



Università degli Studi di Roma Tor Vergata

Faculty of Economics

Management and Law Department

PhD in Management, Business and Accounting

Ph.D. Thesis

“The impact of applying European quality standards (EFQM) on the development of human capital and institutional performance in Abu Dhabi government”

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Academic Year 2017/2018

Declaration

I hereby declare that the thesis entitled “The impact of applying European quality standards (EFQM) on the development of human capital and institutional performance in Abu Dhabi government” submitted for the Award of Doctor of Philosophy in Management, Business and Accounting at the University of Rome “Tor Vergata” in Italy, Department of Management and Law is my original work and the thesis has not formed the basis for the award of any degree, associate-ship, fellowship or any other similar titles.

The material borrowed from other sources and incorporated in the thesis has been duly acknowledged.

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CERTIFICATE

This is to certify that the thesis entitled “The impact of applying European quality standards (EFQM) on the development of human capital and institutional performance in Abu Dhabi government” and submitted by Dr. Mohamed Albeshr is a bonafide research work for the award of the Doctor of Philosophy in Management, Business and Accounting at the University of Rome “Tor Vergata” in Italy, Department of Management and Law and that the thesis has not formed the basis for the award previously of any degree, diploma, associate-ship, fellowship or any other similar title of any University or Institution.

Also certified that the thesis represents an independent work on the part of the Phd candidate.

Relatore: Prof. Corrado Cerruti

Signature of the Relator

Correlatore: Prof. Massimiliano Granieri

Signature of the Correlator

Acknowledgement

In the name of Allah, the most gracious, the most merciful. First of all, I am thankful to Almighty Allah for creating me, blessing me sound health, giving me mind to critically think always helping me in hardship, shows me the ways in the time whenever I have been surrounded by difficulties. I am nothing without Allah almighty's countless Blessings which has always proved bright light in the severe darkness.

I owe the number of people who helped me in successfully carrying out my Ph.D. project. It is mine honor and pleasure to mention some of them who always proved helpful, cooperative and spared their valuable time for me.

I would like to express my special appreciation and sincere gratitude for Prof. Corrado Cerruti for his support, guidance and patience. I would like to thank him for being motivating, for being tremendous mentor for me and for allowing me to grow as a research scientist. I am grateful to him for always being kind, helpful, optimist and trustworthy at every stage of my Ph.D. studying journey. I will always remember the ways he helped me a lot by giving his precious time and cooperation.

I would like to extend my special thanks to Prof. Massimiliano Granieri for his kind efforts, friendly and caring behaviour and most importantly for comments and valuable suggestions and being kind, encouraging and supporting me as a co-supervisor in my PhD thesis project.

Although I have completed manuscript writing in the United Arab Emirates I have never felt any difficulty in communicating them even on the holidays and at very short notice. Their encouraging attitude helped me to keep my spirit high and to develop and realize my research goals. Each meeting, skyping and correspondences with them provided new insights and ideas for future directions.

A special thanks and appreciation to my family members words cannot express how grateful I am to my mother, my father, my beloved wife Ahlam Alazeezi - she has always been my support in the moments when there was no one answer to my queries, sisters, brothers, mother in law, father in law and other family members and in laws for all of the sacrifices that they have made on my behalf. There is lengthy list of friends and teachers to whom I owe a word of thanks.

I would like to mention who's really helped me after returning to Abu Dhabi. My spouse Ahlam's and her sister's I am grateful to for their moral support and for providing me the environment to write up my Ph.D. manuscript.

In last but not least, I am loving my daughters Shamma and Maryam and My Sons Abdulla and Ahmed for staying calm with they mother and allowing me to spent large period of time on Ph.D. studying journey in Italy and thesis writing.

Dr. Mohamed Albeshr

Abstract

In this global era of a dynamic environment, businesses considered human capital as the substantial mean to gain competitive advantage, and ultimately customers are viewed as the king for organizations' profitability and sustainability. In order to enhance product quality standards, rapid changes are occurring in different production methodologies to efficiently fulfill the demands of the customers, for enhancing customer satisfaction and also to gain their loyalty. These philosophies of high-quality management have illuminated the basis of integration of HRM and TQM which has been achieved through the usage of worldwide standards and their governance by regulating bodies such as ISO standards and European Foundation for Quality Management (EFQM) respectively. This research paper studies the efficiency as well as shortcomings of the EFQM Excellence model by highlighting its core concepts of excellence criteria, RADAR and their impact on human capital and institutional performance in the specific scenario of Abu Dhabi Government along with the integration of strategic human capital programme and total quality management for achieving and sustaining organization excellence. 92 literary sources were collected from various journal articles, authorized websites, news reports etc. to answer the research questions. The mixed methodology of data collection has been applied for investigation of research questions. Research instruments used for data collection are direct observations and LIKERT scale based questionnaires which were distributed among the managers and authorities of various organisations in Abu Dhabi. The data analysis has been done through qualitative analysis as well as quantitative analysis through Descriptive Statistics and the Frequency Analysis to understand the implications of CAF tool and other supremacy models to ensure EFQM in Abu Dhabi based organizations.

Keywords: HRM, TQM, ISO, EFQM, Excellence model, Criteria, RADAR, CAF.

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Chapter 1: Introduction

1.1 Overview of the Study

According to Indermun (2014), Human Capital Management (HRM) practices can be defined as a framework that pulls in, creates, provokes and holds representatives to guarantee the successful usage and the survival of the association and its individuals. Given the continuous changing and dynamic settings in which organizations operate Human Capital Management practices had to be strategic and evolved continuously. Strategic HRM policies and practices can help organizations to attain competitive advantage. Strategic practices of the Human capital department can bring about coordination between different operations, open new opportunities and effective risk management in the process (Behdadmanesh, Maryam, Esfandiyari, & Asgarzadeh, 2014). Essential coordination and management is an unavoidable need in bringing in lines the organizational objectives and human capital management of the organizations. Along these lines, a definitive motivation behind adopting strategic HRM is to create a productive relationship between the objectives of the organization and the practices of HR. It has become inevitable for organizations that they integrate strategic HRM activities with organizational policies than treating human capital practices in disconnection, as it enhances authoritative execution and efficiency.

One of the most important focal point within the notion of human capital strategy studies in the earlier times has been based on the different results as well as analysis of huge-scale quantitative information. As the time passes, the concept of human strategy as well as applications has changed a lot. The application of the proper human capital strategy determines the firm's performance with each other. Organizational objectives like increased productivity and profitability can be fulfilled completely by appropriating strategic Human Capital Management practices in the organization's strategies. Strategic HRM is an arranged procedure in which key components are performance estimation, encouragement of feedbacks and ideas and clear communication between supervisors and workers. Evaluation of employees' performances is critical in delivering desired levels of productivity (Aryanto, Fontana, & Afiff, 2015). To increase organizational performance, the human capital department has to work in sync with the managers to achieve the same by optimizing their

human assets. Only working together as a team, they can realize the desired organizational objectives. For instance, if an organization able to appropriately apply the human capital they will be able to attain the following benefits:

- Develop staff performance as well as capabilities.
- Promote constructive attitudes along with help to motivate the employees.
- Provide staffs with advanced job role with an intention to make the full utilization of the available capital (Waiganjo, 2014).

Nowadays companies have rapidly understood the significance of the strategic human capital management. The human capital strategy provides its focal point on the requirement for the human capital plans. Also, the policies that are to be applied inside the circumstances are based in general managerial policies and are aimed to be approachable to the modifying character of the company's external environment (Cech, Yao, Samolejova, Li, & Wicher, 2015). The human capital strategy is a move towards which needs understanding with adjustment by expertise to make sure the most appropriate fit for the HR business strategies organizational success. On the other hand, inappropriate application of the human capital strategy will result in a negative outcome which at the end will directly hamper the success of the business.

Nowadays, the business environment of administrations has transformed from a supportive atmosphere to a comparative one in the whole world also in UAE. The capital administration mainly strategic management section becomes the need of the organizations for fighting for existing in the industry and achieves a stable accomplishment in the industry with prior conditions. The organizational replicas of excellence have spotted and accumulated the prosperous establishments around the world for providing a suitable framework for organization management especially the commercial companies in a proportional environment. The assessing process of organization separable performance would benefit managers for controlling the level by which strategic goals of the organization can be achieved in this concern. Highlighting these types of models, almost all countries everywhere in the world have deliberated some rewards or prizes in regional or national level to inspire associations and business to work for accomplishing excellence and progress which bring success and money.

Total Quality Management (TQM) is measured a significant substance in this background. Where in which, TQM thought has taken the attention of every division of trade and industry, in addition to that of academics and politicians. The significant number of journals, articles, and literature are issued in this particular area is evidence for getting a high level of attention in excellence issues

(Qasrawi, Almahamid, and Qasrawi, 2017). Throughout the past era, quality enhancement has converted one of the furthest significant administrative approaches for accomplishing competitive benefit. Refining the superiority with which an association can convey its merchandises and services is acute for challenging in a growing global marketplace. TQM initiates with the primary hypothesis that staffs in administrations must collaborate with each other with the purpose of achieving excellence for the requirements of the customer. An individual can accomplish and enhance quality by manufacturing, servicing or controlling procedures to stop defects. However, TQM does not merely involve only quality apparatuses and practices.

Total quality control entails organizational efforts to make and install permanent climate in which they improve their ability to deliver goods of high quality and services to their customers. TQM in Abu Dhabi is enshrined in four key concepts; requirements of customers mainly define quality, Top management of organizations has direct responsibility for improvement of quality, Improved quality emanates from improvement and systematic analysis of working processes., Improvement of Quality is a continuous and sustained effort and it is conducted throughout the organization (Benavides-Velasco, A., Quintana-García, & Marchante-Lara, 2014), Total quality management has been applied in non-profit organizations in Abu Dhabi in order to provide services of good quality to clients. Total quality management is also contributing to the achievement of vision 2030 in Abu Dhabi. TQM in Abu Dhabi is regularly judged by seven categories. They are leadership, strategic planning, customer focus, measurement, knowledge and analysis management, workforce focus, operational focus, and results. Abu Dhabi is result oriented and emphasizes on good leadership. The city has invested in human capital through the University of Abu Dhabi to train leaders who can deliver solutions to both long-term and short-term problems.

Sustaining in the present competitive global market is a very tough and ever continuous job. Utilizing several economic tools theorists propounded various policies that protect the work culture and organizational environment and also helps in promotion of innovation which adds value in turning profit (Emas, 2015). To ensure win-win opportunities for the organizational environment and economy, improvements which trim down pollution in production processes have to be implemented. Competitive advantages of an organization rely on the ability to stimulate innovations and maintain strict environmental regulations (Emas, 2015).

According to GSEC, which is Abu Dhabi Government's General Secretariat to the Executive Council's website, both the government and the private sector should adhere to the UAE's federal laws that govern labor relations. As such, they should eliminate all the negative practices such as

coercion, exploitation, discrimination, and human trafficking. They should, on the contrary, provide safe working environments, protect women and minors, and ensure an adequate supply of labor for sustainability of the economic and social development.

EFQM, the excellence model, is a flexible structure specifies all performance aspects, that there are numerous ways for searching and accomplishing the sure one. In contrast, the excellence model benefits of the organization to recognize the objectives and determinations of the organization as well as also delivers some strategies to accomplish them. Also, it helps to understand that the enhancement is a continuous procedure, so implementation is also never-ending procedure (EFQM, 2012). The EFQM, excellence model, is a non-prescriptive model which consists of many criteria. All these criteria create the fundamental base of the model also for being the base for evaluating the organization specialty its performance for enhancing its quality. A different example of rewards is Deming award in Japan, Baldrige reward in USA and Quality prizes in Europe, measured by EFOM (European Foundation Quality Management). Three big efficient cores of the last century (Japan, USA, and Europe) have been used EFQM, and this incidence proved the need for implementing the model in every country and regions. The success rate of the organization after implementing this model has grown up in the USA which gives instances of the importance of the model. However, UAE also started to implement this model. Organizational Excellence is an administrative notion that has been announced rather recently in Abu Dhabi administration entities as an essential notion every sector should give effort hard for achieving this. Since some decades before, executives and businesses have industrialized an accumulative awareness of the significance of organizational excellence and I was helped to accomplish excellent results of the services or product. With the time, excellence has also mounted to the best priority of almost every organization for pursuing difference especially forms the connected world, in its all field. Numerous readings display that administrations that deploy and implement excellence models (or other frameworks mainly TQM based) are proficient enough for addressing crucial administrative concerns in a lesser complex process grounded on non-prescriptive approaches that essentially such replicas deliver.

Excellence structures were mainly established in the late of 1980's and first decades of 1990's by numerous authorities almost everywhere in the world. These authorities accompanied separate investigation with all top organizations for describing their mutual features which are followed by all departments. From this, the excellence model was evolved. The subsequent excellence structures were encompassed in principles which had described the administrative culture and the common management exercises that were followed across central management sections. These authorities also

advanced by awarding rewards for recognizing administrations that efficiently executed their particular excellence structure and assembled information on enactment.

HRM scheme of practices has a positive consequence on HRM, TQM, and performance of that firm and for this reason, the association between HRM and performance has been examined progressively since the appearance of the strategic HRM method at the early period of the 1980s (Izvercian.Monica, Radu, Ivascu, & Ardelean, 2014) and this has been sustained by the capital-based outlook of the firm. Innovative HR or Strategic HR and sustainability are highly correlated to each other. For being sustainable, continuous change is always needed. Proper never-ending change only can come with accurate TQM. In this way, HR and TQM are related to each other. The European Foundation for Quality Management (EFQM) is such a framework to ease out this type of complexities. The model encourages people to recognize the cause and effect relationships between the performance of the organization and what the result is produced. As the Prime Minister and the Vice President of the UAE believe that, 'In the race for excellence, there is no finish line,' the Dubai originated authoritarian association, the Knowledge, and Human Development Authority (KHDA) believes in the same thought. This organization, launched in 2007, is responsible for the expansion, improvement, and quality of the private education in the Emirates.

Abu Dhabi Award for Excellence in Government Performance (ADAEP) was launched in 2006 where the chairman of the award committee is the Secretary-General of the Executive Council. Conditions for the selection of award are rooted in the EFQM model for Excellence. The real implication of the award lies in correct utilization as tools for implementation of the EFQM Excellence Model which, its way is structured to encourage Abu Dhabi Government to make developments towards attaining the goal of excellence. ASQ, headquartered in the USA, provides the world community the appropriate quality with training, accrediting professional certificates, and set of connections with members of the global quality community. The Deming Prize was organized by the Japanese Union of Scientists and Engineers (JUSE) in 1952 to encourage organizations to perform excellent work concerning the quality management field of an organization. European Centre for Best Practice Management also given to the best management team. Singapore Quality Award, Australian business Award, Japan Quality award all are examples of different type of award given for nurturing organizational excellence. The Sheikh Khalifa Excellence Award (SKEA) was initiated by Abu Dhabi Chamber of Commerce and Industry (ADCCI) in 1999 as a structure and methodology for consistent enhancement and development for improving the competitiveness of the business market in Abu Dhabi and the rest of the UAE (Sheikh Khalifa Excellence Award, 2012).

Other than this Dubai quality groups, Dubai Government Excellence program is also helping the organizations for nurturing organizational excellence. This paper studies the efficiency of the EFQM Excellence model in the scenario of especially Abu Dhabi and special attention is given to the integration of strategic human capital program and total quality management for achieving and sustaining organizational excellence.

1.2 Purpose of the Study

Consistently or two now and again, it is obligatory to all administration associations to challenge in a few magnificence grants making troubles for a few and difficulties for others. Associations, as a rule, look for consultancy help as much of the time they neglect to quantify and assess their execution given the model's criteria. Along these lines, the estimation of this paper lies in need to survey the model and after that recognize a portion of the qualities and shortcomings of the EFQM Model and what conceivable hierarchical advancement methodologies or potentially model's change includes are required to accomplish manageable authoritative brilliance.

1.3 Research Questions

This proposed research paper attempted to answer the following questions on the basis of Implications of the study:

- Is the implementation of the EFQM criterion (People) valid throughout varied cultures worldwide?
 - As EFQM was it designed in Europe, the research aims to understand the following question
- Is the implementation of the EFQM criterion (People) worthwhile for the government of Abu Dhabi?

Sub-questions:

While searching for the solution to the research question, few answers to other sub-questions could it be known, which is as follows,

Questions from Literature Review

- Is the current people management approach of the government of Abu Dhabi adequate and how would implementation of the people criterion helping the government?
- To what extent has the success of Abu Dhabi been brought about by application of quality control measures?

- What is the reason behind the reminiscence of Abu Dhabi as an economic powerhouse in the region besides just the vast oil deposits?
- What is the effect of the application of EFQM in Abu Dhabi and what are the results it has had in the city?

Questions from Implications of the Study

- What are the other quality control measures that can be applied to make firms more successful?
- How can the sustainable development in Abu Dhabi in the midst of competition from other cities in the region and around the world be achieved and to what was a professional and work full workforce in Abu Dhabi can help?

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Chapter 2: Literature Review on Approaches towards Quality/Excellence

2.1 Introduction

92 literary sources were taken into consideration to understand and research into the main question. The sources were collected from various journal articles, authorized websites, peer-reviewed articles, news reports, and others.

Relevant keywords that were used in order to search for the relevant academic sources or reports on the basis of which the study is been done. These articles were searched from the internet using few unique keywords which are listed below:

Concept	EFQM, TQM, HR, Human Capital Management, Effect of HRM in TQM, Implying TQM in HRM
Performance	EFQM Excellence model, Excellence models in the world, Excellence models in UAE, Common Assessment Framework and EFQM, ASQ, Deeming Prize, MBNQA, SKEA, Dubai Quality Award
Geographical Section	UAE, Abu Dhabi, Dubai, Singapore, Japan, Europe, Australia

For this assessment, those articles were chosen that were not only based on the topic but were able to help in gathering the relevant data that can help in the research stage of this research. The articles were taken using sites like Google Scholar and B-OK.org as these sites have a large database containing articles that are for EFQM, HRM, TQM and its related topics. To understand whether the articles, reports or journal publications are relevant to the research or not, the introduction abstract or the executive summary sections are thoroughly read. If the relevant concepts such as EFQM, significance of EFQM and its effects in organizations, especially EFQM in government sectors are found then those sources are read thoroughly to understand the concepts and frameworks to assess and conclude whether EFQM would have similar effect on the Abu Dhabi government sector to manage human capital and develop the institutional performances.

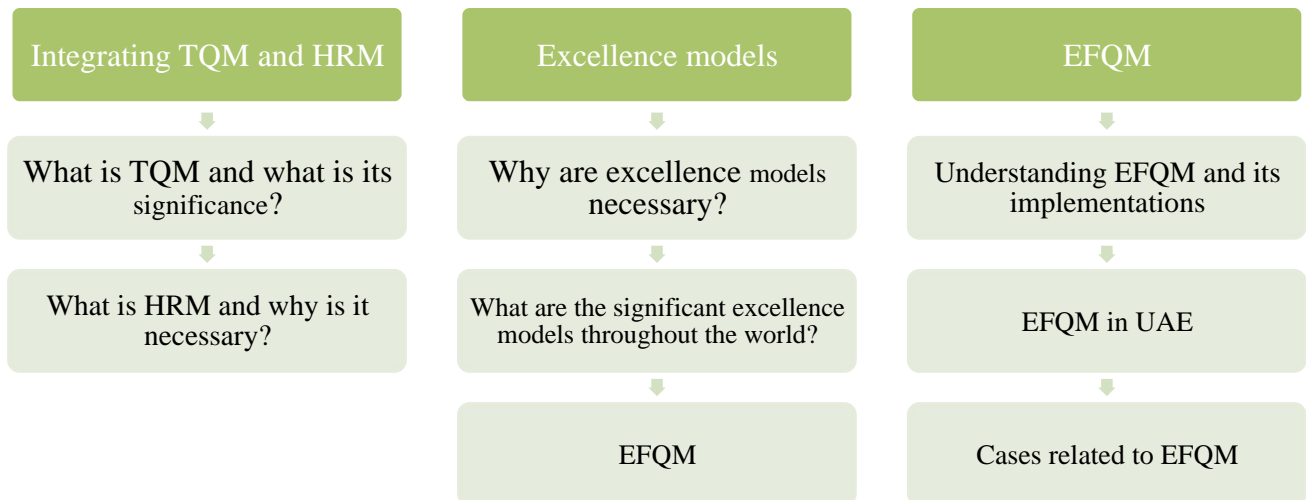
Also, an inclusion-exclusion table is created as a way to provide the considerations and the omissions that were made during the research for this assessment. This is because it can help in making sure that the data collected from the articles and journals are relevant to the topic that is to be researched. This will help in making sure that the research done does not deviate from the topic. If this is not taken care of, then it could result in an inaccurate representation of the data that is important for the purposes of this research. Additionally, it could also lead to a misinterpretation of the result that is found from the quantitative analysis, which could lead to the results of the

hypotheses to be inaccurate. Lastly, this will provide an insight to the reader on what criteria were included and excluded from the data collection process in order to analyze the possibilities of the answers that can be yielded from the research. The inclusion-exclusion is seen to be below.

Inclusion Criteria	Exclusion Criteria
The articles should have topics related to the standards stated by the EFQM or for HRM, and TQM	Those articles should be omitted that do not represent the country or the state that the research is being conducted on, in this case, Abu Dhabi
The articles should be recent, i.e. those articles should be selected that are published after 2013	Those articles should not be chosen that are not associated with Human Capital and its associated topics
The assessment done should be able to help the researcher gain a better understanding of Human Capital Management and the Total Quality Management	
The articles should provide an analysis of the steps that were taken by the government to improve the quality of the work.	

2.1.1 The Literature Framework

In the initial phase, the articles were such searched so that the basic concepts of Human Capital Management, Total Quality Management, the relation between the two and the significance of both in the global approach were understood and got a clear picture. To understand the importance of various frameworks of Total Quality Management in different nations, research work was done as this would gradually result in the understanding of EFQM in an overall perception. Literary sources were researched on and collected to understand EFQM model and other similar models which have the same significance in the competitive market to ensure sustainability.



2.1.3 Competitive World Approach

In today's competitive world, customers are the king of any organization from any point of views. Demands and need of the customer is the main priority that's why rapid changes in the different type of production are occurring. Total quality management is the never-ending process of enhancing customer satisfaction for retaining the customers. Almost every industry is trying to understand every aspect of customer needs for existing in this combative world market (Behdadmanesh, et al. 2014).

2.1.4 Globalization Approach

The era of globalization and digitalization make this process more and more complicated as it opens a new horizon to fulfill the customer's need. Better nature of products and enterprises is the outcome of the procedure of genuine adapting, so it has picked up a vital place for Scholars, logical and instructive organizations (Behdadmanesh, et al. 2014). Colleges and research focuses are trying to enhance their administrations with developments. Training is one of most confused work in dealing with the associations, particularly in HR management, which impacts other inner components, for example, Inspiration, work fulfillment, inventiveness, and development. A standout amongst the most vital impacts of TQM, from the viewpoint of strategic human capital administration, is giving high importance in training. TQM claims that a mistake, which decreases the nature of items and administrations of organizations, is a consequence of having not prepared specialists in all specialized domain. So, the proper understanding of the HR management and TQM should be there for proper improvement of the employee. Only proper improvement of the employees and specialists can bring the innovation (Behdadmanesh, et al. 2014).

2.1.4 Sustainable Development Approach

The growth in technical, administrative, geographical, social and chronological level governs the alteration in the number of fundamentals and structures of the production scheme. The organization of a sustainable invention system must encounter the design of a further complex exertion. This takes into attention the following: Amenableness with the environmental regulation; the quality of products or facility's needs; improved productivity for the needs of stockholders; Satisfaction, comfort, and content of personnel the social and motivational needs (Todorut 2012). The essential for adopting the direction towards a sustainable improvement by the economic administrations was established by the appearance of some novel kinds of universal documents, for instance, ISO standards as well as by alterations in the origin of somebodies functioning at European levels, such as the European Foundation for Quality Management (EFQM). Precisely, there were first changes in the latest ISO 9004 standard and the newest EFQM quality model published in 2010 (Todorut 2012).

2.1.5 Harmonization of Human Behaviour

As one of the results of globalization, quality in itself gets a continuously growing power, as it is started to be the tool of success in business life at the international and national level as well. On the one hand, globalization in commercial overlaps with growing number of global transactions managed by multinational companies, and on the other side, one can find more and more competitors on the market. The key to success relies on the harmonization of human behavior, responsibilities, and tasks on the one hand, and processes on the other hand (Kumar 2012).

2.1.6 Need for Integration of HRM and TQM

Two crucial themes at this era in management and business research are total quality management and human capital management which are affecting organization from the past few decades in the context of bringing its outcome to fulfill its goals (Nhuta 2012). Human capital management and total quality management both are interconnected with each other. The integration of HRM and TQM is the only key to the ongoing process of the organization as HR managers played the significant role in the process of standardized TQM in any organization. Both will be work as a new dimension in the private sector (Chaichi and Chaichi 2015). HRM is critical for TQM accomplishment in any circle of action. Regardless of contrasts in terminology workforce administration, worker relations, representative fulfillment, and so on and the diverse practices considered (preparing, cooperation, strengthening, and so on) (Jain 2010). There is an agreement in the writing that highlights the vital part of the human capital administration in actualizing a TQM framework in an association. Undertakings that dedicate themselves to the execution of TQM

likewise need to perform HRM forcefully, on the off chance that they are to expand the company's performance altogether. An aggregate quality framework contains two unmistakable frameworks: the management framework and the specialized framework. The management framework is worried about the issues of HRM, builds up an applied model for the usage of TQM. At last, it concludes that total quality management (TQM) is a general theory of management that actions to amplify the efficiency of an association through the ceaseless change of the nature of its items, administrations, individuals, procedures and situations (Nhuta 2012).

2.2 Total Quality Management (TQM)

2.2.1 Introduction

The word quality perspectives from the Latin word 'quality', which signifies "of what nature, of what kind". This thought is likewise as often as possible utilized as a part of this sense: the quality and amount of work delivered by the worker could be an announcement about what sort of performance administration it requires of (Usrof and Elmorsey 2016). Another method for utilizing the idea is to consider quality as a great and awful in any circumstance. In any case, one thing for beyond any doubt that quality is an important substance in creating effective organizations and advertising. It is dependably a top need in the motivation of a few associations as the interest for unique quality and more reliable item and administrations expanded. The 'TQM Quality Triangle' as appeared in underlined figures 2, outlines the segments of it. Gaining and concentrating on consumer loyalty is the substance of enhancing quality. Associations must transmute themselves to put capital into the future improvement of the workforce. With motivational components imbued with workers improves consumer loyalty.

A core definition of total quality management (TQM) explains a management approach to long-term success through customer satisfaction. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work.

Cooperation is a critical part of the administration system in making a positive working environment. The aggregate collaboration and interest of representatives in exercises will accomplish brought together authoritative objectives. It includes that if a group or gatherings perform better their individuals build up a solid feeling of energy towards the objectives. Sustainable development is an important sector that worried about the change of present business arrangement used to convey items and administrations to clients. It additionally develops a culture of advancement and constant change in the association. Building a culture of persistent change, workers in association ought to have shared comprehension for the vision and continuous correspondence (Agustiady 2013), and this can

efficiently happen only in a team under a proper leader. Total Quality Management is a management approach that originated in the 1950s and has steadily become more popular since the early 1980s. Total Quality is a description of the culture, attitude, and organization of a company that strives to provide customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with processes being done right the first time and defects and waste eradicated from operations.

Total Quality Management, TQM, is a method by which management and employees can become involved in the continuous improvement of the production of goods and services. It is a combination of quality and management tools aimed at increasing business and reducing losses due to wasteful practices.

Quality activities, for example, HACCP, ISO, and other quality control programs have advanced similarly as the entire quality administration has been characterized and refined by a few autonomous arrangements of analysts (Várnai 2011). Quality management is one of the essences of business, which keeps in mind about the end goal to meet a high-quality standard as per requirement, as it is concentrating on process improvement and administration, in addition to on the front of the critical assets. This Quality management is TOTAL because of the accompanying reasons. All individuals from the association partake in the particular procedures, it is connected to every one of training of the given organization, and it concerns every single hierarchical level, offices in the given firm (Várnai 2011). In precisely, it can be said, that quality management principles are a batch of primary beliefs, rules, norms and values that are thought to be true and treated as the foundation for an effective quality management and as a result produce a positive aftermath on the performance of the organization. These principles are developed and maintained by international experts of ISO / TC 176 who is responsible for supporting ISO's quality management standards (ISO 2015).

Paksoy in 2001 had stated that total quality management is, to sum up, a management outlook and perception which aspires and intends to sustain and ensure the best quality in goods and service production along with a management philosophy which predicts continuous improvement and development. Reports worked on by Tortop, Isbir, Aykaç, Yayman, and Ozer in 2007, illustrate that the methods or means by which the success story of the country can reach in the competition that is continuously going on in the global field, brings about fulfilling the requirements of ensuring the quality of public services. In the report, is stated that even though several attempts have been made as per the quality governance in public organizations and institutions in a country, without any central or general quality research concerning the public organizations and institutions is implemented to date. In the survey, is mentioned that the performances carried out for the particular

purpose to keep up with the stage or level of organizations and extensive efforts level of senior staff or political liabilities which are keen in the innovations of total quality management.

TQM Defined

TQM is a management philosophy that seeks to integrate all organizational functions (marketing, finance, design, engineering, and production, customer service, etc.) to focus on meeting customer needs and organizational objectives.

TQM views an organization as a collection of processes. It maintains that organizations must strive to continuously improve these processes by incorporating the knowledge and experiences of workers. The simple objective of TQM is “Do the right things, right the first time, every time.” TQM is infinitely variable and adaptable. Although originally applied to manufacturing operations, and for a number of years only used in that area, TQM is now becoming recognized as a generic management tool, just as applicable in service and public sector organizations. There are a number of evolutionary strands, with different sectors creating their own versions from the common ancestor. TQM is the foundation for activities, which include:

- Commitment by senior management and all employees
- Meeting customer requirements
- Reducing development cycle times
- Just in time/demand flow manufacturing
- Improvement teams
- Reducing product and service costs
- Systems to facilitate improvement
- Line management ownership
- Employee involvement and empowerment
- Recognition and celebration
- Challenging quantified goals and benchmarking
- Focus on processes/improvement plans
- Specific incorporation in strategic planning
- This shows that TQM must be practiced in all activities, by all personnel, in manufacturing, marketing, engineering, R&D, sales, purchasing, HR, etc.

The Concept of Continuous Improvement by TQM

TQM is mainly concerned with a continuous improvement in all work, from high-level strategic planning and decision-making to detailed execution of work elements on the shop floor. It stems from the belief that mistakes can be avoided and defects can be prevented. It leads to continuously

improving results, in all aspects of work, as a result of continuously improving capabilities, people, processes, and technology and machine capabilities.

Continuous improvement must deal not only with improving results but more importantly with improving capabilities to produce better results in the future. The five major areas of focus for capability improvement are demand generation, supply generation, technology, operations and people capability.

A central principle of TQM is that mistakes may be made by people, but most of them are caused, or at least permitted, by faulty systems and processes. This means that the root cause of such mistakes can be identified and eliminated, and repetition can be prevented by changing the process.¹

There are three major mechanisms of prevention:

- Preventing mistakes (defects) from occurring (mistake-proofing).
- Where mistakes can't be absolutely prevented, detecting them early to prevent them being passed down the value-added chain (inspection at source).
- Where mistakes recur, stopping production until the process can be corrected, to prevent the production of more defects.

Implementation Principles and Processes

A preliminary step in TQM implementation is to assess the organization's current reality. Relevant preconditions have to do with the organization's history, its current needs, precipitating events leading to TQM, and the existing employee quality of working life. If the current reality does not include important preconditions, TQM implementation should be delayed until the organization is in a state in which TQM is likely to succeed.

If an organization has a track record of effective responsiveness to the environment, and if it has been able to successfully change the way it operates when needed, TQM will be easier to implement. If an organization has been historically reactive and has no skill at improving its operating systems, there will be both employee skepticism and a lack of skilled change agents. If this condition prevails, a comprehensive program of management and leadership development may be instituted. A management audit is a good assessment tool to identify current levels of organizational functioning and areas in need of change. An organization should be basically healthy before beginning TQM. If it has significant problems such as a very unstable funding base, weak administrative systems, lack of managerial skill, or poor employee morale, TQM would not be appropriate.

However, a certain level of stress is probably desirable to initiate TQM. People need to feel a need for a change. Kanter (1983) addresses this phenomenon by describing building blocks which are present in effective organizational change. These forces include departures from tradition, a crisis or

galvanizing event, strategic decisions, individual “prime movers,” and action vehicles. Departures from tradition are activities, usually at lower levels of the organization, which occur when entrepreneurs move outside the normal ways of operating to solve a problem. A crisis, if it is not too disabling, can also help create a sense of urgency which can mobilize people to act. In the case of TQM, this may be a funding cut or threat, or demands from consumers or other stakeholders for improved quality of service. After a crisis, a leader may intervene strategically by articulating a new vision of the future to help the organization deal with it. A plan to implement TQM may be such a strategic decision. Such a leader may then become a prime mover, who takes charge in championing the new idea and showing others how it will help them get where they want to go. Finally, action vehicles are needed and mechanisms or structures to enable the change to occur and become institutionalized.

Steps in Managing the Transition

To communicate the change, mechanisms beyond existing processes will need to be developed. Special all-staff meetings attended by executives, sometimes designed as input or dialog sessions, may be used to kick off the process, and TQM newsletters may be an effective ongoing communication tool to keep employees aware of activities and accomplishments.

Management of capital for the change effort is important with TQM because outside consultants will almost always be required. Choose consultants based on their prior relevant experience and their commitment to adapting the process to fit unique organizational needs. While consultants will be invaluable with initial training of staff and TQM system design, employees (management and others) should be actively involved in TQM implementation, perhaps after receiving training in change management which they can then pass on to other employees. A collaborative relationship with consultants and clear role definitions and specification of activities must be established.

TQM encourages participation amongst shop floor workers and managers. There is no single theoretical formalization of total quality, but Deming, Juran, and Ishikawa provide the core assumptions, as a “discipline and philosophy of management which institutionalizes planned and continuous improvement ... and assumes that quality is the outcome of all activities that take place within an organization; that all functions and all employees have to participate in the improvement process; that organizations need both quality systems and a quality culture.”

2.2.2 Significance of Total Quality Management

Total quality management, cutting-edge management logic, has turned into a broadly utilized idea for connecting the employer is highlighting on quality to a more extensive mechanical relations approach. The TQM approach puts the obligation regarding an item or administration quality

specifically on to the workforce. Other than an intensive administration audit, went with much discuss theory, mission and administration, a "client introduction" and the point of zero deformities are the key topics in TQM. Responsibility for quality must be all inclusive and drove from the top (Jayashree and Faisal, 2017).

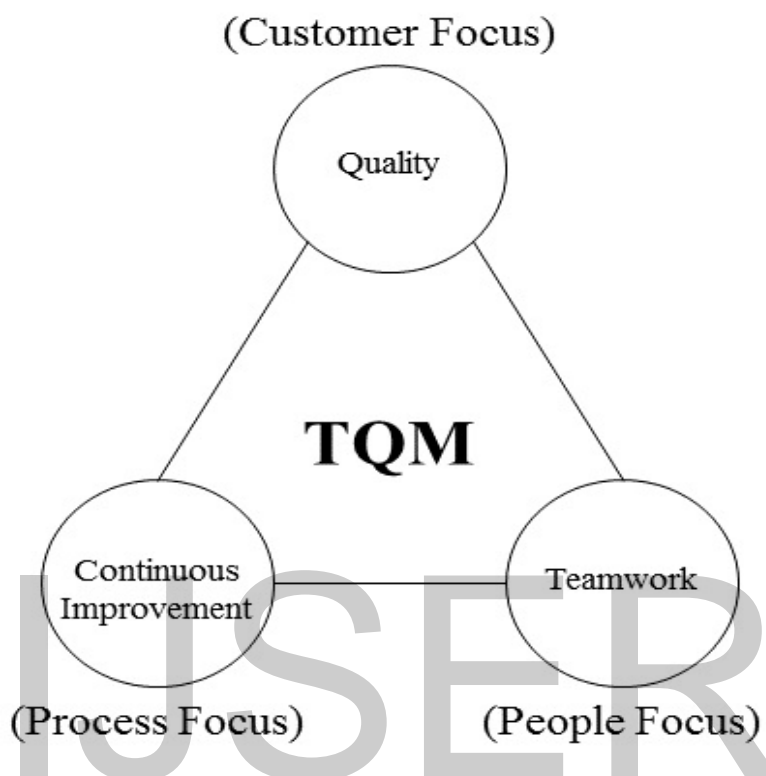


Figure 2: The TQM Quality Triangle Source: (Usrof and Elmorsey, 2016)

From another point of view of (Duran, Çetindere and Şahan 2014) those associations always try to deliver the best and high-qualified items for their clients. The division of management at the undertakings especially endeavors as the division of value administration conveys out quality control, course, association and arranging in the generation framework. Likewise, one of the obligations of this office is to figure out if or not the clients are adequately fulfilled by the suppositions concerning the general focuses of the association. Total Quality Management, which is administration rationality, completes a powerful change in the procedures by utilizing the accompanying methods. These are:

- To change the way of life of the association.
- To acknowledge participatory administration through the objectives of the association
- Learning and training.

- To guarantee persistent change (concentrating on the general focuses of the venture in process change as opposed to individual practices).
- To expand correspondence to encourage change.
- Identifying and fulfilling internal and outside clients (the foundation of a solid correspondence with the providers and clients so that concentrating on quality in item advancement and obtaining strategy instead of cost).
- To gauge and show items and information simultaneously.
- To strengthen the representatives in each quality-related field.

While TQM has been recognized as a foremost invention in management exercise, there has been a popular concern with the "hard" production-leaning aspects of TQM, more other than the softer HRM fundamentals. Underneath table provides the simple 'soft' philosophies and 'hard' philosophies which usually found in the popular of TQM documents and academic magazines (Kumar 2012).

Various Concepts of TQM

TQM 'Hard' Concepts	TQM 'Soft' Concepts
Statistical Process Regulator	Total Employee Participation
Quality Function Distribution	Continuous Development
ISO 9000 sequences	Uninterrupted Training
Pareto Study	Teamwork
Histograms & Process Diagrams	Top-management Assurance & Provision
Tree Conclusion Diagram	Independent Management Style
Critical Path Study	Customer/Citizen Agreement
Fishbone or Ishikawa Figure	Culture Modification
Matrix Diagram	Authorization

Source: (Kumar 2012)

2.2.3 Different explanations of TQM from a different point of view

Literature shows that there is no all-inclusive definition can express the entire picture of TQM. In authoritative settings, characterizing a solitary hypothetical formalization about the term is one of the challenges experienced by associations in the execution of TQM. Underneath table gathers diverse

meanings of TQM as detailed in writing. It is generally underline on consistent change, client center, human asset administration and development management (Usrof and Elmorsey 2016).

Author(s)	Definitions
(Patro 2013)	It is the optimization and incorporation of all the tasks and progressions of a commercial in order to afford for motivated clients through a method of constant development.
(Chao, Hsu and lou 2015)	A management viewpoint, which is often, appropriate when working to expand quality diagonally diverse cultures and productions.
(Liu and Liu 2014)	A set of methods and events to decrease or eliminate deviation from a creative process to recover efficiency, consistency, and value.
(Chaichi and Chaichi 2015)	A key approach used by HR team for sustaining reasonable benefit and is a method of conducting administrations to recover the overall efficiency as well as an act towards attaining the remaining position.
(Kanji 2012)	Athe n idea which the organization can only accomplish through long-lasting planning, by sketching up and executing annual quality strategies which progressively lead the organization towards the execution of the vision of the organization.
(Dias 2011)	A new example in management.
(Lee, Gillspie and alexander 2010)	A professional management plan seeking to recover the excellence of administrative management, affordability which will provide value to customers.

Figure 3: Thoughts of the Scholars about TQM (Usrof and Elmorsey 2016)

Every one of the perspectives above shows that albeit different specialists approach the issues of TQM from alternate points of view, there is still a wide range of unanimity about the significance of standards, practices, and estimations of TQM (Larina 2015). A few scientists additionally incorporate delicate and hard TQM components, association execution and also benchmarking (Zeng, Phan and Matsui 2015). A standout amongst the most notable elements of the TQM writing is the nonexistence of any uniform meaning of TQM. The fruitful execution of TQM relies on upon what practices are received. Once TQM honed viably, it will bring about clear and immaterial advantages and all around recognized for association and person. For example, TQM enhanced

generation execution and upgraded consumer loyalty (Topalvic 2015), upgraded corporate social obligation (Benavides-Velasco), et al. 2014), advanced learning administration, enhanced inspiration and correspondence, enhanced money related execution along with improved maintainability and improvement of association (Todorut 2012), advancing quality and development in administration association, expanded worker contribution, and so on. All these immediate and indirect advantages could be endless if quality management strategies are revealed and conveyed to HR.

2.2.4 Key Elements of TQM

The Total Quality Management of an organization depends on various factors. Total Quality Management (TQM) is a management approach that originated in the 1950s and has firmly become more popular since the early 1980s. Total quality is a characterization of the culture, attitude, and organization of a company that struggles to provide customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with processes being done right the first time and defects and waste abolished from operations. The fundamental elements that make an organization's function efficiently and adequately are ethics, integrity, trust, training, teamwork, leadership, recognition and communication. Every element has a different aspect and has something different to offer.

Ethics:

Ethics can be said a set of principles which are morally correct to administer the actions of a person. One can judge a situation to be good or bad only by his ethics. The ethics are subjective. It can be the ethics or principles of an individual or an organization. The individual ethics guides a single person to judge whether the situation or the result is correct or incorrect personally but, organizational ethics refers to the rules and guidelines which an organization sets up as a business code to which every employee has to adhere and follow. In such a case, bringing an individual's ethics into a situation where an organizational ethics plays a vital role is very insignificant. Ethics in the HRM framework is significant because of productive and interrelated shifts in the organization of work changes in international economies; changes at the national level in policy and institutional structures; and changes at the enterprise level in the policies, systems, and practices of employment. Ethics is an ordinary term frequently used to refer to both moral beliefs and ethical theory. Ethical theory, in distinction, suggests more specific reflections on the nature and justification of right actions in a manner that recommends clarity, substance, and accuracy of the argument.

Integrity:

A person possessing high moral qualities and is honest can be referred to as being an integrated person. Values and even-handedness towards the facts are what is implied by integrity. It is what a customer expects as they suppose integrity to be a total contrast of duplicity and TQM would never function in an environment where duplicity exists. Integrity is one of the constitutional attitudes that employers pursue the employees that they hire. It is the trademark of a person who exposes sound moral and ethical principles at work. Integrity is the foundation on which coworkers build relationships, trust, and effective interpersonal relationships. Any interpretation of integrity will give priority to these factors. A person who has integrity lives his or her values in relationships with coworkers, customers, and stakeholder. Honesty and trust are essential to integrity. Acting with honor and truthfulness are also basic beliefs in a person with integrity.

People who determine integrity draw others to them because they are trustworthy and dependable. They are principled and you can count on them to behave in honorable ways even when no one is watching or even knows about their performance.

Trust:

Trust is a recurring element in organizational learning and relationship marketing. It is the primary concept on which the framework of TQM is built. The result of ethics and integrity is trust. Trust plays a significant role in customer satisfaction. Trust is a consequence of integrity and ethical conduct. Without trust, the groundwork of TQM cannot be built. Trust promotes the full participation of all members. It grants empowerment that stimulates pride ownership and it encourages commitment. It allows decision making at convenient levels in the organization, fosters individual risk-taking for continuous improvement and helps to assure that measurements focus on improvement of process and are not used to compete people. Trust is fundamental to assure customer's satisfaction. So, trust builds the cooperative environment essential for TQM. If an organization is not able to gain the confidence of its customer, then the supportive atmosphere cannot be built which is essential for TQM. Trust encourages commitment and permits the organization to take decisions at appropriate levels.

Training:

Training helps the employees to achieve higher skill level, which makes them be more responsible. It helps an employee to grow and become more productive. For TQM, an employee needs to be trained in interpersonal skills, problem solving, team and job management, decision making and improving

performance and technical skills. They are trained to become successful employees in the organization. Supervisors are entirely accountable for implementing TQM within their departments and teaching their employees the philosophies of TQM. Training that employees desire interpersonal skills, the ability to function within teams, problem-solving, decision making, job management performance analysis and improvement, business economics and technical skills. During the creation and formation of TQM, employees are trained so that they can become productive employees for the company.

Teamwork:

For achieving success in TQM, there is a great need for effective teamwork. With the use of teams, the business will secure rapid and better solutions to problems. Teams also support additional durable improvements in processes and operations. In teams, people sense more reliable bringing up problems that may occur and can get help from other workers to find a solution and put into place. There are mainly three types of teams that TQM organizations adopt:

- Quality improvement teams (QITs) – These are momentary teams with the intention of dealing with particular problems that often occur. These teams are set up for a period of three to twelve months.
- Problem-solving teams (PSTs) – These are momentary teams to solve certain problems and also to classify and overcome causes of problems. They generally last from one week to three months.
- Natural work teams (NWTs) – These teams subsist of small groups of talented workers who share tasks and responsibilities. These teams use concepts such as employee involvement teams, self-managing teams, and quality circles. These teams generally work for one to two hours a week.

The team would help in achieving appropriate solutions to the problems. The teams are capable of providing permanent improvements. A team can be expected to handle issues and provide remedies accordingly.

Leadership:

Leadership plays the most important role in TQM. A leader is capable of inspiring and acts strategically. It occurs in every organization. Leadership in TQM needs the manager to provide a rousing vision, make strategic directions that are assumed by all and to instill values that guide subordinates. For TQM to be profitable in the business, the supervisor must be committed to leading

his employees. A supervisor must understand TQM, believe in it and then explain their belief and commitment through their daily practices of TQM. The supervisor makes sure that strategies, philosophies, values, and goals are communicated down throughout the organization to provide focus, clarity, and direction. A key point is that TQM has to be introduced and led by top management. Commitment and personal involvement are required from top management in creating and deploying clear quality values and goals consistent with the objectives of the company and in creating and deploying well-defined systems, methods and performance measures for achieving those goals. Personal involvement and commitment are essential for a leader in TQM. A leader must be encouraging enough and be able to lead his employees in a successful business venture.

Communication:

A common understanding of thoughts between the receiver and the sender can term as communication. Communication is responsible for binding everything together. Starting from infrastructure to roof of the TQM house, everything is constrained by strong ordnance of communication. It acts as an essential link between all elements of TQM. Communication means a common understanding of ideas between the sender and the receiver. The success of TQM demands communication with and among all the organization members, suppliers, and customers. Supervisors must keep open airways where employees can send and receive information about the TQM process. Communication coupled with the sharing of correct information is important. For communication to be credible the message must be clear and receiver must interpret in the way the sender intended.

There are different ways of communication such as:

- Downward communication – This is the assertive form of communication in an organization. Presentations and discussions basically do it. By this, the supervisors are able to make the employees clear about TQM.
- Upward communication – By this, the lower level of employees are able to provide suggestions to upper management of the effects of TQM. As employees provide insight and constructive criticism, supervisors must listen effectively to correct the situation that comes about through the use of TQM. This forms a level of trust between supervisors and employees. This is also similar to empowering communication, where supervisors keep open ears and listen to others.
- Sideways communication – This type of communication is important because it breaks down barriers between departments. It also allows dealing with customers and suppliers in a more professional manner.

Recognition:

The final element is recognition. Employees and teams work hard to receive recognition for the effort they give. It is the job of the supervisor to recognize the contributors which can enhance self-esteem, quality, and productivity. It should be provided for both suggestions and achievements for teams as well as individuals. Employees strive to receive recognition for themselves and their teams. Detecting and recognizing contributors is the most important job of a supervisor. If an employee receives recognition after his immediate delivery of efficiency, he feels encouraged. As people are recognized, there can be huge changes in self-esteem, productivity, quality and the amount of effort exhorted to the task at hand. Recognition comes in its best form when it is immediately following an action that an employee has performed. Recognition comes in different ways, places and time such as,

- Ways – It can be by way of a personal letter from top management. Also by award banquets, plaques, trophies etc.
- Places – Good performers can be recognized in front of departments, on performance boards and also in front of top management.
- Time – Recognition can give at any time like in staff meeting, annual award banquets, etc.

We can say that these eight elements are necessary for establishing the success of TQM in an organization and that the supervisor plays a vital role in developing these elements in the workplace. Without these elements, the business entities cannot be profitable TQM implementers. It is very clear from the above discussion that TQM without integrity, ethics, and trust would be a great remiss; in fact, it would be incomplete. Training is the key by which the organization creates a TQM environment. Leadership and teamwork go hand in hand. Lack of communication between departments, supervisors, and employees develop an anxiety on the whole TQM process. Last but not the least; recognition should be given to people who provided to the overall completed task. Therefore, led by example, train employees to provide a quality product, create an environment where there is no fear to share knowledge, and give credit where credit is due is the motto of a successful TQM organization.

Public administration and TQM:

Public administration outlines the significant element of the everyday life, and it is, on a daily basis, advantageous in the fields of health, education, security, and others that are produced from the public administrative organizations. Along with it, on a parallel side, improvement of the anticipation of the

public sector and the socioeconomic rank, a legal boost in all the services which manage the government of the nation. On the other hand, the states' structure and services in contemporary market or scenario could not permit the nation to manage the services vigorously and fruitfully. Additionally, with the increase in the scope of the communication in the contemporary globalized world, the public who are called as the costumer of the nation is the example of the still and fruitless administration of the public government.

Comprehending the pieces of evidence, that the difficulties the public faces such as the high burden of taxes, wastage of capital, deficiency in budgets, hyperinflation, and unemployment which are the consequences of the fruitless and poor organization of the public administration. Which cannot be anyhow worked out with the existing traditional bureaucratic formation and operation system, an escape route might be implemented to human-relevant management approaches and total quality management as it takes in all such features put into operation productively by the private sector. However, it is defended that the total quality management is a decision-making uprising comparable to the Weber's Bureaucratic Model which considered as an uprising at a single time.

The total quality management is perceived as an up to date managerial approach or procedure which it's expected that it will impress or instigate the solving of the problems in management area along with the treatment by the management in the 21st century. As per the European Organization for Quality Control or EOQC along with the American Society for Quality Control or the ASQC, the term quality is treated as the whole material goods which provide or offers the degree of satisfying an influenced necessitate of goods or products and services. Acknowledging that the industrial revolution of the depiction of the present use of the term quality had increased along with the sudden increase of the serial and industrial manufacturing following the 1st and 2nd World War, four different periods have been covered in respect to search for comprehending its meaning and style of management at the present day. The periods as mentioned bellow can list as:

- Control Period for examination or inspection.
- Quality Control or Statistical analysis.
- Quality Safety or Quality Assurance.

2.2.5 A small case study: Quality Management in Private Hospitals

The private sector is measured more efficient in comparison to public sector workplaces due to the different incentives, marketing course, and a decentralized business module or reproduction. These primary and significant differences provide tactical benefits leading to the development of

privatizations of sectors and their profitability. However, these conveniences are expensive to implement. The best possible way for private healthcare to meet and surpass customer expectations is by consistent evaluation and calculation which results in a better arrangement of customer expectations and perception. To attain this alignment, a vigorous and trustworthy instrument is required to seize service quality from a customer's observation (Kitapci, Akdogan, and Dortyol, 2014).

Introduction of total quality management in private health care guaranteed improved health care quality. By encouraging this approach in health care certified agencies, business partners, private healthcare organizations, and foundations. Private health organizations face unique and severe problems than other industries. These hospitals are traditionally rigid and greatly divided into several departments with individual departmental head each. The problem zones in a health care facility are the relationship with the physicians, existing quality ensuring techniques and also the management and union association (Short 2010).

2.3 The EFQM Excellence Model

EFQM is a non-profitable organization formed in the year 1988. Fourteen leading organizations came together to develop a framework that would help the organizations increase their competitiveness within the global frame, resulting in the development of the EFQM excellence model. Today with the national partners, EFQM has over 30,000 organizations using the EFQM excellence model. In addition to the model, it has a range of products and services that help support organization implements in the model. Many of these can be delivered in local languages (EFQM 2012).

EFQM's members include a diverse range of organizations from large MNCs to hospitals. An alternative to implementing the total quality management, managers and academics have used the EFQM excellence model (EEM). High scores at EEM raises great chances of an organization from becoming a TQM company as they follow a similar path. The aim is to maintain goods' quality to the highest level. Both provide a scope for performance enhancement.

For leading an organization to a superior level to sustain the business, a method of organizing and running activities based on the concept of Total Quality Management is EFQM. The concepts of TQM which the EFQM here applies and incorporates are focusing on the customer, supplier partnerships, leadership, developing people and involving them, continuous progress, managing the processes systematically, the responsibility of the public and result orientation. Total Quality

Management has several principles, and the business model for excellence is used to interpret those principles into the regular practice. EFQM is now planning to spread and kindle the TQM philosophy throughout Europe.

The European Foundation for Quality Management (EFQM) is such a framework to ease out this type of complexities. The model is logical, realistic convenient, enhanced by the leading organizations to prompt consistent improvement.

The model encourages people to recognize the cause and effect relationships between the performance of the organization and what the result is produced. The EFQM Excellence Model comprises of three integrated modules, viz., the fundamental concepts of excellence, the criteria, and the RADAR.

2.3.1 The Fundamental Concept of Excellence

The fundamental concept outlines and describes the essential or basic principles that create the foundation for achieving long-lasting excellence in any organization. There are eight fundamental concepts of excellence which are as follows:

- Adding value for customers

Understanding, foreseeing and satisfying needs, expectations and chances of the customers is the significant factor for an organization to achieve excellence.

- Creating Sustainable Future

Excellent institutions have a significant positive effect on the world surrounding them by improving their performance, while concurrently improving the economic, environmental and social circumstances within the communities they interact with it.

- Developing Organizational Capability

Excellent organizations improve their capabilities by efficiently dealing the change, both internally and externally of the institutional boundaries.

- Harnessing Creativity and Innovation

Excellent institutions produce progressed value and levels of performance through consistent improvement and systematic innovation by including creativity of their stakeholders.

- Leading with Vision, Inspiration, and Integrity

Efficient leadership for reaching the goals and acting as role models for the organization's values and its ethic could lead to an excellent organization.

- Managing with Agility

Institutions who are recognized for their capability to identify and respond aptly and effectively to opportunities and risks can reach the excellent level of performance.

- Succeeding through the talent of people

Excellent organizations know how to value their people and generate a culture of empowerment for the achievement of both the individual and the organizational objectives.

- Sustaining Outstanding Result

Excellent organizations accomplish sustained exceptional results that meet both with the long-term and short-term requirements of all their stakeholders, within the area of their operating field.

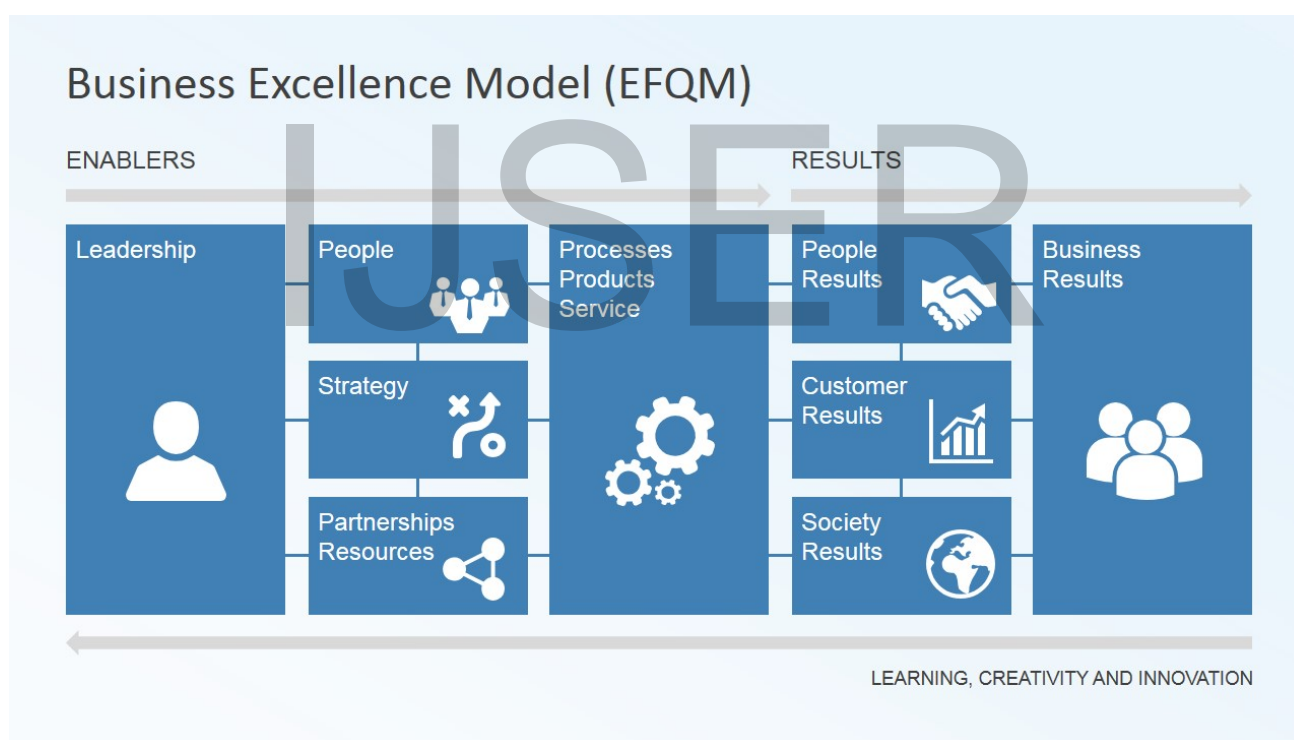


Figure 8: Excellence model

2.3.2 The Criteria

The criteria afford a structure to aid organizations to convert the fundamental concepts and RADAR thinking in practical circumstances. To attain sustained success, an organization needs a strong and effective leadership and clear strategic direction (Rompuy 2012). If the correct approaches implemented, the expected result of them and their stakeholders would be achieved.

Enabler Criterion

The 5 Enablers that an organization needs to perform to affect the development of their implementation of the strategy are as follows (Thawani, The EFQM 2013 Model Changes Implications for Organizations 2013):

Leadership

Excellent organizations encompass effective leaders who outline the future and by hook or by crook, make it happen, acting as a role model for the organizational values and ethics and encourage team members confidence at all times. Such leaders are flexible, enabling the organization to foretell and respond in an efficient and appropriate process to ensure the success of the organization. Leadership is both a research area and a practical skill encompassing the ability of an individual or organization to "lead" or guide other individuals, teams, or entire organizations. The literature debates various viewpoints, contrasting Eastern and Western approaches to leadership, and also US vs. European approaches. US academic environments define leadership as "a process of social influence in which a person can enlist the aid and support of others in the accomplishment of a common task". Leadership seen from a European and non-academic perspective encompasses a view of a leader who can be moved not only by communitarian goals but also by the search for personal power. Leadership can be derived from a combination of several factors.

Strategy

Excellent organizations execute their mission and vision by developing and organizing the stakeholder focused strategy. Policies, objectives, schemes, and processes are settled and positioned to deliver the strategy. The strategy is important because the capitals available to achieve these goals are usually limited. Strategy generally involves setting goals, determining actions to achieve the goals, and mobilizing capital to execute the actions. A strategy describes how the ends (goals) will be achieved by the means (capital). The strategy can be intended or can emerge as a pattern of activity as the organization adapts to its environment or competes. It involves activities such as strategic planning and strategic thinking.

People

Excellent organizations understand the value of their people and create a work environment that is mutually beneficial for the individual and the organizational aims and objectives. The organization develops the competencies and skills of its people and encourages equality. It recognizes,

communicates, provides rewards, motivates, inspires, boosts confidence and enables the people to utilize their pre-owned and freshly learned skills and knowledge for the progress of the organization.

Partnerships and Capital

Excellent firms organize and bring about outside associations or partnerships, suppliers and internal capital and assets with the sole intention of supporting the proposed strategy and policies and the efficient operation of the comprehensive process.

Processes, Products, and Services

Excellent organizations plan, manage and enhance processes to produce increasing value for customers or patrons and other external and internal stakeholders.

Results Criterion

The four outcomes that any organization achieves in the subsequence of the strategic goals are as follows:

- Customer Results

Excellent organizations attain and sustain outstanding outputs that meet or surpass the expectations and requirements of their clients.

- People Results

Excellent organizations achieve and sustain exceptional outcomes that meet or exceed the needs and outlooks of their people.

- Society Results

Excellent organizations accomplish and endure outstanding consequences that reach or exceed the desires and expectations of relevant stakeholders within the society of operations.

- Business Results

Excellent organizations attain and endure exceptional consequences that reach or surpass the requirements and outlooks of their business stakeholders.

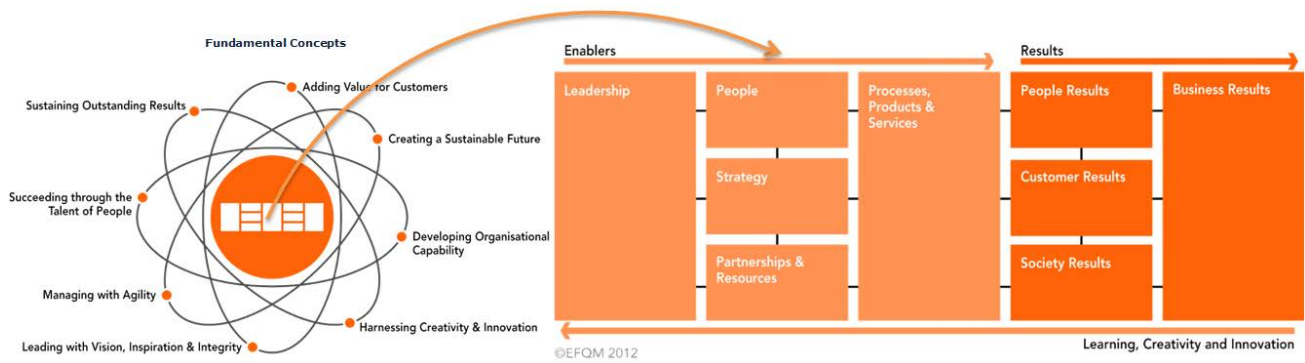


Figure 9: The Criteria Model

In respect to all the four types of results, excellent organizations were found to:

- Improve a group of key performance indicators (KPIs) and the related results to indicate the successful positioning of their strategy, by the requirements and expectations of the relevant stakeholder crowds.
- Locate clear targets for key results, by the needs and anticipations of their business stakeholders, consecutively with their chosen strategy.
- Sector outcomes to comprehend the performance of precise areas of the organization and the experience, requirements, and outlooks of their stakeholders.
- Illustrate positive and enduring good business results over three years minimum.
- Understand distinctly the fundamental causes and drivers of observed inclinations and the effect of these will fall on other performance indicators and co-related outcomes.
- Possess confidence in the future presentation and outcomes based on the comprehension of the source and effect relationships recognized.
- Apprehend the way the key results are in comparison to the similar organizations and applying the data for target setting in relevant fields.

2.3.3 The RADAR

The RADAR framework is a dynamic assessment structure and important management tool that provides an organized approach to questioning the presence of an organization. The RADAR logic expresses that an organization, at the highest level, should:

- Regulate the outcomes the organization is aiming at to achieve as 'result' of the strategy taken.
- Strategize and improve an integrated collection of wide-ranging 'approaches' to provide the expected results both at present and in the future.
- Deploy the approaches constructively to guarantee the appropriate implementation.

- Assess and Refine the arranged approaches by monitoring and evaluating the results attained and the continuing and enduring learning activities.

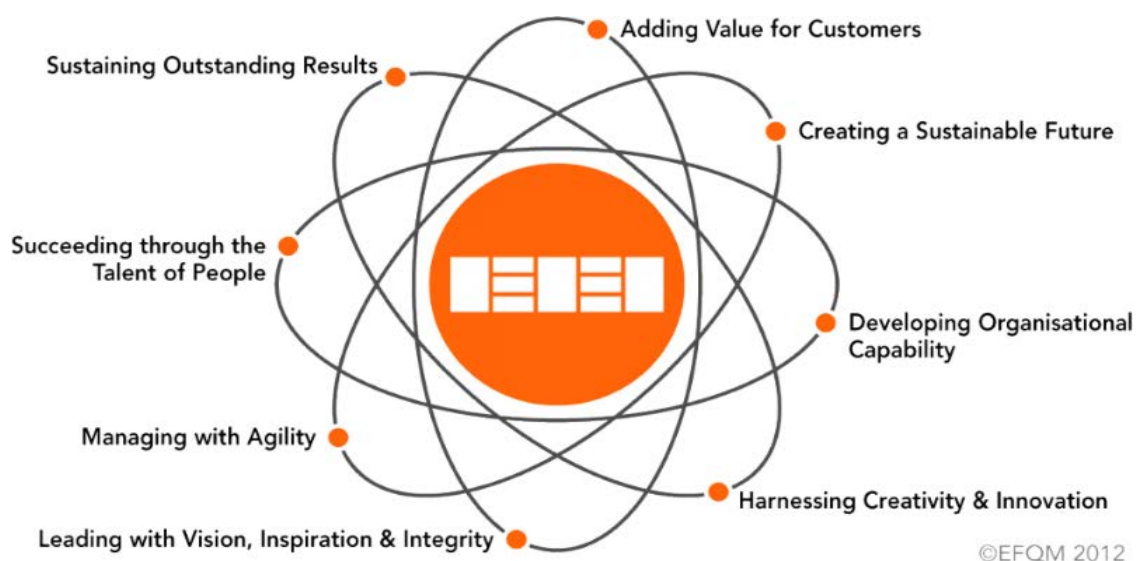


Figure 10: The Radar (EFQM 2012)

2.3.4 Excellence Models in the World

ASQ

ASQ offers the global business community and market with the expertise, implements, and explanations to service organizations and persons enhance the products and services, and experiences are dependent upon security, wellbeing, and regular lives. Initiated in 1946, ASQ had the only mission to upsurge the practices and effects of quality in reaction to the assorted necessities of the world and has been at the forefront of the quality movement ever since. ASQ continue to guide and support innovations in many fields by helping individuals accomplish success and sustainability in the career by providing knowledge capital, skill development courses, professional training, and certifications. ASQ suggests organizational assessment or evaluation tools and culture of quality workshops to help businesses and organizations strengthen and grow to ensure sustainability. It also helps organizations in finding solutions to their business-related complications while recognizing opportunities to make their organizations work in a better way. ASQ simplifies a global community and market through networking, geographic categories and topic-specific member units, development of the career, and the sharing of concepts and also serve industries diverse elements such as manufacturing, software, banking, healthcare, service, and others. The ASQ family of companies comprises of renowned and significant accreditation leaders like ANSI-ASQ National

Accreditation Board (ANAB) and Exemplar Global. ANAB is the U.S. accreditation form for administration systems, laboratories, inspection forms, expertise test providers, and reference material producers. Exemplar Global provides personnel certification, credential management for individuals seeking further professional recognition, and independent certification for training providers to enhance their course quality and outcomes (ASQ 2013).

With personal and organizational associates around the world, ASQ has the status of bringing together the different quality holders who are renovating the world's business market, organizations, and commune to convene the critical challenges that are expected to come in the future.

ASQ provides the world community with the appropriate quality of training, accrediting professional certificates, and set of connections with members of the global quality community.

Headquartered in the USA, ASQ creates champions out of people passionate about quality in over 150 countries. ASQ controls Regional Centers in North Asia, South Asia, Latin America and the Middle East or Africa. Its global offices endow with local access to the community ensuring quality, career development, knowledge, credentials and information services.

ASQ also works in partnership with a network of World Partners across 24 countries and further widen its global accomplishment through a set-up of 14 registered service providers that convey licensed ASQ training and certification assessments within a specified terrain.

The vision of ASQ boasts of making quality a global priority, an organizational essentiality, and a personal ethic; so that, ASQ becomes the community for one and all who try to find quality ideas, technology, or equipment to perk up themselves and their world. ASQ's mission is solely to increase the use and impact of quality in response to the diverse needs of the world. (ASQ n.d.).

The Deming Prize

The Deming Prize was organized by the Japanese Union of Scientists and Engineers (JUSE) in 1952 to encourage organizations to perform excellent work concerning the quality management field of an organization. It is the ancient yet prestigious quality award in the history of quality management assessment and sustainability of organizations. Comparing with Malcolm Baldrige National Quality Award (MBNQA) of the USA and European Foundation for Quality Management (EFQM) of Europe, Deming Prize is the only award that can be contested by a company irrespective of the origin of the country. The Deming Prize acts as a benchmark for businesses to fulfill substantive performance enhancement in the ever-changing, competitive market by utilizing and implementing

total quality management principles, perceptions, and techniques under the light of the specified criteria.

The Deming Prize effects the quality stabilization and improvement of the organization and enhancing the quality of the product or the service. The prize has a significant influence on the sales profit and customer satisfaction and shares in the market. It includes implementation of total participation and development of the organizational culture for enduring overall quality management in the organization (TQM International Pvt. Ltd., 2014).

MBNQA-Malcolm Baldrige National Quality Award

The main principle of the Baldrige structure is mainly to help an organization irrespective of its size, sector, or industry and be prepared to be answering to three questions, which are whether one's organization is performing to its potential? How one can know that? And what as well as how one can improve or change the organization? By challenging oneself with these questions that formulate the Criteria for Performance Excellence, one investigates on the accomplishments and the important elements and factors of the organization. The questions are divided into six interconnected course groups along with result category represent seven critical aspects of managing and performing as an organization, which are, leadership, strategy, customers, measurement, analysis, and knowledge management, workforce, operations, and results.

Baldrige is based on a set of beliefs and behaviors with the focus on core values and key concepts. This key values and concepts are the foundation for incorporating key performance and functional requirements within result oriented structure that creates a base for action, reaction, and ongoing success. These key concepts and values are systems perspective, visionary leadership, customer-focused excellence, valuing people, organizational learning and alertness, focus on success, management of innovation, managing the fact, responsibility towards the society, organization or business ethics and transparency and delivering the value and results.

A focus on processes: The Baldrige framework helps to assess and develop the organizational processes throughout four dimensions, which are, approach, deployment, learning, and integration.

A focus on results, The Baldrige framework leads the way to assess the results from three points of view, the external view which answers the questions how the customers and other stakeholders perceive the organization. The internal view helps in determining how efficient and effective the

organizational operations are; and the future view which assesses whether the organization is learning and growing.

Again, the framework guides the manner in which the results could be effectively assessed along four dimensions of levels, trends, comparisons, and integration.

A focus on linkages

The framework provides linkages among the Criteria categories and treats these essential elements of the system's perception. The significance in a call for data in the strategic planning process and also for improving operations or the requirement for both the customer and market knowledge while establishing the organizational strategy and plans of action are few of the examples of such linkages that the framework guide.

A focus on improvement

The Baldrige framework helps to understand and evaluate how effectively an organization is accomplishing the important aspects which are crucially relevant to that particular organization; how efficient and how correctly the processes are deployed, how much excellent the outcomes are and whether the organization is learning and enhancing. (National Institute of Standards and Technology 2015)



Figure 11: Baldrige framework (Stacey 2016)

The significance of MBNQA to maintain the quality and consistent improvement in an organization:

- It is more comprehensive compared to any other quality awards.
- The model is consistent with several theories of recognized quality experts.
- The criteria conditioned in the framework are universal.
- The criteria stated in the Baldrige excellence model focus on business results support a systematic approach to organizations with a diagnosis based on goals determined by the organization.

The validity of the excellence model; there is a positive correlation found between Baldrige winners and economic success.

Rooted in each of the categories or dimensions, the framework defines the ideal; leadership, strategic planning, customer focus, information and analysis, human capital development, process management and business results.

The Dimensions

Leadership generates vision, ethics, and excellent performance potentialities that are transformed into strategy and operation plans through appropriate strategic planning and concentration on customers. This scheme and action plans steer the comprehensive human capital development and direct the growth of the process management to guarantee the desired business outcomes. Information & Analysis are essential to influence an effective decision making in every facet of the organization.

Wherein which the quality criteria of leadership examine the superior leaders' leadership styles and their involvement in creating or maintaining the organization's morals. In addition to the direction and performance expectations, strategic planning assesses in what process the organization situates the strategic guidelines, how it settles on the necessary action plans and in what manner these plans are interpreted into an effective performance management system.

Examines how the organization determines customer requirements and expectations, as well as how it enhances relationships with customers and determines their satisfaction.

Information & Analysis – Examines the management and effectiveness of the use of data and information to support key organizational processes and the performance management system.

Human Capital Development – Examines how the workforce is enabled to develop and utilize its full potential, how it's aligned with the organization's objectives, and efforts to build and maintain an environment conducive to performance excellence, full participation & organizational growth.

Process Management – Examines key aspects of process management, including customer-focused design, product and service delivery processes, and partnering processes involving all work units.

Business Results – Examines the organization's performance and improvement in key business areas, including customer satisfaction, attainment of performance goals/targets, human capital, stakeholder and partner performance, as well as operational performance (Kedem n.d.)

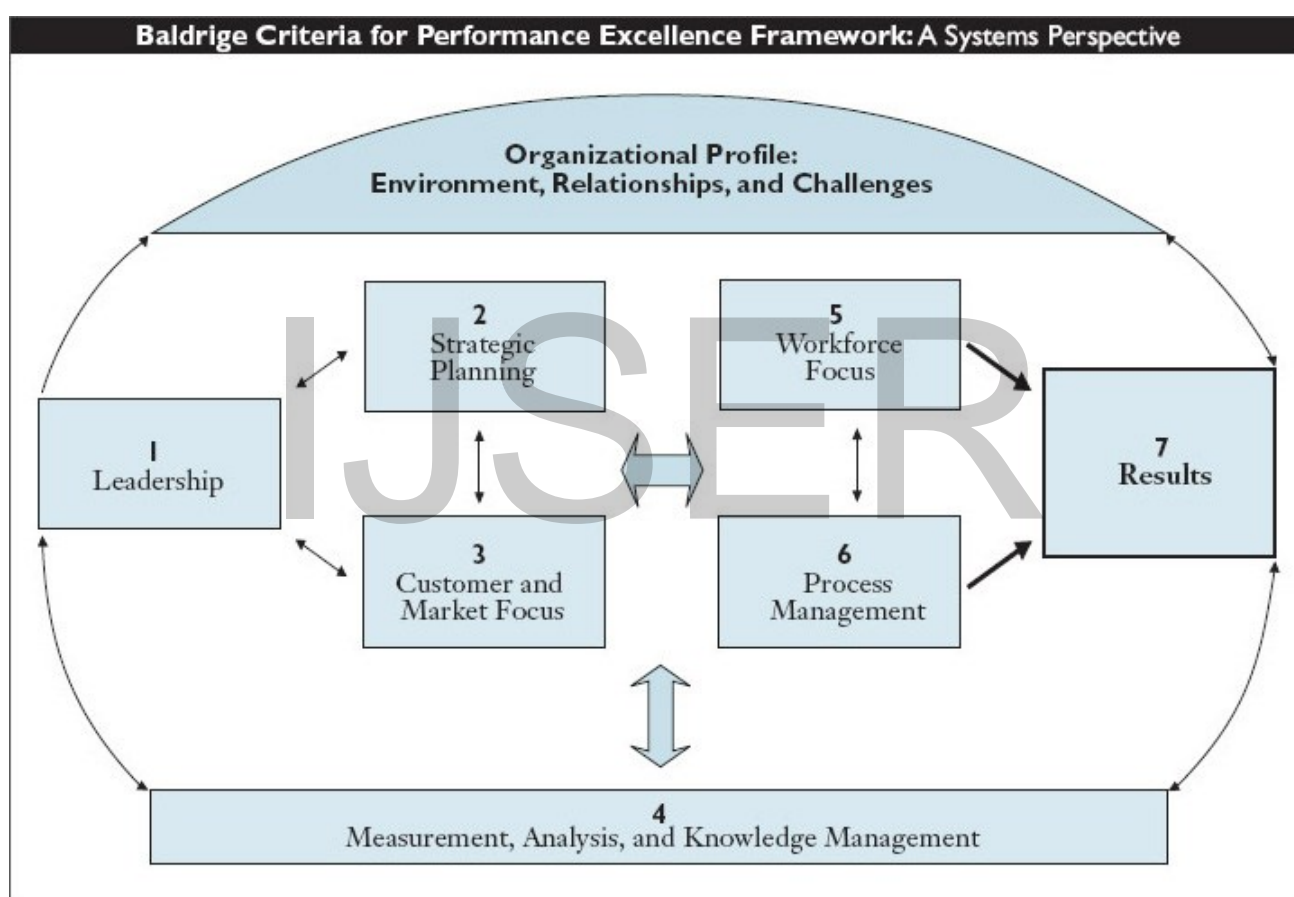


Figure 12: Baldrige framework II (National Institute of Standards and Technology 2015).

European center for best practice management

European Centre for Best Practice Management uses a standard example for designing, evolving and providing initiatives like the 6i's Model which is the procedure by joining the creative aspect to the delivery aspects. The 6i Model is as follows:

Inspiration:

The initial step is grounded on a direct request from customers and promoters and takes place as a consequence of the own academic research. The significant characteristic of this phase is the design of the required ideas and the contents.

Initiation:

The expert research support team who has access to a lot of information, expert knowledge and adequate capital that helps to design new innovative.

Innovation:

The expected outcome of the second phase is a highest standard knowledge product, which is the latest trends and addresses the requirements of the patrons and sponsors and key stakeholders.

Implementation:

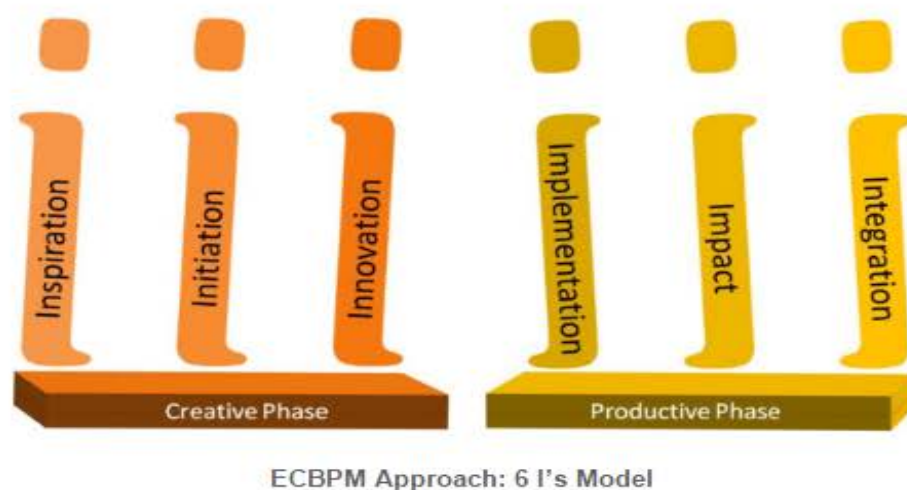
Whether it is research results or innovatively created and developed education and training programs, excellent processes are planned to support organizations through which knowledge is distributed to the all key stakeholders.

Impact:

To make sure that the proper design leads to the right result the work is re-evaluated to guarantee the right impact.

Integration:

To work faithfully with clients, associates, and stakeholders to warrant that the expert knowledge and doctrine gets implanted in the culture of organizations



ECBPM Approach: 6 I's Model

Figure 13: ECBPM model (ECBPM n.d.)

The main objectives of the European Centre for Best Practice Management are as follows:

- To advance as well as encourage the innovative management thinking which can guide in their part the organizations in both the public and private sector to augment every competitive profile.
- To boost the implementations of the best practice uses intra- industry transfer and involvement of knowledge.
- To arrange for proficient guidance in particular areas of interest to the patrons and to tutor them throughout the implementation and optimization.
- To upkeep the progress of organizational excellence and the expansion of core proficiencies which are mandatory for modern world competitiveness.
- To act the role as a significant source of inspiration through inventive research, publications and spreading of fresh, innovative expert knowledge (The European Centre for Best Practice Management n.d.).

Singapore Quality Award Framework

There is four business excellence standards based on the Singapore Quality Award Framework which are; the overall business excellence standard created by the requirements of the framework, and three other business excellence niche ideals for individuals, innovation, and facility. Each of the standards emphases on the management abilities required for a primary enabler of business excellence, which are the people, innovation or service. On the basis of their needs and policy, organizations could practice any of these business excellence ideals to enhance their proficiencies.

As these standards are centered on the same framework, they help institutes to accomplish their business excellence struggles in a holistic as well as cohesive manner.

Certifications and Awards

Under the business excellence inventiveness, organizations are certified for attaining an estimable level of performance on the various ideals. Certified bodies are provided with development chances to acquire from best practices of important organizations on the business excellence journey. Organizations that exhibit outstanding performance on the several standards which are accepted through the business excellence awards.

The Singapore Quality Class and Singapore Quality Award are key indicators of the overall business excellence standard. To recognize past Singapore Quality Award winners who have continual business excellence journey and attained further heights of excellence, the Singapore Quality Award with Special Commendation is bestowed. The People Developer and the People Excellence Award are the key indicators of the niche standard for people where the Singapore Innovation Class and Innovation Excellence Award are for innovation, and the Singapore Service Class and Service Excellence Award for service.



Figure 14: The Business Excellence Journey (Singapore Government n.d.)

Australian Business Award

The Australian Business Awards are the provincial section of a cohesive, hierarchical leadership program steered on both national and international level. Eligible associations from each region are summoned to participate in the world-wide chapter of the program at The World Business Awards. Held annually in the second year of its international launch, the World Business Awards strive for engaging the world's business with innovation and technology leaders through a universal credit and knowledge building initiative which is supported by the program's established structure. The program involves worldwide organizations to target the full spectrum of their products and services and initiatives as well as to review the business performance. The cycle climaxes in the appreciation and celebration of organizations that instrument world-class business initiatives and industry principal products and services on a prominent and promising scale.

The participatory organizations are provided with the unique opening to benchmark themselves alongside the top performers worldwide. The recipients are recognized for their achievements and acknowledged as the exclusive of their industry receiving a place amongst a distinguished group by having their products, initiatives, projects, contributions, and accomplishments recognized on a promising and far-reaching scale. The program delivers the decisive platform for building knowledge, growing brand awareness, impartiality, loyalty, and maintenance through augmented revelation, recognition and status. This creates a valuable capital that can be used expansively to create chances for publicity, optimistic organizational profiling and intensified brand awareness within the corresponding industries both nationally and internationally.

The Australian Business Award for Service Excellence [SXA]

The Australian Business Award for Service Excellence is aware of the organizations which have achieved exceptional consequences through inventiveness that validate innovative service approaches and consequences.

The Australian Business Award for Business Excellence [BEX]

The Australian Business Award for Business Excellence distinguishes organizations that have reached outstanding results through initiatives that establish excellence in business management.

The Australian Business Award for Marketing Excellence [MXA]

The Australian Business Award for Marketing Excellence diagnoses organizations that have accomplished exceptional results through creativities that demonstrate innovative marketing plans with successful effects.

The Australian Business Award for Communications Excellence [COM]

The Australian Business Award for Communications Excellence identifies organizations which have attained outstanding results through initiatives that exhibit innovative communications tactics and outcomes (Australian Business Awards n.d.).

The Australian Business Excellence Awards

The Australian Business Excellence Awards (the Awards) are given annually to identify organizations with expert organizational excellence. The Awards have the most laborious assessment process in Australia. The combination of the proficiency of the Evaluators, the excellence specialists of Award-winning organizations, the panel of review, business and government leaders, the evaluation process and the leading-edge criteria, make this assessment a unique yet encouraging process. Businesses can apply at Award level, where they are assessed against all 16 items in the Australian Business Excellence Framework (ABEF), or at the Category level, where they are estimated against only those items in their selected Category. All participants will be competing on equivalent terms against businesses of all sizes and industry sectors. The annual Award ceremony provides an occasion for the winning organizations to acknowledge in front of its peers, media and government bodies. Award recipients may publish and promote their Awards. Beneficiaries are expected to share statistics about their fruitful excellence strategies with other businesses. This acts as the participation in customer forums and the citations of case studies. Since 1988, the Awards' mission is to endorse, nurture, identify and push the boat out organizational excellence in all its forms. Business excellence is meticulously adjudicated against the criteria put in the Australian Business Excellence Framework, a cohesive leadership, and management system acknowledged internationally. SAI Global is committed to creating the highest shape for the Awards and motivating organizational excellence in Australian businesses by distinguishing and celebrating the organizational best practice.

Japan Excellence Model

Shingo Prize for operational excellence

The mission of the Shingo Prize for Operational Excellence is to generate excellence in organizations through the implementation of globally accepted moralities of operative excellence, the arrangement of management systems and the smart usage of enhanced techniques throughout the entire organizational enterprise.

This is done by teaching accurate values and new models that speed up the flow of value, make even and empower individuals and alter organizational culture.

The vision is to be the worldwide standard of excellence in every industry. As the Shingo Prize origins are in organizational acknowledgment, it is learned that there are three very important principles which are the key insights from a total of 25 years of organizational assessment which are; assessing organizations for acknowledgement requires a visibly defined, very high and universally reliable standard of excellence, right excellence cannot be fleeting and thus, assessment must regulate the rate at which the moralities that produce excellence are deeply embedded in culture, and finally, for any organization to be fruitful, it must be able to perceive the truth about where they are in the progress of a high-performing, principle-based culture.



Figure 15: Shingo operational excellence model

The Shingo Standard

The Shingo standard is by structure the most severe in the world as Dr. Shingo would only want to link his name with the very best. Candidates for acknowledgment are held to an indistinguishable standard irrespective of their location in the world. For 18 years The Shingo Prize assessed organizations by observing their presentation of lean tools, the class of their lean program positioning and, to some degree, the commitment of the management teams. This process consistently caused in 8 to 10 organizations accepting The Shingo Prize each year. Then the critics of the selection process began to appear in blogs and websites and eventually started to counterattack directly. The standard believed is the adage that states that one's best friends are the ones that tell the truth, even when it is tough to hear.

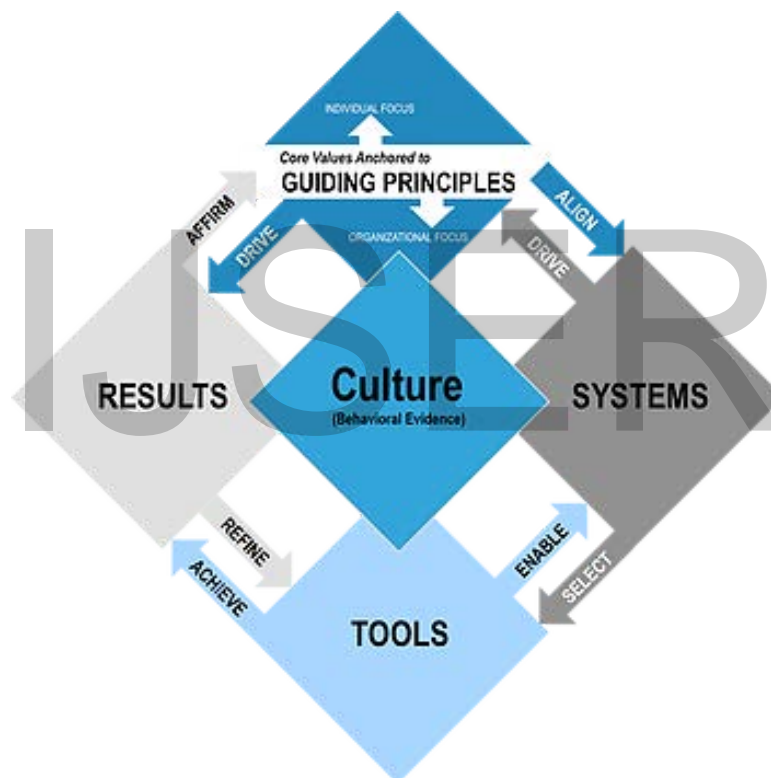


Figure 16: The Shingo Standard (Huntsman 2013)

Japan Quality Award

The core values of the Japan Quality Award are customer focus, capabilities, employees oriented and harmony with society. The core concepts comprise of concept, change, value-based management, process, emergency, dialogue, strategic thinking, brand, and innovation.

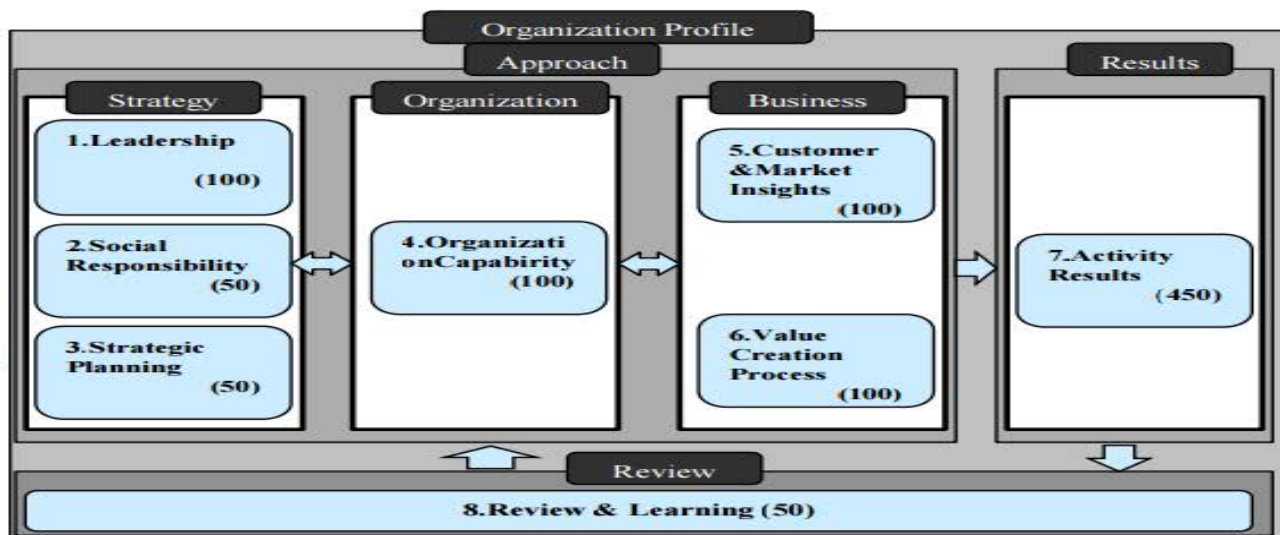


Figure 17: Japan Quality Standards (Japan Quality Award Council 2016)

2.3.5 Excellence models in UAE

2.3.5.1 Sheikh Khalifa Excellence Award

The Sheikh Khalifa Excellence Award (SKEA) was initiated by Abu Dhabi Chamber of Commerce and Industry (ADCCI) in 1999 as a structure and methodology for consistent enhancement and development for improving the competitiveness of the business market in Abu Dhabi and the rest of the UAE. This was the first program in Abu Dhabi to be arranged entirely with the global best practice and taking on the EFQM Excellence model which was gradually trailed by all other regional awards in Dubai, Sharjah, and other places. SKEA maintained its aggressive frame by becoming the Primary National Distributor and Representative of the original title holder of the European Foundation for Quality Management.

Sheikh Khalifa Excellence Award 2015

Since 1999, the award has been recognizing the accomplishments of organizations in the fields of health, oil and gas, tourism, finance, manufacturing and finance and many others to influence and guide towards the improvement of the organizational performance. Though the award does not possess monetary value but helps in the organization's self-assessment and correct emphasis on the appropriate priorities and actions for the development. Institutions applying and adapting to the model would enjoy a privilege of knowing how to motivate people, meanwhile, guiding to a consistent improvement (Badih 2011).

Sheikh Khalifa Excellence Award initiated the Arabic version of the EFQM model which was certified and adopted by all other Arabic speaking nations and other experts of the Organizational Excellence field. Since its setting up, more than 10000 organizations of the UAE implemented the model of Excellence and competed in the assessments, on a regular basis, for the SKEA Award, bestowed by the official patron of the Award, the Crown Prince of Abu Dhabi.

It is important to mention that SKEA is more than being just an award; it is a comprehensive program contributing all relevant services and products concerning the benchmarks of quality and excellence, such as Journey to Excellence programs (J2E) and Licensed Assessors' Training (EAT). The Sheikh Khalifa Excellence Award courses also design Leaders for Excellence (L4E) module for senior executives and managers for enhancing their professionalism. Committed to Excellence (C2E) and Recognized for Excellence (R4E) are international EFQM products, schemed after the SKEA, which are designed to encourage organizations of the UAE to ensure their sustainability towards accomplishing Excellence Transformation. Sheikh Khalifa Excellence Award, in the present, is available in both Arabic and English languages with the similar and relevant credentials accredited by the EFQM.

SKEA program supports in strategic management with the practical tools and techniques to achieve people development concerning knowledge, skills and professionalism and organization improvement concerning effectiveness and efficiency and hence augment the chances to attain the desired and pre-planned the goals and objectives (Sheikh Khalifa Excellence Award 2012).

Fourth Generation system of government excellence

During the year of 2015, His Highness Shaikh Mohammad bin Rashid Al Maktoum, the Vice-President and Prime Minister of UAE and the ruler of Dubai, launched the fourth generation of the government excellence system (GulfNews, 2015). The focus of this was to work on the results and was made to improve the government performances (GulfNews, 2015). The main aim of this was to upgrade the system of the government work and standards based on the results that are achieved as the foundation for the excellence in the main areas of government standards (GulfNews, 2015). These are achieving the visions and goals that the government intends to have, increasing the innovation and empowerment by realizing the highest satisfaction rates and happiness of the people (GulfNews, 2015). It is stated that the focus of this generation of the program is on understanding what constitutes an incentive for continuously improving the labor regulations in proportion with the requirements set by the government (GulfNews, 2015). The system aims to do this by setting

international standards of quality that needs to be applied in the governmental departments. This is primarily done in order to paint a proactive approach to the governments of the future and help in serving the country (GulfNews, 2015). Additionally, it can be seen that achieving the interest of the people should be a government priority before anything else as it can help in making it imperative for the government to be more proactive and innovative (GulfNews, 2015). Doing this can ensure that the contents of the generation of the excellence of the government are in line with what trends are found at the time, which can ensure that a continuous improvement is made on the regulations set on the labors (GulfNews, 2015). It is said to be a new approach to the performance of the future governments and will get rid of traditional or old methods that have been used in the past. This is done in order to gain the trust of the people and their interest as it can help in making the government more proactive than before while competing with themselves. In order for this to achieve, it is necessary that they focus on achieving the results that can affect the daily lives of the people that are working inside the government programs. As a result, the government should focus on achieving the results in their field, which can positively impact or affect the day-to-day lives of the people (GulfNews, 2015). This can help as a way to determine the process that can improve the people working in the government to be more productive and efficient than before (GulfNews, 2015).

Government Excellence Program

The Government Excellence program was approved and announced on November of 2017 as a way to model and shape the future governments based on the excellence and renewable innovations and developments of the business models inside the government work (GulfNews, 2017). For this, a group of organizations has been known for their prominence in international excellence and their quality (GulfNews, 2017). The nine organizations that are included in this system are the European Organization for Quality, Asia Pacific Quality Organization, the Australian Organization for Quality, Juran Global, European Foundation for Quality Management, International Academy for Quality, American Society for Quality, Asian Network of Quality, and University of Miami (GulfNews, 2017). By adding organizations that have global accreditation, it can entail a great responsibility within the organizations to require a system that can deal with these changes (GulfNews, 2017). This can also help in making sure that the organizations can benefit from the rapid changes of technology that are found in today's environment and create a set of mechanisms that can enhance their global standings (GulfNews, 2017). These contain fundamental and strategic options that are used for the development of work systems within the public and private sectors. The government, using this program would focus on the results that the excellence system provides and understand the impact

and its effectiveness in working on improving the work in these organizations. This can help the government to transform their work and culture towards excellence into a daily approach and practices (GulfNews, 2017).

2.3.5.2 Dubai Quality Award

Dubai Quality Award is a framework that is designed to ensure all different initiatives are directed in the desired course. The philosophy and the key criteria of the award, initiated in 1994, are based on nine criteria. All the nine criteria are considered as a whole system to ensure that a single deficiency does not affect the overall score. The Dubai Quality Award model is designed to be non-prescriptive because it believes that there might be other approaches that perform better for an organization (Department of Economic Development 2015).

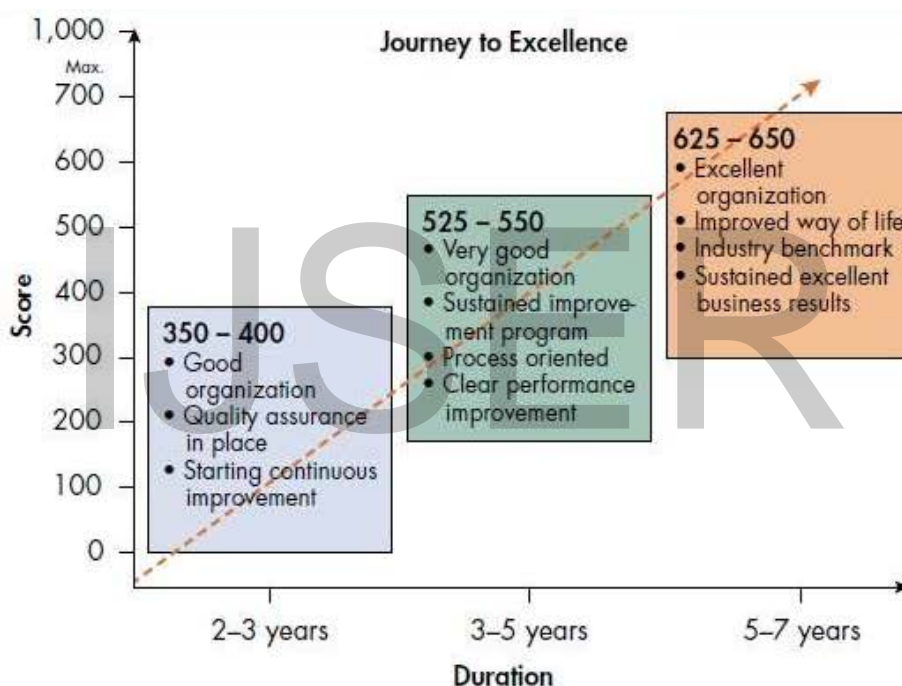


Figure 18: The three levels of DQA (Thawani, 20 Years of Quality Milestones Mark United Arab Emirates' Journey to Excellence 2014)

2.3.5.4 Dubai Government Excellence Program

Dubai Government Excellence Program (DGEP) was established in 1997 aiming to impress the culture of Dubai and establishing excellent performance throughout organizations, departments, teams and even individuals. It intends at dispersing the philosophy of excellence, ensuring quality and a regular tendency of innovation and updated professional habits and techniques in the Government sector. (Government of Dubai 2013)



IJSER

Figure 19: DGEP role framework (Government of Dubai 2013)

2.3.5.5 MRM Business Award

The Mohammed Bin Rashid Al Maktoum Business Excellence Award (MRM), since its inception in 2005, aims to include and support all Gulf Corporation Council (GCC) businesses in the process of gaining excellence. Also, in order to lead the way to institute new achievable business excellence standards and encourage the similar organizations throughout GCC to implement the same. The Award has the only aim; that to establish an advanced competitive business environment which promotes and nurture trade and business improvement and initiates job creation which, as a result, provides a significant impact on the sustainable growth of the GCC wealth. (Dubai Chamber of Commerce & Industry 2016)

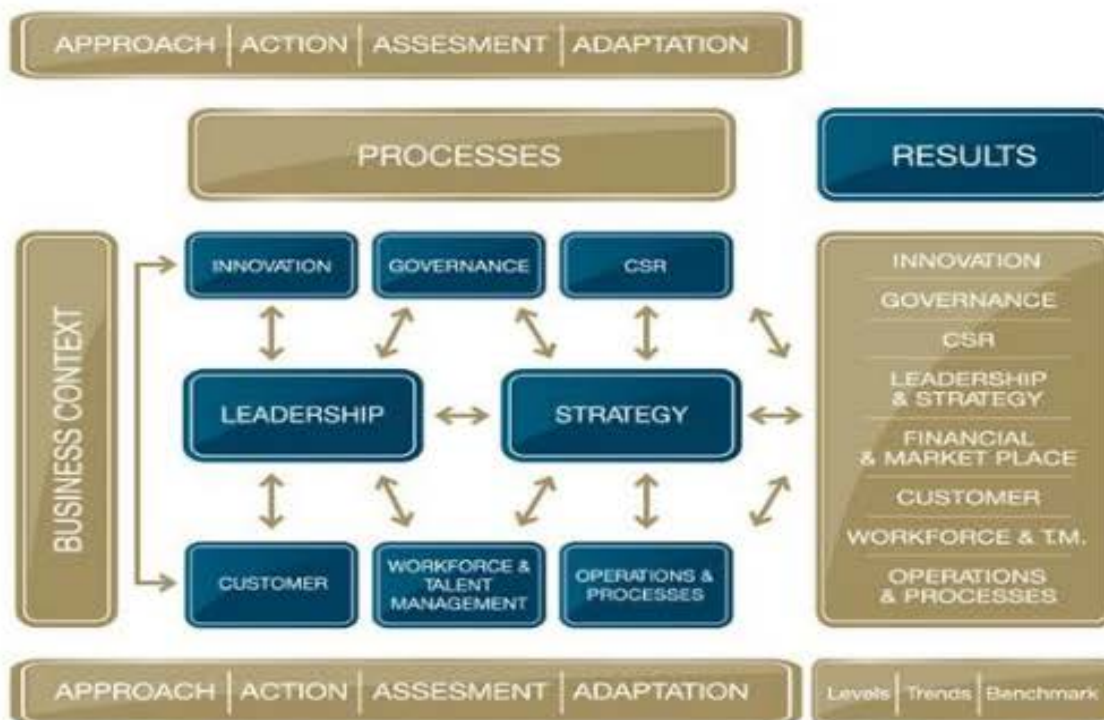


Figure 20: The Model Framework (Dubai Chamber of Commerce & Industry 2016)

2.3.5.6 Dubai Quality Group

It initiated in February 1994, with over 1,500 individuals in place of more than 300 noticeable organizations from both the private and the public sectors. The non-profit business organization was launched by the Department of Economic Development under the benefaction of H.H. Sheikh Ahmed Bin Saeed Al Maktoum. Dubai Quality Group aims to improve a well-read, trained and expert workforce to elevate the wide-ranging and overall performance level of the native environment of the business. The Group organizes and makes required arrangement activities designed and intended for developing and augmenting the professional as well as the managerial expertise of the individuals. (Thawani, Quality Movement in United Arab Emirates 2006)

2.4 Common Assessment Framework

The Common Assessment Framework or CAF is a tool to measure or ensure total quality management in an organization based on the Excellence Model of the European Foundation for Quality Management and the framework of the German University of Administrative Sciences in Speyer.

Organizations managing quality with the assistance of specific models and tools adapt to the concept of Common Assessment Framework which represents one of the frameworks implemented in the

public sector. A Research was done with the objective to analyze the perspectives of the Common Assessment framework among the public sector organizations of the European Union countries where it was evident that there is an inclined growth of CAF users since 2008 till 2012. The outcomes of the assessment distinctly indicated the higher capability of the Common Assessment Framework as an instrument for total quality management in public administration, in addition to other fields of the public sector.

Implementing CAF in organizations tends to enhance performance on a small as well as long-lasting way. A clearer insight into the particular aspects such as effective leadership, full proof strategy and enhanced performance with a proper management of customer satisfaction.

The framework though proved to be an efficient quality management instrument that effectively monitors and assesses performance; it has seen a wide-ranging spread only in the European Union's rather than globally.

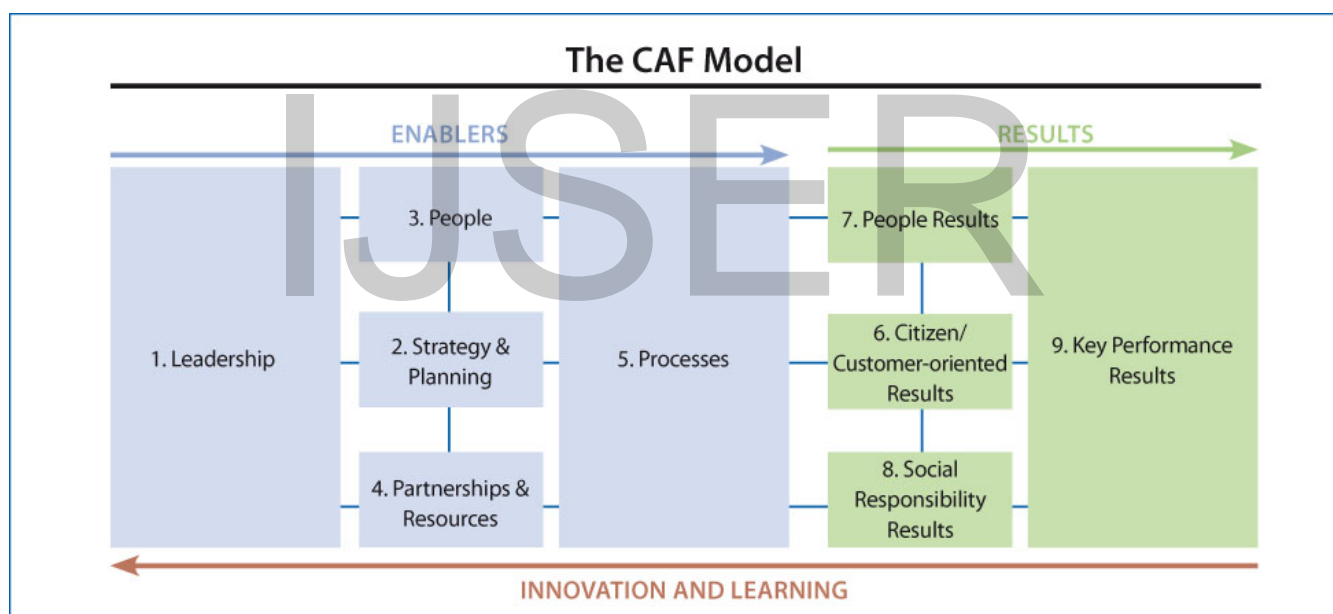


Figure 21: The CAF Model

2.4.1 Relation between Common assessment framework (CAF) and European Foundation for Quality Management (EFQM)

The CAF is a user-friendly, unrestricted tool to help and assess public sector establishments across Europe in exhausting total quality management practices to recover and improve their performance. These models used also in Higher Education Institutions for evaluating the performance of the students. The CAF (Common assessment framework) is a TQM tool which is stimulated by the

foremost Total Quality models in the overall sense and by the famous and well-known Excellence Model of the EFQM (European Foundation for Quality Management) precisely. It is predominantly aimed at public sector establishments, taking into interpretation their features. The relation of EFQM and CAF is very strong as these two models are accumulated to each other. The first version of CAF was particularized and described in 1998 by the IPSG (European Public Administration Network). It is stimulated by the well-known Excellence Model of the European Foundation for Quality Management (EFQM) The European Institute of Public Administration (EIPA) and the model of the German University of Administrative Sciences Speyer, under the guidance of the great orientation of guideline and strategies, well defined through the German presidency, in the first period of 1999. Alternative CAF form was formed and verified during the period of the Finnish presidency at the end of 1999 and the Portuguese tenure in the first era of 2000.

The basis of the CAF is self-assessment which helps the organization to recognize both its strong point and also develop a general idea of actions leading to the constant development of the organization's enactment.

According to Management mania, it opposed to EFQM, where assessment is conceded out by authorized assessors at this point. The main difference between these two models is the assessment part. The CAF delivers a self-assessment outline that is theoretically comparable to the foremost TQM prototypes, EFQM in specific but is particularly considered for the public-sector administrations, compelling into account their alterations.

As one of the famous tool of Total Quality Management, CAF contributes to the essential conceptions of excellence as well defined by EFQM: customer concentration, leadership and reliability of persistence, administration by processes and proofs, participation of people, consequences orientation, conjointly beneficial partnerships, CSR (corporate social responsibility) and constant improvement and invention. It targets to improve the performance of public administrations by these concepts. From this, it is understandable that the basic of EFQM and CAF is similar.

The EFQM and CAF representations are founded on endless learning and methodical enhancement of procedures. Both models are constructed on the value of continuous sustainable improvement, which is known as the Deming Quality Cycle. The main aim of this cycle is to plan, do, check and act. The representations monitor all aspects of performance and help to give attention to those features that are found weak and significant regarding excellence, but this model does not offer a

response about how performance can be upgraded. The CAF model is easier generalized outline than the EFQM Excellence Model, which is mostly used for all providers for organization's quality management and assessment of the performance.

One of the major alterations between the EFQM model and CAF is the scoring method other than assessment method. The EFQM framework is constructed on a sophisticated and erudite scoring method that discriminates between 'method criteria' and 'results criteria' in the RADAR chart (RADAR is discussed above). For method criteria section, organizations evaluate the performance of the employees in terms of method, deployment, review, and assessment. For results criteria section, the expressions are tendencies, comparisons, target values and explanation, and the possibility to improve or succeed.

In the scoring method, the CAF is constructed with five substitute evaluation responses in relation to every single sub-criterion mainly in the enablers and outcomes or result sections. According to the replies of the individual's employees or group members of the self-assessment team, performance is notched from 1 to 5 where 1 depicts that no actions have been taken/no results have been measured, or results are declining and 5 depicts the highest possible score which can be gained. The CAF model titles light approach scoring techniques which is comparatively simple than the EFQM model.

2.4.2. Are there any "footbridges" between CAF and EFQM?

As the CAF is thus founded on the Excellence Model which is possessed, industrialized and promoted by EFQM but self-assessment exhausting CAF is a less rigorous process than a full assessment of the EFQM Excellence Model. For public organizations (or any organization with a general mission) it is therefore perfectly possible and even recommended to start with CAF – specially designed for public sector organizations – and to move to EFQM at a later stage.

Furthermore, EFQM rewards organizations having used CAF and being able to provide evidence of improvements being implemented through its first level C2E "Committed to Excellence". The design and contents of the CAF are very similar to a 1999 version of the European Excellence Model designed by the European Foundation for Quality Management (EFQM). A few extra elements have come from criteria used in the Speyer Quality Award, which is an award for public sector organizations in Germany, Austria, and Switzerland. Further elements were brought in from adaptations of the EFQM model developed in the United Kingdom and Denmark to make the CAF more appropriate to public sector organizations in those countries. Consequently, the CAF has the same nine-box structure as the European Excellence Model, including five so-called 'enablers' and

four 'results areas'. Apart from key criteria 'process and change management and 'customer/citizen-oriented results', the headings of the boxes are identical.

It may seem surprising that external consultants have not had a significant role in introducing the CAF to the organizations which responded to the survey. However, this may be explained by the fact that the CAF, unlike the EFQM Excellence Model, does not have yet a pool of trained external CAF assessors who could be contacted by public organizations asking for help. Moreover, the CAF is presented as a light assessment tool, which may contrast with substantial investment in external advice.

2.4.3. History and Evolution of Common Assessment Framework

In 1998, the need for a tool for organizational assessment in public administration network was realized by the Directors General of the Public Administration of the EU Member States in the European Public Administration Network. Consequently, the formation of this kind of tool was decided and it was also determined that this quality framework should be jointly developed by the Innovative Public Service Group or IPSG and an informal working group of national experts set up by the Directors General of the EUPAN Network. As a result, the first edition of CAF was developed in 1998 and 1999 by the Innovative Public Service Group with the help of the European Foundation of Quality Management or EFQM, the Speyer Academy and the European Institute of Public Administration or EIPA (Nethercott, 2013).

In the year 2000, at the first European Quality Conference in Lisbon, The CAF model was launched. In addition to this, A European CAF Capital Centre was established at European Institute of Public Administration in Maastricht to work with expertise in Common Assessment Framework implementation, to endow with training and consultancy. Another intention of this tool was to support the member states in disseminating the CAF and further development was needed. After the first two years of development of the Common Assessment Framework model, it was evaluated with the study only on how the Common Assessment Framework model can be used. As a result of this, a revised and more improved version of Common Assessment Framework model was developed in 2002 and it was presented at the 2nd European Quality conference in Denmark. Then a further improvement of this model was required and consequently, a new study on the use of the Common Assessment Framework model was conducted. It was felt that various factors in this model should be revised like increasing the coherence, making the model simpler, making it more user-friendly by improving the examples and appendix. Moreover, developing a more finely tuned scoring system for some definite users and widening the quality approach with commands for the advancement

implications plan and instructions for the bench understanding. Once again, in 2006, the Common Assessment Framework Model was revised and improved for the second time and was presented at the European Quality Conference in Finland. It can be seen that in the year 2009 and 2010, there was a trend of following the procedure for peripheral feedback on how the model can be implemented in the organization and the implementation of tailor mode version of the model in the Education Sector (Nethercott, 2014).

Till date, the 2006 version of the model is the latest version of the Common Assessment Framework. A newer version of the Common Assessment Framework Model is planned to be set up in 2012 and it will be based on the results that will be obtained from the conducted study during the first half of 2011.

Now, if we consider the implementation of the Common Assessment Framework model in the Education sector although, in a tailor mode, we can see that the "Every Child Matters" Green Paper proposed to introduce and implement the Common Assessment Framework as a central component of the tactic for helping the children, young people and their families. The history behind this has started through an inquiry into the death of a child named Victoria Climbié (Laming, 2003). Following this incident, the CAF model was implanted to fulfill the additional need of the children and to look after the matters by which the needs can be met.

A standard assessment tool called Common Assessment Framework was introduced to cater the upfront services that are desegregated and focused on the requirements of children and young people. CAF is a standardized approach that conducts an evaluation of a child's additional requirement and concludes how the requirements can be fulfilled. The intention of this framework is to provide a manageable procedure to a comprehensive assessment of a child's requirements and steadiness. This also takes into account the role of parents or the one who takes care of the child and obviously the environmental factors on their overall growth and development. This refers to the introduction to Common Assessment Framework for all the professionals who are working with children and young people in England. It arose as a part of a Govt. Initiatives brought together in the green paper "Every Child Matters" (White, Hall and Peckover 2009) and the Children Act 2004.

The reform agenda in Children services took place through the inquiry into the incident of death of Victoria Climbié (Laming, 2003) who was an eight-year-old West African child and was killed in the UK in 2003. The reason behind her death was extreme cruelty, neglect, and torture by her great aunt and her aunt's partner. Subsequently, after this incident the CAF was introduced as a design, in

association with leading professional and improved information sharing procedures, was developed to modify the method by which the services were delivered previously by moving the focus from its previous priority. Previously the focus of the method was to deal with the consequence of difficulties in children's lives; then it shifted the focus to a more proactive, pre-emptive and defensive measure. The major intention of Common Assessment Framework is to be used for the children who have some additional requirements that may not be complex or harsh enough to require constitutional involvement.

The CAF is needed in the situation where there is a concern about the progress of a child rather how a child is progressing in any way (it may be raised by the child or by the parents or by a professional), where the child's requirement is ambiguous. This can also be in practice if it is found that the child's requirement is broader than a professional's point of view or where it is considered that CAF would be helpful to fulfill the child's requirements.

The draft "Common Assessment Framework" was developed in 2004 following the death of Victoria Climb  and subsequently, in the year 2005, it was revised. CAF was developed to be evidence-based, and it must figure out the solution by which the additional requirements of the child can be met focusing on needs and strength.

The Evaluation of Current State of Implementation of Common Assessment Framework Model of Excellence by the National Institute of Research, Development, and Innovation in Romania.

Here comes the case of Romania, to evaluate the status of implementation of excellence model Common Assessment framework 2013 by the National Institute of Research, Development, and Innovation in Romania. Taking into consideration the analyzing of criteria and also the sub-criteria of Common Assessment Framework model of excellence completion and the evaluation of if the criteria and sub-criteria of the Common Assessment Framework model of excellence are fulfilled regarding its strength and usefulness.

In the following chart radar, the degree of fulfillment of nine criteria is shown. The Criteria are considered for the Common Assessment Framework model of Excellence. In this case, the degree of conformity was evaluated for each of the nine criteria based on the calculation of the sub-criteria reported. Because from the report collected from the sub-criteria helps a lot to evaluate the decision regarding completion or fulfillment of the implementation of the Common Assessment Framework model of excellence considering the nine criteria selected (Popescu, Popescu and Popescu 2013).

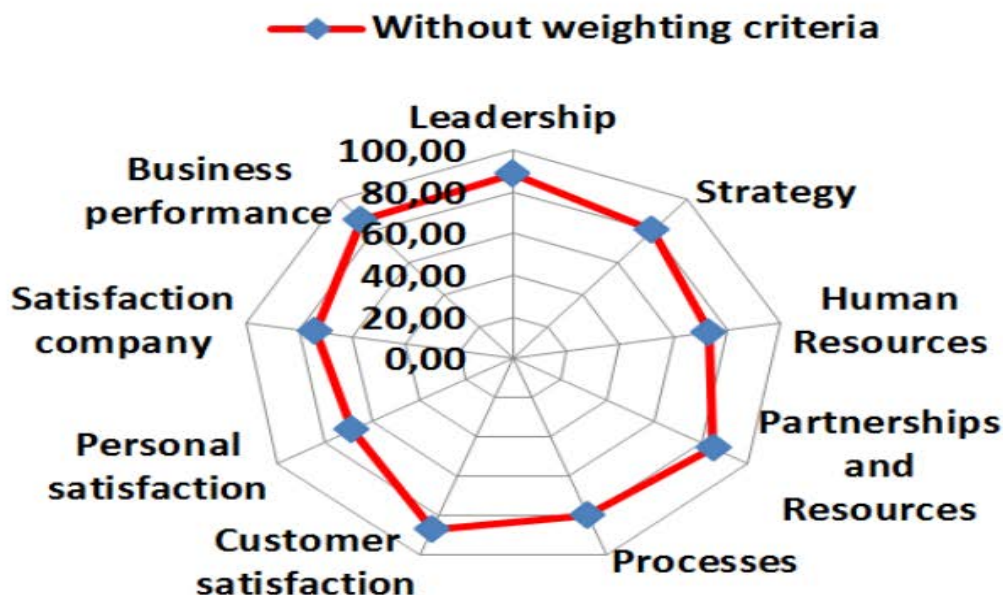


Figure 22: The Radar Graph of the Common Assessment Framework model of excellence 2013 (Popescu, Popescu and Popescu 2013)

Here is the brief description of the fulfillment of each criterion at a glance.

According to the research by the National Institute of Research, Development, and Innovation in Romania, the fulfillment of the criterion "Leadership" has achieved an average score of 88.67 percent. This corresponds to the status of leadership which is based on analyzing the purpose of the necessary alterations. Next is the criterion "Strategy". In accordance with the research by the National Institute of Research, Development, and Innovation or NIRDI, the fulfillment of "Strategy" criterion has achieved an average score of 80.17 percentages and this is based on the stage of analyzing necessary changes. Again, the research by National Institute of Research, Development, and Innovation or NIRDI showed that in terms of the fulfillment of the criterion "Human Capital", an average score of 73.15 percent and this corresponds to the stage which is based on the necessary adjustments analysis. According, to the NIRDI studies in Romania, the fulfillment of this criterion has achieved an average score of 85.24%. Remaining criteria were Results on Customers, Results about Staff, Results on the Organization and the Key Performance respectively 2013 (Popescu, Popescu and Popescu 2013).

2.4.4 The Common Assessment framework in Practice

Education Sector

As the Common Assessment Framework for the fulfillment of the extra needs of the children was established through an inquiry into the death of Victoria Climbe, there is a relevance of implementing the Common Assessment Framework model in the education sector for supporting the children and for their overall development. A study was done to assess the result of the implementation of the above-mentioned framework in the field of Education. The study reveals that though this kind of framework was not required for supporting the children as the environmental factors and many things related to the overall development of children have changed the need for this has raised. According to the study, as the Common Assessment Framework had been introduced since past three years in a school, considered in the study, the principal of that school found this framework too much helpful. This Common Assessment framework prevented children from slipping through the net. The principal of the school also felt that without the Common Assessment Framework, there would have been an irrelevant intervention and by which nothing could be achieved. This study reveals that the school, taken into consideration found value in incorporated working. With this Common Assessment Framework, the children who would have been excluded from the usual schooling procedure had taken into the normal schooling with the inclusion of this framework as this framework works through a multi-agency, youth workers and other health and local authority partners. But according to the principal of the school involved in the study, there were many other opportunities which arose from the Common Assessment Framework and they must be implemented also.

Voluntary Sector

Another study evaluated the implementation of the Common Assessment framework model into the Voluntary Sector. According to the study done, it can be seen that with this application of the CAF model had helped a homeless teenager find independent accommodation and construct a secured future. The introduction of the Common Assessment Framework in the voluntary sector helped a drug addicted guy return to his normal life and develop a safe future. In the case of voluntary sectors, mainly the integrated work was concentrated in the young people workforce.

Health Sector

Integrated working is something where everyone is supporting children, and young people work together efficiently and effectively to fulfill their requirements and to improve their lives. To execute

the integrated working, anyone should combine their professional expertise, knowledge, and skills and they should also involve the children and young persons of their family all through. With this, it becomes easier for them to identify the requirements earlier.

Cater a coordinated package of care that is purposeful for the children and the young people.

Help to obtain better results.

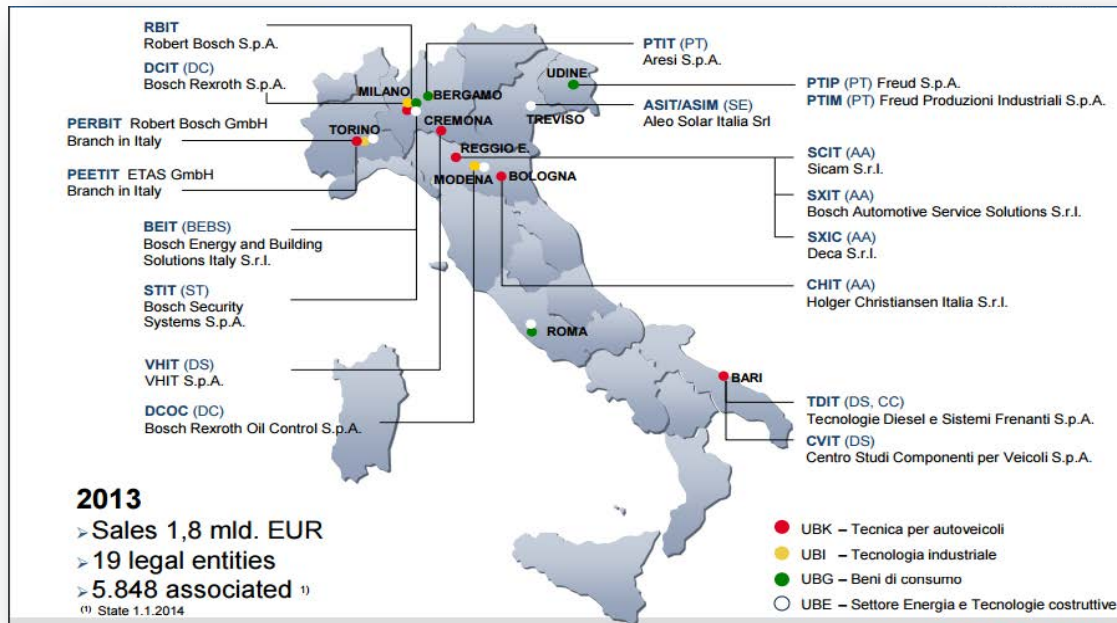
This kind of integrated working has some another interpretation in terms of Health Sector when it implements the Common Assessment Framework into its field. One study regarding the implementation of CAF model reveals that a close connection was maintained with the local primary care services earlier. After the Implementation of Common Assessment Framework model and this helped set up a pilot project in the practice of the concerned doctor, it became easier to identify children with a sufficient level of need and to provide suitable services to meet their requirements. The study resulted in a very satisfactory feedback from the doctors as they found the project of implementing Common Assessment Framework very efficient to accomplish the real need (Early Identification, Assessment of Needs and Intervention, The Common Assessment Framework for children and young people A guide for practitioners 2012)

2.5 Case Study EFQM in Bosch Bari Plant

About the company:

One of the renowned and leading suppliers of technology and services globally is the Bosch Group which has an average associate counting to 390,000 spread all over the world. It deals in four major operational business sectors namely Industrial Technology, Energy and Building Technology, Mobility Solutions and Consumer Goods. It is a leading IoT company. The company was basically set up in the year 1886 by Robert Bosch in Stuttgart (Bosch 2017).

In the year 1904, Bosch set up operations in Italy and inaugurated its first representative office in Milan. It has many divisions of operations like the Diesel Systems which forms a part of the business sector for Mobility Solutions (Bosch 2014). The company employs 59 thousand associates in research and development across the globe (Bosch 2017) and around 2200 employees alone in the Bari Plant project (Bosch 2014).



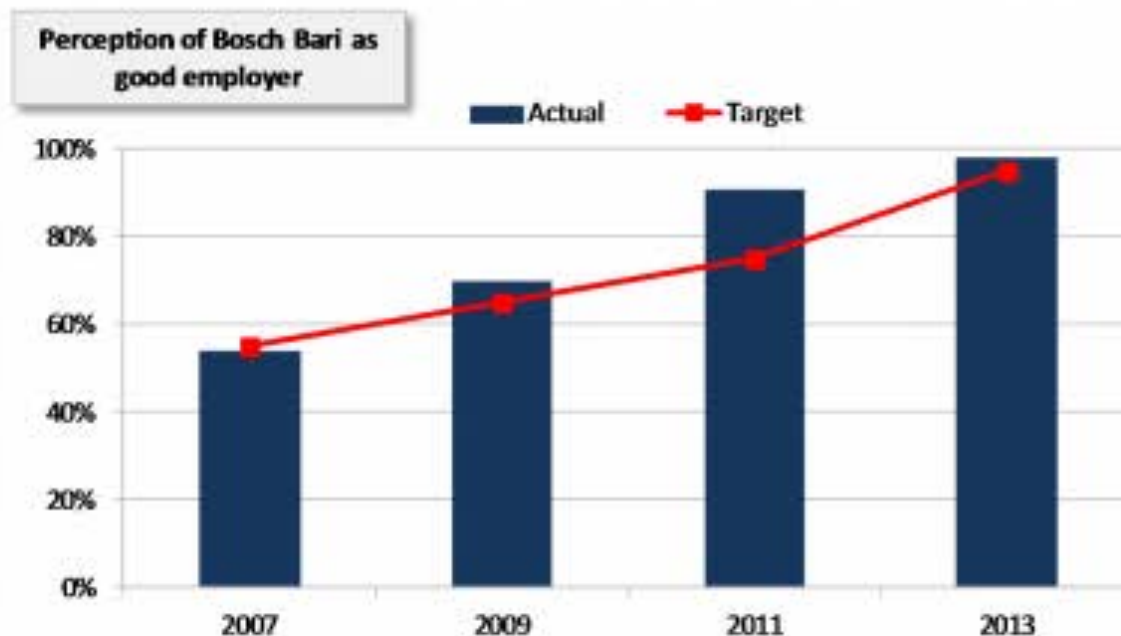
Source: (Bosch 2014).

The site strategy of evolving from a plant to an enterprise is among one of the most important processes of change. The associates were motivated to look beyond the conventional limits of a production facility (EFQM 2014).

EFQM in Bosch Bari Plant:

The people at the Bari Plant are a vital part of the strategy of the Company which is very prestigious on the part of the associates. The wide-ranging set and well-structured communication tools help in the active sustenance as it provides all the associates with the information and the news related to their work, the Bari Plant, the scenario of the Bosch Group and that of the relevant and important stakeholders (EFQM 2014).

The associates of the Bari Plant are capable of attaining passion and precision parallel at the same time and their adaptability to changes that take place in their operational environment facilitates them to bring forth results that are outstanding and sustainable at the same time (Bosch 2014). There has been a requirement for the application of the standards and the principles sternly by the performance and the associates possess that zeal to outperform their targets which pushes them to take a leap over the obstacle and then, confront the next challenge with vigor. Passion and Processes is a potent combination and not a pair of contrast (EFQM 2014).



Source: (EFQM 2014).

The Bosch Bari has acquired a positive image as an employer by focusing strongly on its associates. It has a great impact on the social environment and for sustenance (EFQM 2014).

In 2004, Bosch Bari began to associate itself with the EFQM Excellence model. The EFQM model is an all-inclusive structure that guides an organization in developing a sustainable, sound and consistent improvement system, based on the organization's experience of 10 years. Success comes with the best implementation of the model. The balanced learning from the feedback of the assessment and the systematic application of the RADAR logic advances improvement (EFQM 2014).

Chapter 3: Literature Review on the impact of Quality/excellence on HRM

3.1 Human Capital Management

3.1.1 Introduction

According to Indermun (2014), Human Capital Management (HRM) practices defined as a framework that pulls in, creates, provokes and holds representatives to guarantee the successful usage and the survival of the association and its individuals. HRM practices can be depicted as an arrangement of inside reliable approaches and practices planned and actualized to guarantee that an association's human capital contribute towards the accomplishment of its business goals. As all the organizations around the globe expanded difficulties because of globalization, numerous associations are looking to maintain of all type of cost, and all the matters related to the organization, which are swinging to additional inventive methods for working together through HRM. HRM hones as an arrangement of practices utilized by associations to oversee HR through encouraging the advancement of abilities that are one of a kind to the association, making complex social relations and producing association information to support organization. From this structure, it can set up that HRM enhances the chance to identify with particular practices, formal approaches, and methods of insight that are outlined and created to draw in, create, spur, and hold representatives who guarantee the viable working and survival of the association (Indermun, 2014).

For any organization to function adequately, it must have assets of men (Human Capital), money, materials, and machinery. The assets by themselves cannot accomplish the aspirations of an organization, they need to be gathered, coordinated and utilized through human capital. And, the productive management of human capital is also vital. Therefore, Human Capital Management (HRM) has emerged as a major function in organizations. Human Capital Management is the organizational function that deals with the problems related to people such as compensation, hiring, performance management, origination development, safety, wellness, benefits, employee motivation, communication, administration, and training. The administrative regimen of hiring and developing employees is crucial so that they become more valuable to the organization.

Human Capital management includes:

- conducting job analyses,
- planning personnel needs, and recruitment,
- selecting the right people for the job,

- orienting and training,
- determining and managing wages and salaries,
- providing benefits and incentives,
- appraising performance,
- resolving disputes,
- Communicating with all employees at all levels.
- Maintaining awareness of and compliance with local, state and federal labor laws.
- These are also called as functions of human capital management for the purpose of effect you utilization of human capital.

The historical standard of thumb for HR staffing necessity is one full-time professional HR person should be employed for every 100 employees. The actual ratio for a business can vary depending upon factors such as the degree of HR centralization, the geographic distribution of the employees served, the sophistication level of the employees, and the relative complexity of the organization. The U.S. Office of Personnel Management (OPM) is the world's largest HR department. OPM provides HR services for the federal government's workforce of nearly 2.8 million workers. Its staff accomplishes the tasks to recruit, interview, and promote employees; oversee merit pay, benefits, and retirement programs; and establish that all employees and applicants are treated fairly and according to the law. The ten "Cs" of human capital management are cost-effectiveness, competitive, coherence, credibility, communication, creativity, competitive advantage, competence, change, and commitment. The ten "Cs" frameworks were developed by Alan Price in his book "Human Capital Management in a Business Context". The HR Director is a top-level manager accountable for the administration of all human capital movements and policies. The director oversees compensation, benefits, staffing, affirmative action, employee relations, health and safety, and training/development functions. They also supervise professional human capital staff.

Objectives of HRM

The following points are considered to be essential for developing the Human Resource Management based on the needs of the people

Societal objective: To be socially accountable to the requirements and challenges of society while minimizing the bad impact of such demands upon the organization. The breakdown of organizations to use their capital for society's profit may result in restrictions. For example, societies may pass laws that limit human capital decisions.

Organizational objective: To recognize that HRM exists to provide the organizational capability. HRM is not an end in itself; it is only a means to facilitate the organization with its basic objectives. Simply stated, the department exists to aid the rest of the organization.

Functional objective: To cultivate the department's contribution at a level convenient to the organization's needs. Capitals are emaciated when HRM is more or less cosmopolitan than the organization demands. A department's level of service must be appropriate for the organization it serves.

Personal objective: To facilitate employees in accomplishing their personal goals, at least insofar as these goals enhance the individual's contribution to the organization. Personal objectives of employees must be met if workers are to be maintained, retained and motivated. Otherwise, employee performance and satisfaction may drop, and employees may leave the organization.

Nature of Human Capital Management

Human Capital Management includes management objectives like planning, organizing, directing and controlling

- It includes procurement, development, maintenance of human capital
- It helps to gain individual, organizational and social objectives
- Human Capital Management is an interdisciplinary subject. It involves the study of management, psychology, communication, economics, and sociology.
- It includes team spirit and teamwork.
- It is a continuous process.

HR manager

The Human Capital Manager is a mid-level position accountable for overseeing human capital activities and policies according to marginal level direction. They supervise human capital staff as well as restraint compensation and benefits, employee relations, staffing, training, safety, labor relations, and employment records.

Key responsibilities of Human Capital Manager

Human Capital Manager is one of the most substantial keys to open a lock hanging on the door of success in an organization. If a Human Capital Manager is productive enough to handle and to take out best from his team members any organization can attain more from his target goals. Human

Capital manager plays a vital role in the hierarchy, and also in between the higher management and low-level employees. Stated below are major responsibilities of Human Capital Manager:-

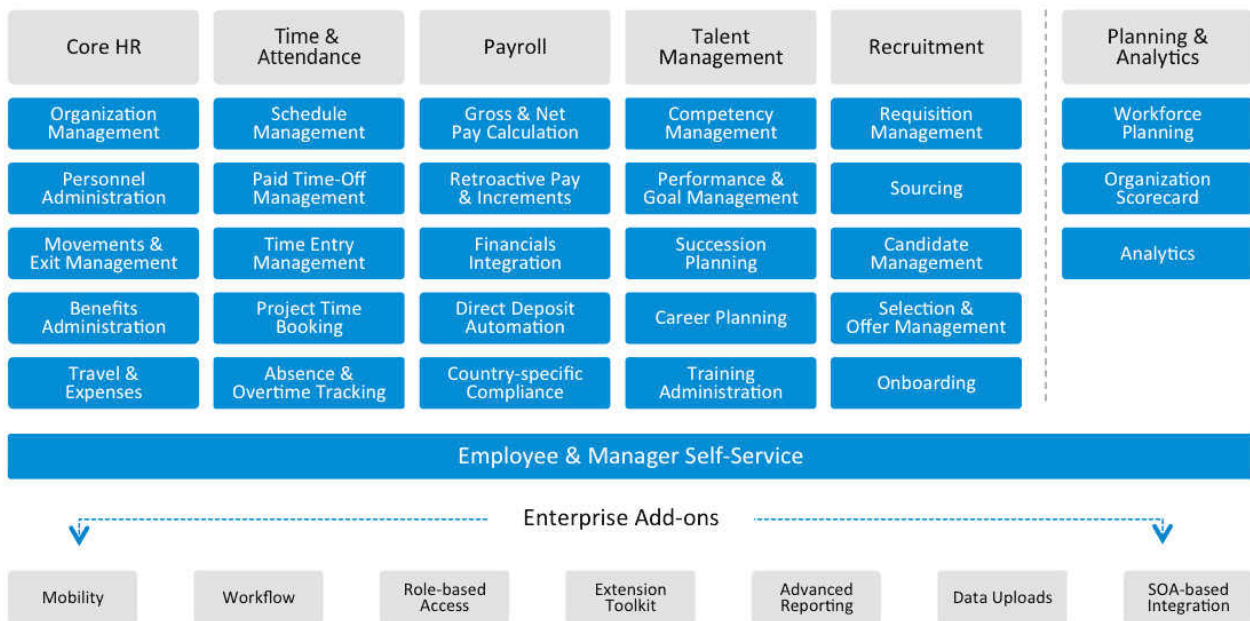


Fig 21: Human Capital Management

3.1.2 Importance of Human Capital Management

HR division of an organization is associated with different types of tasks. Basically, Human management tasks:

- Monitoring the Manpower enrolment in association for purposes.
- Identification and examination of occupations to clarify the qualities of each of them.
- Planning for employment.
- Identification and choice of the most qualified staff to fill positions in the association.
- Employee empowerment.
- Proper Training and learning process for every employee for improving their quality.
- Design of pay structure, reward, and compensation framework.
- Designing a framework for of representative's protestations and disciplinary frameworks work.
- Workplace wellbeing and security framework outline

Support procedures, objectives of hierarchical culture change Projects. The reason for human administration recourses is the Policies and measures, required to execution a part of the undertaking of administration, which is reliant on a few parts of representative exercises, particularly for

enlistment, staff preparing, execution evaluation, compensate and making a protected and reasonable environment for workers which basically involves the following works:

- Job investigation (recognizing the way of the representative's employment).
- Human asset management.
- The selection of qualified candidates.
- The orientation of new workers.
- Payroll administration (remuneration of workers).
- Motivation and Benefits.
- Evaluate the performance (performance appraisal).
- Communicating with workers (meetings, advising, and disciplinary arrangements).
- Human assets advancement and preparing.
- Make the workers focused on the association (Indermun, 2014).

From this literature, it's clearly understood how the HR team of any association is contributing to the success of a firm. This is the motivation behind why different associations know about the significance of their HR. The state of the emergence of this essential is a compelling administration of HR, i.e. cautious arranging, sorting out, driving and controlling (Samolejova, et al., 2015). HRM is regularly connected with the presentation of new and imaginative types of work for the adequacy of associations. An extensive literature review has exhibited for the estimation of these. Cech and all (Cech, Yao, Samolejova, Li, & Wicher, 2015) stressed that HR office is ordinarily the best possible division of the association that develops and incorporated a progression of arrangements, projects, and methods through qualified workers.

HR with high quality will decide the execution of development. To accomplish perfect outcomes, human asset management ought to be directed deliberately. It ought to dependably be connected and figure systematically adjusted the authoritative procedure. Aryanto and all (2015) (Aryanto, Fontana, & Afiff, 2015) had inquired about utilizations five measurements of key human asset administration. Which incorporates arranging, procurement, advancement, execution administration, also, remunerate administration and demonstrate that these practices decidedly identified with development capacity, which has positive effects on developing performance. Likewise, its targets will enhance the efficiency of representatives and helpline chiefs oversee them all the more viable (Usrof & Elmorsey, 2016). Ruel and all (2014) (Ruel, Bondarouk, Florén, & Rundquist, 2014) uncovered that human asset administration rehearses, specifically preparing, working in groups, and inward work adaptability, including work revolution, are emphatically identified with ingenuity.

Ponder uncovered that both hypothesis and routine of administration progressively demonstrate that imaginativeness is a fundamental component of advancement of present-day associations. It is underscored that creativity is a key achievement consider for both private and public sectors (Jonczyk, 2015).

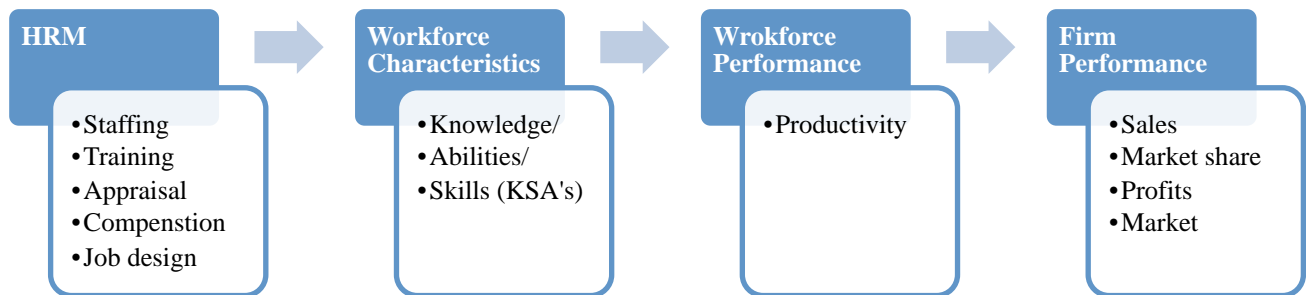


Figure 1: Contribution of HRM in the performance of the organization

3.1.3 The excellence of HRM practices Of an Organization

The HRM division can kick off the TQM procedure by serving a good example through the execution of two important undertakings: giving client arranged administration and adding to the running of the business. The concept of TQM stands entirely on HRM. It is additionally in a decent position to promote TQM by coordinating the procedure into such HR works as enrolment and determination, preparing and improvement, execution assessment and reward frameworks. The key to achieving depends on the harmonization of human capital, obligations, and assignments in one part and its proper procedures in the other part. When we talk about change-administration (and not about emergency administration, where quick and general changes have life-sparing force), rather than radical changes, it is additionally coming about to present incremental changes, where the accompanying seven variables ought to be gone up against thought:

- The scale of Change: one or some significant authoritative components change.
- The Measure of Change: little alteration concerning the evolving values.
- Level of Change: one or some progressive levels which are included in the association.
- The way of Change: changes are acknowledged well ordered.
- The speed of Change: relatively moderate changes.
- The basic point of Change: supporting the association's outer and inner conformity to the earth (financial, social, aggressive environment, and so on.), likewise to build up the association's structure and its sub-frameworks.

- Control of Change: the top administration is playing the leading parts in change forms (Várnai, 2011).

3.2 Impact of TQM on Human Capital Management

3.2.1 Difference between Traditional HRM Approach and Total Quality HRM Approach

The TQM tactics brought alterations in the outlooks and expectations of the executives about the roles of human capital executives. Further, the outlooks of stakeholders about the HRM occupation have also been varying. Traditionally, purposes of the business associations were constrained to productivity and earnings. Consequently, stakeholders mainly employees and consumers, were gotten low importance in the traditional approach. But, the objective of the business and the quality HRM method mostly focused on maximizing customer happiness and market share in terms of profitability by enhancing quality (Kumar, 2012).

Subject	Traditional HRM Approach	Total Quality HRM Approach
Philosophy	A fair day's effort for a fair day's wage.	Mutual responsibility, Commitment, and rewards.
Business Objectives	Improved productivity for improving profitability; quality is a secondary issue; attention on labor	Improved quality of improving productivity, customer fulfillment, employee fulfillment, and loyalty.
Major Constituencies	Managers, shareholders, consumers, employees.	Customers, all employees, shareholders.
Quality Objective	Satisfactory quality for remaining in business; staff driven approaches to quality development.	Total quality management and continues development at and across every level.
Business Information Sharing	Limited to only those information that required a basis for job performance.	The organization is like open books, s board info on profits, output, quality, costs, and capital spending plans all are shared.

Education and Training	Feedback on job performance, on-the-Job Training,	Quality and financial education, various skill training, problem-solving and team process.
Job Security	Labor as a modifiable cost; discharges common during business recessions	Formal assurance is the key concern in all decisions
Reward structure	Management designed and directed	Designed and attuned by management – formal, early union involvement; employee committee;

Figure 2: Comparison of traditional and total quality human capital management approaches (Kumar, 2012)

3.2.2 Framework and Relationship: the integration of HR & TQM

In executing proper TQM framework in an enterprise, The Human Capital Department plays a major part: that of creating and conveying the TQM vision, setting up the hierarchical points of interest for the usage of TQM methods, the actual usage and giving fundamental support to keep up the excitement about TQM (Benavides-Velasco, A., Quintana-García, & Marchante-Lara, 2014). The Human Capital Department works as an alternate operator in the change procedure with relative analyses of the necessities of the venture. It might also create and convey preparing programs that reflect the long-haul mission and vision of the organization. Human capital management can work as an instrument with a foremost role in the enactment of TQM in two methods:

By demonstrating the TQM theory and standards at the operational level in the division, the Human Capital Department can launch as a starting point for the TQM procedure over the venture.

The Human Capital Department, with assistance from the administration group of the enterprise, can circulate this procedure from the office level to significant business level by making an authentic culture necessary for the improvement and acknowledgment of TQM (Izvercian.Monica, Radu, Ivascu, & Ardelean, 2014).

The Human Capital Department also has a major role in the recruitment, selection, appraisal, and development of the reward systems to institutionalize a quality-based orientation. An assessment of the capacity of the Human Capital Department to institutionalize TQM starts with an understanding

of the TQM philosophy. In other words, TQM relies on the involvement of the management team and that of the workforce (Izvercian.Monica, Radu, Ivascu, & Ardelean, 2014).

Over the previous decades, TQM and Human Capital Management were essential parts of the business environment. The integration of the two sectors becomes a topic of extensive examination in the field because of its significant effect on the individual and hierarchical execution (Izvercian.Monica, Radu, Ivascu, & Ardelean, 2014). Strengthening the activities to build the intensity of the venture is a need these days and must be accomplished through an approach as far as TQM and HR. TQM is an approach whose objective is to boost aggressiveness through constant change of item quality, HR, administrations, procedures, and environment. TQM can be clarified as a relationship amongst frameworks and the usage of value, firmly identified with intensity and execution (Benavides-Velasco, A., Quintana-García, & Marchante-Lara, 2014). The part of both human asset administration and TQM is to make a culture/good performance based framework.

3.2.3 Participation of HRM towards TQM

Human Capital assumes an essential part of absolute quality management. The accompanying strengths shape the human capital administration towards TQM:

- Monetary development reported by the government of India in 1991.
- Opening the Indian economy to whatever remains of the globe through the globalization approach.
- Entrusting more importance to the private sector to assume a helpful part in the rebuilding and improvement procedure of Indian economy is necessary.
- Mounting rivalry among the enterprises over the globe.
- Fruitful association proactively and deliberately comprehends and reacts to present and future work culture.
- Human Capital different qualities and portability are making new worker needs and assumptions about the future work culture.
- The data innovation upheaval is reshaping the center skills required in a learning economy.
- Authoritative and human asset pioneers are being tested to end up distinctly compelling vital accomplices in the formation of world-class work societies (Kumar, 2012).

However, it can be concluded that soft TQM practices have a constructive impact on job participation, organizational assurance and job satisfaction for the personnel function. A TQM service requires a set of inside HRM practices, which can be appropriately fitted for TQM (Jayashree and Faisal, 2017). This system of HRM practices, which was labeled quality related HRM system

and that entitled with empowerment, job sovereignty, communication, joint effort, designed training, improvement and recognition and reward oriented motivation factor for the contributions of employees, is an important reason for TQM execution. Moreover, it added related practices to persons denominated by the fiction as high-performance Human capital management practices which have a positive effect on organizational performance (Jayashree and Faisal, 2017).

3.2.4 TQM and Performance Appraisals

Performance appraisal is thought to be an essential step towards creating HR and enhancing its execution. A performance assessment framework attempts to bolster human asset exercises to expand competitiveness. The activities of the enterprise performed for the expert improvement of their representatives plan to adjust the human asset quality to the business needs (Izvercian.Monica, Radu, Ivascu, & Ardelean, 2014). Constant quality development of employees in their tasks delivers a ceaseless distribution of extraordinary quality yields and facilities to consumers. One of the performance administration processes which could be of enormous backing is an actual performance appraisal as it includes different extents throughout the establishments. Performance appraisal denotes to the approaches and methods grounded in two ways communication concerning employees as well as employers. The appraisal includes the steps of noticing and estimating the level of workers' performance and preferably providing them with properly analyzed feedback (Rabbani et al., 2017). This procedure can be used for both progressive and organizational purposes in the application of TQM. Organizations have yearly performance appraisals with the immediate administrator to discuss and evaluate the remarks on underling's performance. It is also used as a way of encouraging teamwork, decreasing grievances, recognizing employees' fortes and weaknesses and their proper training needs and furthestmost it delivers a foundation for increments and advancements which motivate employees (Rabbani et al., 2017). Utilizing preparing and proficient improvement projects ought to bring about expanded worker productivity, and in this manner, the last will have capabilities, capacities, and upgraded aptitudes and also the capacity to share them. Authority at significant business level can be characterized as the capacity of an individual (the pioneer) to persuade a group/gathering of workers to take after directions with a specific end goal to accomplish the objectives set at the significant business level (Izvercian.Monica, Radu, Ivascu, & Ardelean, 2014).

In a present setting, establishments are implementing evaluation systems for TQM which includes different types of assessment scale, like behaviorally anchored rating (BARS), zero-based budgeting (ZBB), performance evaluation (PE) and 360-degree feedback, program planning and budgeting

(PPB) or management by objectives (MBO). All these methods were indeed a portion of the philosophy in large American corporations and further businesses which are not just in the US. But several administrations used MBO series in TQM program as it is more vivid and also encompassed in human capital administration cycle. Researchers also established that MBO has a constructive influence on the reward for the staffs and raises efficiency (Huang, Huang, Chen, & Yien, 2011). Its objectives are compulsory on the workstation as a whole where enactment and results directly affect the willpower and achievement of the business. As an administration approach, it has been additionally developed by numerous administration theoreticians, like Douglas McGregor, George Odiorne, and John Humble. MBO is a procedure that includes collaboration and control to set a proper objective oriented goal for the purpose of evaluating and enhancing employee's performance. Literature specifies that purposes without clear paths for its accomplishments can only be a grade of requirements. For example, one association as a goal for the year 2011 is to increase its profit margin to 15 percent in 2011 from 12 percent in 2010 (Usrof and Elmorsey, 2016). So, this is very vibrant as a goal that the association needs to include MBO program in company's overall TQM scheme of scheduling and aim setting. It is essential that the MBO program ought to be specific, assessable, attainable, and accurate and the plan must be incorporated within the pre-determined time (Usrof and Elmorsey, 2016).

The purpose of performance appraisal system is to inspire and empower workers for organizational accomplishment; and increasing job satisfaction and organizational assurance, which will decrease employee turnover. After having divergence on conditions, performance appraisal has a straight or mediated consequence on job performance. It should be dispersed with a renewed force towards job elucidate, successful communication, motivational inducement and work environment for the betterment of the employee (Chaichi & Chaichi, 2015).

3.2.5 TQM and Effectiveness of Training

Total Quality Management is an administration culture which can be utilized as a tool for every single human asset, fund, innovation Institutionalization. The principle TQM reason for existing is to include every single prepared representative from top supervisors to the most minimal levels, utilizing Educational exercises, objectives and mission of the association (Behdadmanesh, Maryam, Esfandiyari, & Asgarzadeh, 2014). TQM framework gives the appropriate structure to the abuse of involvement, ability, scholarly capacity and physical wellsprings of instructive association by speaking to the strategies and apparatuses. What's more, it consequently assists the association administration with applying the existing and potential abilities of instructive specialists in future.

The mission of administration preparing is abusing the staff, and it can efficiently be conceivable, utilizing the TQM (Behdadmanesh, Maryam, Esfandiyari, & Asgarzadeh, 2014). Training and improvement have been perceived as the primary usage of TQM. One of Deming's 14 focuses was that all representatives must be prepared in quality change methods (Jayashree and Faisal, 2017). Organizations focused on TQM put capital into preparing. Preparing is fundamental to the inner dispersion of value thoughts and practices, as without it there is no reliable establishment for a formal quality program. TQM preparing is not a solitary exertion, but instead, ought to be directed consistently. Viable preparing interests must arrange methodically and impartially. Fundamentally preparing must be situated to the procedure system. Worker preparing is central for some TQM projects, for example, the reception of new quality ideas, the set-up, and practices of consumer loyalty frameworks, the utilization of measurable quality control, or the change of culture or quality control circle. Besides, representatives require three fundamental territories of preparing standards of TQM, the utilization of TQM devices and critical thinking strategies (Jayashree and Faisal, 2017). Observational reviews demonstrate that the utilization of preparing and improvement projects is more regular in organizations with ISO accreditation than those without it. So also, it was discovered vital connections between quality activities and worker contribution and preparing. Proficient profession improvement for TQM organizations is viewed as a broad and nonstop process with advancement open doors for workers, yet utilizing limited vocation ways. Besides, it requests level profession advancement. Thus, incorporates development of capacities, work pivot, and level development. "Even" profession improvement is probably going to wind up distinctly huger, and vocation ways may turn out to be more unpredictable and assorted. Thus, advancement criteria ought to be founded on the procurement of capacities.

3.2.6 TQM in the context of Teamwork and Employee Empowerment

In today's unpredictable surroundings, diverse organizational actions become complex due to development of knowledge, globalization, and difficulty of work. Administration in an organization is now required to reorganize their functioning units to update information stream and optimize communication relationships. So, teamwork becomes a central part of any association (Usrof & Elmorsey, 2016). The admired belief that 'two heads are better than one' is actually brilliant forth crucial in reality. It guided several disciplines that are involved in human collective decision-making process. Learning indicates that collaboration can be evaluate using diverse types such as esprit de corps, trust building in team, appreciation, and rewards (Mazur.Barbara, 2014). Teamwork is one of the essential parts of TQM. There is consent in the narrative that teamwork in a team made of employees from diverse organizational serviceable areas which are responsible for promoting TQM.

Employee Empowerment is also a part of proper teamwork. There are various theories on motivation are established to emphasize on motivation like Herzberg's motivation theories etc. This approach acknowledged that motivating equipment like remuneration alone cannot motivate employees, but the wisdom of genuine appreciation and identification for the task which is completed well and this gives more enthusiasm for doing work. Teamwork is essential as it involves the group effort between personnel and non-managers, between different work of different departments, as well as with clients and suppliers. Within the framework of TQM, it included that teamwork is a vital result and a circumstance for uninterrupted development. It facilitates joint efforts to resolve quality struggle, places overall accountability for quality within the team while decreasing the perspective for individual blame. That permits better sharing of information regarding all issues inside the occupation group. All of these are reasons for greater collaboration for progressing the functioning of the workgroup continuously. Teamwork is the leading factor of TQM practice, which is highly correlated with job satisfaction (Jayashree and Faisal, 2017).

Defining a team is not an easy task. A team is a cluster of people that can generate and imagine new concepts individually as well as collectively to elucidate a specified problem (Mostafaa, Gould-Williams, & Bottomley, 2013), particularly in procedures and actions. Working in groups also permits individuals from diverse areas to encourage management verdicts, exercise their cooperative skills as well as contribute to the improvement of organizational performance (Kabir & Parvin, 2011). Evidence of the efficiency of personal involvement in a team has been recognized in many research papers. For example, Sharif and Nahas (2013) (Sharif & Nahas, 2013) examines the efficiency of teams within the fast-rising private scholastic group in the UAE. The outcomes found that the features and rudiments of teams are very efficient regarding performance.

The connection between HRM and TQM was recognized as being in the part of improvement and empowerment of individuals and the change from a mechanism based type of management to the management of empowerment where consideration is focused on coaching and prominent (Sharif & Nahas, 2013). It is acknowledged that a TQM atmosphere promotes employee empowerment. Five of Deming's 14 points communicate directly to the concept of association and empowerment. According to the principle, TQM can help to encourage empowerment of all executives by giving them more accountability and information then it can undermine medium managers' outdated role in realizing and monitoring the directions of top administration (Jayashree and Faisal, 2017).

3.2.7 TQM in the context of Recruitment and Staffing

Recruitment is a phase that inspires candidates who are concerned about working for the association (Rashmi, 2010). It can also be described as an exercise or activity conceded on by association with the primary function of searching and attracting prospective employees. Selection is the procedure of declining the quantity of inappropriate applications and searches the most relevant qualifications. Recruitment and selection procedure is the primary step in the implementing TQM in an organization. This is the process which enables a sequence of steps which are mutually denoted as the recruitment procedure life cycle. This cycle starts with the recognition of a proper opening and finishes when the most deserving candidate filled the gap and begins to deliver according to the job to an acceptable standard. The resourcing cycle assured that association fascinated the extremely talented employees and signed the service affiliation deal with executive socialization method with the new employee. It was described that the selected and recruited employee should be well-groomed, composed but decisive, self-assured, and with an excellent ability to converse accurately and professionally. In spite of this, more personal skills like good team participant, having a good sense of service outlook and having a mature personality (Patro, 2013).

It is vital to think about employees' activities, approaches, and principles for successful TQM program in an association. There is a most important force towards growing personnel training. For the purpose of utilizing the human assets, associations have recently multiplied the volumes of their training course. This will boost again as TQM is executed at various stages throughout the organization.

The objective of the selection and recruitment procedure should be to recognize potential workers who can work in a team, having a problem resolving ability and who are approaching with information to progress actions or have some values and behaviors which are constant with an excellence management philosophy. Subsequently, associations should hire workers with having good academics, the necessary skills which can facilitate the execution of TQM. For resourcing, applicants can comprise a lot of diverse channels and exercises. Ceremonial recruitment techniques consist of newspaper confidential advertisements, Web bulletins, advertisements and human source reservoirs, while informal techniques include delicate connections and openings through professionals and other personnel (Silva & Shinyashiki, 2014). The proposal is made to expand a quality culture that must be there by selecting and recruiting workers with the necessary behavioral and attitudinal features and initiating them into the excellence culture. This states that aspirants must be properly fitted to the managerial culture and the TQM scheme. Ultimately, employee safety is

essential for retaining the employee which enhances the stability of the job and promotes TQM. Experimental research explains that attempt made for the period of the staffing and selection procedures, looking for workers with action-oriented to TQM manipulates the implementation of TQM results.

More complicated staffing and selection processes are essential for TQM. Booming recruitment and assortment of workers with the appropriate information, abilities, skills, and outlooks companionable with the TQM viewpoint can become a powerful strength for supporting continuous program efficiency. This described that the recognition of proficiencies, derived from a TQM approach and the utilization of the multi-method assortment (Chaichi & Chaichi, 2015).

3.2.8 Compensation system in the context of TQM

Compensation is one of the important elements of HRM practices that manager use to manage their personal and, in addition to being the specific maximum operational cost for them. For personal, it is naturally the most right key issues to consider at the time of negotiating a service agreement. A briefness and clarity of conscripted service agreement can define vividly or thoroughly the responsibilities and expectations of the association and the worker in a way to decrease future variances (Chaichi & Chaichi, 2015). There is an important body of research that concluded reimbursement system as one of the best incentives to motivate employees. Operative rewards have been recommended to have a strong constructive relationship with employee satisfaction and improved efficiency as well as performance. When employees are appropriately inspired with suitable motivational tools, assurance and enhanced organizational achievement are assured. It states that employee's performance would be determined by the morals cherished by the corporation. Constructing and nurturing a valuable, performance focused organization is vital for long-lasting existence and sustainability in the context of employees. The effective gratifying system is essential in motivating the personnel and the formation of the right organizational weather (Kabir & Parvin, 2011).

Motivational features and its consequence in various surroundings should master by administrators to plan an appropriate rewards structure. Several writers have argued that expectation theory impacts prerequisite behaviors when employees recognize that, their struggles will be compensated (Chaichi & Chaichi, 2015). Additionally, the spirit of this reward structure is to align the association with that of the personnel for generating a suitable atmosphere for developed performance. When an employee is encouraged with appropriate incentive to achieve, their employee satisfaction level will be interpreted into improved consumer service and job completion, which will give huge benefit the

organization through productivity, quality, market share and inclusive competitiveness (Rabbani et al., 2017). A proper quality of work will add value to an appropriate management of quality of the organization.

3.2.9 Significance: Integration of HRM and TQM

After studying HRM, TQM and the relationship between these two, it can be concluded that the quality-oriented HRM scheme of practices has a positive consequence on HRM, TQM, and performance of that firm. For this reason, the association between HRM and performance has been examined progressively since the appearance of the strategic HRM method at the early period of the 1980s, and this has been sustained by the capital-based outlook of the firm. HRM schemes also can help in sustaining economical advantage by facilitating the improvement of organizational assets and proficiencies and contributing to sustainable benefit through organizational culture and innovation. Thus, a tactical perspective of HRM shields the overall HR approaches adopted by commercial units of the companies and attempts to quantify their influences on performance.

Some scientists have tried to discover the association between HRM and administrative performance from a different point of views. After, that many studies have inspected individual observations and the use of different schemes of HRM practices has started to receive more attention. This integrative approach stuck on the significance of applying internally reliable HRM practices rather than sequestered practices, in order to distress performance and efficiency. The descriptive assumption of this approach in HRM is that the influence on the performance of groups or bags of consistent HRM practices can be better than the increasing impact of all the discrete practices including the bundle. Additionally, for some writers are considered about those bundles of HRM practices is better inconsistency in the capital-oriented view of the firm, which proposes the meaning of merging capital to acquire sustainable competitive benefit through TQM. Although the experimental literature reports many unique methods, the inferences and the conformations of HRM practices has been considered. In general, it delivers support for the notion of the enterprises which implement schemes of internally reliable HRM executes for obtaining better performance. Additionally, that backing is mainly established only when the HRM scheme adopted is proper TQM framework for delivering quality works and fulfilling organizational goals (Liu & Liu, 2014).

3.3 Research Framework: HR and TQM

The Requirement and Importance of a framework

Nothing is permanent, not even the global market. The interconnectivity and interdependencies between organizations, countries, and economics are increasing in complexity. To sustain in the competitive environment, any company is required to innovate and improve on a regular basis. Again, an organization, more than ever before, requires understanding, managing, and effectively balancing the needs and expectations of their stakeholders. The above analysis highlights that Human Capital Management and TQM have essential effects on the competitiveness of human capital. As there is a restricted number of a difficult research on this issue, a research framework to analyze the impact of total quality, human capital and competitiveness were established. The underlined figure shows the relationship between the total quality management, human capital management, and competitiveness.

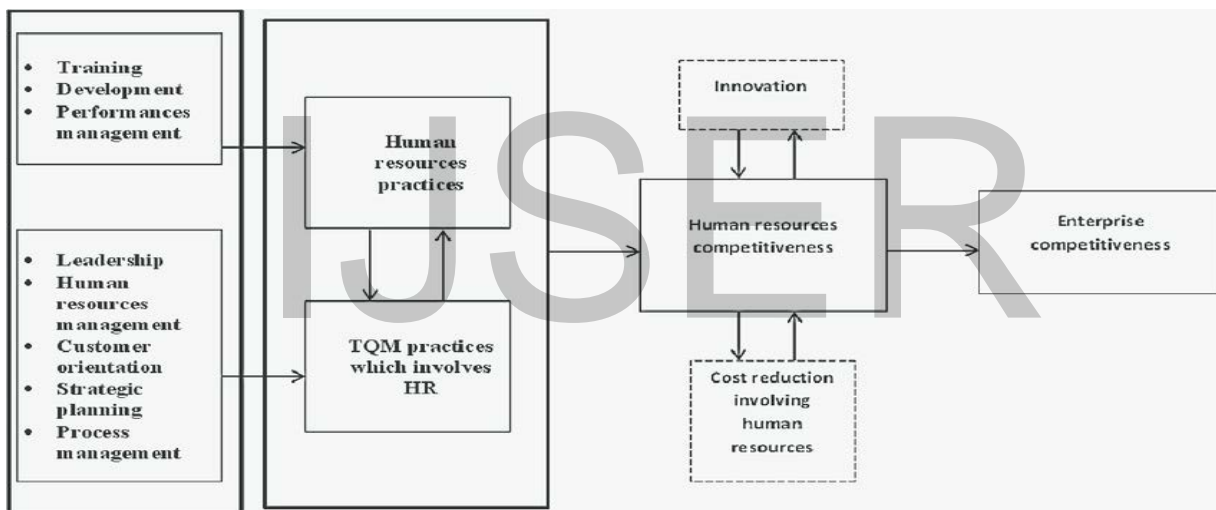


Figure 3: Relationship human capital - total quality management – Competitiveness (Izvercian.Monica, Radu, Ivascu, & Ardelean, 2014)

TQM literature enlightened by the following series: the provider is a partner - the worker is a good (product) - the customer is a guide. From this theory, the parallel between human capital management and TQM can be deducted. Total quality philosophies can effortlessly be applied to develop the excellence of human capital and therefore to exploit its competitiveness. Regarding human capital, TQM is fully involved in an in-depth relationship with human capital elements and human capital detailed consequences (see Figure 6).

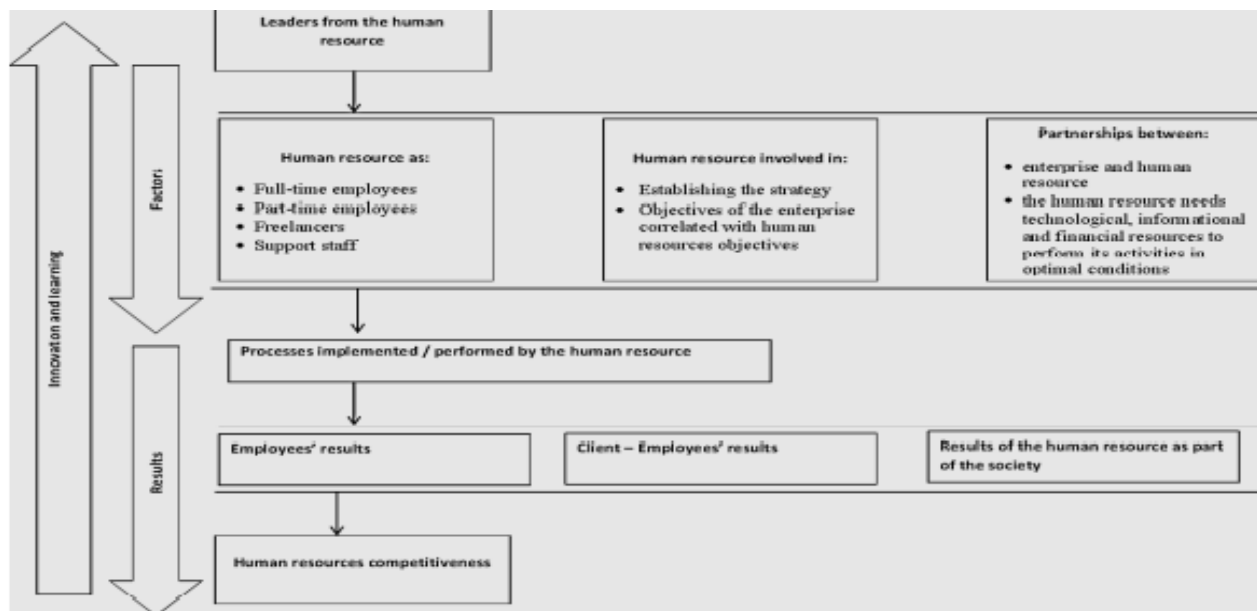


Figure 4: Involvement human capital in TQM (Izvercian.Monica, Radu, Ivascu, & Ardelean, 2014)

3.4 Framework of the Literature Review



Chapter 4: Research Methodology

4.1 Introduction

Research is the procedure of analyzing, interpreting and collecting data with the purpose of understanding a phenomenon. The research procedure is methodical and organized in describing the objective, handling the data, and collaborating with the findings happen within conventional frameworks and in a proper agreement with available guidelines. The outlines and guidelines deliver researchers with a suggestion and indication of what to embrace in the investigation, how to accomplish the research, and what kinds of interpretations are possible founded on the data collected. Research methodology is described as the broad approach the investigator takes for carrying out the investigation project.

This chapter primarily deals with the methodology of research that has been espoused for current topic. The chapter is in continuation of the prior two chapters wherein the introduction to the overall study comprising of background and context followed by critical review of the literature which has been developed. The primary reasons for developing these two chapters were to gain a detailed theoretical understanding of the concepts related to the research topic under study. Further, it also helped in the determination of gaps in prevailing literature thus assisting in the development of research methodology to fill up these gaps.

This chapter of research methodology provides a detailed outline of differing philosophical approaches associated with this study thus laying the foundation for further study. This study is essentially based upon the pragmatism philosophy wherein a mixed method has deployed for a collection of data. The primary intent of using a mixed method is twofold. Firstly, it aims to recognize the differing EFQM that has been applied to human capital and institutional performance in Abu Dhabi Government. Secondly, it intends to explore the implication EFQM on human capital and institutional performance in Abu Dhabi Government.

4.2 Research paradigms

A research paradigm is a perspective about research held by a community of researchers that's based on a set of shared assumptions, concepts, values and practices (Johnson and Christensen 2010, p: 31). Human research studies are undertaken under two primary research paradigms that are positivist and naturalistic research paradigm. The former one is associated with quantitative studies which are deductive and the latter with qualitative ones which are inductive.

Quantitative research is more inclined to resolve problems accurately whereas qualitative is more subjective (Punch 2013). Quantitative research is more inclined to use mathematical and statistical approaches whereas in qualitative it is the understanding of research that affects the interpretation of data (Punch, 2013). Quantification of data is undertaken in quantitative studies but in qualitative one data examination is influenced by the perspectives of the participants and interpreters. In the case of qualitative study, the research/interpreter is endowed with the responsibility of critically examining the pattern of data provided by participants and thus extracts meaning from the same. A researcher is in a position to collect in-depth information from the participants that add value to the over a study which makes qualitative approach superior to quantitative one. In quantitative studies, the scope for biases is less as compared to qualitative ones.

The analysis of both quantitative and qualitative approaches, it can be stated that both have their pros and cons. Thus, the decision to select the right method is intricate. However, with the help of research questions, the researcher can decide the approach which needs to be adopted mainly as a selection of these approaches is dependent on their ability to resolve research question.

4.3 Pragmatism and Mixed Methods Research

The mixed research method is a contemporary research approach wherein the researcher resorts to both quantitative research approach and qualitative research approach in a single study. Thus, an amalgamation of both the research approaches in termed as a mixed approach which is ruled by the pragmatism philosophical assumption (Maxwell, 2015).

Pragmatism philosophy aims at studying the implications of actions taken in the practical environment and is focuses on designing solutions of problems which are considered to be centrifugal. Pragmatism philosophical assumption is widely adopted in studies deploying mixed research methods owing to the epistemological rationalization and judgment that is derived from the same. It is with the help of this amalgamation of quantitative and qualitative approaches that the research can not only effective dig out solutions to research questions but also provide for a comprehensive research study. Pragmatism philosophy is highly supportive which makes it possible to use both research approaches simultaneously in a single study thus providing all-inclusive outcomes. When a research deploys various approaches for a collection of data, then it is possible to serve the research purpose in a better way and thus achieve research objectives in a form that will have universal implication thus pragmatic approach is best applicable in mixed research method (Creswell, 2013).

4.4 Quality Culture and Mixed Methodology Research

One of the significant reasons for using the mixed research methodology in the quality culture studies is the scope for triangulation. It is with the help of such an approach it is possible to derive findings and draw interpretations even in the most complex environment (Smeaton and Davis, 2014). Quality culture is a dynamic area of study for a mixed approach which is highly recommended. With the help of triangulation, it is possible to create theories as well as provide an explanation for the findings from raw data. This triangulation can be done through methods, sources of data adopted or from researchers. All of this is done to scrutinize the same phenomena under study critically. Another advantage of triangulation is that it helps in ensuring validity and reliability of the study thus making the study accurate and effective. Through triangulation of qualitative and quantitative approaches, it is possible to delineate detailed outcomes thus providing quality meaning to research findings (Smeaton and Davis, 2014). With the help of triangulation, it is possible to overcome issues related to a single approach and thus make the study more strong and effective.

4.5 Mixed Methods Research Design Criteria

The mixed method research design is a combination of three constituents namely the implementation, priority and theoretical consideration and integration of both the research approaches. It is by defining the research design criteria for mixed method a researcher is able to articulate data collection and data analysis principles in a lucid manner (Creswell, 2013). In the implementation constituent, the research needs to resort to a logically and chronological order for collection of data irrespective of the same being quantitative or qualitative. This implies that the first set of data collected would lay the foundation for a collection of the second set of data and so on.

Priority and theoretical consideration are mainly assigning weight to either of the approaches that are quantitative and qualitative in order to achieve research objective. It is this provision of relative weights to the approaches utilized. The research can either provide equal importance to both the approaches or have a biased attitude towards one. Another factor affects the weight criteria, is the pragmatism perspective that defines the theoretical aspect of the same. The quantitative data collection was undertaken prior to qualitative collection as it is the former one that lays the foundation for the collection of the latter type of data. Finally, in the integration constituent, both the data types are mixed to derive results and thus accomplish research objectives. This mixing is done in the data analysis stage, which is followed by interpretation of findings. It is this stage where the researcher can draw quality conclusions and powerful inferences thereby resolving research questions.

Analyzing Mixed Methods Data

The following module will discuss strategies for analyzing the data collected in mixed methods research.

Learning Objectives:

- Explain the difference between concurrent and sequential data analysis.
- Describe the basic data analysis procedures for both the qualitative and quantitative data collected.
- Describe strategies for integrating the qualitative and quantitative data in order to interpret the results.

Mixed methods data analysis will involve analyzing the data from both the qualitative and quantitative approaches used in the study. The strategy for data analysis and the timing of the analysis may be driven by the overall rationale or purpose for using mixed methods such as triangulation, complementarity, development, initiation, and expansion. These rationales were explained in more detail in a previous module. The rationale behind the mixed methods approach typically drives the design of the research study and therefore, determines at what point in the project data is collected and analyzed. In general, the qualitative and quantitative data will either be analyzed concurrently or sequentially. For example, if the purpose of using mixed methods is triangulation, then data will likely be collected and analyzed concurrently. If the purpose is for development, the study will be designed to occur in phases and data from the first phase will be collected, analyzed and used to develop the second phase.

Regardless of when the data is collected and analyzed within the study, there are general procedures for data analysis for both qualitative and quantitative data. The chart below outlines the basic processes. The exact methods for qualitative and quantitative data analysis were discussed in detail in those Research Ready units.

Data Analysis Procedures	For Quantitative Data	For Qualitative Data
Preparing Data	Coding data and assigning numeric values; recording data to prepare computer analysis	Organizing data; transcribing text
Reviewing and Exploring Data	Descriptive analysis; looking for trends and distributions	Reading data and notes; developing qualitative codes
Analyzing Data	Using appropriate statistical tests; use of statistical software; recording of confidence intervals	Coding data and assigning labels; grouping of data and looking for related themes; use of statistical software
Representing Data	Representing results in tables, graphs and figures	Presenting findings in discussion or text form; may use figures and visuals to represent themes

Once the data from the qualitative and quantitative portions of the study have been analyzed, the data will need to be integrated in an appropriate way depending on the purpose of the study. The integration of the data will maximize the strengths of each approach while minimizing the weaknesses. Effective integration of the data is the key to utilizing the mixed methods approach to drawing more comprehensive conclusions from a project. Three common methods for data integration are discussed below:

Data Consolidation or Merging – This can be achieved by jointly reviewed both types of data and consolidating them through the use of numeric codes or narrative. It typically requires transforming one dataset so that it can be compared to the other data set. For example, perhaps numeric codes are assigned to the narrative data collected in a qualitative study so that the results can be comparing to the quantitative results.

Connecting Data – When connecting data, one set of data is analyzed and the results are used to guide the subsequent data collection, thus making a connection between data sets, but not directly comparing results. This is used in two-phase projects where data is collected and analyzed sequentially.

Embedding the Data – One set of data is considered to the primary source and the second set of data is embedded in the first one. For example, the primary data in a project may relate to quantitative data in a drug therapy trial. However, within the project, a smaller set of qualitative narrative responses may be collected from participants and used to supplement the results collected from the trial.

4.6 Population and Sample

A population is all the units or individuals or entities of attentiveness. Characteristically, there is no obtainable data for more or less all entities in a population. A sample is a subsection of the entities in a population. There is normal data that is available for entities in samples. A simple random sample is a subset chosen in an arbitrary manner in which the individual possible trials of similar sizes have a similar chance of being designated (Asiamah, Oteng-Abayie, and Mensah, 2017). If a trial is the representative of the whole population, then indicators calculated from trial data will be almost same with corresponding standards from the population. It is seen that a sample contains less info than full population, so estimations taken from the samples about population capacities always encompass with some form of uncertainty or ambiguity. For random trials, larger samples or subsets show an accurate result than conventional methods. The chance variance between sample estimations and population standards is smaller (on average) basically for larger samples or trials (but not essential for exact samples).

The population is the set of entities under study, for example, the entity in some cases could be the mean height of men. This is a hypothetical population because it includes all men that have lived, are alive and will live in the future. I like this example because it drives home the point that we, as analysts, choose the population that we wish to study. Typically it is impossible to survey/measure the entire population because not all members are observable (e.g. men who will exist in the future). If it is possible to enumerate the entire population it is often costly to do so and would take a great deal of time. In the example above we have a population "men" and a parameter of interest, their height.

Instead, we could take a subset of this population called a sample and use this sample to draw inferences about the population under study, given some conditions. Thus we could measure the mean height of men in a sample of the population which we call a statistic and use this to draw inferences about the parameter of interest in the population. It is an inference because there will be some uncertainty and inaccuracy involved in drawing conclusions about the population based on a sample. This should be obvious - we have fewer members in our sample than our population, therefore, we have lost some information.

There are many ways to select a sample and the study of this is called sampling theory. A commonly used method is called Simple Random Sampling (SRS). In SRS each member of the population has an equal probability of being included in the sample, hence the term "random". There are many other sampling methods e.g. stratified sampling, cluster sampling, etc which all have their advantages and disadvantages.

It is important to remember that the sample we draw from the population is only one from a large number of potential samples. If ten researchers were all studying the same population, drawing their own samples then they may obtain different answers. Returning to our earlier example, each of the ten researchers may come up with a different mean height of men i.e. the statistic in question (mean height) varies of the sample to sample -- it has a distribution called a sampling distribution. We can use this distribution to understand the uncertainty in our estimate of the population parameter.

The sampling distribution of the sample means is known to be a normal distribution with a standard deviation equal to the sample standard deviation divided by the sample size. This is because this could easily be confused with the standard deviation of the sample it more common to call the standard deviation of the sampling distribution the standard error.

In the mixed method, sequential design collection is dependent, with one form of data addition to building on another. It is however not an independent process. Hence, within a sequential explanatory design, the qualitative information delivers more specifications about the quantifiable

outcomes (Asiamah, Oteng-Abayie, and Mensah, 2017). The justification and explanation for selecting which type of sampling is necessary for this research, depends on that the amount of preceding knowledge and information about the participants, a researcher had from the first phase of the study. This type of sampling will help the researcher to gain greater insight into the issues related to EFQM and total quality management, which were recognized in the first phase.

4.7 Sample Size

The sample size which will be best for this particular EFQM topic is totally reliant on the nature of the research queries (Polit & Beck, 2014). However, there is no standard sample size. The extent of the specimen is likewise essential in quantitative research as little examples are in danger of being excessively illustrative of small subgroups inside the objective populace. Subsequently, for generalizing, repeatability and recognizable proof of sample size are essential. Be that as it may, when a rate figure is given as an example by a scientist, is to evaluate populace esteem, where bigger specimens have a less inspecting mistake (Polit & Beck, 2014). Larger sample sizes generally lead to increased precision when estimating unknown parameters. For example, if we wish to know the proportion of a certain species of fish that is infected with a pathogen, we would generally have a more precise estimate of this proportion if we sampled and examined 200 rather than 100 fish. Several fundamental facts of mathematical statistics describe this phenomenon, including the law of large numbers and the central limit theorem.

In some situations, the increase in precision for larger sample sizes is minimal, or even non-existent. This can result from the presence of systematic errors or strong dependence in the data, or if the data follows a heavy-tailed distribution. Sample sizes are judged based on the quality of the resulting estimates. For example, if a proportion is being estimated, one may wish to have the 95% confidence interval be less than 0.06 units wide. Alternatively, the sample size may be assessed based on the power of a hypothesis test. Analysts can assess how vast are their examples through power investigation with a specific end goal to test their speculations. This estimation is done earlier research or by a pilot test. There is no conclusive number of members required in a subjective research. Notwithstanding, various issues can influence test estimate in subjective research; be that as it may, the managing guideline ought to be the idea of immersion. Tests for subjective reviews are for the most part substantially littler than those utilized as a part of quantitative reviews.

4.8 Ethical Considerations in Research

It is critical for specialists to talk about ethical implication of their investigation and to stay aware of their ethical uprightness in their work. It is basic to address morals in research keeping in mind the

end goal to guarantee value and equity and reasonableness to members of one's research. The real issue to consider as a specialist utilizing this method is the capability of overexposure by the members, especially if the exploration subject is delicate. To give look into members, the most secure condition conceivable, the scientist must have a comprehension and capacity to apply good hypotheses to their circumstances as specialists, committed to guaranteeing that research does not hurt members in studies. In any case, there are contemplations to be taken when leading an investigation. These are identified with issues of assent and hazard to members' privacy and information gathering. In this study, all the participants are basically from different companies and organizations who are implemented EFQM or thinking about implementing it. That's why their information can reveal their business process, as the research topic is sensitive. That's why extra care should be taken.

Informed Consent of Individuals taking an interest in an examination considers having a sensible desire that they will be educated on a way of the review and may pick regardless of whether to take an interest. They likewise have a sensible desire that they will not be constrained by interests. In any case, in a self-controlled survey, specialist expect inferred assent reflect individuals deliberate agree to take part. However, this type of agreement may be utilized as a part of the place of or in conjunction with educated or express assent.

Furthermore, for the subjective research, assent is viewed as a continuous process. Classification of any individual taking an interest in an exploration examine has a sensible desire that data gave to the analyst will be dealt with privately. Like this, the member is qualified for expect that such data will not be given to any other individual. The principle of anonymity implies that the member will stay mysterious or anonymous though all through the review even to the specialists themselves. In this anonymity is viewed as insurance of classification, of which it happens when an analyst cannot interface members to their information. Unmistakably, the anonymity standard is a more grounded assurance of protection. However, it is once in a while hard to achieve, particularly in circumstances where members must be measured at various time focuses. Be that as it may, classification is striking in subjective research contemplates in light of their inside and out nature, yet secrecy is conceivable.

Information Storage as when directing any exploration extend that includes gathering information from human members, needs to guarantee that the information gathered is taken care of and put away safely. As per administrative structures representing information security, look into morals and research administration as per the Data Protection Act (Polit & Beck, 2014). The system laid out underneath the information stockpiling that might be in paper shape, or electronic (or both),

incorporates Research information e.g. talks with recordings, surveys, transcripts, coded/dissected information. Individual data gathered amid the review i.e. assent shapes, articulation of intrigue structures, email addresses. All paper and electronic information in a way that it is kept secure e.g. paper information in a bolted bureau, electronic information in secret key ensured document space on the scientist PC, and additionally on encoded electronic gadgets. Consent of not only the executive who gives interview needed but also the organization's consent is also needed as all the information is related to the organization.

Confidentiality and Data safety is the measure issues in this topic as the research question are directly related to the organization culture, business process, methods of implementing EFQM, total quality management etc. All this information is very delicate. Problems in storing can lead to a big problem. The information will be collected only in the context of UAE as the main objective of this research is to understand the current scenario of implementation of TQM mainly EFQM in UAE and the role of human capital it.

4.9 Data Collection

Data collection is the process of collecting and measuring facts on variables of interest, in a well-established systematic fashion that empowers one to answer stated research questions, test hypotheses, and appraise outcomes. The data gathering component of research is ordinary to all fields of study including physical and social sciences, humanities, business, etc. While methods vary by regimen, the emphasis on ensuring actual and honest collection remains the same.

The importance of ensuring accurate and appropriate data collection

Regardless of the field of study or inclination for defining data (quantitative, qualitative), accurate data collection is necessary to maintaining the integrity of research. Both the selection of appropriate data collection instruments (existing, modified, or newly developed) and clearly described instructions for their correct use reduce the likelihood of errors occurring.

Consequences from improperly collected data include

- Inability to answer research questions accurately
- Inability to repeat and validate the study
- Crooked findings resulting in wasted capital
- Misleading other researchers to pursue fruitless avenues of investigation

- Compromising decisions for public policy
- Causing harm to human participants and animal subjects

While the degree of effect from faulty data collection may vary by discipline and the nature of the investigation, there is the potential to cause disproportionate harm when these research results are used to support public policy recommendations.

4.9.1 Quantitative research

Quantitative research encompasses with the collection of all types of data so that info can be subjected and quantified to statistical supervision to maintain or disproves alternative hypothesis claims (Cln, 2013). The investigator uses the mathematical framework as the methodology of the data analysis procedure. Three past trends relating to quantitative research approach contain a proper design of the research, test, and selection of best procedures and statistical analysis. However, this type of research also comprises the collection of the data that is naturally numeric and the investigator has a tendency to use mathematical frameworks. Additionally, the researcher practices the investigation methods to guarantee arrangement with statistical data assortment methodology (Cln, 2013). It is a kind of an investigation or assessment intended to help in assessing the quality culture within all organizations in Abu Dhabi through the statistical analysis of the responses. For doing this survey, a questionnaire was designed with the aim of getting proper answers and information related to research questions Appendix 1. In planning questionnaire, pretty many standards are to be taken after.

The first is to detail explanations that can be deciphered in various routes by various individuals who will give diverse answers. The second is to utilize positive articulations just and have an open answer class after every conceivable answer. The third is never to make any suspicion about the respondent and maintain a strategic distance from things that can have more than one question. Be that as it may, while questionnaire is useful for little reviews, it can be unreasonable to utilize them for tasks that include an expansive number of respondents. While an overview is the deliberate gathering of data from various people and utilized for logical purposes and give data in all examination fields. In any case, the achievement is needy upon how the populace is spoken to by the respondents; costs, scope, adaptability, readiness to take an interest, and the exactness of the reactions can impact the method for leading an overview. The questionnaire is designed to understand different prospect related to TQM implementation and its effects on a different section of the organization.

4.9.2 Qualitative research

One type of identifier of the qualitative research is the societal phenomenon being inspected from the applicant's lookout. There are diverse types of research schemes that practiced in qualitative investigation techniques to structure the research method. Accordingly, the different methods have an intense effect on the investigation strategies discovered. Qualitative research is less organized in explanation because it articulates and shapes new theories. This type of research can also be defined as an operative model that occurs in a normal setting that allows the researcher to improve a level of a factor from being extremely involved in the real experiences.

Qualitative research is directed at a poststructuralist pattern. There are five zones of this type of research: ethnography study, case study, grounded theory study, phenomenological study and content investigation. These five zones are demonstrative of investigation that is constructed upon inductive cognitive and related methodologies (CIn, 2013). This type of research builds its principles on inductive instead of logical reasoning. This is from the observational rudiments that pose queries that the researcher tries to elucidate. The strong association between the spectator and the data is a noticeable difference from the quantitative research scenario, where the investigator is severely exterior of the occurrences being examined. In this case, the same questionnaire will be used to investigate the implementation of TQM mainly EFQM and its effect on the organization.

Throughout the decades, focus groups are utilized as both an independent strategy and in the mix with overviews and other research strategies, most strikingly individual, inside and out meetings. Examinations between focus groups and both studies and individual meetings help to demonstrate the particular focal points and burdens of gathering meetings, focusing on the part of the gathering in creating communication and the part of the mediator in directing this collaboration. The benefits of focus groups can be amplified through watchful regard for research configuration issues at both the venture and the gathering level. Imperative future headings include the advancement of guidelines for announcing focus gathering research, more methodological research on focus groups, more consideration regarding information investigation issues, and greater engagement with the worries of the examination members.

Focus gathering infers a gathering dialogue with a specific end goal to recognize recognitions, musings, and impressions of a chose gathering of individuals in regards to a particular point of examinations. Talk ought to be seen by the members as no-debilitating and allowed to express any feeling, regardless of if this sentiment is shared or not by alternate members (Johnson & Christensen,

2010). Focus groups create significant data, particularly when the members speak to little groups of premium, disregarded by the quantitative research or when the region of examination.

The top to the bottom meeting is a system intended to inspire a distinctive photo of the member's viewpoint on the exploration subject. Consequently, it is viable for getting to a wide scope of perspectives on a particular point, rather than accomplishing bunch agreement. A mid top to bottom meetings, the individual being met is viewed as the master, and the questioner is viewed as the understudy (Johnson & Christensen, 2010). The scientist's meeting strategies are propelled by the yearning to learn everything the member can share about the examination subject. Amid top to bottom meetings, the individual being met is viewed as the master and the questioner is viewed as the understudy. The specialist's talking methods are inspired by the craving to learn everything the member can share the exploration theme. Top to the bottom meeting is a powerful subjective strategy for motivating individuals to discuss their own sentiments, feelings, and encounters. It is likewise a chance to pick up knowledge into how individuals translate and arrange the world.

4.9.3 Objective of the Survey

The objective of the survey is to capture how effective the implementation of EFQM is in the UAE. In Appendix 12, through the questions, the demographic factors are determined by the survey respondents and the descriptive statistics in Appendix 7. The relevance as to what group of the respondents was aware of EFQM and its benefits of implementation have discussed in the Empirical approach chapter. The gender of the respondents is known through Appendix 13 and its descriptive statistics in Appendix 8 which reflect that there are more male members. Later in the chapters, the significance of the impact of EFQM in human capital and institutional performance with gender factor has been portrayed. For this, the target of the survey is determined to be the respondents should be around the

The chapter also connected the importance of knowing the educational background through the questions in Appendix 14 and its descriptive statistics are done in appendix 9 as discussed in the empirical approach chapter.

Appendix 15 is where the questions are such designed which lists what the nature of the employment is of the respondents. The questions in Appendix 16 point out the duration of employment of each of the participants that have worked in the organization. These questions are significant as to list out the group of respondents who are well aware of EFQM and it's advantageous to portray the opportunities

and challenges while EFQM is used to manage human capital and improve the institutional performance of Abu Dhabi government.

Similarly, questions in Appendix 17 relate the department where the respondents are working on the factor of implementing EFQM. Appendix 18 contains the important set of questions related to the size of the organization. The size of the company is a significant factor to understand whether EFQM can be implied in any organization, irrespective of its size and whether it has the same amount of effect in any organization with any amount of workforce.

The questions included in Appendix 19 are for the organizations to determine how much aware they are of their specific way of managing quality, whether they know of EFQM and how well they understand the organization's approach towards attaining the organizational goals.

On the basis of the questions in Appendix 20, the component rotator matrix is applied, as seen in Appendix 2 which determined the various relations between the factors which are the questions pointed out here.

4.10 Pilot Study

Pilot studies are the minor version of the chief study which is used to exam whether the components of the chief study can all work together accordingly or not. It is concentrated on the procedures of the main study, for example, to give a guarantee that randomization, treatment, recruitment and addition assessments all run effortlessly. Pilot studies as they are often underpowered (lesser size of the sample) can only be needed to create principles that there will be a tendency towards the significance which provides provision for larger studies (Lancaster, 2015). If the significance is established in the pilot study, one essentially still is organized that the full-scale test could produce different outcomes. One of the advantages of conducting a pilot study is that it might give advance warning about where the main research project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated (Lancaster, 2015). Thus, pilot studies are conducted for a range of different reasons. Pilot studies are based on quantitative and/or qualitative methods and large-scale studies might employ some pilot studies before the main survey conducted. Whether hypothesis testing is to be used or not, what is clearly the assumption that is taken, searching all this is the main aim of a feasibility or pilot study. However, it is not used to test treatment effectiveness. This is the objective of the future definitive trial. Therefore, any initial testing should be evidently regarded as such necessary test and known as a pilot study. The pilot

study primarily will be done in to understand the main implementation of EFQM in the organization which has been surveyed.

Pilot studies can play a very important role prior to conducting a full-scale research project

Pilot studies are small-scale, preliminary studies which have objective to investigate whether critical components of the main study usually a randomized controlled trial (RCT) will be feasible. For example, they may be used in pursuit to predict an appropriate sample size for the full-scale project and/or to enhance various aspects of the study design. Often RCTs need a lot of time and money to be carried out, so it is critical that the researchers have confidence in the key steps they will take when conducting this type of study to neglect wasting time and capital.

Hence, a pilot study may answer a simple question: “Can the full-scale study be conducted in the way that has been planned or should some component(s) be altered?”

The results of the pilot study must be of high quality to allow readers to define the results and implications correctly. This blog will highlight some key things for readers to consider when they are estimating a pilot study.

What are the main reasons to conduct a pilot study?

Pilot studies are conducted to describe the feasibility of some critical component(s) of the full-scale study. Typically, these can be divided into 3 main aspects:

- ***Process:*** where the feasibility of the key steps in the main study is assessed (e.g. recruitment rate; retention levels and eligibility criteria)
- ***Capital:*** assessing problems with time and capital that may occur during the main study (e.g. how much time the main study will take to be completed; whether the use of some equipment will be feasible or whether the form(s) of evaluation selected for the main study are as good as possible)
- ***Management:*** problems with data management and with the team involved in the study (e.g. whether there were problems with collecting all the data needed for future analysis; whether the collected data are highly variable and whether data from different institutions can be analyzed together).

Reasons for not conducting a pilot study

A study should not simply be characterized as a ‘pilot study’ by researchers hoping to justify a small sample size. Pilot studies should always have their objectives linked with feasibility and should inform researchers about the best way to conduct the future, full-scale project.

How to interpret a pilot study

Readers must describe pilot studies carefully. Below are some key things to consider when assessing a pilot study:

- The objectives of pilot studies should always be linked with feasibility and the critical component that will be tested must always be stated.
- The method section must present the process for success. For example: “the main study will be feasible if the retention rate of the pilot study exceeds 90%”. Sample size may vary in pilot studies (different articles present different sample size calculations) but the pilot study population, from which the sample is formed, must be the same as the main study. However, the participants in the pilot study should not be entered into the full-scale study. This is because participants may change their later behavior if they had previously been involved in the research.
- The pilot study may or may not be a randomized trial (depending on the nature of the study). If the researchers *do* randomize the sample in the pilot study, it is important that the process for randomization is kept the same in the full-scale project. If the authors decide to test the randomization feasibility through a pilot study, different kinds of randomization procedures could be used.
- As well as the method section, the results of the pilot studies should be read carefully. Although pilot studies often present results related to the effectiveness of the interventions, these results should be interpreted as “potential effectiveness”. The focus in the results of pilot studies should always be on feasibility, rather than statistical significance. However, results of the pilot studies should nonetheless be provided with measures of variability (such as confidence intervals), particularly as the sample size of these studies is usually relatively small, and this might produce biased results.

The procedure of pilot study

A pilot study is a pre-sampling study in this study a sample survey is conducted within a population to test the questionnaire either it is easy to understand by people or not. For pilot study, we just considered a very small sample and check the difficulties which can arise during the survey with the help of pilot studies we can overcome the difficulties.

Results from pilot studies

A pilot study can address a number of issues. As part of the research strategy the following factors can be resolved prior to the main study:

- Check that the instructions given to examiner are apprehensible.
- Check that examiners and technicians are sufficiently talented in the procedures.
- Check the correct operation of equipment.
- Check that the experimental person can perform a task (physical or cognitive).
- Check the reliability and validity of results.
- Detect a floor or ceiling effect (e.g. if a task is too difficult or too easy there will be skewed results).
- Assess whether the level of intervention is appropriate (e.g. the dose of a drug).
- Identify adverse effects caused by the procedure and the effectiveness of actions to reduce them.
- Define early compassionate endpoints.

4.11 Data Analysis

Data Analysis is defined to be a process in which statistical or logical techniques are used for describing and illustrating the data using visual tools and figures, compress and recap the findings of the data, and evaluate the meaning of the results that are found (Begum and Ahmed, 2015). Various analytic procedures help in providing a way for drawing inductive inferences from the data and distinguishing the signal or the phenomenon of interest from the noise that is found from the data (Begum and Ahmed, 2015).

Data analysis in qualitative research could include statistical procedures, it is seen that the analysis often includes an ongoing iterative process where the data is continuously gathered and analyzed as well. The researchers do this by analyzing the patterns found in the observations that are done during the observation stage (Begum and Ahmed, 2015). The form of the analysis is determined by the specific qualitative approach taken (field study, ethnography content analysis, oral history, biography, unobtrusive research) and the form of the data (field notes, documents, audiotape, and videotape).

It is seen that keeping the integrity of the data ensure that the representation of the data is done as accurately as the research can show. Improper statistical analyses could distort the scientific findings, which could potentially lead to results that can misdirect readers (Begum and Ahmed, 2015). The misdirection of result could lead to a negative impact on the research and could potentially impact

the perception of the entire research process as well. Additionally, it can be seen that integrity issues in the research stage are just as relevant to the analysis of non-statistical data as well.

Considerations/issues in data analysis: there are a number of issues that researchers should be aware of with respect to data analysis. These include:

- Having the necessary skills to analyze
- Concurrently selecting data collection methods and appropriate analysis
- Drawing unbiased inference
- Inappropriate subgroup analysis
- Following acceptable norms for disciplines
- Determining statistical significance
- Lack of clearly defined and objective outcome measurements
- Providing honest and accurate analysis
- The manner of presenting data
- Environmental/contextual issues
- Data recording method
- Partitioning 'text' when analyzing qualitative data
- Training of staff conducting analyses
- Reliability and Validity
- Extent of analysis

The mixed method strategy to examination is a remittance of generally direct than an extra for the subjective and quantitative ways to deal with the examination, at the last two research techniques will keep on being significant and essential (Onwuegbuzie and Poth, 2015). The objective for specialists utilizing the mixed techniques way to deal with research is to draw from the qualities and limit the shortcomings of the quantitative and qualitative research approaches. A mixed method includes the utilization of both quantitative and subjective explanatory procedures inside a similar structure, which is guided either from the earlier, some posterior, or iteratively (speaking to logical choices that happen both before the review and amid the review). Mixed researches include the examination of one or both information sorts (i.e., quantitative information or subjective information, or quantitative information and subjective information). Which happen either simultaneously (i.e., in no sequential request), or consecutively in two stages (in which the subjective examination stage goes before the quantitative examination stage or the other way around, and discoveries from the

underlying investigation stage illuminate the resulting stage), or more than two stages (i.e., iteratively) (Onwuegbuzie and Poth, 2015).

The mixed researches can be planned based, wherein it is specifically connected to the blended strategies outline (e.g., consecutive blended investigation systems utilized for successive blended techniques outlines). Then again, the mixed researches can be stage based, in which the blended investigation happens in at least one stages (e.g., information change). In mixed researches, either the subjective or quantitative examination strands may be given need or roughly approach need subsequently from the earlier choices (i.e., decided at the exploration conceptualization stage) or choices that rise over the span of the review (Smeaton & Davis, 2014).

4.12 Quantitative Data Analysis using SPSS

A quantitative approach is regularly worried about discovering confirmation to either bolster or negate a thought or speculation the scientist may have (Smeaton & Davis, 2014). A speculation is a place an anticipated response to an examination question is proposed. It is an orderly way to deal with examinations amid which numerical information is gathered as well as the analyst changes what is gathered or seen into numerical information (Onwuegbuzie and Poth, 2015). It frequently depicts a circumstance or occasion, noting the "what" and 'what number of' inquiries may have about something; an examination which includes measuring or tallying characteristics (i.e. amounts). All Likert scales information from the study was dissected utilizing SPSS programming rendition 22.

From the results, with supportive prove different interpretation will be drawn. This also includes the interpretation of the perceptions of respondents to composites for patient total quality culture dimensions. In this research, the data was analyzed using a number of a statistical methods including frequency analysis, descriptive statistics comparison, normality test, Reliability t-test, summative scores and distribution analysis, multiple regression analysis, Pearson correlation coefficient, Analysis of variance (Anova), logistic regression etc for a different reason.

4.12.1 Reliability Test

Reliability is worried about the capacity of an instrument to gauge consistently. It ought to be noticed that the reliability of an instrument is nearly connected with its validity. Alpha was produced by Lee Cronbach in 1951 to give a measure of the inner consistency of a test or scale (Tavakol & Dennick, 2011); it is communicated as a number in the vicinity of 0 and 1. Inward consistency depicts the degree to which every one of the things in a test measures a similar idea or build and subsequently it is associated with the between relatedness of the things inside the test. Inner consistency ought to be

resolved before a test can be utilized for research or examination purposes to guarantee validity (Johnson and Christensen, 2014). A score greater than 6 signifies or denotes a consistency in the data. Reliability refers to the extent to which a scale provides consistent results if the measurements are repeated a number of times. The analysis of reliability is called reliability analysis. Reliability analysis is determined by obtaining the proportion of systematic variation on a scale, which can be done by describing the association between the scores obtained from different administrations of the scale. Thus, if the association in reliability analysis is high, the scale yields consistent results and is therefore reliable.

Researchers performing analysis on either quantitative or qualitative analysis should be cognizant of challenges to reliability and validity. For example, in the area of content analysis, Gottschalk (1995) identifies three factors that can affect the reliability of analyzed data:

- stability, or the tendency for coders to consistently re-code the same data in the same way over a period of time
- reproducibility, or the tendency for a group of coders to classify categories membership in the same way
- accuracy, or the extent to which the classification of a text corresponds to a standard or norm statistically

The potential for compromising data integrity arises when researchers cannot consistently demonstrate stability, reproducibility, or accuracy of the data analysis

There are four different approaches:

Test-Retest: Respondents are administered indistinguishable sets of a scale of items at two different times under equivalent conditions. The degree of similarity between the two measurements is described by computing a correlation coefficient. The higher the correlation coefficient found from the reliability analysis, the greater the chance for the predicted value to be accurate as the forecasted value. This does have some limitations. Test-Retest Reliability is sensitive to the time interval between testing. The initial measurement may alter the characteristic being measured by Test-Retest Reliability in reliability analysis.

Internal Consistency Reliability: In reliability analysis, internal consistency is used to measure the reliability of a summated scale where several items are summed to form a total score. This measure of reliability in reliability analysis focuses on the internal consistency of the set of items forming the scale.

Split-Half Reliability: A form of internal consistency reliability. The items on the scale are divided into two halves and the resulting half scores are correlated in reliability analysis. High correlations between the two halves indicate high internal consistency in reliability analysis. The scale items can be split into halves, based on odd and even numbered items in reliability analysis. The limitation of this analysis is that the outcomes will depend on how the items are split. In order to overcome this limitation, coefficient alpha or Cronbach's alpha is used in reliability analysis.

Inter-Rater Reliability: Also called inter-rater agreement. Inter-rater reliability helps to understand whether or not two or more raters or interviewers administer the same form to the same people homogeneously. This is done in order to establish the extent of consensus that the instrument has been used by those who administer it

Assumptions:

- Errors should be uncorrelated.
- The coding done should have the same meaning across items.
- In Split Half test, assignments of subjects are assumed random.
- The observations should be independent of each other.
- In Split Half test, the variances should be equivalently assumed

4.12.2 Normality Test

After checking the reliability of responses, it is important to check for the normality of the parameters. The presumption of typicality is particularly basic when building reference interims for factors. Visual examination of the circulation might be utilized for surveying ordinariness, in spite of the fact that this approach is typically inconsistent and does not ensure that the dissemination is ordinary (Ghasemi, Zahediasl, & Saleh, 2012). This is checked through mean and standard deviation distribution for normality of the parameters. In order to understand the distribution of the data, a normality check is run using histograms and the Kolmogorov or Shapiro Wilk test (Ghasemi, Zahediasl, & Saleh, 2012).

In statistics, normality tests are used to describe if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed.

More precisely, the tests are a form of model selection, and can be interpreted several ways, depending on one's interpretations of probability:

- In descriptive statistics terms, one measures a goodness of fit of a normal model to the data – if the fit is poor then the data are not well modeled in that respect by a normal distribution, without making a judgment on any underlying variable.
- In frequentist statistics statistical hypothesis testing, data are tested against the null hypothesis that it is normally distributed.
- In Bayesian statistics, one does not "test normality" per se, but rather computes the likelihood that the data come from a normal distribution with given parameters μ, σ (for all μ, σ), and compares that with the likelihood that the data come from other distributions under consideration, most simply using a Bayes factor (giving the relative likelihood of seeing the data given different models), or more finely taking a prior distribution on possible models and parameters and computing a posterior distribution given the computed likelihoods.
- An informal approach to testing normality is to compare a histogram of the sample data to a normal probability curve. The empirical distribution of the data (the histogram) should be bell-shaped and resemble the normal distribution. This might be difficult to see if the sample is small. In this case, one might proceed by regressing the data against the quantiles of a normal distribution with the same mean and variance as the sample. Lack of fit to the regression line suggests a departure from normality. (see Anderson Darling coefficient and Minitab)
- A graphical tool for assessing normality is the normal probability plot, a quantile-quantile plot (QQ plot) of the standardized data against the standard normal distribution. Here the correlation between the sample data and normal quantiles (a measure of the goodness of fit) measures how well the data are modeled by a normal distribution. For normal data the points plotted in the QQ plot should fall approximately on a straight line, indicating high positive correlation. These plots are easy to interpret and also have the benefit that outliers are easily identified.

4.12.3 Descriptive statistics and frequency analysis

Descriptive statistics are numbers that condense the information with the motivation behind depicting what happened in the specimen (Thompson, 2010). Conversely, inferential insights are numbers that permit the specialist to figure out if there are contrasts between at least two examples and whether these distinctions are probably going to be available in the number of inhabitants in intrigue. Descriptive statistics likewise can be utilized to contrast tests from one review and another. A measure of central tendency, Measure of dispersion and graphical representation are included in it.

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. Descriptive statistics are typically distinguished from inferential statistics. With descriptive statistics, you are simply describing what is or what the data shows. With inferential statistics, you are trying to reach conclusions that extend beyond the immediate data alone. For instance, we use inferential statistics to try to infer from the sample data what the population might think. Or, we use inferential statistics to make judgments of the probability that an observed difference between groups is a dependable one or one that might have happened by chance in this study. Thus, we use inferential statistics to make inferences from our data to more general conditions; we use descriptive statistics simply to describe what's going on in our data. Descriptive Statistics are used to present quantitative descriptions in a manageable form. In a research study, we may have lots of measures. Or we may measure a large number of people on any measure. Descriptive statistics help us to simplify large amounts of data in a sensible way. Each descriptive statistic reduces lots of data into a simpler summary. For instance, consider a simple number used to summarize how well a batter is performing in baseball, the batting average. This single number is simply the number of hits divided by the number of times at bat (reported to three significant digits). A batter who is hitting .333 is getting a hit one time in every three at-bats. One batting .250 is hitting one time in four. The single number describes a large number of discrete events. Or, consider the scourge of many students, the Grade Point Average (GPA). This single number describes the general performance of a student across a potentially wide range of course experiences. Every time you try to describe a large set of observations with a single indicator you run the risk of distorting the original data or losing important detail. The batting average doesn't tell you whether the batter is hitting home runs or singles. It doesn't tell whether she's been in a slump or on a streak. The GPA doesn't tell you whether the student was in difficult courses or easy ones, or whether they were courses in their major field or in other disciplines. Even given these limitations, descriptive statistics provide a powerful summary that may enable comparisons across people or other units.

Frequency distributions are frequently the primary investigations to be done on an informational index. Frequency distributions are an important technique for portraying ostensible or ordinal level information (Discrete information) (Thompson, 2010). Since discrete data just portray some classifications or categories, frequency distributions satisfactorily depict nominal or ordinal level information. Frequency distributions likewise can help identify data entry mistakes. For understanding the different type of executives and their preference, knowledge about the total quality

management and their feedback about the changing scenario of different sector of the organization in the context of total quality management, frequency analysis has been chosen.

Statistics is a very useful subject that is originated from mathematics. Its study is started in middle school and becomes a separate subject in higher-level mathematics. Statistics is a systematic study of collection, organization, and analysis of data for a research or a survey. It is quite helpful in the forecast and prediction of various results from the well-organized data.

A statistical data may consist of a list of numbers related to a research. Among those numbers, few may be repeated twice and even more than twice. The repetition of number in a data set is termed as the frequency of that particular number or the variable in which that number is assigned. The frequencies of variables in a data are to be listed in a table. This table is known as frequency distribution table and the list is referred as a frequency distribution.

A frequency distribution shows us a summarized grouping of data divided into mutually exclusive classes and the number of occurrences in a class. It is a way of showing unorganized data e.g. to show results of an election, the income of people for a certain region, sales of a product within a certain period, student loan amounts of graduates, etc. Some of the graphs that can be used with frequency distributions are histograms, line charts, bar charts and pie charts. Frequency distributions are used for both qualitative and quantitative data.

There are many types of frequency distributions

- Grouped frequency distribution
- Ungrouped frequency distribution
- Cumulative frequency distribution
- Relative frequency distribution
- Relative cumulative frequency distribution

4.12.4 Missing value and outlier analysis

Missing data is one of the issues, which need to be comprehended for continuous application. Inappropriate ascription produces inclination result. The missing value is one of the primary consideration, which can render the acquire result past utilize achieved from a particular informational index by applying information mining procedure. (Waqas, Syed Saeed-Ur-Rahman, Imran, & Rehan, 2016) There are a few systems accessible to control the issue of missing values, for example, supplanting the missing an incentive with: (a) closet value, (b) mean substitution and (c)

median substitution and so forth. A few calculations are likewise used to manage the issue of missing values, for example, k-nearest neighbor (Waqas, Syed Saeed-Ur-Rahman, Imran, & Rehan, 2016).

Outlier detection means to discover designs in information that doesn't adjust to expected conduct. Outlier detection is identified with, however different from noise removal and noise accommodation both of which manage undesirable noise in the information. Noise can be characterized as a marvel of information which is not important to the examiner, but instead goes about as an obstruction to information investigation. Noise removal is driven by the need to expel the undesirable protests before any information investigation is performed on the information.

Missing values and outliers are frequently encountered while collecting data. The presence of missing values reduces the data available to be analyzed, compromising the statistical power of the study, and eventually the reliability of its results. In addition, it causes a significant bias in the results and degrades the efficiency of the data. Outliers significantly affect the process of estimating statistics (*e.g.*, the average and standard deviation of a sample), resulting in overestimated or underestimated values. Therefore, the results of data analysis are considerably dependent on the ways in which the missing values and outliers are processed. In this regard, this review discusses the types of missing values, ways of identifying outliers and dealing with the two.

Missing values can arise from information loss as well as dropouts and non-responses of the study participants. The presence of missing values leads to a smaller sample size than intended and eventually compromises the reliability of the study results. It can also produce biased results when inferences about a population are drawn based on such a sample, undermining the reliability of the data. As a part of the pretreatment process, missing data are either ignored in favor of simplicity or replaced with substituted values estimated with a statistical method. In general, the analysis of missing values involves the consideration of efficiency, handling of missing data and the resulting complexity in the analysis, and the bias between missing and observed values.

The other problem is that of outliers, which refers to extreme values that abnormally lie outside the overall pattern of a distribution of variables. When weight data are collected, a value of 250 kg cannot fit into the normal distribution for weights; it thus represents an outlier. Outliers result from various factors including participant response errors and data entry errors. In a distribution of variables, outliers lie far from the majority of the other data points as the corresponding values are extreme or abnormal. The outliers contained in sample data introduce bias into statistical estimates such as mean values, leading to under- or over-estimated resulting values. Dealing with outliers is

essential prior to the analysis of the data set containing outlier. This involves modifying outliers after identifying their sources or replacing them with substituted values.

When analyzing a data set containing missing values, the causes of missing data should be taken into account to handle the missing data properly. If a large proportion of the data is missing, further discretion is required in a manner that considers the missing rate. The use of more than one method is recommended for the handling of missing values to compare results. Furthermore, detection and treatment of outliers are important when processing collected data. Any human errors such as data entry errors should be minimized or prevented as part of the effort to reduce outliers in data. Special care is therefore necessary when entering data. This review paper underlines the efforts to minimize common problems associated with data analysis, including biased results and subsequent under- or over-estimation, by handling missing data and outliers properly during the pretreatment process.

4.12.5 Pearson correlation coefficient

Correlation is a measurable technique used to survey a conceivable director linear relationship between two continuous factors (Mukaka, 2012). It is basic both to compute and to interpret. The term correlation is utilized to allude to an affiliation, association, or any relationship, connection or correspondence. Correlation is measured by a statistic called the correlation coefficient, which speaks to the quality of the putative direct relationship between the factors being referred to. Pearson's correlation coefficient is the test statistics that measure the statistical relationship, or association, between two continuous variables. It is known as the best method of measuring the association between variables of interest because it is based on the method of covariance. It gives information about the magnitude of the association, or correlation, as well as the direction of the relationship. It is a dimensionless amount that takes an incentive in the range -1 to $+1$ (Mukaka, 2012). For understanding the association between implementation of EFQM and the efficiency of the employees of the organization, correlation test will be done. For understanding the association between implementation of ISO and the efficiency of the employees of the organization, correlation test will be done. For evaluating the relation between different measures (example health, welfare, safety etc) and employee efficiency correlation test will be done.

Correlation is a technique for investigating the relationship between two quantitative, continuous variables, for example, age and blood pressure. Pearson's correlation coefficient (r) is a measure of the strength of the association between the two variables. The first step in studying the relationship between two continuous variables is to draw a scatter plot of the variables to check for linearity. The correlation coefficient should not be calculated if the relationship is not linear. For correlation only

purposes, it does not really matter on which axis the variables are plotted. However, conventionally, the independent (or explanatory) variable is plotted on the x-axis (horizontally) and the dependent (or response) variable is plotted on the y-axis (vertically). The nearer the scatter of points is to a straight line, the higher the strength of association between the variables. Also, it does not matter what measurement units are used.

Values of Pearson's correlation coefficient

Pearson's correlation coefficient (r) for continuous (interval level) data ranges from -1 to +1:


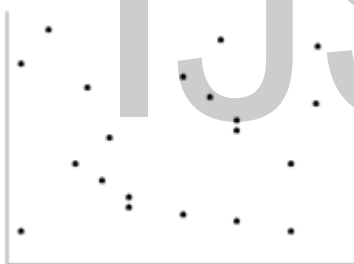
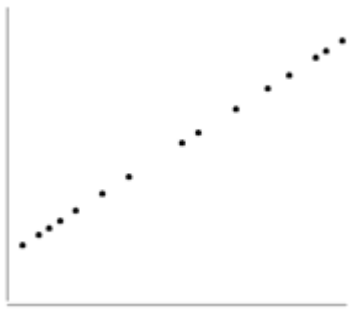
$r = -1$		data lie on a perfectly straight line with a negative slope
$r = 0$		no linear relationship between the variables
$r = +1$		data lie on a perfectly straight line with a positive slope

Fig: Pearson correlation

A positive correlation indicates that both variables increase or decrease together, whereas negative correlation indicates that as one variable increases, so the other decreases, and vice versa.

The t-test is used to establish if the correlation coefficient is significantly different from zero, and, hence that there is evidence of an association between the two variables. There is then the underlying assumption that the data is from a normal distribution sampled randomly. If this is not true, the conclusions may well be invalidated. If this is the case, then it is better to use Spearman's coefficient of rank correlation (for non-parametric variables). It is interesting to note that with larger samples, a low strength of the correlation, for example, $r = 0.3$, can be highly statistically significant (ie $p < 0.01$).

4.12.6 T-test

A t-test takes a gander at the t-measurement, the t-circulation and degrees of flexibility to decide the likelihood of contrast between populaces; the test measurement in the test is known as the t-measurement. A T-test is a statistical examination of two population means (Rietveld and van Hout, 2017). A t-test is an analysis of two population's means through the use of statistical examination; a t-test with two samples is commonly used with small sample sizes, testing the difference between the samples when the variances of two normal distributions are not known.

A t-test looks at the t-statistic, the t-distribution and degrees of freedom to determine the probability of difference between populations; the test statistic in the test is known as the t-statistic. To conduct a test with three or more variables, an analysis of variance (ANOVA) must be used.

A form of hypothesis testing, the t-test is just one of many tests used for this purpose. Statisticians must use tests other than the t-test to examine more variables, as well as for test with larger sample sizes. For a large sample size, statisticians use a z-test. Other testing options include the chi-square test and the f-test.

The formula used to calculate the test is a ratio: The top portion of the ratio is the easiest portion to calculate and understand, as it is simply the difference between the means or averages of the two samples. The lower half of the ratio is a measurement of the dispersion, or variability, of the scores. The bottom part of this ratio is known as the standard error of the difference. To compute this part of the ratio, the variance for each sample is determined and is then divided by the number of individuals composes the sample or group. These two values are then added together, and a square root is taken of the result. A two-sample t-test examines whether two samples are different and it commonly used when the variances of two normal distributions are unknown and when an experiment uses a small sample size. To lead a test with at least three factors, an analysis of variance (ANOVA) must be

utilized. For comparing the different measures (example health, welfare, safety etc.) of various organizations, a test will be done.

4.12.7 ANOVA

Analysis of variance (ANOVA) is a statistical method worried about contrasting methods for a few specimens. It can be considered as an augmentation of the t-test for two independent samples to more than two gatherings (Kim, 2014). The reason for existing is to test for huge contrasts between class means, and analysis of variance finishes this. For comparing the different measures (example health, welfare, safety etc.) of various organizations, ANOVA will be done.

Analysis of variance (ANOVA) is a collection of statistical models and their associated procedures (such as "variation" among and between groups) used to analyze the differences among group means. ANOVA was developed by statistician and evolutionary biologist Ronald Fisher. In the ANOVA setting, the observed variance in a particular variable is partitioned into components attributable to different sources of variation. In its simplest form, ANOVA provides a statistical test of whether or not the means of several groups are equal, and therefore generalizes the *t*-test to more than two groups. ANOVAs are useful for comparing (testing) three or more means (groups or variables) for statistical significance. It is conceptually similar to multiple two-sample t-tests, but is more conservative (results in less type I error) and is therefore suited to a wide range of practical problems. The analysis of variance test is the initial step in factors that affect a given data set. Once the analysis of variance test is finished, the analyst performs additional testing on the methodical factors that measurably contribute to the data set's inconsistency. The analyst utilizes the analysis of the variance test results in an f-test to generate additional data that aligns with the proposed regression models. The test allows comparison of more than two groups at the same time to determine whether a relationship exists between them. The test analyzes multiple groups to determine the types between and within samples.

How to Use

The type of ANOVA run depends on a number of factors. It is applied when data needs to be experimental. Analysis of variance is employed if there is no access to statistical software resulting in computing ANOVA by hand. It is simple to use and best suited for small samples. With many experimental designs, the sample sizes have to be the same for the various factor level combinations. Analysis of variances is helpful for testing three or more variables. It is similar to multiple two-sample t-tests. However, it results in fewer errors and is appropriate for a range of issues. ANOVA

groups difference by comparing the means of each group and includes spreading out the variance into diverse sources. It is employed with subjects, test groups, between groups and within groups.

Types

There are two types of analysis of variance: one-way (or unidirectional) and two-way. A one-way ANOVA evaluates the impact of a sole factor on a sole response variable. It determines whether all the samples are the same.

Two-way ANOVA allows a company to compare worker productivity based on two independent variables. It is utilized to observe the interaction between the two factors. It tests the effect of two factors at the same time.

History

The t- and z-tests developed in the 20th century were used until 1918 when Ronald Fisher created the analysis of variance. ANOVA is also called the Fisher analysis of variance, and it is the extension of the t- and the z-tests. The term became well-known in 1925, after appearing in Fisher's book, "Statistical Methods for Research Workers." It was employed in experimental psychology and later expanded to subjects that are more complex.

The formula for F used in ANOVA is $F = \frac{\text{between group variance estimate (MSB)}}{\text{group variance estimate (MSW)}}$, where $F = \text{MSB}/\text{MSW}$. Every variance estimate has two parts, the sum of squares and the rim (SSB and SSW) and degrees of freedom (Df).

The ANOVA trial of the speculation depends on a correlation of two independent gauges of the populace variance. This strategy is exceptionally valuable in uncovering critical data especially in concluding exploratory results and in deciding the impact of a few components on other handling parameters.

4.12.8 Multiple Regression Analysis

Multiple Regression is a statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables when the focus is on the relationship between a dependent variable and one or more independent variables (or 'predictors') (Parahoo, 2014). More specifically, regression analysis helps one understand how the typical value of the dependent variable (or 'criterion variable') changes when any one of the independent variables is varied, while the other independent variables are held fixed. Multi co-linearity test through VIF should be done. Multiple regression is an extension of simple linear regression. It is used when we

want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable (or sometimes, the outcome, target or criterion variable). The variables we are using to predict the value of the dependent variable are called the independent variables (or sometimes, the predictor, explanatory or regressor variables). Multiple regressions also allow you to determine the overall fit (variance explained) of the model and the relative contribution of each of the predictors to the total variance explained. For example, you might want to know how much of the variation in exam performance can be explained by revision time, test anxiety, lecture attendance and gender "as a whole", but also the "relative contribution" of each independent variable in explaining the variance.

4.12.9 Logistic regression analysis

Logistic regression is an augmentation of linear regression used to anticipate dichotomous ward variable. It is connected when the connection between ward variable and independent factors (s) is nonlinear. Linearity is thought to be in logit. Strategic relapse foresees probability (Josephat, 2012). With a specific end goal to have expectation display like that of straight relapse there is a need for controlling the logistic regression model which is regularly called logit, also known as common logarithm of an odds ratio (Josephat, 2012).

Logistic regression is the appropriate regression analysis to conduct when the dependent variable is dichotomous (binary). Like all regression analyses, the logistic regression is a predictive analysis. Logistic regression is used to describe data and to explain the relationship between one dependent binary variable and one or more nominal, ordinal, interval or ratio-level independent variables. Logistic regression is a powerful tool, especially in epidemiologic studies, allowing multiple explanatory variables being analyzed simultaneously, meanwhile reducing the effect of confounding factors. However, researchers must pay attention to the model building, avoiding just feeding software with raw data and going forward to results. Some difficult decisions on the model building will depend entirely on the expertise of researcher on the field.

Sometimes logistic regressions are difficult to interpret; the Intellect's Statistics tool easily allows you to conduct the analysis, and then in plain English interprets the output.

To understand the effect of implementation of TQM in a different independent work environment, employee benefit, logistic regression has been chosen as Implementation is a categorical variable.

4.13 Qualitative Data Analysis

Qualitative data does not just number things, but rather is a method for recording individuals' states of mind, emotions, and practices in more prominent profundity. Inside subjective request, it is essential to distinguish the interpretative system utilized by the scientist to direct the review and break down the information, as basic methods of insight and suppositions can unequivocally or certainly impact decisions concerning the understanding of information. Qualitative Data analysis consists of:

- Examining,
- Categorizing,
- Tabulating,
- Recombining, the evidence obtained from the research.

All this is concerned with the organization and the interpretation of information (other than numerical information, which is generally the preserve of quantitative research) in order to discover any important underlying patterns and trends. Qualitative data analysis is the method in which we move from the raw data that have been collected as part of the research study and use it to provide explanations, understanding, and interpretation of the phenomena, people, and situations which we are studying. The aim of analyzing qualitative data is to examine the meaningful and symbolic content of that which is found within. What we are aiming for is to try to identify and understand such concepts, situations, and ideas as:

- A person's interpretation of the world/situation in which they find themselves at any given moment.
- How they come to have that point of view of their situation or environment in which they find themselves.
- How they relate to others within their world.
- How they cope with their world.
- Their own view of their history and the history of others who share their own experiences and situations.
- How they identify and see themselves and others who share their own experiences and situations.

It is important that before you decide upon your method of data analysis, you become very familiar and confident in your chosen field.

4.13.1 Thematic analysis

Qualitative approaches are amazingly different, complex and nuanced and topical examination ought to be viewed as a foundational technology for subjective investigation. Information gathered from center gatherings can be examined by collecting information together to shape subjects and ideas that catch the way of the point. Thematic analysis is one of the most common forms of analysis in qualitative research. It emphasizes pinpointing, examining, and recording patterns (or "themes") within data. Themes are patterns across data sets that are important to the description of a phenomenon and are associated with a specific research question. The themes become the categories for analysis. Thematic analysis is performed through the process of coding in six phases to create established, meaningful patterns. These phases are familiarization with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report. In this, the genuine expressions of members are displayed to bolster and give a rich portrayal of the thematic analysis (Polit & Beck, 2014). The thematic analysis includes the coding of subjective information to deliver topics. A subject is a "design found in the data that at any rate depicts and sorts out the conceivable perceptions and at the greatest translate parts of the wonder. Thematic analysis permits the analyst to distinguish designs, and from those examples create subjects or typologies to portray them. For understanding the trend and importance of TQM mainly EFQM in the context of UAE, thematic analysis has been chosen. Thematic analysis is used in qualitative research and focuses on examining themes within data. This method emphasizes organization and rich description of the dataset. The thematic analysis goes beyond simply counting phrases or words in a text and moves on to identify implicit and explicit ideas within the data. Coding is the primary process for developing themes within the raw data by recognizing important moments in the data and encoding it prior to interpretation. The interpretation of these codes can include comparing theme frequencies, identifying theme co-occurrence, and graphically displaying relationships between different themes. Most researchers consider thematic analysis to be a very useful method in capturing the intricacies of meaning within a data set. There is a wide range as to what a "data set" entails. Texts can range from a single-word response to an open-ended question or as complex as a body of thousands of pages. As a consequence, data analysis strategies will likely vary according to size. Most qualitative researchers analyze transcribed in-depth interviews that can

be 2-hours in length, resulting in nearly 40 pages of transcribed data per respondent. Also, it should be taken into consideration that complexity in a study can vary according to different data types.

The thematic analysis takes the concept of supporting assertions with data from grounded theory. This work is designed to construct theories that are grounded in the data themselves. This is reflective in the thematic analysis because the process consists of reading transcripts, identifying possible themes, comparing and contrasting themes, and building theoretical models.

Thematic analysis is also related to phenomenology in that it focuses on the human experience subjectively. This approach emphasizes the participants' perceptions, feelings, and experiences as the paramount object of study. Rooted in humanistic psychology, phenomenology notes giving voice to the "other" as a key component in qualitative research in general. This allows the respondents to discuss the topic in their own words, free of constraints from fixed-response questions found in quantitative studies.

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Chapter 5: Empirical Approach

The research analysis completed here is the basis of direct observations or answers collected from the questionnaires distributed among the managers and authorities of a various organization in Abu Dhabi to understand the opportunities as well as risks of implementing EFQM in the organizations. The questionnaire followed both Likert scale and multiple-choice options.

Following is the analysis was done after the responses were collected from the questionnaire distributed.

5.1 Analysis of the descriptive statistics.

5.1.1 Analysis of the descriptive statistics of the age group in the sample taken for the research problem in determining the impact of applying EFQM in the companies of Abu Dhabi.

From the Descriptive Statistics and the Frequency Analysis, it has been found that the majority of the respondent participated in the survey fall into the age group of 26 to 40 years, according to the responses given in the survey. With the cumulative percentage of 70 as found in the frequency table that has been developed by using the SPSS tool. 62% of the total number of respondents participated in the survey are under the age group of 26 to 40 years old. There are four different groups of age in the survey, and they are 15 years to 25 years, 26 years to 40 years, 41 years to 55 years and above 56 years. The highest number of participants in this regard was found out to be less than 26 to 40 years old; the second majority of the participants were for the age groups 41 to 55 years old with the cumulative frequency of 92. 22% of the total number of respondents is under the specified age group of 41 to 55 years old. Whereas the lowest number of respondents were found to be from the age group of 15 to 25 years old and above 56 years with the same percentage of 8% in the frequency table. The descriptive statistics along with the individual frequencies, cumulative frequencies and valid percentages of the age group of the corresponding respondents which is given in the Appendix - 7 of the Appendix.

The table depicts that the workforce working in different industries of Abu Dhabi is relatively younger but not too younger which might reflect the moderate experience of work in the respective industries. The age group and the experience of work and their relationship will further be analyzed by conducting the correlation between them using the SPSS tool and will be discussed further in the following sections. Then accordingly the total variance explained, the reliability test, the factor analysis, and the ANOVA Analysis will also be discussed in this connection in the further details.

5.1.2 Analysis of the descriptive statistics of the gender of the sample considered for the research problem in determining the impact of applying the EFQM for the development of human capital the industries in Abu Dhabi Government.

From the descriptive statistics and the frequency analysis to the gender group in determining the impact of applying EFQM in the human capital management and the institutional performance of Abu Dhabi Government, it has been found that the majority of the respondents are males with the cumulative frequency of 76. Whereas the cumulative frequency that has been found out for the female's respondents is 24% of the total number of respondents are females, and 76% of the total number of respondents is found out for the male respondents. The table shows the Descriptive Statistics along with the individual frequencies, in this case for respective gender, the cumulative frequency and the valid percentages for gender which is given in the Appendix – 8 of the Appendix Section. The result here might imply the thing that the workforce in Abu Dhabi Government mostly consists of male workers or it may be the case that female worker did not participate in the survey which was conducted through the use of questionnaire whereas the male respondents participated eagerly in the survey. The correlation between gender and the respective work experience in this regard has been analyzed with the correlation analysis with the use of SPSS tool, which has been discussed in the further section.

5.1.3 Analysis from the Descriptive Statistics of the educational qualification of the respondents in the determination of the impact of EFQM for the development of the human capital and the institutional performance of Abu Dhabi government.

From the descriptive statistics and the frequency analysis which have been conducted by using the SPSS tool, the majority of the participants were found out to be postgraduates. There are four segments of the respondents in the questionnaire. On the basis of which the responses had been collected. The post graduate's respondents are found out to be the majority of the respondents who are the workforce in Abu Dhabi government with the cumulative frequency of 100. Out of the total number of respondents, the postgraduate respondents had been figured out to be 48% and hence constituted the majority of the respondents among all. The total number of respondents had been categorized in terms of their educational qualification, namely high school Level, HSc Level, Undergraduate Level and Post Graduate Level. The postgraduate respondents being the majority of the respondents were followed by the undergraduate level respondents with the cumulative frequency of 52%. Among all the other respondents, the undergraduate respondents were of 28%. This might imply that the workforce that is employed in Abu Dhabi Government is holding higher degrees namely post graduates according to the table which shows the individual frequencies along

with the cumulative frequencies and the valid percentages for educational qualification of the respondents. The thing that if there is any correlation between the level of education and the years of experience will be further analyzed by the bi-variate correlation analysis with the use of SPSS.
Appendix – 9

5.1.4 Analysis of the relationship between age and work experience of the respondents in determining the impact of applying EFQM in developing human capital management and institutional performance in Abu Dhabi Government.

The Pearson correlation value in the table developed using the SPSS tool, has been found out to be the value between the age group of the respondents participated in the survey concerning the years of experience is found out to be -0.107 . (Appendix - 10) This proves that there is a negative relationship between these two variables, namely age of the respondents and the years of experience in this regard, in determining the impact of applying EFQM for the development of human capital and institutional performance in Abu Dhabi Government. This indicates that the increase of ages of the workforce the workplace of Abu Dhabi Government does not require more years of experience. The table represents in the Appendix (mention the letter of the appendix) of the paper. This also means that the respondents of lower age group may possess more years of experience. As there is a majority of the respondents as this has been found out from the frequency distribution of the descriptive statistics. The age group of 26 years to 40 years and from this correlation analysis, it might also be the case that the employees of comparatively lower age among the respondents participated in the survey have more years of experience in this case.

5.1.5 Analysis the relationship between the level of education of respondents and years of experience of respondents working in Abu Dhabi Government Sector to determine the impact of applying EFQM for the development of the human capital and the institutional performance in Abu Dhabi Government Sector

The Pearson Correlation value in the table developed by using SPSS tool, represents the correlation value between the two variables, namely, the level of education and the years of experience have found out to be negative, -0.173 . This depicts that there is a negative relationship between the variables named level of education of the respondents and the years of experience of the respective respondents in this regard. Therefore, it might be the case that the higher level of education of the respondents did not always imply that they would also have more years of experience compared to others; on the other hand, the lower level of education of the respondents did not always imply that

they would have comparatively few years of experience. The table with the Pearson correlation value is given in Appendix 11 of the Appendix section of the paper.

5.1.6 Analysis of the perception of the respondents in the context of different factors associated with the determination of the impact of EFQM for the development of human capital and institutional performance in the Government Sector of Abu Dhabi

The Reliability Test

Through the extensive literature review and the survey conducted for the research problem, it has been found that there are several factors for determining the impact of EFQM on the development of human capital and institutional performance of the government sector of Abu Dhabi. The factors are classified into several types, as mentioned below:

- The implementation of EFQM in the organization of the respondents participated in the survey of the project.
- Age of the respondents.
- Departments of working of the respondents.
- Years of experience of the respondents.
- Gender of the respondents.
- The size of the organization where the respondents were working.
- Awareness of Total Quality Management by the respondents.
- The application of the Total Quality Management in the organization they were working.
- The improvement of efficiency of the organization where the respondents were working on implementing the Total Quality Management.
- The usefulness of strategic human capital in implementing the total quality management.
- The sustainability factor regarding the implementation of Total Quality Management.
- Achievement of the target of the organization in which the respondent is working with the implementation of Total Quality Management Framework in the respective organization.
- The selection of a model of total quality management whether it is EFQM or others.
- The quality consciousness of the organization.
- The RADAR framework.
- The proper framework provided by the organization where the respondents were working.
- The award provided by the organization for the advancement of the performance of the employees and some others as well.

The importance of these factors was measured individually through the questions asked through the questionnaire to the respondents in Likert scale in order to recognize the perception of the respondents regarding the implication of EFQM for the development of human capital management and the institutional performance in the government sector of Abu Dhabi. And also to re-categorize the factors in accordance with the degree of significance in determining the impact of applying EFQM in the government sector of Abu Dhabi for the development of human capital and institutional performance. In order to conduct this, the thing that is important is the factor analysis (Akaike, 1987). Before the factor analysis is done to re-categorize the associated factor, the idea that is important to be conducted is the Reliability Test. The significance of the reliability test is lying in the fact that it is in order to check the reliability of the responses provided by the respondents participated in the survey. In this case, the reliability test has also been done before the factor analysis, the table of the reliability test is provided in Appendix 1 of the Appendix section of this paper. The Cronbach's Alpha value has been found out to be 0.609 which is more than 0.5. The reliability test and the Cronbach's Alpha value to be more than 0.5 then the responses are considered to be accepted. This is the case in this problem also. As the value is found out to be more than 0,5 the responses are reliable and accepted and are taken for the further data reduction and factor analysis in this regard.

Total Variance Explained in the Reduced Data

By following the reduction of the data, the various factors associated with the impact of (European Foundation for Quality Management) or EFQM application in the development of human capital and institutional performance of the government sector of Abu Dhabi. The factors that have been found out to be very likely to determine the impact of the application of European Foundation Quality Management or EFQM to make the development of the human capital and the institutional performance of Abu Dhabi. In the data reduction, they are found out to be reduced and re-categorize into seven factors further. The total variance explained for the significance of the factors associated in determining the impact of EFQM on the Government sector of Abu Dhabi as provided and perceived by the respondents is presented in Appendix 3 of the Appendix section of the paper.

Upon conducting the data reduction, it had been found that the factor loadings for the first factor and the second factor were the maximum among all and thereby making a sign of the factors under these two factors to be the most important regarding this. The individual significance of the factors had been discussed in the further section derived from the factor analysis of this paper. From the Eigen Values of the various factors extracted through the data reduction by using the SPSS tool, the total

variance of all the factors had been explained, and the table of total variance explained has been represented in Appendix 3 of the attached appendix section of the paper. From the table of total variance explained the percentage of variance of the first factor is found out to be 13.711 with the percentage cumulative frequency of 13.711 as this is the first factor, and at the same time the percentage of variance of the 2nd factor had been found out to be 12.496 with the cumulative frequency of 29.206. Hence from this, it can be figured out that the variance in perception of the respondents as the responses provided by them regarding the significance of associated factors in the first one is more than that of factor 2.

Next considering the third factor, the percentage of variance of the 3rd factor has been found out to be 11.178 with the cumulative percentage of 37.384. From this which is obtained from the table of total variance explained that the importance of 2nd factor is more than the importance of 3rd factor in determining the impact of applying EFQM in Abu Dhabi Government Sector for the development of human capital and the institutional performance. Further, considering the 4th factor in this regard, for which the percentage of the variance has been found out to be 10.669 with the cumulative percentage of 48.052. The case is again the same with the previous one that the factor preceding the fourth factor in this case that is the 3rd factor had found out to be the more important factor in this regard compared to the 4th one though it possessed less cumulative percentage than the fourth one.

Considering that the 5th factor in the regard of determining the impact of applying EFQM for the development of human capital and the institutional performance in the government sector of Abu Dhabi. The percentage variance has been found out to be 9.894 with the cumulative percentage of 57.946, again the case is like the previous cases, that is, and the 4th factor is found out to be more significant than the fifth factor. Moving to the 6th factor, the table of total variance explained is showing that the associated percentage of variance as 9.437 with the cumulative frequency of 67.383, again the 5th factor is considered to be more important than the 6th one as the percentage of variance is higher for the 5th factor compared to the following factor, though the cumulative percentage of the 6th factor is higher than the preceding one. The last factor of the table of total variance explained the research problem in determining the impact of applying EFQM in the government sector of Abu Dhabi for making the development of human capital and institutional performance. The percentage of variance is shown as 8.127 with the highest cumulative frequency of 75.411, which is turned out to be the least significant factor among all the seven considered as this factor is possessing the least percentage of variance.

5.2 Factor Analysis

After the completion of the data reduction and the factor analysis process by using the SPSS tool, the component matrix was further generated with the use of SPSS tool again. The component matrix represents the factor loadings of the individual factor which are considered to have an impact in determining the expected impact by applying EFQM in Abu Dhabi Government Sector for the sake of development of the human capital and the institutional performance. The factor loadings have been observed for all the associated factors through the component matrix generated in order to assess the impact of EFQM in the respective sector. With the assessment of the factor loading depicted by the component matrix, the factors were re-classified, and in the research problem, it had also been figured out that which among all the reclassified factors, has the highest factor loading. The factors in this regard were evaluated to understand and recognize which one is the essential factor is considered in this regard to assessing the problem of the paper. The factors and their associated importance in accordance with the factor loading have been discussed in the following section individually. The component matrix is represented in the Appendix section of the paper as Appendix 2.

To understand the impact of adopting the EFQM framework on the improvement of Human capital and the overall performance in Abu Dhabi government sector several factors were taken into consideration. These factors ranged from the awareness of total quality management and about its significance to the workforce's knowledge about the initiative taken by their organization to improve quality; to the motivation behind the implementation of total quality management.

Factor 1

As per the rotated component matrix, it can be concluded that the factor loading of whether the organization permits incentives or rewards to enhance the performance of the employees is highest when tried to relate to the impact of EFQM implementation which accounted to 0.818. This signified that the organization authorities know the value of motivating the employees to result from the maximum impact on their best performance. If an employee is rewarded for his good performance, he would obviously show the tendency to give his best. Keeping on motivating in this manner would definitely encourage the employees to adopt EFQM which would direct them more towards the maximum performance. There is just .001 difference between the highest and the second highest factor which being the awareness whether the organization applies total quality management at all or not. The resultant factor loading being 0.817, it signifies that having the knowledge of overall quality

management and whether it is practiced within the organization helps to comprehend the impact of EFQM in Abu Dhabi government sectors.

Factor 2

The highest factor loading on the factor that strategic human capital guidance for quality implementation in the organization counts to 0.835. This signifies that tactical handling of the human capital does help the organization from implementing total quality management which can lead the way for the impacts of EFQM on the sector. But as the factor of sustainability being the reason for total quality management implementation shows factor loading of 0.809, it becomes less important that the strategic management of human capital. This signifies that the question of sustainability of the organization does not impact that much on implementation or adoption of total quality management in the organization as human capital handling can impose the effect on. Similarly, it can be said with the factor loading 0.429 that accepting the safety measures provided by the firm or being happy with it does not affect the adaption of EFQM in the organization.

Factor 3

The highest factor loading in Factor 3 is 0.854 which signify that just the awareness of total quality management can lead the significance of understanding the impact of EFQM. It reflects that when the workforce or the organizational authorities are aware of the word total quality management they would also be able to understand the significance of it and would work or plan for attaining it or implementing within the organization which would pave the way for implementation of the EFQM model. This would eventually enhance the human capital and the organizational performance. 0.703 being the second highest factor loading signify that the factor of importance of EFQM is more than excellence in the organization. This factor reflects that implementing EFQM is much more preferred than merely working for excellence. Attaining excellence in just a single step for being successful is doubtful, whereas EFQM covers all aspects, including excellence, to guide through the process of reaching success.

Factor 4

The factor of quality awards affecting total quality management scored the highest factor loading of 0.839 which imply that this factor imposes the highest influence on the understanding of the impact of EFQM on human capital and the overall development of Abu Dhabi government sectors. This signifies that the employees of Abu Dhabi government sectors as well as the organizations are

motivated and encouraged by the fact of Quality Awards which are given by the governments or renowned organizations in recognition of implementation of maximum total quality management. The prestige and recognition that an organization receives in the national or the global platform could encourage and boosts the confidence of the workforce of all organizations and brings the best out of them. The 2nd highest factor loading of 0.832 signifies that after the motivation of winning Quality Awards, the health measures responsibility taken by the organization affects the impact of EFQM in Abu Dhabi government sectors.

When the workforces are aware and are ensured that the organization efficiently and responsibly handles all the health measures of its people, then the workforce becomes more eager to show their capability to the organization by giving their best performance, and this helps in the impact of EFQM. Similarly, the factor of welfare management in the organization scored factor loading of 0.217 to portray its significance that not only the health measures, if the employees are well aware of the welfare management of the organization they would adapt to EFQM much more efficiently. As this knowledge of organizational management of welfare would push them to work for best performance, the employees would be able to understand the impact of EFQM in the human capital and overall enhancement of the organization along with its people.

Factor 5

Accounting the highest factor loading being 0.667, it signifies that the welfare management of the organization imposes the maximum effect on the impact of EFQM in the human capital and the overall improvement of Abu Dhabi government sectors. This reflects that the measures or initiatives taken up by the organization and the agreeableness towards them from the employee perception impose an effect on the impact of the implementation of EFQM in the organization. If the employees are satisfied with the welfare initiatives taken up the organizational authorities, they would be encouraged and more concentrative towards putting up their best performance which would lead to the influence that EFQM has in an organization. This would eventually help in the development of the human capital and the comprehensive institutional performance of the organization. After being agreeable towards the organizational measures for welfare, the factor of the employees agreeing with the safety initiatives in the organization concludes the second highest factor loading of 0.410. This reflects that if the employees are contented and agreeing to the activities by the organizational authorities, to ensure safety of the employees, then the employees would be satisfied as well as subsequently be motivated to give their best towards the organizational excellence, which would be

understandable for the impact of EFQM with particular focus on the organizational performance areas and the human capital improvement.

Factor 6

Carrying the highest factor loading of 0.821, the factor of the rules and regulations of the organization being employee friendly had the most impact on the influence of EFQM in organizational performance and human capital in the government sectors of Abu Dhabi government. Only if the employees can easily adopt the policies or rules and regulations operational in the organizations then in that organization EFQM would have the most impact on the human capital and the overall institutional performance. The second highest factor loading being 0.669 signify that the factor of company's following of all fundamental concepts totals quality management. This reflects the that if the company trails all the core elements of total quality management, then EFQM can result in an effective outcome in improving the human capital and the comprehensive organizational performance.

Factor 7

The factor of being in a mutually benefitted situation of both the organizational aims and individual goals scores the highest factor loading of 0.826 signifying the reason behind affecting the most influence of EFQM in Abu Dhabi governmental sectors. This implies that if implementing total quality management in the organization can result in an association between the individual aims and organizational goals and lead to a mutual benefit situation, adapting the EFQM model in the organization would affect the human capital department in an influential way and the overall institutional performance would be improved. The factor of total quality management's effect on the employee's work efficiency scored the second highest factor loading of 0.508. This signifies that if the employees think or consider there is an impact of total quality management on their performance capability or competency, then there are higher chances of developing the human capital and improve the institutional performance with the implementation of EFQM in the organization.

5.3 Anova Analysis

5.3.1 Analysis of the variance in the perception of the individual factors associated with the determination of the impact of applying EFQM in the development of human capital and the institutional Performance in Abu Dhabi Govt. The sector with respect to age through one way ANOVA test.

ANOVA test is performed to realize the impact of the responses provided by the respondents through the use of the questionnaire by the factors considered in this regard. In one way ANOVA, taking into consideration the null hypothesis is important. For conducting ANOVA Analysis, the null hypothesis is that there is no statistically significant difference between the selections of the associated factors and on the other hand the alternative hypothesis is that there is a statistically significant difference between choosing the associated factors. With the use of SPSS, the p-value has been found out. The p-value is the considerable value that means it is the representative of the level of significance at 95 percent and hence the p-value is considered to be a significant value. The considerable value had the predetermined value of 0.05.

The table of ANOVA represents the p-value or the significant value in this research problem associated with the determination of the impact of applying EFQM for the development of human capital and institutional performance in the government sector of Abu Dhabi. All the values when the analysis is conducted concerning the age of the respondents are found out to be 0.05. All the significant value or p-values are implying that the null hypothesis is accepted, that is there is no statistically significant difference in the selection of factors with respect to the age of respondents in the research problem. Consequently, the alternative hypothesis that is there is a statistically significant difference in the selection of factors to the age of the respondents rejected in this case as the significant value is found out to be more than 0.05. The ANOVA table represents in Appendix 4.

5.3.2 Analysis of the Variance in the perception of the individual factors to the gender of the respondents in connection with the determination of the impact of applying EFQM in the development of human capital and institutional performance in Abu Dhabi Government Sector.

The ANOVA Analysis is performed with the view to understand the impact of responses provided by the respondents through the use of the questionnaire on the basis of the factors considered in the research problem of determining the effect of applying EFQM in the government sector of Abu Dhabi for the development of human capital and institutional performance. In one way ANOVA, the consideration of null hypothesis is necessary. In this case, the null hypothesis is depicted as there is no statistically significant difference in the selection of factors and on the other hand, the alternative hypothesis is depicted as there is a statistically significant difference in the selection of the factors. The selection of the null hypothesis or the alternative hypothesis is based on the significant value or the p-value. The p-value or the significant value is predetermined at the level of 95 percent significance and the value is predetermined at 0.05.

In the ANOVA table, the significant value is found out to be more than 0.05 for all the factors, except the 4th factor, the 5th factor, and the 6th factor. Hence the null hypothesis that there is no statistically significant difference in the selection of factors to the gender of the respondents is accepted and consequently the alternative hypothesis that there is a statistically significant difference in choosing the factors to the gender of the respondents. The alternative hypothesis is only accepted for the 4th, 5th and the 6th factors as the significant value or the p-value have been found out for them as less than the predetermined value of 0.05 at the level of significance of 95 percent. The table is presented in Appendix 5 of the Appendix section of the paper.

5.3.3 Analysis of the variance in the perception of individual factors with respect to the level of education of the respondents in connection with the determination of the impact of applying EFQM in the government sector of Abu Dhabi for the development of Human Capital and Institutional Performance.

ANOVA Analysis is important to realize the impact of responses that are provided by the respondents in the pilot survey. Through the use of the questionnaire and on the basis of the factors considered in the research problem of understanding the impact of applying the EFQM in the government sector of Abu Dhabi for the development of human capital and the institutional performance. In the ANOVA Analysis, the consideration of null hypothesis is significant. The null hypothesis in this regard is depicted as there is no statistically significant analysis in the selection of the factors; on the other hand, the alternative hypothesis is that there is a statistically significant difference in choosing the factors.

In the table of ANOVA which is analyzed to recognize the impact of the factors considering the level of education of the respondents represents the p-values or the significant value to be more than 0.05 for most of the factors except factor 2, factor 4 and factor 5. Hence the alternative hypothesis is rejected in this case, and the corresponding null hypothesis is accepted that there is no statistically significant difference in choosing the factors with respect to the level of education of the respondents. The alternative hypothesis, in this case, is that there is the statistically significant difference in choosing the factors with respect to the level of education. The table presents in the Appendix section in Appendix 6.

5.4 Findings

The findings on the questions set up that are discussed in Chapter 7 and the questions are attached as Appendices 12 to 20.

From the above research methodology, which has been conducted using the quantitative approach implies that the implementation of the EFQM in the government sector of Abu Dhabi will be beneficial in terms of the development of the human capital and the institutional performance. As the data collected by the responses provided by the respondents through the pilot survey by using questionnaire, hence research analysis result has been obtained. The descriptive statistical analysis and the associated frequency analysis has been depicted that there is no relation between the age of the respondents and the years of experience; the organizations do not require that the increase in the age will not necessarily imply that the years of experience will increase. Similarly, correlation analysis has established the negative relationship between the age of the respondents and the years of experience, the gender and the years of experience as well. The gender has no impact on the years of experience of the workplace in Abu Dhabi Government sector. That means there are no gender biases in Abu Dhabi Government Sector. The concern is only about the improvement of the human capital and the institutional performance improvement.

The reliability test was further conducted in order to make the judgment of the data or the responses collected from the respondents. In the reliability Test, the Cronbach's Alpha value has been found out as more than 0.5 that implies that the responses are acceptable and considered for the further data reduction and factor analysis. The responses of the employees who had participated in the survey responded in terms of the enhancement of the human capital and the improvement of the institutional performance. The ANOVA analysis has been conducted further which represented that the null hypothesis that the statistically significant difference in the selection of the factor concerning the age, gender and the level of education of the respondents were turned out to be rejected as the significant value or the p-value resulted to be more than 0.05.

Chapter 6: Case Studies of EFQM Adoption in the UAE

6.1 Empirical POA: The Case Studies

6.1.1 Case Study -1

EFQM Case study

Abu Dhabi City Municipality

Abu Dhabi City Municipality had its inception in the year 1962 named as Department of Abu Dhabi Municipality and Town Planning. The royal decree upon the Municipality and Town Planning emphasized on providing services to the public, ensuring right planning for the development of the city including proper roads, sewerage, lighting and maintenance services. With effective and visionary leadership, the United Arab Emirates have developed and prospered and reflected overall growth across all the sectors. It was decided by the leaders to drive the developments of the future by emphasizing on the quality of the infrastructure, through which, they visualized that the United Arab Emirates would attain sustainability. In the year of 2007, the authorities of UAE propounded the law which stated that the three separate municipalities, namely, the Abu Dhabi City Municipality, Al Ain Municipality and Western Region Municipality would be under the Department of Municipal Affairs.

Since its inception, Abu Dhabi City Municipality had the key objectives of implementing developed projects to establish advanced infrastructure in the city which included the construction of developed drainage systems, roads, bridges, and proper means of commute. The Municipality had been also taking into consideration the objectives propounded by the development plans and thus, now, the Abu Dhabi City Municipality is a member of the Organization of Islamic Cities and also of the Arab Towns Organization, along with being the founding member of the General Secretariat of UAE Municipalities. Furthermore, to the policies propounded by the government that emphasizes on developing Abu Dhabi to the level of a modern capital city, Abu Dhabi City Municipality has the major preference to establish or develop the environment. This would be just ideal for the residents to live, ensuring art of class amenities (Department of Municipal Affairs and Transport, 2017).

EFQM in Abu Dhabi Municipality

The reasons or motivational factors that led Abu Dhabi Municipality to incorporate EFQM model in their system were the necessity to focus on improvement and to emphasize on the customer needs. The authorities recognized the significance of EFQM in assisting in the enhancement of human

capabilities. Also, EFQM has implemented because of the governmental regulation along with the requirement of achievement within the organization. In order to change the lead and win the award, Abu Dhabi Municipality incorporated has used EFQM excellence model.

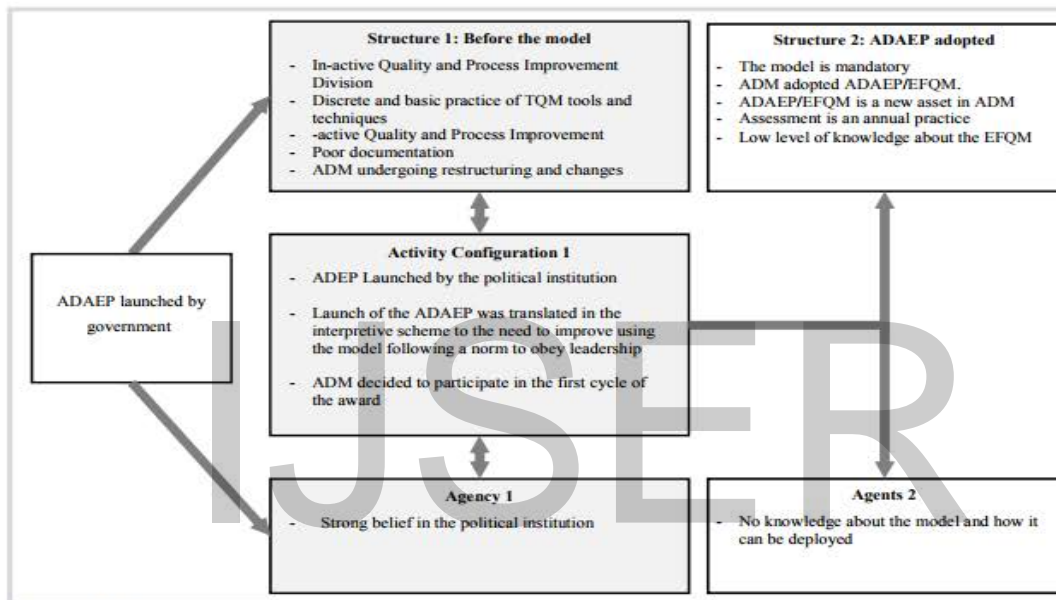
Initially, Abu Dhabi government agreed to incorporate EFQM only as per government guidelines with the only aim to win the ADAEP award. During that phase, ADM was facing several challenges such as the Works Department and Agriculture and Animal Production Department was merged in 2005 with the Municipality to establish a new complete department called as the name Department of Municipalities and Agriculture. Again, in 2007 the Municipality was divided into three separate municipalities which were taken under the Department of Municipal Affairs. Due to these different changes, instability was formed in the culture of the public body. The workforce belonged from various sectors, as a result of which, the environment was unable to create unified culture. There came a tendency to perform for individual self; only thinking of own benefits, and neglected others' work. Again, for the division of the municipality into three others, and outsourcing, several employees left to join some other sector, eventually, the organization had to let go several experienced and skilled employees.

As there were many challenges faced in the implementation of the excellence model during the phase when the municipality was going through many changes, the management of the organization was busy handling those changes and thus, emphasized on establishing a new structure for the organization. As a result of which, attention was not given to the organization of the model but only considered as a mandatory duty to compete in the award submission.

The quality management practiced in the organization at the time when EFQM was incorporated was fragmented and not up to the mark. Already burdened with so many changes within the organization and unaware of any experience with similar kind of excellence model, Abu Dhabi Municipality was not ready for any other change. That is when they sought help from a consulting agency, but after two months the result was not as expected.

After realizing the reasons behind no result in the first phase, ADM could comprehend the original nature of the excellence model that could result in improvements within the organization and not only effective in winning an award. That was when the authority started to emphasize on excellence, and this had led to the transfer of motivation for implementing the model from just a mere wish to win an award to desire as well as a necessity to improvement.

The committee of ADM has listed six criteria for better human resource management; leadership, partnerships and capital, customer feedback, processes, policy and strategy and society outcome. The employees of the public organizations have recognized several other features of the model such as the emphasis on the development of the leadership approach and importance given to the people. After collecting the results, a further action plan was done including the feedback report. After the training and awareness, the structure initiated the self-evaluation practice through accepting and cooperating in the process. This assessment helped in recognizing the actual areas where further improvement can be done.



The EFQM Excellence Model Adopted by Abu Dhabi Municipality

Improving the competencies of the people, business process, strategic planning was all the outcomes after Abu Dhabi Municipality finally adapted the EFQM Excellence Mode not just to win the competition but to recognize and accept the reasons actually for which the model was propounded. (Mohamed, Capabilities Development in the Public Sector: The Role of Excellence Model, 2013).

6.1.2 Case Study – 2

EFQM Social Media Practice in Vodokanal

About Vodokanal St Petersburg

The initiation of Vodokanal in St. Petersburg can be dated back to 1858, with the inception of centralized water supply in the city. In the initial decades, this centralized supply of water was

provided to the customers through primary mechanical treatment. Vodokanal of St. Petersburg in the 1990s developed a strategic planning. In the present day, the organization is responsible for providing drinking water in St. Petersburg to more than ten thousand organizations and 5 million residents (Vodokanal). The organization also had taken the initiative to gather and treat wastewater. The firm takes care of endangered species like pinnipeds, protect the environment of the Baltic Sea, and managing the use of natural capital are few of the activities that the firm earnestly follows (Vodokanal).

EFQM in Vodokanal St. Petersburg

The firm has the primary emphasis on transparency in sharing information and holding concern and accountability for the upcoming generations along with the mission of developing the culture of water consumption. This would finally expect the outcome of sustainability.

The organization uses Da Voda, an internet portal and social networking to create awareness creating activities. This use of social media, the organization had followed the EFQM model which ensured them of winning the EFQM social media practice competition. The primary objective of the organization is to gain the attention of the audience available on the internet, with particular emphasis on the youth gathering that is responsible to decide in the coming 5 to 10 years. It is the aim to make this youth aware of the water consumption and environment-related issues. Following the EFQM model, the organization took the approach that permitted communication on serious issues related to the attitude towards water and nature.

The internet portal, Da Voda can be described as an about natural capital and the attitude towards them, and this is conveyed by the Neva Crayfish. Concluding on the crayfish as the main character of the internet portal was also analyzed and decided on, accordingly by following the EFQM model. The public interest in the various operations of Vodokanal in different fields was observed and analyzed; inquiries were made by the mass media to grasp the outcomes of the internal social studies, and the reviews of the mass media publications were gathered and evaluated before selecting the Neva crayfish.

Following the EFQM Social Media Good Practice, Vodokanal is trying to implement the concepts of protecting and understanding the significance of the environment in making the people aware.

After following the EFQM model and incorporating the Neva crayfish, the positive outcome was evident in less than three years' time. The Da Voda portal, after operating for about three years, it

reflected a stable increase in the count of visitors landing on the page. When in 2010, the number of visitors was 150 per day, it increased to 270 by 2011; while again, in 2012 the count of visitors further increased to 390 visitors each day (EFQM, 2015).

In the contemporary era of the vast and continuous development in the technological and scientific fields, in every second there is either an innovation being reported or an advancement of technology noted. In this scenario, the growth in social media usage and activities on the social media platform is highly evident. To grow a business, it has become essential to be present and active in various social media options, be it exclusive website or portals, activities on Facebook or Twitter or other similar foundations and this leads the business to sustainability. Recognizing this, EFQM had initiated this Social Media Good Practice Competition which acts as an opportunity for organizations to evaluate their activities in social media and how much these activities are useful in attaining the pre-determined objectives and initiating growth.

The modern EFQM framework reflects that this platform is responsible for initiating numerous opportunities for organizations to communicate with stakeholders and sharing information with the customers which was only limited to a download of informational sheets in the past days. But identifying social media had enabled, with following the proper framework of EFQM, a proper and actual transfer of communication and exchange of concepts which eventually adds value in attaining excellence in the organization. The main aim of this Social Media Good Practice Competition performed by EFQM is to recognize the instances that could provide exemplary approaches which would further motivate and inspire other organizations.

Vodokanal St. Petersburg always had its focus on awareness-raising services about environmental issues, further to its main operations regarding providing the residents of St. Petersburg with affordable water. This Da-Voda internet portal of the organization was initiated in cooperation with 2PR, partner public relation agency, in 2010, with only tendency to engage the active internet users as the visitors landing that particular portal, and getting to know about the environmental issues and thus the water consumption culture is created. With the help of the main character Neva Crayfish, the website can explain the audience the necessity of saving water along with methods or techniques of how to protect the water without hampering every routine of life. It also makes the visitors aware as to what the outcome can be if such careless attitude towards the water continues.

At present, following the EFQM framework, the internet portal with its Neva Crayfish has resulted in increasing the count of visitors and followers; over seven thousand; and this also raised the necessity

for the internet portal in social networking sites of Facebook and Twitter, where the crayfish talks in both Russian and English. The Da – Voda portal does not only provide suggestions to visitors but also informs them about techniques to save money in the process. The internet portal provides advice about the technical equipment which can save the water, eventually not inflict any problem in the lifestyle. In general, the Da – Voda website along with its protagonist Neva Crayfish, following the framework of EFQM, provides assistance to the organization in continuing its mission of protecting water and promoting the necessity of the reduction in water consumption in the city. This approach is successful which can be easily concluded through the evidence that in 2010, where per day water consumption in St. Petersburg was 188 liters per head; it had reduced to 164 liters per person by the first quarter 2012.

6.1.3 Case Study - 3

Case Study Analysis on ADTA

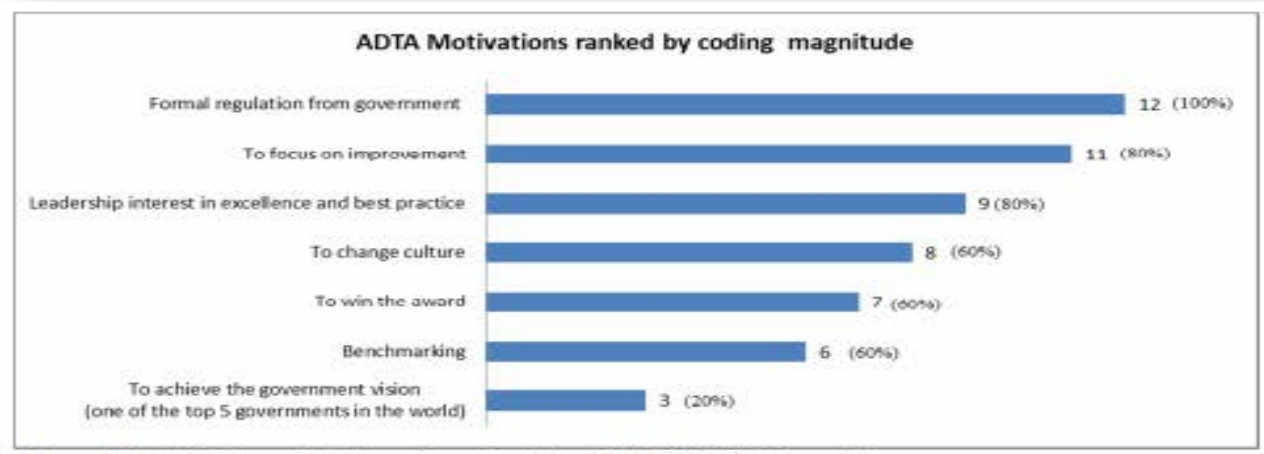
About the Company

ADTA or Abu Dhabi Tourism Authority was established in December 2004. The main directive of this organization is to develop the tourism industry in Abu Dhabi (reference). Usually, tourism is an excellent source of revenue for any country and leads to economic development. It was recognized by the Abu Dhabi Economic Vision that one of the major areas that ensures diversification and economic growth is tourism. The primary directives of the ADTA are to promote Abu Dhabi internationally as a tourist destination, build up the infrastructure to meet the needs and to manage the tourism sector. There are certain divisions that form a part of ADTA's organizational structure like Tourism Standards, Administration, Strategy and Policy, Promotion, Marketing, Finance and Product Development.

EFQM in ADTA

Through the implementation of solutions that are innovative, the hospitality and tourism industry competitiveness is supported by the EFQM Framework and it also encourages the leaders to put into practice the proven excellence models and frameworks (EFQM, 2017).

ADTA was motivated to adopt the EFQM model due to the following reasons:



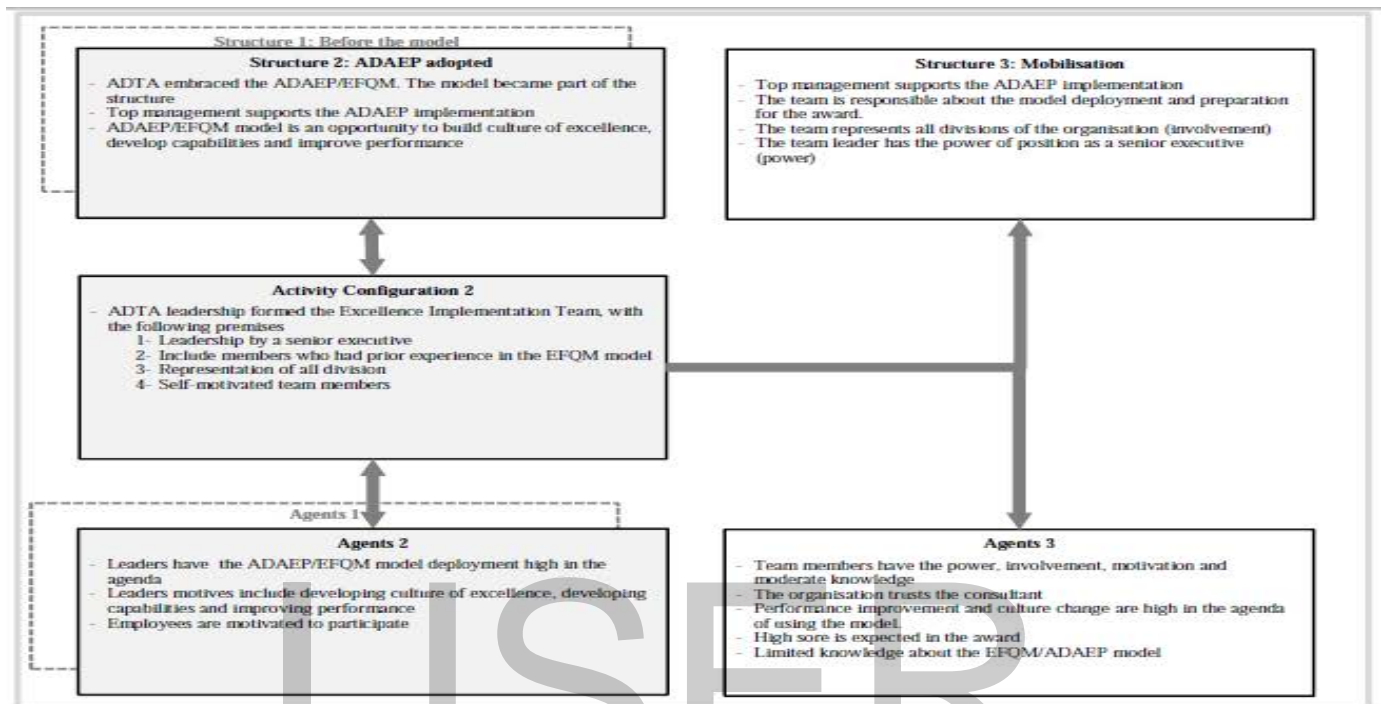
Source: (Mohamed, Capabilities Development in the Public Sector: The Role of Excellence Models, 2013).

In ADTA, the use of the ADAEP/EFQM (Abu Dhabi Award for Excellence in Government Performance / European Foundation for Quality Management) began in the year 2007 like in other government entities in Abu Dhabi as the government made it compulsory for all the government units to participate. The ADAEP is based on EFQM model. The objective of the organization was to focus on improvement and win the award. The ADAEP practices information sharing and helps in spreading the knowledge of successful practices of improvement (Shemali, 2009). The model provided with an opportunity to build an excellent culture, capability development and in improving performance (Mohamed, Capabilities Development in the Public Sector: The Role of Excellence Models, 2013).

ADTA inherited the tourism activities from several entities. To enlarge and develop the tourism industry in Abu Dhabi, the operational capabilities that required to be executed was needed to be built. So, it was believed that to guide the process of capability building, the suitable model was the ADAEP award model. The main motive for the use of the model was to improve the performance (Mohamed, Capabilities Development in the Public Sector: The Role of Excellence Models, 2013). It set its target on the achievement of the utmost customer satisfaction and raises the standard of the quality. The model was competent in developing operational capabilities for the execution of the strategy.

The implementation of the Excellence model was done in three cycles in ADTA. In the first cycle, cross-functional teams were formed to spread people's engagement. Leadership was done by the

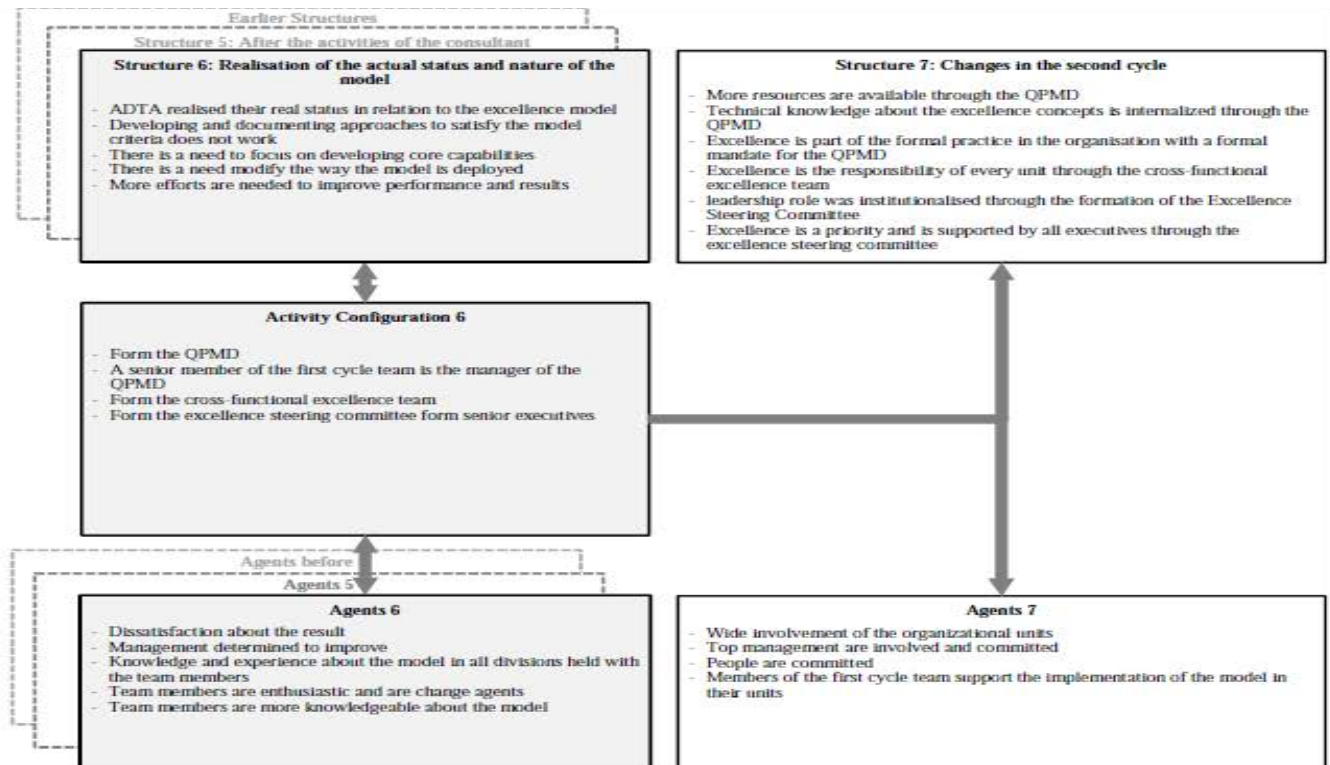
senior executives and members with prior experience in the EFQM model were included in the team. The very team comprising of knowledge, power, motivation, and involvement worked to spread awareness or for the development of approaches to the satisfaction of the model criteria. Through the engagement of leadership, a strong emphasis was laid on the assurance of the engagement vertically.



First Cycle Excellence Deployment Structure

Source: (Mohamed, Capabilities Development in the Public Sector: The Role of Excellence Models, 2013).

The results of the first cycle aroused a sense of realization of the actual status of the organization in respect to the journey of excellence. In the second cycle, few changes were made to their approach to the managing of the implementation of the excellence model. A positive change that occurred was that the company started to rely more on the internal capabilities and reduced using external consultants. Through the formation of the Excellence Steering Committee which included the senior executives in the organization, the role of leadership was institutionalized. It maintained the leadership support (Mohamed, Capabilities Development in the Public Sector: The Role of Excellence Models, 2013).

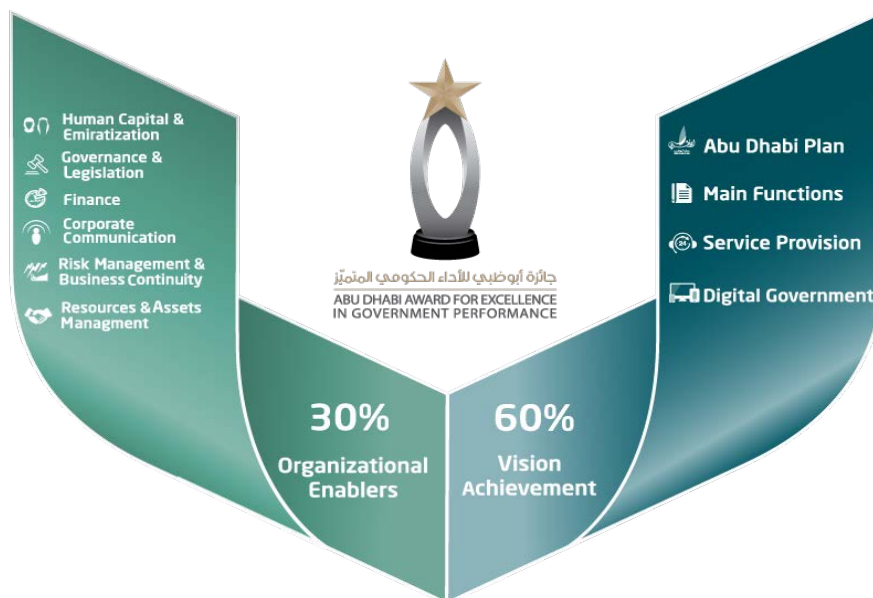


Structural Changes in the Second Cycle

Source: (Mohamed, Capabilities Development in the Public Sector: The Role of Excellence Models, 2013).

The leadership remained close to the ADAEP/EFQM model activities in an organization. By the introduction of more governance measures, the ADTA improved the implementation of the model. It paved the way for the direct involvement of the leadership and QPMD's (Quality and Performance Management Development) formal responsibility. The third cycle was not very different from the second cycle. The results were pending because of the third cycle (Mohamed, Capabilities Development in the Public Sector: The Role of Excellence Models, 2013).

Leadership forms an integral part of the excellence initiatives founded in Abu Dhabi. The Abu Dhabi Award for Excellence in Government Performance (ADAEP) was established in 2006 which aimed at improving all the performances of the government organizations at Abu Dhabi by adopting the TQM based models and techniques. The primary objective of the award is to establish quality standards and benchmarks among the units to improve organizational practices and accordingly help in extracting excellent results in key performance (Azeez, 2016). The following figure depicts the categories of awards:



ADAEP Structure

Source: (Abu Dhabi Awards for Excellence in Government Performance, 2017).

Outcomes

The use of EFQM in ADTA reflected useful practices and successes. ADTA learned about how an organization can evaluate its activities and resolve it through the implementation of the EFQM model. In the second cycle, ADTA was successful in winning the excellence award among the other small or medium government departments. The EFQM model has been successful in helping ADTA in building a progressive level of capabilities. The operational capabilities progressed as well as the strategic capabilities. The following table reflects the various changes that ADTA underwent in the three cycles of the award due to the EFQM model implementation:

ADTA Summary of Activity and Changes

The TICSS (The International Customer Service Standard) was started as an effect of the EFQM model at the beginning of the year 2010 after surveying about the customer satisfaction. The deployment of EFQM model resulted in the improvement of both management of the program and financial planning and further linking them both. ADTA had to revise the guidelines for financial planning to cope with the changes from the Department of Finance (DOF). Automation of financial planning was done as well. Thus, it can be said that the implementation of the EFQM model of Excellence brought about a great many changes in ADTA.

6.1.4. Case study – 4

About ADNEC

The Company Abu Dhabi National Exhibition Company or ADNEC was established in the year of 2005. It was made up of the Abu Dhabi National Exhibition Centre, Al Ain Convention Centre, Excel London, Capital Centre, Aloft London Excel, Hyatt Capital Gate Abu Dhabi, Aloft Abu Dhabi and IDEX LLC (ADNEC, 2017).

The vision of the company includes the intention to become the leading events destination for the prominent international exhibition as well as conferences in the Middle East and North Africa Region (ADNEC, 2017).

The mission of Abu Dhabi National Exhibition Company or ADNEC lies in increasing the business tourism of Abu Dhabi, with the creation of a platform that facilitates the organizers of the events to comprehend the objective of the events. This, in turn, connects people through the arrangements of the events rather the international class events. Also, it is seen that the selection of the venues for the events cater the best services so that it can go beyond the expectation of the stakeholders (ADNEC, 2017).

In order to consider the value of the company above, there are four values of the company which is responsible for the development of the culture of the Abu Dhabi National Exhibition Centre. The four values are as follows:

- Work Together
- Struggle towards excellence
- To be creative and innovative
- Fervent about what the company does (ADNEC, 2017).

ADNEC and EFQM

The company considered here, Abu Dhabi National Exhibition Company has won the recognition for the excellence 4-star rating by the European Foundation for Quality Management (EFQM) which is subsequent to the recent comprehensive assessment of all features of superiority across Abu Dhabi National Exhibition Company.

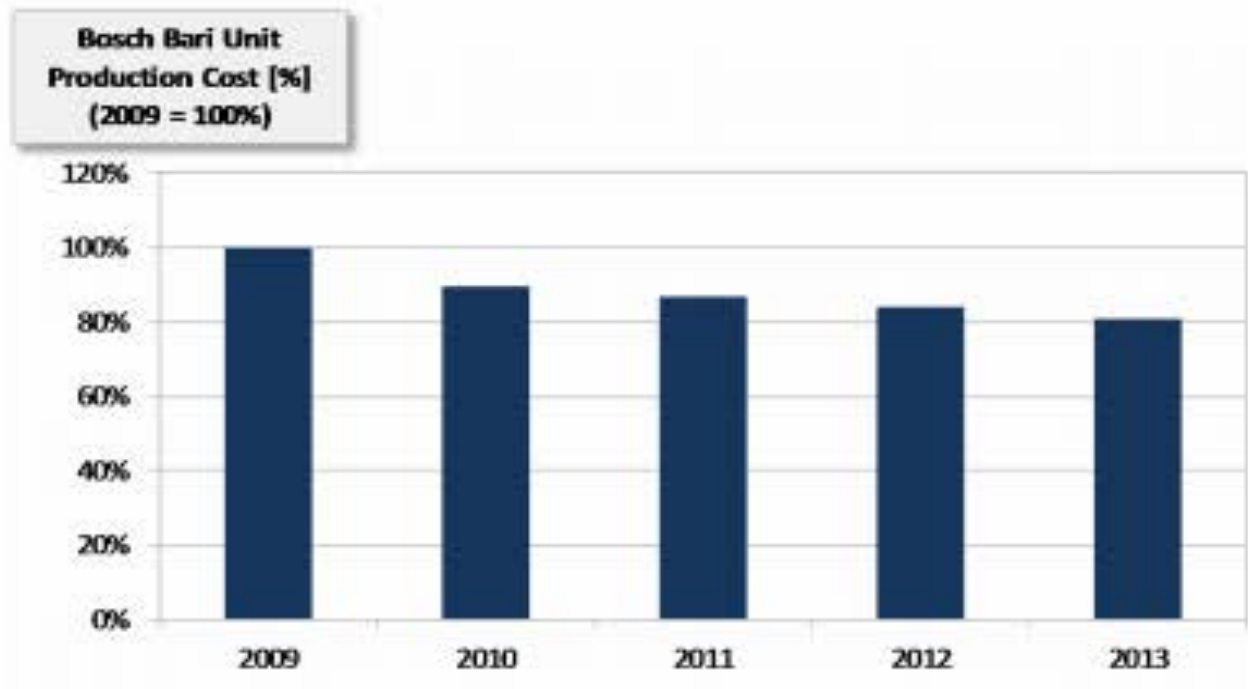
The EFQM acknowledgment corroborates ADNEC's continuous efforts to advance quality and make sure that the implementation of best practices (ADNEC, 2017).

According to the Chairwoman of Abu Dhabi National Exhibition Company, Noura Mohammad Hilal Al Kaabi revealed that the company was excited to receive the four stars by the European Foundation of Quality Management for outstanding performance by ADNEC with the implementation of EFQM. According to her, the achievement was an accurate indication of the supervision or guidance of the United Arab Emirates leadership, the performance and activities of the senior management of the Abu Dhabi National Exhibition Company and also the devotion and loyalty of the employee's team of the company towards the achievement of the objective or targets. In addition to this, the high standard that is implemented to each one of Abu Dhabi National Exhibition Company which have continued the process underpinning the company's effort to increase the tourism business in Abu Dhabi.

This kind of gratitude of the Abu Dhabi National Exhibition Company establishes that the reasons behind this success were the commitment, teamwork, and obviously the engagement of the workers.

The chairwoman had also mentioned that the determination towards achieving the excellence is considered as one of the corporate values of the company and it is also considered as a recognition of this determination has acted as the reinforce the accomplishments of ADNEC towards the improvement of their processes of services. This kind of development was regarded as something to have a positive impact on the company as it had led the company towards the Abu Dhabi Excellence Award in Government Performance or ADEAP assessment in just four months which in turn had helped the company in providing with the proper inspiration to enhance their efforts.

Moreover, the Group CEO of Abu Dhabi National Exhibition Company Humaid Matar Al Dhaheri revealed that the company is proud to get the approbation from the European Foundation for Quality Management. This gratitude for excellence embraces a matter of great importance for ADNEC group who works assiduously to go beyond the expectation of their stakeholders, consumers regarding their service. In his word, the recognition by EFQM also validates the commitment by ADNEC in catering an excellent experience, especially for their customers from the sector, name MICE sector (Thomson Reuters, 2017).



Source: (EFQM, 2014).

The continuous optimization of the cost is one of the essential and significant influences which uphold the growth of the Bosch Bari Plant. When the company was facing decline economically, it was able to respond in accordance with the situation with effect and brought its cost performance below the level of pre-crisis (EFQM, 2014).

Benefits of Implementing the EFQM Excellence Model

The Implementation of the EFQM excellence model has proved to be beneficiary for the company. The company has been successful in attaining the status of "Best in Class" by refining and quickly improvising the efficient and standardized processes with the implementation of the Bosch Production System. Based on the same strategy, the Bosch Bari has tried to improve the satisfaction of the customer by producing the highest and the most improved quality at the lowest price and with the shortest time of deliverance. Since 2006, there has been a positive projection of the Customer Satisfaction Index. The EFQM Excellence Model has also helped in achieving another objective. Through transparent and standardized processes, it has increased the motivation and satisfaction of all the associates. It has also raised the involvement level of the associates in the process of continuous improvement. With the implementation of the EFQM Excellence Model, there has been a significant improvement by the Bosch Bari in the key results that include cost, quality, and delivery (EFQM, 2013).

Other Options for Better Implementation of EFQM Model

There are certain changes that the company might have adopted for a better implementation of the EFQM Excellence Model. There prevails a continuous seeking for excellence, and it could have been implanted by an organizational model that could have maintained the right balance between the top-down impulse and the bottom up involvement. Implementing this process in Bosch Bari might have made it faster (EFQM, 2014). The organization could also have taken benefit of the activities that set a standard even before. The comparisons and contrasts that can be drawn with others concerning the good practices or the lessons that can be learned from the top-class organizations prove to be motivating for the organizations like the Bosch Bari Plant (EFQM, 2014).

6.2 Empirical Analysis

6.2.1 EFQM in the UAE Organizations

The Family Development Foundation (FDF) was credited with a certification of world-class experience from the European Foundation for Quality Management, on the basis of the outcomes of the field evaluation carried through the experts of the EFQM according to the latest standards for 2013. The Director-General of the Family Development Foundation stated that this international accreditation is part and parcel of the core organizational excellence and developmental program launched by the foundation. Emphasis has been put on the employees of the organization to continue to work hard and with consistent effort to transform the organization as to the global standard and thus attain the expectations and missions of the institution and promote its vision. For these reasons, it obtained the European Organization for Quality Management excellence award. (Emirates New Agency, 2015)

6.2.2 EFQM in UAE Government Sector

As the Prime Minister and the Vice President of the UAE believes that, in the race for excellence, there is no finish line', the Dubai originated authoritarian association, the Knowledge and Human Development Authority (KHDA) believes in the same thought. This organization, launched in 2007, is responsible for the expansion, improvement and quality of the private education in the Emirates. The firm had implemented the EFQM model from the start with an aim in leadership training and performance management, with the faith that EFQM is the most effective for gaining success. To the authorities, it seemed that to bring innovation to the KHDA's progress, the principles of EFQM is the priority choice to attain long-lasting goals logically. As Dr. Wafi Dawood, the authority under which EFQM principles were implemented in the organization, feels that the value of the EFQM model

should be ensured throughout the organization, for which he ensured that every board member is directly responsible for preserving the ideology of EFQM. All board members have entitled a specific measure to develop a performance that would be continuously monitored annually. Mr. Dawood ensures that the members can work in relaxed work environment and have easy admission towards right leadership, assimilating the managers within the team. KHDA became the first government body within the Middle East to achieve five stars from EFQM Excellence award and was admired for its enthusiasm for innovation. In just three years, the company enhanced the customer satisfaction level from 76.8% to 95.1% which is a record amongst all Dubai's governmental authorities. Having faith in the morals of EFQM, the organization is determined to be always dedicated and open to adaptability. (Marc Amblard, 2014)

Emirates Identity Authority (Emirates ID), a governmental organization in the UAE progressed to its benchmarked 2010 – 2013 strategy with the implementation of the EFQM principles. The strategic planning affected the overall institutional performance and consecutively gave support to the organization to establish itself as a pioneer in its area of operation. A string of key success factors (KSFs), the strategic enablers, were branded to steer improvement towards attaining the respective strategic objective. 16 key success factors were recognized and allotted key performance indicators (KPIs) for determining the progress in reaching each success factors, thus, in a comprehensive strategic growth. 20 distinctive initiatives were arranged from the description of the gaps marked and the alteration in the model requirements in the operations. This arranged strategic development way guaranteed that all the anticipated initiatives were connected to all the potential gaps and key success factors and in succession, related to tactical objectives.

Later in the development of corporate strategy, integration of new tactics into operational activities was done. This was done in the process of improvising each departmental activity within the institutional structure. This process provided a horizontal connection between the daily works of each department with the initiatives recognized in the corporate strategy. Advancement of the functioning activities includes documentation of high-level planning, designed timelines and targets, and also the tasks of individuals liable for each initiative.

The key success factors that played significant roles in the success of the whole in the whole strategy comprise leadership, commitment, active and dynamic executive mindset, distinct and transparent visualization of expected upshot, convenient thinking frameworks, communications and change management plans (Al-Khoury, 2012).

6.2.3 Abu Dhabi Award for Excellence in Government Performance

Abu Dhabi Award for Excellence in Government Performance (ADAEP) was launched in 2006 where the chairman of the award committee is the Secretary General of the Executive Council. It is seen that there are conditions that are made for the selection of award are often rooted in the EFQM model for Excellence and utilizes its essential notions as criteria to evaluate the performance of several different government bodies and individuals in their effort to gain excellence. The award was initiated explicitly for Abu Dhabi Government institutions and the State-Owned Enterprises as part and parcel of the mission to develop their performance and situate Abu Dhabi in the top listed governments of the world map.

The Award was created to provide comprehensive framework or structure within which organizations can examine and evaluate themselves and reflect in which areas they can apply the enhancement, based upon years of specific experience. The real implication of the award lies in correct utilization as tools for implementation of the EFQM Excellence Model which, its way is structured to encourage the Abu Dhabi Government to make developments towards attaining the goal of excellence. Through this adaptation of the total quality and excellence doctrines, governmental institutions can improvise effective leadership that can bring together the correct people to install strategies through efficient and valuable management of processes and capital and to attain excellent presentation and outcomes. (psemagazine, 2015)

6.2.4 Implementation of EFQM in the UAE Private Sector

The Neka cement company in the United Arab Emirates achieved a total of score of 336 / 16 in the EFQM model to the area 39 / 49% of their goals to achieve and results in the area of 24 / 74% of their goals to achieve an and enablers. Which attracts the reputation for excellence as a privilege license is attained. As the research was evident, the data analysis proved that the organization reached the benchmarked goal of 38 / 15%, creating tactical statement for the use, direction and corporate culture, the formation of operational institutional framework and process management systems. By realizing the gravity of the efforts, it could help personnel working in the organization to meet clients, suppliers and other third parties, outside the organizational operations to attain (Khalili & Abbarin, 2013).

The EFQM Framework in the Healthcare sector in the UAE

The healthcare sector in the UAE has an all-encompassing convention of enhancing approaches and excellence models to aid in the evaluation of the quality of the work by attaining high levels of

efficacy and competences in their procedures. EFQM is the model of excellence used significantly in the UAE, its approaches produce a basic framework, and it's measured as a universal and wide-ranging framework, more than other conventional healthcare methods. As it is a general approach, it does not determine specific criteria, professional guidelines, rules and ethics for health care and it does not shelter specifically the clinical features of the healthcare organizations as the European certification system that is provided by the Joint Commission for Accreditation of Healthcare Organizations (JCI). But, in a general way, EFQM approach brings the notions of the structured health care services, conceptually with the modification of the improvement of the specific guidelines for medical care. Which are guided by the Ministry of Health (MOH) in the UAE as a comprehensive and distinguishes between processes, frameworks and results in quality? The chances, procedure, structure and result confirms adequacy to the possibilities of the EFQM framework.

Additionally, the UAE government is acting together to be liable for all needed assistance to the UAE corporate sector in Abu Dhabi and the UAE to encourage 'innovative world-class practices' in excellence tactics and expedite its application for consistent development. The inclusion of the Sheikh Khalifa Excellence Award (SKEA) for enduring excellence is completely brought into the line with the international best practice and embracing the EFQM Excellence model.

The EFQM Excellence model is motivated to enable the people and organizations of Abu Dhabi and the UAE to develop their presentation, competitiveness and attain world-class importance for the business community at large. Mafraq Hospital included in Abu Dhabi Health Services (SEHA) in Abu Dhabi, was awarded the Diamond Sheikh Khalifa Excellence Award (SKEA) in 2011. As a government hospital, Mafraq Hospital was the first medical service facility to receive the SKEA. Abu Dhabi Health Services also accredited it and recognized as the best scorer for its excellent result on implementing the EFQM Excellence model to create a quality of organizational culture between all the employees. Few other government hospitals who won the Sheikh Khalifa Excellence Award are Sheikh Khalifa Medical City (SKMC), Al Ain Hospital and Tawam Hospital which belong to SEHA and also the non-government named Al Noor Hospital was also presented the award (Abuhejleh & Yehia, 2014).

Chapter 7: Conclusion

When the fourteen-leading organization came with the idea of the EFQM Excellence Model in 1988 with the sole aim of helping organizations in facing the challenges in the globally competitive world and sustain themselves, with the passing of time, they resulted in aiding more than 30000 firms all around the world. Authorities of organizations understand the necessity of maintaining the quality within an organization for which they are always ready to go to any extent to attain competitive advantage, success and sustainability. For this reason, when organization officials recognized the excellent outcomes of implementing the EFQM Excellence model, they became eager to adopt the framework in own organizations, resulting of which there are so many organizations in the list of success.

From finding the best raw materials to promoting and marketing the products or the services to the targeted customer group, and finally delivering the finished goods and the services to the consumers; the comprehensive workflow of an organization should significantly exhibit the best quality which would eventually result in satisfying the customers who are the hand holders determining the success of the organization. Thus, quality should not only be emphasized when searching for the best of the raw materials but also when they are created or manufactured along with maintaining the quality of retaining the employees of the firm, taking effective decisions when required and so on. Maintaining total quality management is thus as significant as finding the raw materials, to satisfying et workforce, to implement best leadership styles or approach, to satisfy customers with the best technique possible and to respond to the feedback after the product or service is in the hands of the consumers. Total Quality Management is dependably thus, a top need in the motivation for associations as the interest for unrivalled quality and more reliable item and administrations expanded. EFQM Excellence model is such a framework which enables and ensures total quality management in an organization. After the research, it can be seen that it helps in the cooperation of the employees with the authorities to work for the predetermined organizational goals.

Human Capital is understood to be one of the major elements in an organization which is responsible for the swift flow of the whole organizational operations. In the contemporary global world, not the capital but the workforce or the employees are considered as the major capital of success for the organization. Recognizing this, the authorities of the organization emphasized on their main capital being the employees. The Human Capital Department of any organization plays the role of selecting the apt individuals with required skills, looking after their training for making more competent for the organizational activities, see to the fact that the employees are satisfied and keep on motivating

by awarding for their best performance along with preparing them for further training to develop own professionalism. After EFQM is implemented, excellence is attained in this human capital team of any organization. It is observed that the employee satisfaction and employee retention have increased in those organizations.

The Human Capital Department of organizations is responsible for the overall growth of an employee as that will affect the overall performance of the organization. Thus, the team is required constantly motivate and satisfy the workforce. The employees should not face any cross-cultural barriers as in this globalized world expatriates are common in any Multinational Companies or the MNCs. There should always be the scope that the individuals can participate in further trainings for skill development and impose an impact on the performance of the firm. The EFQM Excellence model sees to that the human capital team can take the excellent performance out of the human capital of an organization to help the organization attaining sustainability.

The employee who is joining the organization undergo basic training which helps in adapting to the organizational environment and with further advancement of the days, this employee can take up the responsibility of guiding or showing the right way to work or perform the best to a new employee due to gaining of experiences. Gradually he might be in a position of decision making which is seen to be developed after the implementation of the EFQM excellence model. The model described procedures that can help a leader imply or take up correct approaches or techniques which can claim the best practical results or decisions that uplifts the overall organizational performance. The EFQM Excellence model helps the human capital team to motivate the employees properly by guiding through few steps. Even several renowned organizations provide excellence awards to encourage employees of organization throughout the world whoever implements the EFQM excellence model and show a tremendous change in employee satisfaction so that they can result in the growing success of the organization.

The literature review section of the paper has included the Common Assessment Framework; the paper had focused the history and evolution of the common assessment framework and the relationship between the common assessment framework and the European Foundation for Quality Management. The history of Common Assessment framework included the key fact that every child matters. It was the root of the concept which was implemented to enhance the performance of the human capital and the institutional performance later. The paper has discussed the implementation of the Common Assessment Framework in different sectors like in the education sector, the health sector, as well as in the voluntary sector. The research methodology section of the paper consists of

both the qualitative study by conducting the Thematic Analysis and the quantitative analysis of the pilot survey through the questionnaire.

The Thematic case study analysis was conducted on the basis of the case studies which included the implementation of the European Foundation Quality Management Framework or the EFQM in different government sectors of Abu Dhabi. Like the paper has discussed the implementation of EFQM in Abu Dhabi Municipality and Abu Dhabi Vodokanal which operates in St. Petersburg with the water supply management, Abu Dhabi Tourism Authority or ADTA, implementation of EFQM in Abu Dhabi National Exhibition Company or ADNEC, implementation in the Bosch Bari Plant of Abu Dhabi. The benefits that the organizations have received have been discussed in the paper. The quality management terms and the rewards provided by the company for the enhancement of the Human Capital and the institutional performance of the organization have also been discussed in the paper.

On the basis of the case studies discussed the thematic case study analysis had been conducted. Chapter 3 consists of the research methodology section, where the reliability test, the descriptive statistics along with the frequency distribution analysis, the correlation analysis, the data reduction and the consequent factor analysis and finally the ANOVA test. Which have been conducted to analyze the data collected through the use of the questionnaire in the pilot survey, in order to determine the impact of applying the European Foundation Quality Framework Model to improve the human capital and the institutional performance in the Government Sector of Abu Dhabi.

The research methodology has discussed the analysis of data like in terms of the correlation between age of the respondents and the years of experiencing. It has been found that the organizations do not seek the workforce to have more years of experience with more age. There are also no gender biases in the organizations in terms of years of experience too. The reliability test was conducted to understand the reliability of the data collected through the questionnaire which was proved to be acceptable as the Crochbach's alpha value was found out to be more than 0.5. Then the data reduction and the factor analysis had been conducted where the factor loadings implied the importance of the factors in determining the impact of applying EFQM in the government sector of Abu Dhabi and the benefits associated with it. In addition to this, it can be seen that the research questions created for this helped in not only improving the quality of the research but can also make sure that it can help in better determining the impact of Human Capital on the performance of the people working in the organization. The answers that were found from this strongly indicate that the Human Capital and its discussed models could have a significant impact on the people working

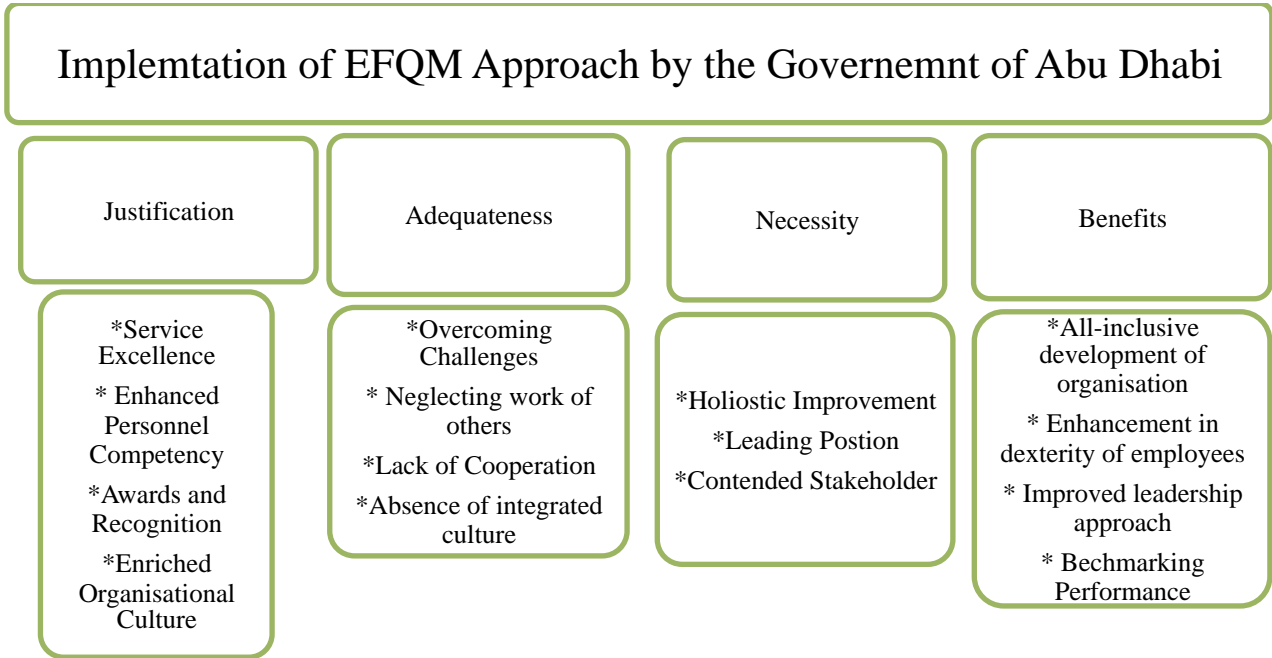
within an organization in Abu Dhabi or across UAE. The EFQM criterion could help in making sure that the implementation of it could be valid across different types of cultures that can be present within the country.

The ANOVA Analysis was also conducted to recognize the impact of the responses in order to assess the research objective. The thing that is important in the ANOVA analysis is the significant value or the p-value, and the value of which is predetermined at 0.05 and the table of ANOVA represents the value regarding the research problem, which is found out to be more than the significant value at the level of significance of 95%. Hence, the considered null hypothesis was accepted that the statistically significant difference in choosing the factors with respect to the age, gender and the level of education was not there in the assessment of the research problem.

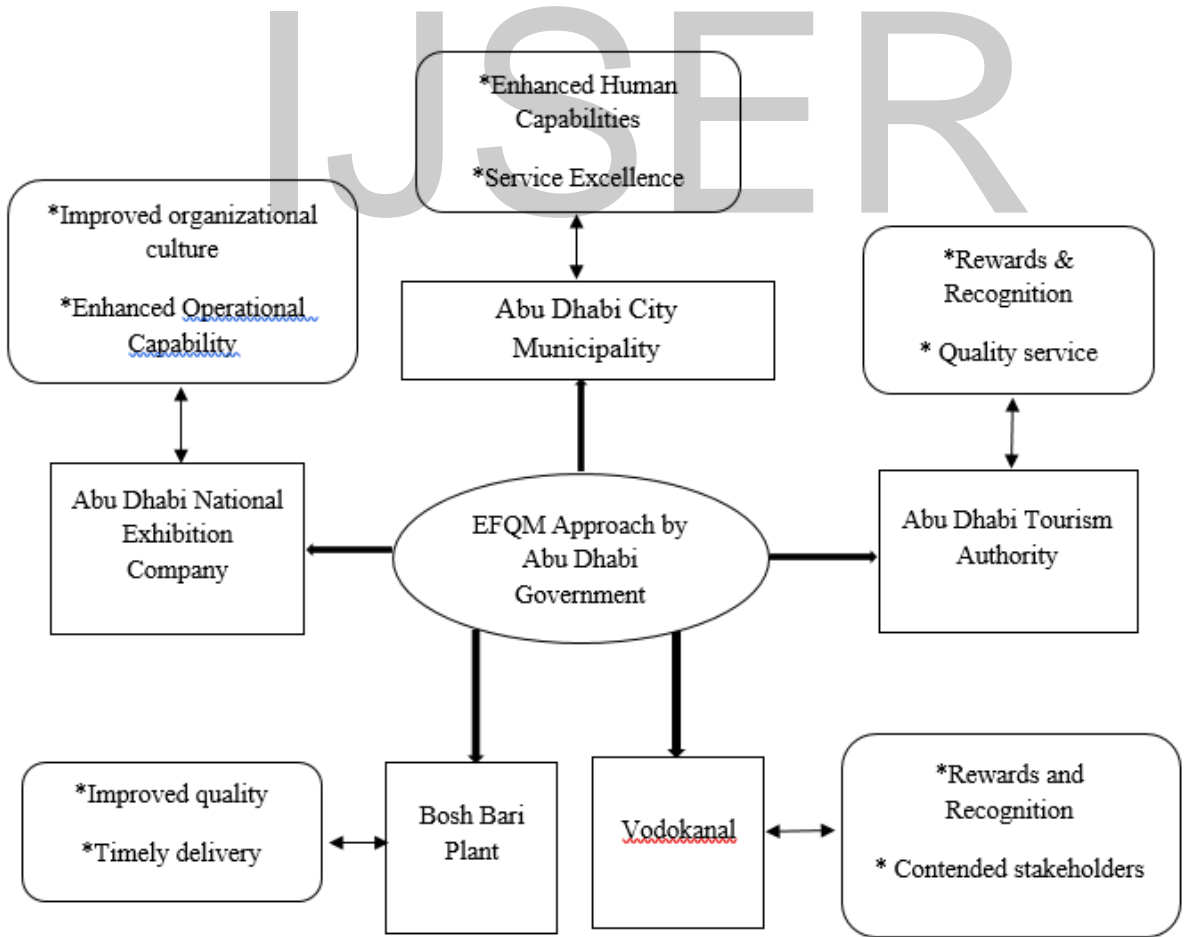
The implementation of EFQM in the organizations of government sectors in Abu Dhabi has been resulted to be beneficial, and the research leads to the statement that further implementation of this framework will definitely lead to the improvement of human capital and institutional performance.

7.1 The Thematic Case Study Analysis

The present study focuses on the adoption of the European Quality Standards (EFQM) on the Development of human capital and institutional performance by the government of Abu Dhabi. It answers the research questions related to the instances of quality measures introduced by the Abu Dhabi Government and how implementation of EFQM brings out the best of the city so that Abu Dhabi stands strong apart from its oil deposits also. For this purpose, four case companies have been taken. In Case 1, the company in Abu Dhabi Municipality which had its inception in the year 1962 named as Department of Abu Dhabi Municipality and Town Planning. The 2nd Case Company is Abu Dhabi National Exhibition Company, or ADNEC was established in the year 2005. The 3rd Case Company is Abu Dhabi Tourism Authority was established in the year 2004. The 4th one is the Bosh Bari Plant which is renowned and leading supplier of technology and services. And the 5th case company is the Vodokanal in St. Petersburg which provides a centralized water supply in the city. An in-depth analysis of 5 differing cases has been completed, and the following themes have been developed:



Thus, the present study attempts to investigate the benefits derived by all the sectors mentioned above by adopting the EFQM excellence approach.



7.2 Justification of EFQM Criterion (People) for the Government of Abu Dhabi

Answering the research question of how the implementation of EFQM criterion is successful or not in the government sector of Abu Dhabi, it can be said that, yes, implementation of EFQM criterion proved worthwhile for the government of Abu Dhabi which can be inferred from the excellent performance of the various sectors taken as case companies. The different benefits derived by these sectors are mentioned below:

1. **Service Excellence:** After employing EFQM model in their system, Abu Dhabi Municipality witnessed an up gradation in the quality of services provided to the citizens. The model also helped the organization to find out the areas in which improvement can be applied. Each one in Abu Dhabi National Exhibition Company focused on improving quality service which resulted in the increase in the tourism business in Abu Dhabi. Bosh Bari Plant also attained customer satisfaction by generating the uppermost and the most amended quality at the lowermost price and with the minimal time of deliverance. Vodokanal by following the EFQM model adopted a methodology that allowed communication on thoughtful issues associated with the attitude towards water and nature. They also made youth aware about the consumption of water and all the critical issues about the environment.
2. **Enhanced Personnel Competency:** Abu Dhabi Municipality found the EFQM model to be effective as it enhanced the human capabilities. The employees of the organization felt motivated and strived to work for ensuring quality services. Moreover, Abu Dhabi National Exhibition Company also found rationalization of all its operations and augmented the performance of its workforce. Further, Abu Dhabi Tourism Authority also observed the development in the capability of its employees as a result of excellence model. The performance and day to day operations of the company were found to be more efficient. Bosh Bari Plant by implementing transparency and standardization in its process through EFQM model also boosted motivation and satisfaction of its employees.
3. **Awards and Recognition:** Abu Dhabi National Exhibition Company was also delighted to receive the four stars by the European Foundation for Quality Management for outstanding performance by ADNEC with the implementation of EFQM. Bosch Bari Plant got success in achieving the status of "Best in Class" by refining and speedily inventing the well-organized and consistent procedures with the execution of the Bosch Production System after implementing EFQM model. In Vodokanal, after ensuring the EFQM model and integrating the Neva crayfish, the constructive upshot was apparent in less than three years' time. The Da

Voda portal, after functioning for about three years replicated a constant upsurge in the count of people landing on the page.

4. ***Enriched Organizational Culture:*** An excellent organizational culture was developed by Abu Dhabi Tourism Authority resulted in improved working conditions and productivity of the employees. Bosch Bari Plant, by successfully implementing EFQM model experienced upright organizational culture leading to amplified effectiveness and productivity. Vodokanal, after implementing EFQM gained the attention of the audience on social media and ensured itself to win EFQM social media practice competition.

7.3 Adequateness Current People Management Approach of the Government of Abu Dhabi

Understanding the present practice of people management in Abu Dhabi government sector, it is evident that, yes, the overall people management approach of the government of Abu Dhabi is adequate. However, there is still scope for improvement to augment the productivity and efficiency of the employees. For this reason, the implementation of EFQM has been applied to amend the capabilities of the employees.

Before implementation of EFQM in Abu Dhabi Municipality, the Department faced several challenges in the year 2005 about the management of human capital as there was a merger between two departments which are Works Department and Agriculture and Animal Production Department. Moreover, in the year 2007, the Municipality was segregated into three distinct municipalities which were taken under the Department of Municipal Affairs. This resulted from the accumulation of workforce from different sectors resulting in the evolution of environment which was inept to form an integrated culture. People started neglecting work of others and mainly concentrated on their tasks. In addition to this, several skilled and experienced employees also left the organization. However, after the implementation of EFQM model in Abu Dhabi Municipality, due weight was given to improve the competencies of the employees. In addition to this, stress was paid on the development of the leadership style and prominence was also given on the people.

Though Abu Dhabi National Exhibition Company was performing well with respect to the efficiency and capabilities of its employees, yet EFQM was implemented to achieve great excellence and to derive best of the employees. Thus, with the employment of EFQM in Abu Dhabi National Exhibition Company, all the achievement exhibited a precise indication of the administration or supervision by the United Arab Emirates management. The enactment and undertakings by the high-ranking management of Abu Dhabi National Exhibition Company and also the dedication and faithfulness of the employee's team of the company towards the attainment of the intents or

objectives. Thus, a significant level of augmentation in the overall competency of the employees in Abu Dhabi National Exhibition Company was witnessed after the implementation of EFQM model.

In a case of Abu Dhabi Tourism Authority, through realization of a potential of its employees was satisfactory yet, in this sector too, EFQM model was implemented to reap the paybacks of its excellence. Through this methodology, the leader of the Tourism Department of Abu Dhabi feels encouraged and work in tandem to achieve organizational goals. Furthermore, effective communication was observed between the employees of the Bosh Bari Plant as a result of employment of EFQM model. Moreover, sustainable development was realized due to the outstanding performance of the employees. The employees became competent enough to produce maximum output at minimal cost leading to satisfaction among the consumers.

After the application of EFQM in Vodokanal at St. Petersburg, a considerable change in the working conditions of the employees of the organization was witnessed. Employees of Vodokanal became accountable for their task, and there was also transparency in all the activities.

7.4 Necessity to Implement the People Criterion of EFQM

Answering the sub research question of what are the effects of people criterion so that the Government of Abu Dhabi should implement it, it can be said that the government of Abu Dhabi should definitely implement the people criterion of EFQM to realize the potential of this effective approach for the holistic enhancement in the performance of the various sectors of Abu Dhabi. It was observed that all the government sectors of Abu Dhabi were running smoothly yet it became imperative for the government to employ EFQM approach to have the leading position. All its sectors got benefitted by the excellence model.

In Abu Dhabi Municipality, the primary intention of the organization was to focus on the needs of the customers with enhanced performance. Thus, by incorporating EFQM in the system, Abu Dhabi Municipality was able to provide excellent services to its customers. The capabilities of its human capital also got enhanced leading to the attainment of organizational objectives. This approach also proved beneficial in Abu Dhabi Municipality in managing the employees of different sectors which started working together after the merger of two departments.

In the case of Abu Dhabi National Exhibition Company, the government pondered on employment of EFQM model so that it can enhance its business by offering best services to its stakeholder thereby satisfying them. This demanded to improve the efficiency and proficiency of its employees which became possible by adopting EFQM approach. However, Abu Dhabi Tourism Authority

mainly concentrated in the improvement of its performance thereby winning the award. This entailed building of an apt organizational culture that motivated its employees to work in the direction of the organizational intent. Thus, the application of EFQM approach became inevitable for this sector, and it ultimately led to enhanced quality service and customer satisfaction.

The government of Abu Dhabi was also concerned about its Bosh Bari Plant as people of the plant were the indispensable part of the strategy of the company. Proper attention was not paid to the employees of the Bosh Bari Plant. With this technology, an excessive emphasis was paid to the employees, and they felt encouraged. The Vodokanal also required improvement in its operations for educating people about various environmental issues. Thus, the government also contemplated on employing EFQM model to this sector, so the employees become competent enough to spread awareness about defending and understanding the importance of the environment.

7.5 Benefits of Implementing the People Criterion to a Government

After implementation of people criterion to a government, there are several benefits which are observed by the government of Abu Dhabi. By embracing people criteria, the government of Abu Dhabi was capable to achieve a complete development of its various sectors.

In Abu Dhabi City Municipality, a dramatic change occurred after taking up of people criteria of EFQM approach. There was an upsurge in the competencies of employees and all the employees worked in an integrated manner. Moreover, there was also decrease in the turnover of the employees and outstanding services were provided to the customers. A unified culture was established in the organization and organization was also able to win many awards and recognition. In addition to this, due weight was given to the workforce and organization too concentrated on the development of leadership approach.

In Abu Dhabi National Exhibition Company, people criteria of EFQM approach turn out to be very fruitful. It resulted in the intensification of teamwork and cooperation. Moreover, the employees also got motivated to struggle towards achieving excellence. They became more creative and innovative concerning the task allotted to them. Overall continuous efforts were made by the personnel for enhanced quality and improved services.

Abu Dhabi Tourism Authority was yet another sector where the paybacks of the people criteria of EFQM approach were observed. The change in the organizational culture resulted in the improved performance of the employees. This assisted organization in acquiring awards and in benchmarking. Furthermore, the utmost satisfaction of the customers was attained and there was also rise in the

quality standard. At the Bosh Bari Plant, the people criteria of the model assisted in the rise of zeal among the employees to outperform their target. They also became capable of conquering their passion and adapted the changes in the organization in a positive manner. The overall organizational effectiveness and excellence were enhanced which contended the stakeholders. Implementation of people criteria of EFQM in Vodokanal St. Petersburg resulted in increased efficiency of the employees. There was an upsurge in the potential of the employees and they also achieved the leadership position in their sector.

With the Analysis of the Case Study of different sectors of Abu Dhabi government which are, Abu Dhabi Municipality, Abu Dhabi National Exhibition Company, Bosh Bari Plant, Abu Dhabi Tourism Authority and Vodokanal, it was observed that with the implementation of European Quality Standards (EFQM) on the Development of human capital and institutional performance. Its considerable improvement in all the above-mentioned sectors was observed which led to holistic enhancement in the performance of them. There was the increase in the capabilities of the employees and excellent services were provided which resulted in the satisfaction of the stakeholders.

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