommon and argued that many quality strategies fail to deliver because what is planned and what is implemented are not the same. They continued that the failure to realistically consider implementation issues is common.

Mersha, (1997)⁴ stated **that:** "Many organizations in industrialized nations have found that successful introduction and sustenance of TQM can be elusive. A survey conducted by the Forum Corporation of 685 executives who initiated TQM indicated that many [organizations] have not gone past the TQM awareness stage and thus have failed to achieve the desired purpose. Some studies show that TQM implementations fail in about 70 percent of US firms".

¹ Thiagaragan, T., Zairi, M. and Dale, B.G. (2001), "A proposed model of TQM implementation based on an empirical study of Malaysian industry",

² Vracking, W.J. (1995), "The implementation game", *Journal of Organizational Change*, Vol. 8 No. 3, pp. 31-46.

³ Thiagaragan, T., Zairi, M. and Dale, B.G. (2001) same reference above.

⁴ Mersha, (1997). *International Journal of Operations & Production Management*.

Sousa. P, (2001)¹ postulated that only 20 per cent of companies that implement TQM do so successfully.

Spector and Beer, (1994)² discussed the dichotomy they have found between the overwhelming support expressed in organizations for TQM principles coupled with overwhelming failure in implementation. They contend that this suggests that organisations need to become more expert at implementing the "sweeping organisational transformation that lies at the core of TQM". Chin and Pun (2002)³ argued that one of the main reasons for the failure of TQM can be attributed to implementation problems. According to (Chin and Pun, 2002)⁴ the overwhelming volume of literature in TQM is primarily focused on techniques, prescriptions and procedures. However, less attention has been devoted to how TQM was introduced and implemented.

2.7 The Excellence:

The word "excellence" is now part of the language of business – and even the not-for-profit and public sectors. While many claims are no doubtfully justified, it can seem that anyone making a claim about their products or services feels they should use it.

The Longman English Dictionary defines "excellence" as: "The quality of being excellent". Oxford English Dictionary defines it as: "The quality of being

¹ Sousa. P, (2001). Relationship between national culture and TQM implementation, Case study: Iranian multinational electrical Manufacturing companies.

² Spector and Beer (1994). Journal of Organizational Change Management.

³ Chin and Pun, (2002). A measurement-communication-recognition framework of corporate culture change.

⁴ Chin and Pun, (2002). same reference.

outstanding or extremely good" and it defines the verb „excel“ as: “Be exceptionally good at or proficient in an activity or subject”.

EFQM put excellence in organizational context and defines "Organizational Excellence" as: "the overall way of working that results in balanced stakeholder satisfaction (customers, employees, partners, society, and shareholder) to increase the probability of long term success as an organization".

In the 2003 version of the EFQM Excellence Model, Excellence is defined as "Outstanding practice in managing the organization and achieving results based on a set of Fundamental Concepts" (Abu Saada, 2012)¹.

The EFQM Model is a non-prescriptive framework that recognizes many approaches to achieve sustainable excellence.

2.7.1 The Basic concepts of Excellence:

1. Results orientation is achieving results that delight all the organization’s stakeholders.
2. Customer Focus is creating sustainable customer value.
3. Leadership and Constancy of Purpose is visionary and inspirational leadership, coupled with constancy of purpose.
4. Management by Processes and Facts: All activities should be managed in a systematic and effective way, taking into account all stakeholder& perceptions.

¹ Abu Saada. I. J, (2012). *Applying Leadership Criterion of EFQM Excellence Model In Higher Education Institutions*.

5. People development and involvement is maximizing the contribution of employees through their development and involvement.
6. Continuous learning, improvement and innovation is challenging the status quo and effecting change by using learning to create innovation and improvement opportunities.
7. Partnership development is developing and maintaining value -adding partnerships.
8. Public responsibility: The organization fosters a positive and mutually beneficial relationship with society and community (EFQM, 2013)¹

2.7.2 The History of the Development of the EFQM Excellence Model:

1. The EFQM Excellence model, previously called the European Model for Business Excellence, was introduced at the beginning of 1992 as a framework to seek for the European and National Excellence Awards (EFQM, 2003)².
2. Hides *et al*, (2004)³ reviewed the history and development of the EFQM model. The success of the Baldrige Model (USA) and the Deming prize (Japan) encouraged the formation of the European Foundation for Quality Management (EFQM) in 1988.

¹ EFQM, (2013), Previous reference ,p 15.

² (EFQM, 2003), EFQM Excellence Model version 2003, Brussels.

³ Hides, Michael. T, Davies, John, and Jackson, Sue, (2004). "Implementation of EFQM excellence model self-assessment in the UK higher education sector – lessons learned from other sectors", The TQM Magazine, Vol 16 · No 3, p 194-201.

3. It is the most widely used organizational framework in Europe where it has become the basis for the majority of national and regional Excellence Awards.
4. The EFQM Excellence Model takes a holistic view of the organization and it allows the organization to assess its strengths and areas for improvement. It is a non-prescriptive framework that allows for enough flexibility to be adapted to any type of organization regardless of size or sector.

The EFQM Excellence Model consists of 9 criteria and (32) sub-criteria. The five criteria on the left-hand side of Figure 2.1 are called “Enablers” and are concerned with how the organization performs various activities. According to (Peter, H., 1994)¹ ‘The enablers are those processes and systems that need to be in place and managed to deliver total quality’. The four criteria on the right of Figure 2.1 are concerned with the “Results” the organisation is achieving with respect to different stakeholders. Added also that ‘result provide the measure of actual achievement of improvement. Paul. W, (2002)² stated that “the EFQM Model provided a truly service focused quality system which had an inbuilt mechanism for the attainment of continued organizational improvement identified that ‘the criteria of the model helped managers to understand what TQM means in relation to managing a company. These criteria have the weightings from the total score of 1000 points. The Model, which recognizes there are many approaches to achieve sustainable excellence in all aspects of performance,

¹ Peter, H., (1994) "Making Self-assessment Successful", The TQM Magazine, Vol. 6 Iss: 3, pp.29 - 31

² Paul. W,(2002). "United Kingdom: Implementing the European Foundation for Quality Management Excellence Model".

is based on the premise that: Excellent results with respect to Performance, Customers, People and Society are achieved through Leadership driving Policy and Strategy that is delivered through People, Partnerships and Resources, and Processes as in The EFQM Model presented in figure 2.1 below.

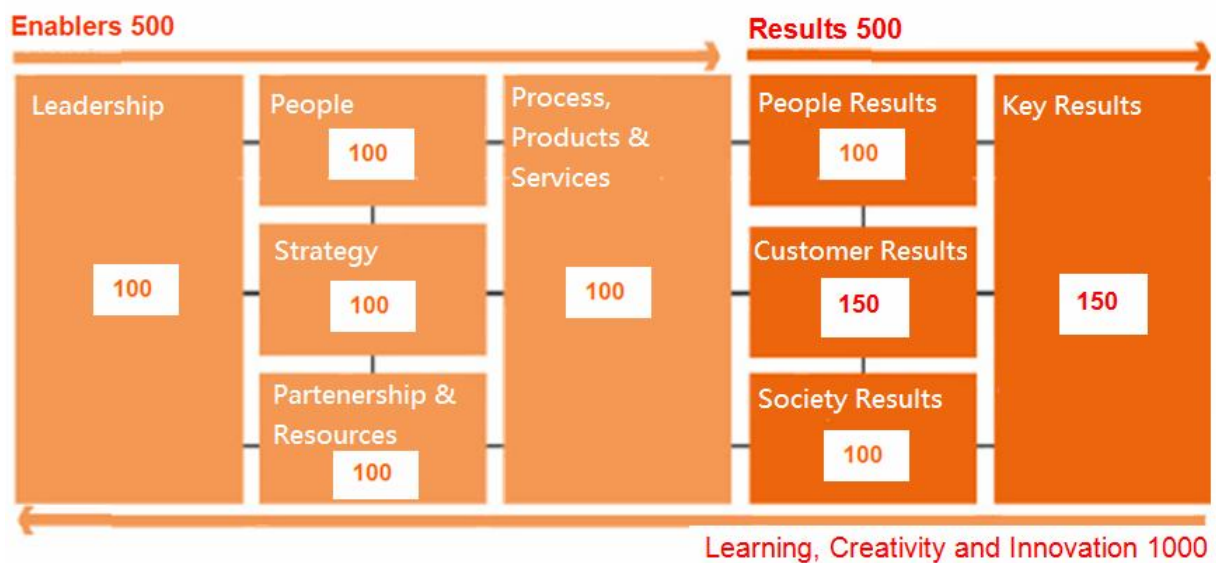


Fig 2.1: EFQM Excellence Model & Allocations (EFQM, 2013)¹

2.7.3 EFQM Excellence Model 2010

The EFQM Excellence Model was developed in 1990 to provide a framework for organisations to determine the effectiveness of their strategy development and implementation. It is not a “check list”. It is non-prescriptive and can be applied by any organisation, regardless of size or sector.

The Model has been reviewed a number of times over the past years, incorporating new ideas and thinking, legislative and regulatory requirements and adapting to the changing global economic, societal and political environment.

¹ EFQM, (2013), Previous reference p 15.

The EFQM Excellence Model 2010 is made up of 3 parts;

1. The Fundamental Concepts of Excellence:

There are 8 concepts of excellence which underpin the Model and are the “red threads” that run through the 9 Box Model. These are used to provide a holistic overview.

2. The 9 Box Model:

This is the most recognized part of the EFQM Model. There are 32 criterion parts grouped under 9 criteria, each represented as one of the 9 boxes.

These are used to understand the details within the organisation.

3. RADAR:

The RADAR is the tool used to assess and score during the assessment.

It is based on a cycle of continuous learning and improvement.

2.7.4 EFQM Training:

EFQM offer training for Business Excellence and Managers to provide the knowledge and skills required to effectively implement the EFQM Excellence Model in their organisation. To support your journey to excellence, you may be interested in the following courses:

EFQM Leaders for Excellence:

“Leaders for Excellence” is designed for managers who want to understand and apply the EFQM Excellence Model within their working environment. Using real application documents, from either the public or private sector, and simple, effective tools, participants will learn how to identify areas for improvement and adopt a structured approach to effectively address them.

EFQM Assessor Training

Being an assessor is not merely a 'technical' exercise but is a demanding task requiring a balance of excellent interpersonal and analytical skills coupled with an understanding of the realities of operating environment. During the course you will be assessed based on your team work contributions, your information assimilations, your feedback and written exercises. Passing formally qualifies you as an international EFQM Excellence Assessor.

2.7.5 EFQM Excellence Model Uses:

EFQM described EFQM Excellence Model as: “a practical tool to help organizations to establish an appropriate management system by measuring where they are on the path towards Excellence, helping them to understand the gaps, and then stimulating solutions” (EFQM 2013)¹.

Definitions of different levels of usage of the Excellence Model as in the Table 2.1 below:

¹ EFQM, (2013), Previous reference p 15.

Table 2.1: Definitions of different levels of usage of the Excellence Model

Level	Distinguishing features (examples)
Entry Level	<ul style="list-style-type: none"> • Some knowledge of the concepts of excellence and performance improvement. • Limited awareness of the Excellence Model. • Membership of a regional or national quality foundation. • Some involvement with local and sector networks. • Limited deployment of quality tools within the organization. • Survey or matrix-based self-assessments have been carried out.
Maturing Level	<ul style="list-style-type: none"> • Dedicated budgets for the Excellence Model are committed and a number of staff have been trained externally as assessors. • An evidence-based self-assessment has been conducted and a cycle of self-assessment is emerging. • The Excellence Model is partially deployed across the organization and is partially integrated with planning and improvement processes. • Early examples of organizational improvement are emerging and the organization is entering or winning regional awards.
Advanced Level	<ul style="list-style-type: none"> • Senior Managers demonstrate clear leadership and support for the principles of excellence. • A culture of self-assessment and continuous improvement is established. • The organization has achieved recognition and awards for excellence, nationally and at, or close to, European level. • The Excellence Model is fully deployed and the organization has integrated it into its planning and improvement processes.

PriceWaterhouseCoopers (2000)¹.

The main reason for companies to apply the EFQM Excellence Model is to pursue business excellence through TQM, thereby allowing them to compete successfully

¹ *PricewaterhouseCoopers, (2000). Team Performance Management: An International J, Vol; 7 No; 3, p36.*

in the global markets. The EFQM Excellence Model is a practical tool that can be used in a different ways:

- **Self-Assessment tool.**
- **Benchmarking** with other organizations.
- **Improvement tool.**
- **Structure** for the organization's management system. The EFQM Excellence Model is a non-prescriptive framework based on 9 criteria. Five of these were 'Enablers' and four were 'Results'. The 'Enabler' criteria cover what an organization does. The 'Results' criteria cover what an organization achieves. 'Results' are caused by 'Enablers' and 'Enablers' are improved using feedback from 'Results'. The Model, which recognizes there are many approaches to achieving sustainable excellence in all aspects of performance, is based on the premise that: Excellent results with respect to Performance, Customers, People and Society are achieved through Leadership driving Policy and Strategy, Which is delivered through People, Partnerships and Resources, and Processes.

2.7.6 Self-Assessment:

The European Foundation for Quality Management suggests a number of approaches for self-assessment, which are questionnaire, matrix chart, workshop, pro-forma and award simulation, (EFQM 2003)¹.

Porter, M. E, (1998)² stated that: "Self-assessment is a strategic business improvement tool. Managers at the highest level of the organisation lead most self-assessments. Commitment to improvement is demonstrated by senior managers' and directors' involvement in self-assessment activities".

¹ EFQM, (2003), Previous reference p 21.

² Porter, M. E. (1998). *Competitive strategy: Techniques for analyzing industries and competitors : with a new introduction*. New York.

Definition of self-assessment is: "Self-Assessment is a comprehensive, systematic and regular review of an organization's activities and results referenced against the EFQM Excellence Model. The Self-Assessment process allows the organization to discern clearly its strengths and areas in which improvements can be made and culminates in planned improvement actions which are then monitored for progress". Hides et al. (2004)¹ reported that the self-assessment process was dependent upon good data collection.

Thus it can be seen from the above definition that self-assessment is a vehicle for systematic continuous improvement in an organization. An extensive study by (Coulambidou and Dale, 1995)² supports this view. The surveyed organizations when asked which factors were the most important for justifying their continuing with self-assessment identified the following:

- Identify opportunities for improvement.
- Provide new motivation for the quality improvement process.
- Direct the improvement process.
- Manage the business.

Paul. W., (2002)³ sees four main areas of benefit in using **self-assessment**:

Measurement, applying best practice, involvement, reinforcement of direction
Clearly there is a degree of overlap between the results of *Coulambidou and Dale's* survey and Hillman's views, which are based on his experience of training consultancy in organizations using the EFQM Excellence Model. There is clear

¹ Hides, Michael. T, Davies, John, and Jackson, Sue, (2004), previous reference p 21.

² Coulambidou and Dale (1995). Relationship Between Job Satisfaction and Business Excellence: Empirical Evidence from Hospital Nursing Departments.

³ Paul. W., (2002) Previous reference p 11.

agreement that self-assessment helps in identifying areas for improvement and directing the improvement process.

*EFQM, (2003)*¹ recognized that each self-assessment approach delivers different benefits and involves different resources and risks.

In line with this thinking the *(EFQM, 2013)*² have a menu of approaches that organizations can choose from dependent upon whether they are well on the way with applying quality concepts and frameworks, just starting the journey or somewhere in between the two. A distinction is also made between the amount of effort required for each approach in terms of low, medium and high effort. Clearly these choices depend upon the availability of resources within the organization regarding commitment, time, energy, information and finance. Likewise the organization may consider applying the EFQM Model throughout all departments at once or design a phased approach, whereby some departments will apply it before others, dependent upon the aforementioned resources available.

Business Excellence Models are not only designed to present the criteria and procedures to compete award winner; its purpose is to become an effective self-assessment tool for those who are interested in quality and allocate resources to serve as guidance for improving their organizations. That is to say, the model is geared not only to the organizations in a position to successfully compete for the award but also to those who wish to take up the challenge of pursuing competitiveness and business excellence.

¹ EFQM, (2003) , previous reference p 21.

² (EFQM, 2013) , previous reference p 15.

Porter & Tanner, (2004)¹ proposed eight-step common processes for an organization to conduct a self-assessment, see Table 2.2.

It starts from choosing the framework and ends up with eliciting the action plans for those are necessary to be corrected or improved.

Step -1 Choosing the framework: The purpose of the step is to choose a BEM being used in the self-assessment project.

There is no 'best' framework, only the appropriate framework. Several factors dictate the choice of the actual framework, including length of experience with assessment and geographical location. At the detailed level within the frameworks, many organizations tailor the framework and terminologies to improve its usability. Except that, the management issues which related to this self-assessment project have to be identified by the in-charge manager in this step. They include the details of each main activity, timescales and resource requirements.

Step -2 Forming the assessment team: Due to the criteria address a wide range of areas, including human resource management/organizational behavior (leadership, people management and results), business analysis (all the results' criteria), and process management. No single person is likely to have an in-depth knowledge in all these areas. Thus, the implementation of the Business Excellence Model (BEM) self-assessment is a team-based activity.

It involves forming a team that has the responsibility for preparing the submission.

It is essential that the submission team members are drawn from a broad cross section of the organization, have the necessary insights and the authority to

¹Porter & Tanner, (2004), previous reference p 15.

access the information required. Also, the process of assessing business or organizational excellence relies on people being able to make an objective assessment of excellence. People's perception of excellence differs, and the team-based approach makes the whole process robust to those differing views and experiences.

Step -3 collecting the information: Self-assessment is an organizational health check that is best based on facts and not subjective opinions. However, there are various ways of establishing the facts.

This step is governed by two factors, the objectivity required and the resources available. Generally speaking, greater objectivity requires more resources. A range of data collection approaches is available for different stage of quality maturity. The approaches include questionnaire survey, matrix, pro-forma, and award-type processes.

Generally speaking, the organization with the less quality maturity chooses the rather basic data collection approaches, such as questionnaire survey. It allows the assessments project to be made without too much resource consumed. On the other hand, the organization with the more quality maturity chooses the more advanced data collection approaches, such as award-type processes.

Step -4 Assessments and scoring: The first task of the assessment team is to carry out an individual assessment and score the submission in this step. Assessors review the entire submission document to identify the strengths, areas for improvement, and clarification issues in the site visit. This information is recorded in a scorebook in terms of a multidimensional evaluation scoring system, such as 'result ', 'approach ', 'deployment', 'assessment' and 'review' in EQA . The

multidimensional evaluation scoring system has many advantages, it is important to separate approach/deployment/assessment/review from results/scope.

Step -5 Consensuses: Following the individual assessment and scoring, members of the assessment team come together to share their views on the submission and to reach consensus on the strengths, areas for improvement, scores and clarification issues in the site visit. Consensus is a learning opportunity for each assessor, and provides the opportunity for the team to take an overview of the total information available from each individual assessment, reassess the evidence and reach consensus. The senior assessor plays a key role in the process and is responsible for organizing and running the consensus meeting.

Step 6-The site visit process – clarification and verification: It is almost impossible to capture the true position of an organization in the submission document. During the assessment process, many areas require further clarification. It is also necessary to make the verification to the validity of the submission document.

These tasks can be carried out during site visits to the organization. Individual assessment, consensus and site visit are the key sub-processes to a self-assessment project.

Step7-Feedback: The feedback report is the major output from the self-assessment process. It is the final analysis of the organization and contains the accumulated knowledge acquired by the assessor team. A good report is tactful and constructive and is based on fact not on subjective opinion. It should encourage the organization to take improvement opportunities forward and ensure that the best practice is deployed across the organization.

Step -8 Action planning: Any self-assessment cycle should be concluded with a post completion review to identify what went well with the process, what could

be improved, and what benefits have been or are likely to be achieved. The culmination of the whole process is to take the feedback from the assessment and to develop action plans that deliver increased levels of satisfaction for the stakeholders—namely customers, employees, society at large and the shareholders to the other financial stakeholders.

2.7.7 Types of Assessment approaches:

- 1. Questionnaire approach:** Deemed by the EFQM (2003)¹ as one of the least labor intensive approaches (providing an existing questionnaire is used) the questionnaire self-assessment approach aims to obtain the views of all people within the organization. The benefits associated with this approach are that it is quick and easy to apply, can involve all the organization's people, supports communication efforts and can be used in conjunction with other approaches. The associated risks are that the strengths and areas for improvement cannot be ascertained, accuracy of feedback is dependent upon the phrasing of the original questions, there may be questionnaire fatigue within the organization and expectations can be raised and unfulfilled if timely, appropriate actions do not occur (EFQM 2003)².
- 2. Matrix chart approach:** In essence the matrix chart approach requires an organisation to create a series of achievement statements that can be assigned a rating from 1-10. Statements would have to be identified for all the nine criteria of the Model, thereby involving the creation of 90 achievement statements in total. The matrix chart is then used by management teams who self-assess where the organization is in relation to

¹EFQM (2003), previous reference p 21.

²EFQM (2003) same reference.

the statements. The benefits associated with this approach are that it is simple to use, requires minimal training, can involve all the organization's people, supports team discussion and clearly demonstrates progress and the lack of progress in relation to all the nine criteria of the EFQM Excellence Model. The associated risks are that the list of strengths and areas for improvement are not produced, it does not allow comparisons against EQA applicants and there is no direct cross-reference between the matrix statements and the sub-criteria of the Model (EFQM 2003)¹.

3. Workshop approach: The workshop approach has five distinct phases; Training, data collection, a scoring workshop, prioritization of improvement actions, and a review of progress. The latter becomes part of the normal review process for the organization. The benefits associated with this approach are that it; is an excellent way to familiarize management teams to understand the Model, supports team building and allows for discussion and agreement regarding the strengths and areas for improvement, which provides motivation towards improvement actions. The associated risks are that it; is less robust than the award simulation approach requires expert facilitation and can result in unrealistic, often over generous scoring (EFQM 2003)².

4. Pro-forma approach: The pro-forma approach involves using a set of pro-forms, which in total contain all the 32 sub-criteria of the EFQM Excellence Model. A Practical Guide for Self-Assessment¹.

¹ EFQM (2003), previous reference p 21.

² EFQM (2003), same reference.

Assessment teams collect the appropriate information and then use the pro-forms to undertake a self-assessment. The benefits associated with this approach are that it; provides factual information, delivers a list of strengths and areas for improvement, can involve a range of the organization's people and provides a reasonably accurate indication of an award application score. The associated risks are that; the process is dependent upon good data collection and the performs can stifle recognition of the full story relating to excellence development (EFQM 2003)¹.

- 5. Award simulation approach:** The award simulation approach is in essence a replication of the process for entering for the European Quality Award. It involves preparing a full submission document abiding by the criteria laid down in the EFQM Award Application brochure (EFQM 2003)². Subsequently a team of trained assessors, either internal or external to the organization, scores the application and provides a feedback report containing a list of strengths and areas for improvement. The benefits associated with this approach are that it provides; a list of strengths and areas for improvement, an excellent communication document, an opportunity to compare performance with other organizations and a rehearsal for applying for the EQA. The associated risks are less involvement of managers because the task is usually delegated, a potential for creative writing and it can be too ambitious for an organization early on in its journey towards excellence (EFQM 2003)³.

¹ EFQM (2003), previous reference p 21.

² EFQM (2003), same reference.

³ EFQM (2003), same reference.

Clearly the issue of which self-assessment approach to use and why is a significant one for organizations. This issue will be explored in the fieldwork.

To help organizations with the process of self-assessment, RADAR logic was introduced *adapted from Carlos et al, (2005)*¹.

Table 2.2: Types of Assessment Approaches

	Approach	Typical process	Advantage	Disadvantage
1	Award simulation	Using a team of trained assessors drawn from the whole organization using the written report approach.	High accuracy	More time and resources required
2	Peer Involvement	Similar to the award simulation but with the trained assessors drawn from a business unit.	High accuracy	Difficult in getting the right people
3	Workshop (Quick inspection)	A management-led approach with data and evidence gathered during the workshop.	Shorten time-scale for data collection	Less accurate
4	Matrix chart	Use of an organization-specific achievement matrix based on the EFQM Model on a point scale of 1 to 10 or similar.	Quick & simple	Over-simplified, low Accuracy
5	Questionnaire	Questionnaire based on EFQM Model criteria for scoring.	A good method for getting widespread feedback	Very dependent on the skill in rawing up the questionnaire
6	Hybrid or ... Others		

Source: (Ir Dr Mckey Ho, 2012)²

¹ Carlos B, Vicente R, Inmaculada B., (2005) "To what extent do enablers explain results in the EFQM excellence model?: An empirical study", International Journal of Quality & Reliability Management, Vol. 22 Iss: 4, pp.337 - 353?

² Ir Dr Mckey Ho, (2012): Implementation of EFQM Excellence Model

2.7.8 RADAR logic:

Radar logic is a dynamic assessment framework and powerful management tool that provides a structured approach to questioning the performance of an organization and consist of four elements: Results, Approach, Deployment, Assessment and Review as in the figure 2.2 below:

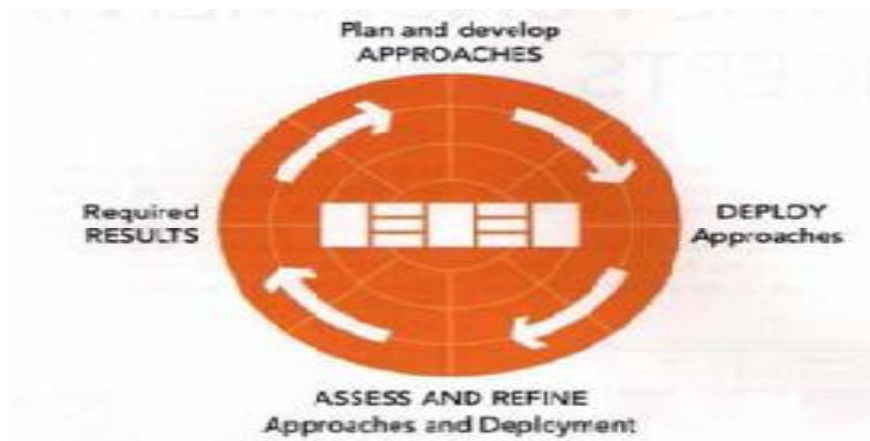


Fig 2.2: Radar logic framework (EFQM, 2003)¹.

The specific elements of Radar concept that should be addressed are:

1. Results: This covers what an organization achieves. In an excellent organization the results will show positive trends and/or sustained good performance, targets will be appropriate and met or exceeded, performance will compare well with others and will have been caused by the approaches. Additionally, the scope of the results will address the relevant areas.

2. Approach: This covers what an organization plans to do and the reasons for it. In an excellent organization the approach will be sound -having a clear rationale, well-defined and developed processes and a clear focus on stakeholder needs, and will be integrated - supporting policy and strategy and linked to other approaches where appropriate.

¹ EFQM (2003), previous reference p 21.

3. Deployment: This covers the extent to which an organization uses the approach and what it does to deploy it.

In an excellent organization the approach will be implemented in relevant areas, in a systematic way.

4. Assessment & Review: This covers what an organization does to assess and review both the approach and the deployment of the approach. In an excellent organization the approach, and deployment of it, will be subject to regular measurement, learning activities will be undertaken, and the output from both will be used to identify, priorities, plan and implement improvement

Radar logic compared to the Deming/Shewhart cycle of continuous improvement and continues later:

"All in all it can be seen that applying the RADAR logic is a rigorous process that has the potential to achieve desired results providing efforts are continuous and relentless, measurements are timely and appropriate, and learning opportunities are not overlooked.

Furthermore, applying the Radar logic to the nine criteria of the EFQM Excellence Model is a demanding exercise that requires a sensible implementation approach best achieved by starting simple".

Scoring: The weightings for each of the criteria in the EFQM Excellence Model are as table 2.3 below:

Table 2.3: The weights of the criteria of the excellence model out of 1000 pts

	The criteria	The weight	
	Leadership	10%	Enablers 50%
	Strategy	10%	
	People	10%	
	Partnerships and Resources	10%	
	Processes & products & services	10%	
	People Results	10%	Results 50%
	Customer Results	15%	
	Society Results	10%	
	Business Results	15%	

Source: (EFQM, 2013)¹

However many authors have drawn attention to the negative aspects of the scoring system.

Leonard and McAdam (2002)² quoted a manager interviewed as part of their research into organizations using the EFQM Excellence model who makes a point about the dangers of measurement and in particular the scoring system of the EFQM model:

"When you start assessment, self-assessment in departments, you'll be looking at scores because there's danger if you do that, managers are going to start creating scores here. And I've a feeling at the moment that the right way to approach it is not to have a score".

¹(EFQM, 2013) previous reference p 15.

² Leonard and McAdam, (2002). International Journal of Quality & Reliability Management.

PriceWaterhouseCoopers, (2000)¹ reported from an extensive survey that, in a number of cases, organisations undertook their self-assessment without using the scoring mechanism. As they became more familiar with the process of self-assessment then the scoring system was given more importance. This was usually the case on their second or third self-assessment cycles.

Although some organizations could see advantages in producing scores, for example, for participating in the benchmarking database run by the Civil Service College, the majority of managers interviewed instead concentrated their efforts on assessing, prioritizing and targeting areas for improvement.

In addition, the fact that the maximum score that can be achieved is 1000 infers that there is a standard for excellence. This is at odds with the notion that the EFQM Excellence model exists to promote continuous improvement in an organization through the identification of areas for improvement. The author would argue that even an organization that scores the maximum of 1000 points still has scope for improvement. This is another argument that undermines the scoring process. In the recent 'refreshment' of the EFQM Excellence Model, explained that the EFQM had decided on this to ensure that:

"The true value of the RADAR process is gained (Plan, Do, Check and Act) rather than just a mechanism for scoring".

This provides further evidence to support the view that scoring can detract from the improvement process. It can be seen clearly from the above debate that the decisions of whether to use scoring as part of self-assessment, whether to amend the weightings given in the model and subsequently what purposes any scores

¹PriceWaterhouseCoopers, (2000). previous reference p 26.

should be used for are significant for organizations as they impact on organizational behavior (John., D, 2004)¹.

2.7.9 Assessment Criteria:

The assessment criteria are grouped by Fundamental Concept. The approach title is a generic title so you understand what is required. If the approach you use in your organisation has a specific title, you can change the title in the box; for example, if you use a “Balanced Scorecard”, you can change the title of the approach in row 3 to “Balanced Scorecard”. If you call the top level management report the “KPI Monitor”, change it to this. The guidance text is there to give you a further understanding of the type and scope of the approach. The description you add should be summary of the approach used, where it is implemented and how it works. 1 or 2 short sentences are sufficient. For example, if you’re describing a “Balanced Scorecard” approach, you might say:

“We implemented the Balanced Scorecard 3 years ago. Performance is reviewed monthly at the Board Meeting and the measures included are reviewed and updated in line with our 3 year strategic plan.” There is a column after the rating for each approach to note any improvement opportunities suggested during the discussions.

¹ (John., D, 2004) previous reference p 6.

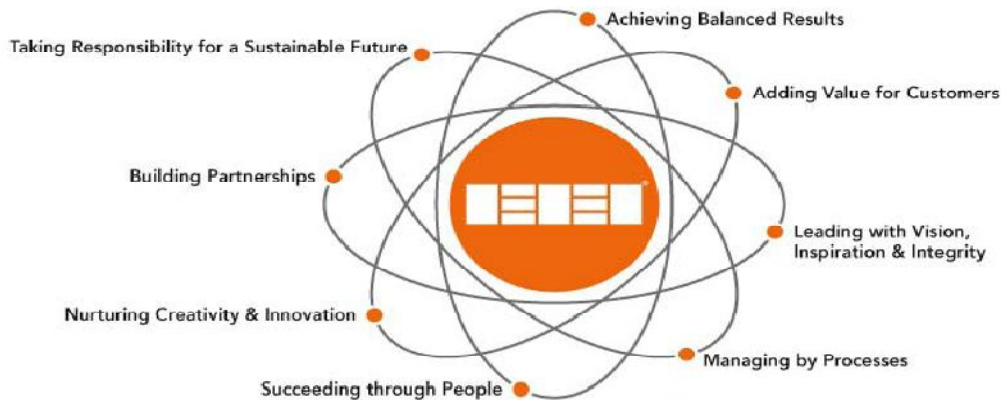


Fig 2.3: The fundamental concept of the Excellence Model (EFQM,2010)¹

The Quick Check criteria are based on the Fundamental Concepts of Excellence. The fundamental concepts are the “Red Threads” that underpin the EFQM Excellence Model.

Table 2.4: The fundamental concept of the Excellence Model

No	Fundamental concept	approach	guidance
1	Achieving Balanced Results	Business Planning Process	The approach you use for prioritising and planning your future activities, in line with your stakeholder needs and expectations.
		Target Setting Process	The approach you use for setting performance targets for your key performance indicators, both financial and non-financial, in line with stakeholder expectations.
		Balanced Scorecard or Top Level Management Report	The approach you use to develop the framework of measures you use to track performance against strategic objectives, usually for review by the Management Team.

¹ EFQM Excellence Model version 2010, Brussels.

Cont. to table 2.4: The fundamental concept of the Excellence Model

No	Fundamental concept	approach	guidance
2	Adding Value to Customers	Customer Relationship Management	The approach you have developed for understanding and meeting the needs and expectations of your customers.
		Complaints Management Process	The approach you use for ensure customer complaints are captured and resolved effectively and efficiently.
		Customer Survey	The approach you have for collecting structured customer perception data to enable the review of "customer relationship management".
3	Leading with Vision, Inspiration and Integrity	Clear Vision, Mission & Values statements	The approach you have for defining and refining the organisation's Vision, Mission and Values.
		KPI Report & Review Meeting	The approach you use to regularly review performance against your key objectives and agree appropriate improvement actions and tactical responses to performance levels achieved.
4	Management by Process	Process Framework Defined & Mapped	The approach you use for defining and documenting the framework of key processes required to effectively implement your strategy.
		Process Ownership Defined	The approach you use for defining ownership and responsibility for managing your key processes.
		Process Improvement Methodology	The approach used for identifying, prioritising and implementing process improvements, including ensuring they have had the desired impact on improving the effectiveness and efficiency.

Cont. to table 2.4: The fundamental concept of the Excellence Model

No	Fundamental concept	approach	guidance
		Employee Survey	The approach you have for collecting structured people perception data to enable the review of HR policies and processes.
5	Nurturing Creativity and Innovation	Benchmarking Strategy	The approach you have for comparing the effectiveness and efficiency of your key processes and approaches against suitable external benchmarks.
		Knowledge Management Strategy	The approach you use for ensuring people, both within and outside your organisation, have access to accurate, reliable and timely information that will enable the effective execution of your key processes and the achievement of your strategic objectives.
		Market Research & Analysis	The approach you use for understanding changes and performance levels within the external environment your organisation operates in.
6	Developing Partnerships	Standard Procurement Policies	The approach you use to effectively and efficiently acquire the external products and services your organisation requires to deliver your strategic and operational objectives.
		Partnership Policy & Guidelines	The approach you use for identifying, forming and developing relationships with external partners whose core products and services compliment those of your organisation.
7	Taking Responsibility for a Sustainable Future	Environmental Management Policy	The approach you have to determining, managing and minimising the impact of your operations on the environment.
		CSR Policy	The approach you have adopted to understanding and maximising your contribution to society, whether locally or globally.

2.8 What is the performance?

This question seems simple to address at first glance but it is in fact, quite complex. Part of the problem defining “performance” is that you will come across a number of words with similar meanings in the literature.

They eventually develop a working definition of performance as: “Doing today what will lead to measured value outcomes tomorrow”.

This working definition takes in the process of producing results and the results themselves and is a common concept when people define organizational performance. This definition can be analyzed by considering a simple system view of an organization’s activities and results, like that in following Figure.

Is well understood then, a measure of the performance of inputs may give an indication of the level of performance of eventual outcomes.

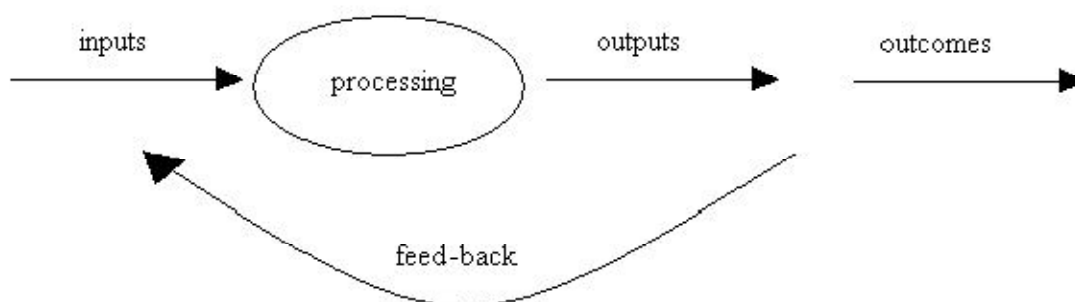


Fig 2.4: Simple systems view of an organization performance, Khogali, (2014)²

¹ (EFQM,2010) previous reference p 42.

² Khogali, (2014), previous reference p 8.

2.8.1 Financial and Non-Financial Performance:

Financial performance is often spoken of as the ultimate indicator of a company's performance. But, there is no one financial measurable that will satisfy all stakeholders in an organisation. Shareholders look at how their investments are increasing, managers may look at sales and profits and customers may be concerned with costs.

Eccles (1991) produced an influential article in the Harvard Business Review entitled "The performance measurement manifesto". In it, he stated that "The leading indicators of business performance cannot be found in financial data alone. Quality, customer satisfaction, innovation, market share - metrics like these often reflect a company's economic condition and growth prospects better than its reported earnings do. Depending on an accounting department to reveal a company's future will leave it hopelessly mired in the past. More and more managers are changing their company's performance measurement systems to track non-financial measures and reinforce new competitive strategies." Eccles identified the fact that the technology to make the change to non-financial performance measurement systems had become possible and economically feasible. He also identified the fact that there was a developing body of academic and practitioner knowledge about performance and specifically non-financial performance that would help the development of viable systems. He rather optimistically stated that "When one leading company can demonstrate the long-term advantage of its superior performance on quality or innovation or any other non-financial measure, it will change the rules for all its rivals forever".

Quality awards like the Malcolm Baldrige National Quality Award in the US, the European Foundation for Quality Management (EFQM) Model and the impact of the balanced scorecard movement led to an interest in non-financial measures of performance. The advocates of these awards and models imply that performance cannot be defined in strict financial terms. They reinforce the view that performance is the result of some causal factors.

2.8.2 The Concept of Performance & Organizational Performance:

As a concept, performance is what determines the result of an activity qualitatively/ quantitatively. Also defined as accomplishing the predetermined criteria to achieve a task, the concept of performance (Performance Management System) stands out in business literature as a more important concept when combined with the concept of evaluation.

The concept of performance evaluation has many definitions besides denoting a process in which the performance of an individual, a unit or organizations in terms of predetermined standards or on the basis of other similar performances. In evaluation of personnel on individual base, an executive evaluates the performance of his/her personnel through comparison with predetermined standards. Performance evaluation enables him/her to know his/her employees better and therefore, is a planned instrument that, on an individual basis, details an individual's success in a task, his/her willingness, attitudes, behaviors, moral nature and characteristics and evaluates his/her contribution to the overall success of the organization. On the organizational basis, performance evaluation is nothing more than an evaluation of organizational success through predetermined standards or comparison. Evaluation of organizational

performance forms an important frame in sustaining success in today's business life in which global competition is rapidly increasing and radical opportunities exist together with crucial obstacles in terms of information technologies.

In this study, we found that all the criteria are grouped under seven criteria. Though the names might be different, these criteria all reveal the organizational performance. These criteria are as follows: quality, efficiency, innovation, productivity, financial performance (profitability and suitability for the budget), quality of work life, customer satisfaction.

2.8.3 PERFORMANCE OUTCOMES:

- In excellent organizations, results will show positive Trends and/or sustained good performance.
- Targets will be set for key results and will be appropriate and met or exceeded.
- Performance will be compared externally and the comparison will be favorable, particularly, against best-in-class.
- Understanding of the relationship between key Enablers and key results will provide confidence that positive performance will be sustained in the future.

2.9 Business Challenges:

1. Customers are more demanding, if they are sophisticated and knowledgeable, if you don't offer a good service they will buy from competitors.
2. Competition is greater the same product offered at low cost this may be because of low wage costs or large investment.
3. Technology is change: e.g. Service organization is using information technology

to respond failure.

4. Legislation: is making greater demand on companies, environmental, health, and safety laws require companies to work safe and pollution-free business.

TQM program creates continuous improvement. These reduce cost and improve customer satisfaction. Both these factors ultimately lead to more profit.

Porter & Tanner, (1996)¹ describe TQM as a business approach that focuses on improving the organization's effectiveness, efficiency and responsiveness to customers' needs by actively involving people in process improvement activities. They argue that measurement is fundamental to know if improvement has occurred and that self-assessment provides a means of monitoring the progress of TQM programmed.

EFQM Excellence Model recognizes that stakeholder needs are met through the process that describes the approaches that used to implement the excellence model, hence the improvement of that approaches used is at the heart of any organizational development and it is through processes that the talent of people can be released, which in turn produces better performance. It also follows that improvement in performance can be achieved only by involving the people in the continuous improvement of the approaches used to implement the excellence model.

¹Porter & Tanner, (1996), previous reference p 15.

CHAPTER 3

Materials & Methods

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Materials & Methods

3.0 Study Methodology:

This chapter contains sections on the choice of research strategy, the research design, and preparation for data collection and methods for the analysis of case study data.

The study also followed by the analytical/descriptive approach in addition to the statistical analysis. The data was collected from the primary and secondary sources.

3.1 The secondary resources:

The secondary resources included the use of books, journals, statistics, reports, web pages and the performance indicators data.

3.2 The primary resources:

The primary resources were collected by using questionnaires that were obtained from the authorized and delegated persons as appendix (2).

The methods of collecting data in this research depend on the output of questionnaires which conducted with the project managers and core persons at the companies of case studies. Yin, (1994)¹ describes six major sources of evidence; documents, archival records, interviews, direct observation, participant-observation and physical artifacts.

It was indicated earlier in the chapter that the discussions that the author had with the project managers in each of the case study organizations had revealed

¹ Robert K. Y, (1994). CASE STUDY RESEARCH: Design and Methods.

that there was only a handful of people in each case study organization who would have sufficient knowledge of the deployed approaches to be able to provide an insight into either the whole of the implementation of approach or significant portions of it.

3.3 Questionnaires:

A questionnaire perspectives and statements were designed according to approaches criteria to assess the effectiveness of deployed approaches according to EFQM Excellence Model written in Arabic and English languages as appendix (1) which represent:

- The soundness of deployed approaches.
- The integration of deployed approaches.
- The implementation of deployed approaches.
- The measurement of deployed approaches.

The questionnaire of this study approved by scientists from different universities appendix (3).

Yin, (1994)¹ has described the research design as the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions.

Since the secondary data was collected from the submission documents which reflect the customer perception towards companies under study for the years 2009 to 2013 hence, 50 questionnaires are collected from 6 out of the 30 companies under study for December 2014. The aim of the questionnaires is to define and examine the impacts of the deployed approaches toward

¹ Yin, (1994), previous reference p 51.

implementing the EFQM Excellence Model on the excellence results achieved appendix (4).

3.4 Data Measurement:

Ordinal scales were used. Ordinal scale is a ranking or a rating data that normally uses integers in ascending or descending order. The numbers assigned to the important (1,2,3,4,5) of effective criteria of deployed approaches, do not indicate that the interval between scales are equal, nor do they indicate absolute quantities. They are merely numerical labels. Based on Likert scale, table 3.1 below:

Table 3.1: Likert scale to determine the perception of the deployed approaches

Item	Strongly agree	Agree	Do not Know	Disagree	Strongly Disagree
Scale	5	4	3	2	1

Source: Abu Saada, (2013)¹

3.5 Questionnaires Data Analysis:

Data analysis for questionnaires and test of its hypotheses is done. The instruments of applied study, which contain the description of the study's population and its samples, method of collection data, reliability and validity of the study tool, and the statistical treatments that used the methodology of the study will be shown here.

3.6 Population and Scope of sample size:

The population of the study included (50) questionnaires conducted with of core persons: represent the project manager and also with a members of the main team worked at the units to apply the excellence model and they were a familiar with Excellence Model and any quality applications' concept. The population

¹ Abu Saada, (2013), previous reference p 20.

considered as a comprehensive sample for the study collected from the business units with respect to volume for each business unit.

3.7 The data collection Process:

All the levels covered by the same questionnaire' questions, firstly to determine the approach deployed and secondly inquiring about the perceptions of the approaches deployed during the period of implementing the Excellence Model, and some data collected about the business performance indicators

3.8 Conduct of Data Collection within the Case Studies:

The case study background memo will be send to business unit's managers before the visits in order that the general managers were awarded of the data collection procedures with a letter to business unit's managers' appendix (6).

Each person will receive a copy of the notes for questionnaires before two weeks in order that they were be informed by the research protocol. The questionnaire and data collection took place between one and two days before. The study will have access to the business units' files and documentations of each business units in order to copy supporting documents for each case.

3.9 Choice of Interviewees for the questionnaires:

The persons who selected to reply the questionnaires included the projects' managers and the members of improvement teams at the business units.

3.10 Time and Location of the questionnaires:

The questionnaires times were arranged to be convenient to the interviewees and took place between the 15th and 20th of February 2015. This allowed the interviewees to reflect on the whole time period of the implementation of the approaches. All the questionnaires were conducted on site at the case study

business units, which allowed for the opportunity to access appropriate documents as planned.

3.11 Statistical analysis Tools:

In order to satisfy the study objectives and to test its hypotheses, the following statistical instruments were used:

- 1) Pearson correlation coefficient for Validity.
- 2) Cronbach's Alpha for Reliability Statistics.
- 3) Frequency distribution.

3.12 Validity of Questionnaire:

Validity refers to the degree to which an instrument measures what it is supposed to be measuring. Validity has a number of different aspects and assessment approaches. Statistical validity is used to evaluate instrument validity, which include internal validity and structure validity

Internal Validity

Internal validity of the questionnaire is the first statistical test that used to test the validity of the questionnaire. It is measured by a scouting sample, which consisted of 50 questionnaires through measuring the correlation coefficients of each filed table 3.3 below.

Structure Validity of the Questionnaire

It measures the correlation coefficient between one field and all the fields of the questionnaire that have the same level of likert scale.

3.13 Reliability of the Study:

The reliability of an instrument is the degree of consistency which measures the attribute; the less variation an instrument produces in repeated measurements of an attribute, the higher its reliability.

Cronbach's Coefficient Alpha:

This method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient alpha value between 0.0 and + 1.0, and the higher values reflects a higher degree of internal consistency.

For the field, value of Cronbach's Alpha was calculated for the whole field of the questionnaire found to be 0.91 which is considered high; the result ensures the reliability of field of the questionnaire.

CHAPTER 4

Results and Discussion

CHAPTER 4

Results and Discussion

4.1 The validity of the performance indicators:

Table 4.1: Correlation coefficient of business performance indicators

No	field	Pearson Correlation Coefficient
1	The training implemented on the deployed approach support the business units to achieve excellence results	0.81
2	Organizing workshops & seminars about the deployed approach support the business units to achieve excellence results.	0.65
3	Qualified Assessors in the business units support to achieve excellence results.	0.82
4	Management systems Implemented in business units support to achieve excellence results.	0.83
5	Benchmarking processes organized in business units support them to achieve excellence results.	0.79
6	Improvements teams in the business units support to achieve excellence results.	0.68

* Correlation is significant at the 0.05 level.

The p-values (Sig.) are less than 0.05, so the correlation coefficients of all the fields are significant at $\alpha = 0.05$, so it can be said that the fields are valid to be measured to achieve the main aim of the study.

4.2 The reliability of the questionnaire:

Table 4.2: Reliability of the paragraphs of questionnaire

No	Field	Cronbach's Alpha	Overall Cronbach's Alpha
1	The Soundness of the deployed approaches	0.68	0.927
2	The Integration of deployed approaches	0.87	
3	The Implementation the deployed approaches:	0.79	
4	The Measurement of deployed approaches:	0.77	

Table 4.3: Reliability of the whole questionnaire:

items	Cronbach's Alpha
14	0.927

Thereby, from the table 4.3 it can be said that the questionnaire was valid and reliable.

The results show that reliability of whole perceptions of the criteria of the questionnaire is accepted because Cronbach's Alpha is very high and calculated to be 0.927.

4.3 The analysis and discussions of primary data of questionnaires:

Question (1): What is the approach deployed when decide to implement the excellence model?

4.4 Determination of deployed approach:

Table 4.4: The distribution of the deployed approaches in the business units

No	The deployed approach	Frequency	Percentage
1	External Consultant	1	2
2	Workshop	47	94
3	Award Simulation	1	2
4	other	1	2
Total		50	100

Table 4.4 shows that the respondents are 47 out of 50 samples agreed that the workshop approach deployed with the percentage of 94% of the samples. It means that Giad Industrial Group business units adopted the deployment of the workshop approach when implementing the EFQM excellence Model. This result agreed with Watson, 2002 as he said that the main reason offered by the sampled companies for applying the EFQM approach to quality was self-assessment.

4.5 The Perceptions of Deployed Approach:

Question (1): To what extent do the deployed approach is sound?

Table 4.5: The Soundness of the deployed approach

Paragraph	Agree %	Do not know %	Disagree %	The mean	Proportional mean %	Rank
The deployed approach is clear & rationale	89	7	4	4.42	89	Agree
There are objectives & plans of deployed approach	85	6	9	4.09	85	Agree
The deployed approach Based on data	77	14	9	4.09	77	Agree
				4.20	83.7	Agree

Table 4.5 shows that the satisfaction perception represented by agreement scale on the soundness of the workshop approach is greater than the other two level of satisfaction with a mean of 4.2 with the average percentage of the components of the field of the paragraphs of %83.7.

The results show that all respondents of business units agree with 89% that the workshop approach is clear and rationale and the approach has a plan and strategy objectives and the processes based on data relevancy.

Question (2): To what extent do the deployed approach is integrated.

Table 4.6: The integration of the deployed approach

Paragraph	Agree %	Do not know %	Disagree %	No answer	The mean %	Proportional mean (%)	Rank
Integrated & support strategy	77	6	13	4	4.02	77	Agree
Enable the flexibility & agility	74	11	13	2	3.83	74	Agree
Ensure equal opportunities	81	9	10	0	4.02	81	Agree
					3.96	77.3	Agree

Table 4.6 shows that the satisfaction perception represented by lakert scale on the integration of the workshop approach with a mean of 3.96 and the average percentage of the components of the field of %77.3.

The results show that all respondents of business units agree with percentage of 77.3% that the workshop approach is integrated by supporting strategy and equal opportunities.

Question (3): To what extent do the deployed approach is implemented.

Table 4.7: The implementation of the deployed approach

Paragraph	Agree %	Do not know %	Disagree %	The mean (%)	Proportional mean (%)	Rank
Leadership commitment	94	2	4	4.50	94	Agree
systematic implementation	72	15	13	3.83	72	Agree
priorities project improvement	66	19	15	3.72	66	Agree
documented & recommended	76	11	13	3.89	76	Agree
				3.98	78	Agree

Table 4.7 shows that the satisfaction perception represented by lakert scale on the implementation of the workshop approach with a mean of 3.98 and the average percentage of the components of the field is %78.

The results show that all respondents of business units have satisfaction on agree scale with percentage of 78% that the workshop approach is effectively implemented.

So the workshop approach is effectively implemented with percentage of 78% by the commitment of leaders of business and in a systematic manner and with priorities to improvement projects and this workshop approach is documented and recommended.

Question (4): To what extent do the deployed approaches are measured.

Table 4.8: The measurable criteria of The deployed approach

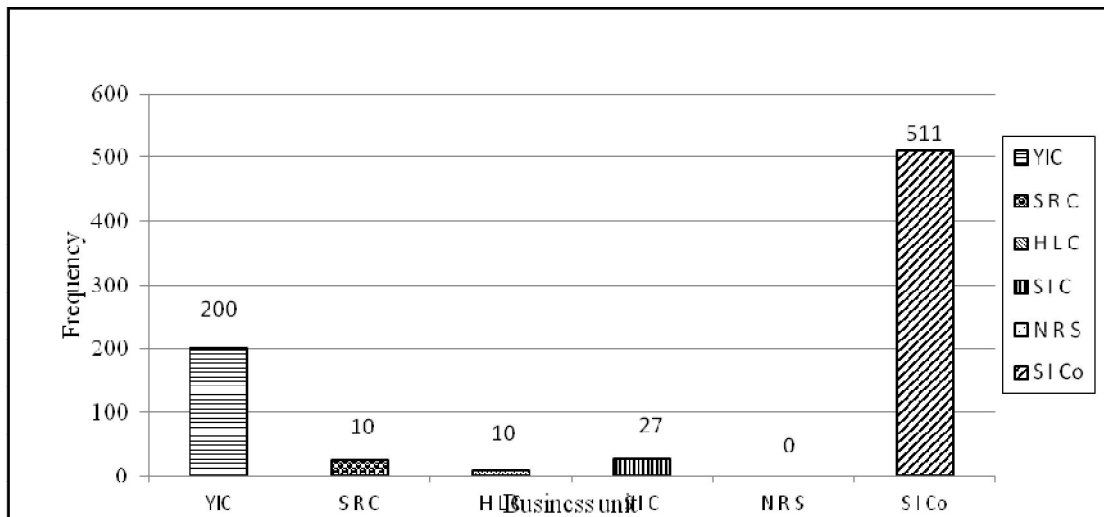
No	Paragraph	Agree %	Do not know %	Disagree %	No answer	The mean	Proportional mean	Rank
1	Effectiveness & efficiency measured	58	19	23	0	3.43	58	Agree
2	Learning & creativity implemented	78	9	13	0	3.79	78	Agree
3	Recognition and people support	87	2	11	0	4.13	87	Agree
4	Perception to stakeholders measurable tools	83	6	9	2	4.08	83	Agree
						3.85	76.5	Agree

Table 4.8 shows that the satisfaction perception represented by lakert scale on the measurable of the workshop approach with a mean of 3.85 and the average satisfaction percentage of 76.5%.

The results show that all respondents of business units have satisfaction on agreement scale with percentage of 76.5% that the workshop approach is measurable effectively and efficiency, the approach has learning and creativity implemented. The approach of recognition and people support and has satisfaction of stakeholders.

4.6 The secondary data of submission documents:

- **Question (6):** What are the impacts of the internal success factors indicators of the deployed approach on the excellence results achieved in Giad units?



YIC= Yarmouk Industrial Complex, SRC= Sar railway comany, HLC=High level, SIC= Saria Industrial complex, NRS= Nahj for Roads Systems, SICO= ALshagara Industrial Complex.

Fig 4.1: The trained people in business units

Figure 4.1 shows that the companies which planned and trained her peoples on the excellence model perspectives they scored high results when participating in Giad Award of Excellence which goes in line with John Davies, 2004 about the essential element in effective implementation of EFQM Excellence Model.

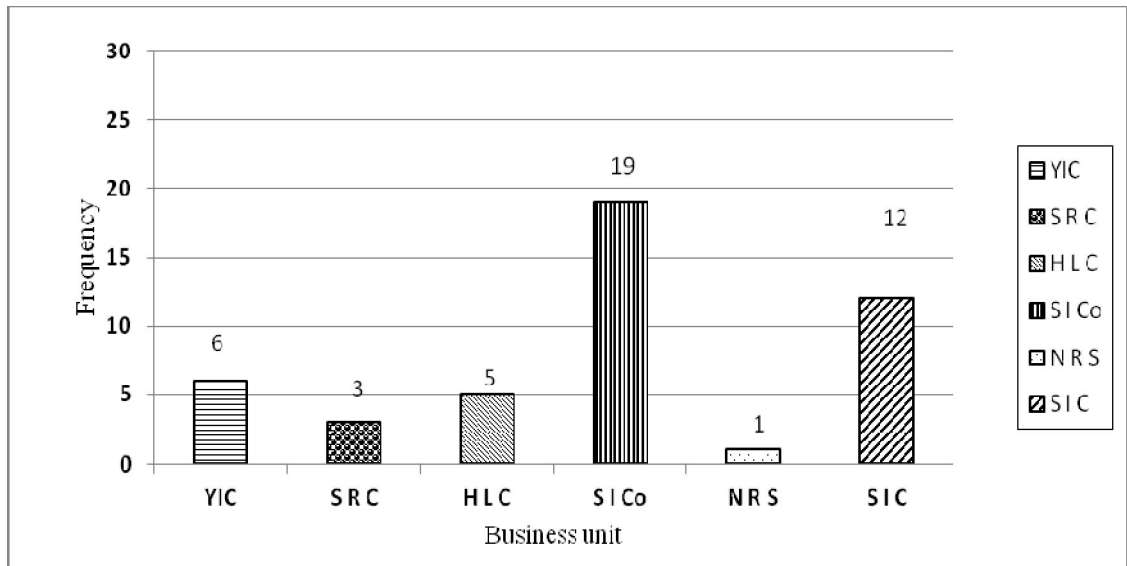


Fig 4.2: The workshops & seminars arranged in business units

Figure 4.2 shows that the companies which planned the approach to implement the excellence model used the approach of seminars and workshops, scored high results when participating in Giad Award of Excellence which goes in line with the research of (John. D, 2007) about the essential element in effective implementation of EFQM Excellence Model which represent education and training; and activities to maintain momentum in the implementation process.

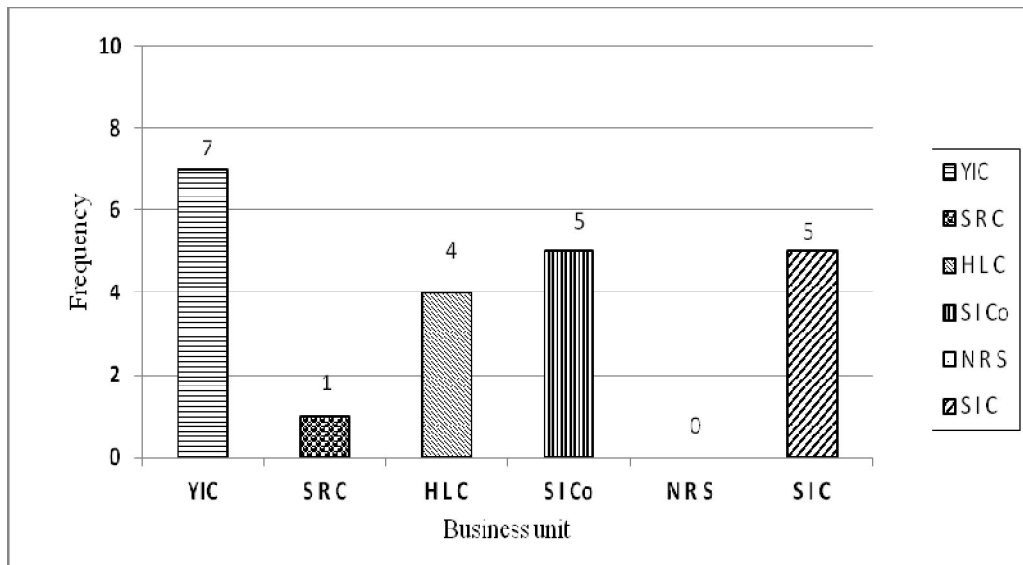


Fig 4.3: Qualified assessors in the business units

Figure 4.3 shows that the business units planned to have qualified assessors to implement the excellence model to improve the performance and to score high results when participating in Giad Award of Excellence which goes in line with (John. D, 2007)¹ about the essential element in effective implementation of EFQM Excellence Model which represent education and training; and activities to maintain momentum in the implementation process.

¹John, D., (2007). Previous reference p 6.

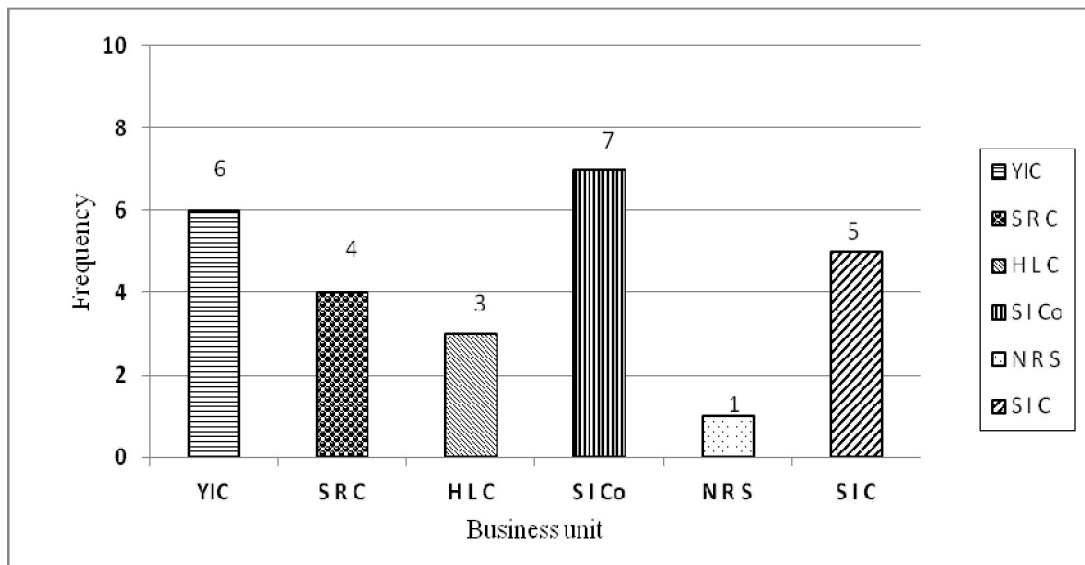


Fig 4.4: The management systems implemented in the business units

Figure 4.4 shows that the companies which used standard management systems represent big support to deployment of workshop approach in order to implement the excellence model and scored high results when participating in Giad Award of Excellence which goes in line with (Radoslav. J, 2013)¹ finding that the role of innovation in the assessment of the excellence of enterprise subjects.

¹(Radoslav. J, 2013), previous reference p 12.

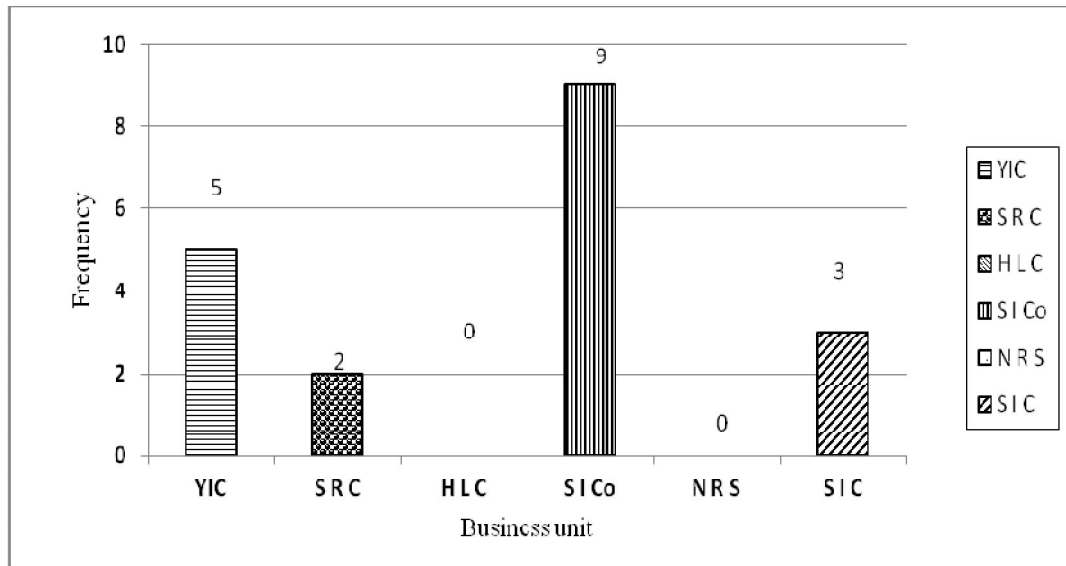


Fig 4.5: The benchmarking processes arranged to support the deployed approach

Figure 4.5 shows that the companies which planned to organise benchmarking to implement the excellence model, they scored high results when participating in Giad Award of Excellence which goes in line with (Khogali. A. G, 2014)¹ that scoring' can provide an organisation with an internal benchmark for its next self-assessment, in order to capture positive trends. It can also be used among organisations for some external benchmarking and comparison.

¹ (Khogali. A. G, 2014), previous reference p 8.

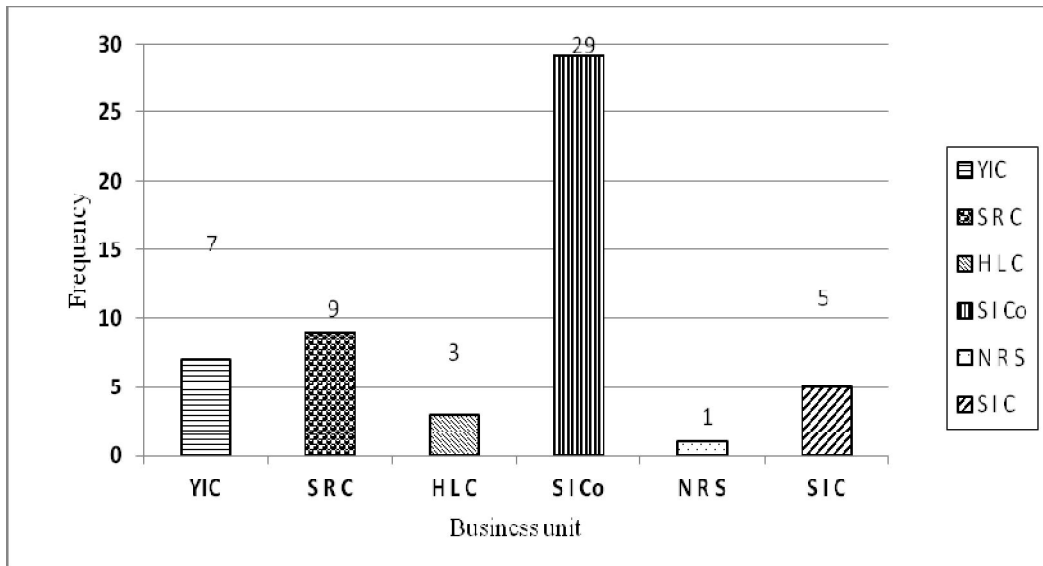


Fig 4.6: The improvement teams formed to support the deployed approach:

Figure 4.6 shows that the business units which have many teams to improve the implementation of the excellence model, they scored high results when participating in Giad Award of Excellence which goes in line with (John. D, 2004)¹ as he said that: Fundamental to effective and efficient improvement, innovation and learning is the ability and enablement of the people in the organization to make informed judgments on the basis of data analyses and the incorporation of lessons learned.

Figures (4.1 to 4.6) of data collected from the submission documents of secondary data of the business units shows that four out of six results from the business units scores have high scores of results in Giad Award of Excellence relative to other ones which have also a high performance indicators in the training of people, organized seminars about the EFQM model, qualified assessors, management systems, many benchmarking processes and formed many improvements teams while the two business units have low scores results in Giad

¹(John., D, 2004) previous reference p 6.

Award of Excellence and also have low performance indicators in same above indicators. The results show that when business units decide to implements the EFQM Model, must work hard to improve the performance indicators of success factors represent: training, qualified assessors, select suitable management systems, precede many benchmarking processes and form improvement teams so as to achieve high excellence results of performance.

Throughout this study all hypothesis were tested and validated. The following are the main results of the test of hypothesis:

The results obtained from Table 4.5 agreed with hypotheses that the deployed approach was defined as a “workshop approach”.

Table 4.9: Perceptions on the criteria of the workshop approach

No	Criteria	The mean	Perceptional mean (%)
1	The soundness of the workshop approach	4.20	83.7
2	The integration of the workshop approach	3.96	77.3
3	The implementation of the workshop approach	3.98	80
4	The measurement of the workshop approach	3.85	76.5
Total		4.00	80

Table 4.9 shows that the whole satisfaction perception represented by lakert scale on the four components of the workshop approach criteria with a mean of 4.00 and the average percentage with the perception satisfaction of 80%.

The results show that all respondents of business units have a high satisfaction with percentage of 80% and mean of 4.00 that the workshop approach is suitable to implement the Excellence Model.

There is a significant effect that the implementation of the EFQM Excellence Model in Giad Group Business units based on well defined approach which goes in line with the results achieved in the table 4.5.

There is a significant effect of perceptions of the approach' criteria: soundness, clear rationale on deployed approach of business units which goes in line with the results in the tables (4.10 to 4.12) below:

Table 4.10: The deployed approach is clear and rationale

Response	Frequency	Percent (%)
Agree	42	89
Don't know	3	7
Disagree	2	4
Total	47	100

Table 4.10 shows that 89% of the respondents agreed that the workshop approach at the business units are clear and rationale.

Table 4.11: The deployed approach is planned

Response	Frequency	Percent (%)
Agree	40	85
Don't know	3	6
Disagree	4	9
Total	47	100

Table 4.11 shows that 85% of the respondents agreed that the workshop approach at the business units is planned.

Table 4.12: The deployed approach is a process based

Response	Frequency	Percent (%)
Agree	36	77
Don't know	7	14
Disagree	4	9
Total	47	100

Table 4.12 shows that 77% of the respondents agreed that the workshop approach at the business units is based on processes.

There is a significant effect of perception of integrated approach of business units which goes in line with the results achieved as in the tables (4.13 to 4.15) below:

Table 4.13 The integration and support strategy of the deployed approach

Response	Frequency	Percent (%)
Agree	36	77
Don't know	3	6
Disagree	6	13
No answer	2	4
Total	47	100

Table 4.13 shows that 77% of the respondents agreed that the workshop approach at the business units integrated and support strategy.

Table 4.14: The flexibility and agility of the deployed approach

Response	Frequency	Percent (%)
Agree	35	74
Don't know	5	11
Disagree	6	13
No answer	1	2
Total	47	100

Table 4.14 shows that 74% of the respondents agreed that the workshop approach at the business units have flexibility and agility.

Table 4.15: The equal opportunities of the deployed approach

Response	Frequency	Percent (%)
Agree	38	81
Don't know	4	9
Disagree	5	10
Total	47	100

Table 4.15 shows that 81% of the respondents agreed that the workshop approach at the business units integrated and support strategy.

There is a significant effect of perceptions of the approach' criteria: sequential, systematic manner, structured, flexibility, agility, and the commitment of leadership on deployed approach of business units which goes in line with the results achieved as in the tables (4.16 to 4.19) below.

Table 4.16: Leadership commitment to deployed approach

Response	Frequency	Percent (%)
Agree	44	94
Don't know	1	2
Disagree	2	4
Total	47	100

Table 4.16 shows that 94% of the respondents agreed that leaderships at the business units committed to workshop approach.

Table 4.17: The Systematic and implemented deployed approach

Response	Frequency	Percent (%)
Agree	34	72
Don't know	7	15
Disagree	6	13
Total	47	100

Table 4.17 shows that 72% of the respondents agreed that the workshop approach at the business units implemented in systematic way.

Table 4.18: Prioritized improvement actions of the deployed approach

Response	Frequency	Percent (%)
Agree	31	66
Don't know	9	19
Disagree	7	15
Total	47	100

Table 4.18 shows that 66% of the respondents agreed that the workshop approach at the business units implemented in systematic way.

Table 4.19: The documented and recommended deployed approach

Response	Frequency	Percent (%)
Agree	36	76
Don't know	5	11
Disagree	6	13
Total	47	100

Table 4.19 shows that 76% of the respondents agreed that the workshop approach at the business units is documented and recommended.

There is a significant effect that the perceptions of approach' criteria is measurable business units which goes in line with the results achieved as in the tables (4.20 to 4.23) below:

Table 4.20: The effectiveness and efficiency of deployed approach

Response	Frequency	Percent (%)
Agree	27	58
Don't know	9	19
Disagree	11	23
Total	47	100

Table 4.20 shows that 58% of the respondents agreed that the workshop approach deployed in the business units effectively.

Table 4.21: The availability of measurable tools

Response	Frequency	Percent (%)
Agree	39	83
Don't know	3	6
Disagree	4	9
No answer	1	2
Total	47	100

Table 4.21 shows that 83% of the respondents agreed that the workshop approach at the business units' measurable tools.

Table 4.22: Learning & Creativity of deployed approach

Response	Frequency	Percent (%)
Agree	37	78
Don't know	4	9
Disagree	6	13
Total	47	100

Table 4.22 shows that 78% of the respondents agreed that the workshop approach at the business units encourage a learning and creativity.

Table 4.23: Recognition and people support on the deployed approach

Response	Frequency	Percent (%)
Agree	41	87
Don't know	5	11
Disagree	1	2
Total	47	100

Table 4.23 shows that 87% of the respondents agreed that the workshop approach at the business units implemented included recognition and people support approaches.

Table 4.24: Results and scores achieved on Giad Award of Excellence

Business unit	Giad Award of Excellence Scores					Trend of Scores	Internal Success Factors of performance Indicators					
	2009	2010	2011	2012	2013		1	2	3	4	5	6
S I Co	228.93	330.30	413.38	461.88	470.05	+	511	19	5	7	9	29
Y I C	140.45	234.00	360.25	403.75	440.00	+	200	6	7	6	5	7
H L C	166.58	138.75	169.00	234.80	345.00	+	10	5	4	3	0	3
S I C	188.25	244.10	287.83	294.38	263.02	+/-	27	12	5	5	3	5
S R C	197.50	282.00	173.75	239.00	246.04	-	10	3	1	4	2	9
N R S	115	165	110	106	167	-	0	1	0	1	0	1

Trained people=1, Seminars & Workshops=2, Qualified Assessors=3, Management Systems=4, Benchmarking Processes=5, Improvement Teams=6

Table 4.24 shows that, four out of six business units have positive and sustain trends, and achieved suitable results when use effective performance indicators of the deployed approach: training, seminars and workshops, qualified assessors, management systems, benchmarking processes and improvement teams as stated in the hypotheses.

So results obtained from the questionnaire agreed and goes in line with the hypotheses that the deployed approach is well defined as a workshop approach and has a criteria of high perceptions to all respondents at all fields and the data of submission documents represent the internal success factors of performance indicators agreed also to the hypotheses which goes in line that they impact the scores achieved by business units when participating in Giad Award of Excellence.

CHAPTER 5

Conclusion and Recommendations

CHAPTER 5

Conclusion and Recommendations

5.1 Conclusion:

Throughout the study, all questions were answered and all hypotheses were validated. The following are the main findings and results of the study:

1. The workshop approach is deployed in all Giad business units with percentage of 94% of the respondents in order to implement the EFQM Excellence Model.
2. The workshop' approach applies the perception criterion of soundness approach of 83.7% represent a satisfaction of the respondents, which reflect the ability of business units' model to achieve suitable excellence results when participating in Giad Award of Excellence.
3. The workshop' approach applies the perception criteria of integration approach of 77.3% represent a satisfaction of respondents, which reflect the ability of business units' model to achieve suitable and positive excellence results when participating in Giad Award of Excellence.
4. The workshop' approach applies the perception criteria of implementation' approach of 80% represent a satisfaction of respondents, which reflect the ability of business units' model to achieve suitable and positive excellence results when participating in Giad Award of Excellence.
5. The workshop' approach applies the perception criteria of measurable approach of 76.5% represent a satisfaction of respondents, which reflect the ability of business units' model to achieve suitable and positive excellence results when participating in Giad Award of Excellence.

6. There is a significant effect that the internal success factors of performance indicators of deployed approach have positive impacts on the excellence results achieved represent: training the people about the excellence model, organizing seminars and workshops about the assessment approach, have qualified assessors, adopting management systems, proceeding benchmarking processes and forming improvement teams which shorten time-scale for data collection.
7. The workshop approach has Shorten time-scale for data collection.

5.2 Recommendations:

From the results and findings of this study, the deployed approach role is affected and shaped by applying approach criterion to implement EFQM Excellence Model, hence recommending the following:

1. Increasing the awareness of the concept of self assessment specially workshop approach when decide to implement EFQM Excellence model in the organizations.
2. The commitment of leaderships of the business units is a very important issues in implementing the EFQM Excellence Model.
3. The deployed approach need to widen the improvement of its effectiveness, soundness, integration, implementation and measurement in order to implement correctly the EFQM Excellence Model.
4. The study would recommend that Giad Industrial Group extensively continue the practices and applications of EFQM Excellence Model through the actions and practices of Giad Excellence Awards so as to improve the performance of their business units through excellent sustainable results by

deploying the approach of workshop which represent one of the assessment approaches.

5. The success factors of performance indicators represent the important effective issues to implement the EFQM Excellence Model which can be one of the activities to support the deployment of the approach.

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APPENDICES

بسم الله الرحمن الرحيم

جامعة السودان للعلوم والتكنولوجيا

كلية الدراسات العليا

مركز الجودة والامتياز

استبيان بحث تكميلي

تأثير منهجيات تطبيق نموذج التميز الاوروبي فى نتائج الاعمال

بمجموعة جيااد الصناعية

The Effects of Implementation Approaches of EFQM Excellence Model on Business Results

أسئلة استبيان البحث:

أخى الكريم للاستفادة القصوى من هذا البحث فى مؤسساتنا التكرم بملء الاستبيان بكل حيادية ليعطى نتائج حقيقية.

..... ■ إسم وحدة الأعمال:

المنهجية المتبعة لتطبيق نموذج التميز:

١/ مستشار ٢/ فريق عمل ٣/ محاكاة الجائزة ٤/ أخرى حددها:

م	العبارات	موافق تماما	موافق	غير متأكد	غير موافق	غير موافق تماما
١	تعتمد المنهجية المتبعة لتطبيق النموذج على منطق واضح وسليم بناء على احتياجات المؤسسة.					
	المنهجية المتبعة لتطبيق النموذج لها خطة عمل وأهداف محددة وواضحة.					
	يتم استعراض مناهج العمل المستخدمة بالاستناد للبيانات والأدلة فى اقسام المؤسسة المختلفة.					
٢	المنهجية المتبعة لتطبيق النموذج متكاملة وتدعم استراتيجية المؤسسة.					
	المنهجية المتبعة لتطبيق النموذج تمتاز بالمرونة وسرعة الفهم والتكيف وسط المعنيين.					
	تتضمن المنهجية المتبعة لتطبيق النموذج فرصا للمشاركة المتساوية من قبل أعضائها.					
٣	تشارك الادارة العليا بفعالية فى أنشطة بناء نموذج التميز واصدار القرارات ذات الصلة وتبنى مقترحات التحسين.					
	المنهجية المتبعة لتطبيق نموذج التميز يتم تنفيذها بشكل منظم يتيح للعاملين المرونة وسرعة التكيف المؤسسى.					
	يتم ترتيب الأولويات لمشروعات التحسين والاتفاق عليها من خلال تطبيق المنهجية المتبعة لتطبيق					

م	العبارات	موافق تماما	موافق	غير متأكد	غير موافق	غير موافق تماما
	النموذج.					
	يتم توثيق ونشر نتائج مشروعات التحسين للمعنيين.					
4	يتم قياس كفاءة وفعالية المنهجية المتبعة ومنهجيات العمل الأخرى وتقييمها بشكل منتظم فى المؤسسة.					
	يوجد استخدام للتعلم والابداع فى إدارة وتطبيق المنهجية المتبعة لبناء النموذج.					
	تتضمن المنهجية المتبعة آلية للتحفيز والدعم والاعتراف باداء فرق التحسين.					
	تمكن المنهجية المتبعة من الفهم المشترك للمعنيين لادوات موثوقية وتصنيف النتائج واتجاهات الاداء بالمؤسسة.					

Appendix (1)

Sudan University of Science and Technology
College of Post Graduate Studies
Total Quality Management & Excellence Centre

**The Effects of Implementation Approaches of EFQM
Excellence Model on Business Results**

تأثير منهجيات تطبيق نموذج التميز الاوروي على نتائج الاعمال

Questionnaire

The deployed approaches to implement the Excellence Model:

1. **Consultant** 2. **Workshop** 3. **Award Simulation** 4. **Other**

Major Criteria of Deployed Approaches		Scale				
		1	2	3	4	5
1	<u>Sound Approach:</u> <ul style="list-style-type: none">- Clear and rationale.- Planned with objectives.- Process based on data.					
2	<u>Integrated Approach:</u> <ul style="list-style-type: none">- Integrated and support the strategy.- Enables the flexibility and agility.- Equal opportunities.					
3	<u>Implemented Approach:</u> <ul style="list-style-type: none">- Leadership is commitment.- Systematic implementation.- prioritization of improvement actions.- Documented and recommended.					
4	<u>Measurable Approach:</u> <ul style="list-style-type: none">- Effectiveness & efficiency measured.- Learning & Creativity implemented.- Recognition and people support.- Perception to stakeholder					

Appendix (2)

بسم الله الرحمن الرحيم
جامعة السودان للعلوم والتكنولوجيا
كلية الدراسات العليا
مركز الجودة والامتياز

تأثير منهجيات تطبيق نموذج التميز الاوروي على نتائج الاعمال
بمجموعة جياذ الصناعية

الاخ الكريم مدير مشروع تطبيق نموذج التميز الاوروي بشركة.....
للاستفادة القصوى من هذا البحث فى مؤسساتنا نرجو التكرم بمدنا بالوثائق والمستندات التى تمكنا من التعرف على بيانات
عوامل النجاح لمؤشرات الاداء للمنهجية المتبعة لديكم لتطبيق النموذج الاوروي:

م	مؤشرات الاداء	العدد
١	نتائج التميز المحققة للمؤسسة فى الخمسة جولات السابقة لجائزة جياذ للتميز منذ العام ٢٠٠٩م وحتى ٢٠١٣م.	
٢	عدد العاملين الذين تم تدريبهم بالشركة للتعريف بالمنهجية المتبعة ونموذج التميز الاوروي.	
٣	عدد السمنارات وورش العمل التى نظمت لفهم المنهجية المتبعة لبناء نموذج التميز بالمؤسسة(الدورات التدريبية).	
٤	عدد المحكمين المعتمدين بالمؤسسة وفق نموذج التميز الاوروي.	
٥	عدد الانظمة القياسية التى تطبقها المؤسسة (الجودة ، السلامة والبيئة ، تقنية المعلومات ، التدريب...الخ).	
٦	عدد المقارنات التى تمت لمناهج العمل مع شركات أخرى مشابهة أثناء عملية بناء نموذج التميز.	

Appendix (3)

بسم الله الرحمن الرحيم
جامعة السودان للعلوم والتكنولوجيا
ماجستير الجودة والتميز
استبيان البحث


*The Impacts of the Deployed Approaches for implementing the Excellence Model on The Excellence Results achieved

أثر المنهجيات المتبعة لتطبيق نموذج التميز على نتائج التميز بمجموعة جيايد الصناعية

موافقة لجنة التحكيم على الاستبيان:

م	الاسم	الجهة	التوقيع
١	د/ الطيب ابراهيم على	جامعة السودان للعلوم والتكنولوجيا	
٢	د/ عبدالسلام عبد الماجد	جامعة النيلين	
٣	د/ محمد فضل الله على	هيئة التصنيع الحربي جامعة الرباط	

- حالة الدراسة تشمل ستة شركات من مجموعة جيايد الصناعية.
- مرفق فرضيات البحث.


د/ عفاف أحمد محمد
جامعة السودان

Appendix (4)

The perception of the criteria of the deployed approach:

No	Business units	PERSPECTIVES				Perceptual mean (%)	Rank
		measured (%)	Implemented (%)	Integrated (%)	sound (%)		
1	SRC	86	84	93	87	88	Strongly agree
2	HLC	79	80	78	80	81	Agree
3	NRS	40	43	40	43	50	Disagree
4	SICO	89	93	91	94	92	Strongly agree
5	YIC	72	70	73	80	70	Agree
6	SIC	79	86	81	82	82	Agree
		74	76.8	76.8	83.0	78	

Appendix (5)

بسم الله الرحمن الرحيم

جامعة السودان للعلوم والتكنولوجيا

كلية الدراسات العليا

مركز الجودة والامتياز

التاريخ:.....

السيد/مدير شركةالمحترم

السلام عليكم ورحمة الله وبركاته

الموضوع/ بيانات البحث

سيقوم الباحث بإجراء دراسة ميدانية بعنوان: (تأثير منهجيات تطبيق نموذج التميز الاوروبي على نتائج الاعمال) بمجموعة جباد الصناعية ضمن متطلبات البحث التكميلي لنيل دوجة الماجستير فى ادارة الجودة الشاملة والامتياز ويتطلب ذلك الحصول على مجموعة من البيانات لتكملة البحث. شاكرين لكم حسن تعاونكم التوجيه بمدنا ببعض البيانات والسماح لنا بالاطلاع على بعض المستندات ، ونضمن لكم سلامة وحفظ البيانات وأن نستخدم هذه المعلومات لأغراض البحث العلمى فقط.

ولكم الشكر والتقدير

الباحث

Appendix (6)

بسم الله الرحمن الرحيم
جامعة السودان للعلوم والتكنولوجيا
كلية الدراسات العليا
مركز الجودة والامتياز

التاريخ:.....

السيد/.....المحترم

السلام عليكم ورحمة الله وبركاته

الموضوع/ استبيان البحث

يقوم الباحث بإجراء دراسة ميدانية بعنوان: (تأثير منهجيات تطبيق نموذج التميز الاوروبي على نتائج الاعمال) ضمن متطلبات البحث التكميلي لنيل دؤجة الماجستير فى ادارة الجودة الشاملة والامتياز ويتطلب ذلك الحصول على مجموعة من البيانات لتكملة البحث ، ويشرفنا ان تكون مساهماتكم ومشاركاتكم القيمة من خلال خبراتكم العلمية والعملية لتكملة هذا البحث. شاكرين لكم حسن تعاونكم فى الاجابة بوضوح وشفافية على أسئلة الاستبانة ، ونضمن لكم سلامة وحفظ البيانات التى تدلون بها ، وأن تستخدم هذه المعلومات لأغراض البحث العلمى فقط.

ولكم الشكر والتقدير

الباحث