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A Study on Best Quality Practices at King Faisal University (KFU), Alhassa, Saudi Arabia

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Abstract— *This paper aims to examine the quality best practices in King Faisal University (KFU). The quality best practices issue has taken a huge consideration among different Saudi Arabian sectors. These sectors include education, manufacturing, government, private, healthcare, IT, service and non-profit organizations. This research concentrates and discusses the quality management in Saudi Arabian higher education system.The study is a specific reference to one of the well-known public university in Saudi Arabia i.e. KFU.*

The importance of conducting this research is to examine the quality best practices in KFU in terms of many aspects. These aspects include university in general, colleges, curriculum, employees, faculty members and students. Although some colleges attain academic accreditations, there is a lack of knowledge in terms of main quality best practices.

The substantial expectation of this research is to eliminate the quality drawbacks in KFU. Another emphasis is to provide a number of recommendations to enhance the quality best practices in KFU.

Keywords—Higher Education Institutions (HEIs),King Faisal University (KFU), Deanship of Development & Quality Assurance (DDQA), Quality Assurance, Quality Enhancement (QE),Total Quality Management (TQM).

I. INTRODUCTION

This chapter introduces the study and shows the importance of the topic and discusses the reasons for conducting the research.

1.1 Background of the Study

Quality is playing a critical role in higher education. Both administrators and academic of Higher Education Institutions (HEIs) are constantly looking for ways to obtain more effective and meaningful educational instruction. Example of these investigators is King Faisal University and its Deanship of Development & Quality Assurance (DDQA).

DDQA administrators have started to establish quality sector to improve the quality, standards of their higher education, and to make their educational system more effective. In fact, one of the main DDQA's objectives is implementation of public policies related to the total quality management (TQM) in the university.Recently Saudi universities have started to shed light on quality management by implementing the total quality management concept.

TQM has successfully been implemented in some Higher Education Institutions (HEIs) in Saudi Arabia. This research aims to compare the quality work of this university with the TQM principles.

1.2 Problem Statement

The implementation of quality practices in Saudi Arabian higher education institutions has gained great interests. However, most of these institutions still not mature enough to deal with these practices. King Faisal University as a case will study comprehensively their quality practices performance. Therefore, this research attempts to answer the following questions:

- **What is the impact of adopting best quality practices in KFU?**
- **How to align best practices with KFU quality objectives?**

1.3 Objectives of the study

This study encompasses mainly following objectives:

- Explore thebenefits and recommendation of best quality practicesas a successful implementation in King Faisal University.
- Identify best quality practices to support the implementation of TQM concepts at the KFU.
- Identify the impact of adopting quality best practices in KFU.

1.4 Research Methodology

This study conducts by using a quantitative method (i.e. questionnaires). The target audience of this study was faculty members at KFU. The sample size was 21 faculty members who were categorized based on their job title, gender and education level.

The questionnaire was developed by using Google forms. It was divided into two sections; Demographics and Quality Best Practices. The questionnaire was designed mostly with close ended questions, with Likert scale from 1-5 with options (strongly disagree, disagree, neutral, agree, and strongly agree). Only one question had different options that are (Bad-Good-Satisfied-Very Good- Excellent). Questionnaires were sent to the target

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audience via emails, and Whatsapp in the beginning of March 2017. Total of 40 faculty members received the survey. However, only 21 were filled it.

The data was analyzed and interpreted thoroughly. Both descriptive and measurable analysis was conducted.

1.5 Scope of the study

This study focuses on the performance of quality best practices implementation in Saudi Arabian higher education system, specifically, the King Faisal University (KFU).

1.6 Definition

This study includes a number of abbreviations that relates to quality management in higher education. The main abbreviations and its definitions describes as following:

Quality Assurance (QA): Quality assurance provides to the standards maintained by the institutions through check of external bodies(Biggs, 2003).

Quality Enhancement (QE): Quality enhancement refers to the continuous improvement in the institution system (Biggs, 2003).

Total Quality Management (TQM):A network of interdependent components that work together to try to accomplish the aim of the system (Deming 1994).

Higher Education Institutions (HEIs)

King Faisal University (KFU)

II. LITERATURE REVIEW

2.1 Introduction to Quality

Although the literature provides many explanations of the quality, there is no a unique definition. Below are examples of these definitions:

- "The lack of quality is the losses a product imparts to the society from the time the product is shipped" (Genichi Taguchi).
- "Quality should be aimed at the needs of the customer, present and future" (Edwards Deming).

The literature discusses that quality includes two dimensions; products and services as shown in Table 1(Bergman and Klefsjö 2003). However, for the scope of the study, the quality dimension, which is taken into consideration in higher education, is the service quality.

Table.1: Quality Dimensions

Quality Dimensions	
Products	**Services**
Reliability	Reliability
Performance	Credibility
Maintainability	Accessibility
Environmental Impact	Communication
Appearance	Responsiveness
Flawlessness	Courtesy
Safety	Empathy
Durability	Tangibles

Previous research has defined quality management term in many ways. However, in relation to quality in education, Borgue & Bingham-Hall (2003) defined quality as "conformance to mission specification and goal achievement--within publicly accepted standards of accountability and integrity". Quality basically maintains balance between the internal and external forces. The quality to a college could be derived by recognition of the institution and a training program (Eagle & Brennan, 2007),

Dr. W. Edwards Deming was the first scholar to introduce the concept of TQM. According to Hasson&Klefsjo (2003), TQM defines as "Management strategy that has interrelated components, namely: core values, techniques and tools". Therefore, TQM refers to the administration technique that, which will improve the quality and profitability in associations. It is a yearly quality process, which moves towards the flawlessness of the vision of the association.

2.2 Quality of Higher Education

Some researchers discuss that the quality will enable organizations practices or tasks to become successful (Bergman and Klefsjö 2003, Feigenbaum 1994). Higher Education Institutions (HEIs) are not excluded. In fact, Feigenbaum (1994) believes that the higher education quality is a critical factor and will lead tostrong competition among countries.

The concept of quality of higher education has defined in several ways based on the industry (Campell and Rozsnayi2002). Example of these definitions are illustrate in Table 2.

Table.2: Quality of higher education definitions related to industry (Campell and Rozsnayi 2002)

Quality as excellence	To be the conventional scholastic view that holds as its objective to be the best.
Quality as fitness	This approach requires that the item or administration has congruity with client needs, prerequisites, or goals.
Quality as enhancement or improvement	Emphasizes the pursuit of continuous improvement and is predicated on the notion that achieving quality is centralto the academic ethos.

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However, some research argued that quality in education is totally different than industry (Tribus 1994, Kwan 1996). Kwan (1996) stated that it can be distinguished between education and industry in four ways, objectives, processes, input and outputs.

Moreover, the literature shows that it is vital to identify customers and stakeholders in higher education. Owlia and Aspinwall, (1998) classified higher education stakeholders into five groups; employers, society, faculty, families and students. According to their results students were given the highest rank.

Quality improvement is an ongoing process, and to enhance quality, HEIs need to implement TQM strategy. The main TQM role in academia is to provide guidance in educational institutions to enable them continue improvement through the entire educational process.

Some research (Ahire et al. 1996, Flynn et al 1994) provides many constructs for TQM implementation as shows in Table 3.

Table.3: TQM constructs

TQM constructs (elements)	
Leadership	Supplier quality management
Vision and plan statement	Evaluation
Process control and improvement	Product design
Quality system improvement	Employee participation
Recognition and reward	Education and training

HEIs have to consider the key elements of TQM in order to improve the quality. These elements include leadership, continuous improvement, employee participation and empowerment and information management (Mohammed et al 2016).

For the purpose of this research , six elements (i.e. best practices) are selected, which are Leadership, Vision and Plan Statement, Evaluation, Quality System Improvement, Faculty Members Participation, Education and Training, and it added new element called Education learning outcomes.

The conceptual definitions of the constructs and the practices that support their implementation are presented in the following section.

2.3 Study constructs

Leadership

Leadership can be defined as "the ability of top management to establish, practice, and lead a long-term vision for the firm, driven by changing customer requirements, as opposed to an internal management control role" (Anderson et al. 1994).Malcolm Baldrige Quality Award (1999) identifies the crucial role of leadership in terms of creating the goals, values and systems that enable performance improvement.

Top management role and involvement is a key practice in any organization.The main responsibilities of top management leaders include establish quality policies, establish and deploy quality goals, provide resources, provide problem-oriented training, and stimulate improvement. Lack of top management involvement might lead to serious negative consequences. In addition, it is vital to engages people in quality activities. According to DuBrin (1995),encourage people to assess the level of quality is an important leadership practice.

Vision and Plan Statement

Vision and plan statement encompass two aspects: Vision statement and plan statement. The purpose of a vision statement is to link the firm's values, aspirations and purpose to enable employees make decisions that are align with and supportive of these objectives (Meredith and Shafer, 1999).The organization need to have quality policy that shows overall intentions and direction of an organization with regard to quality. On the other hand, a plan statement is a formalization of what is proposed to happen in the future.Employees at different levels should be engaged in drawing up plans and should be encouraging their commitment to the realization of these plans (Mann, 1992).

Evaluation

The concept of evaluation can be defined as "systematic examination of the extent to which an entity is capable of fulfilling specified requirements"(ISO 8402, 1994). The organizations should continuously evaluate its various business strategies to achieve a competitive advantage. Another evaluation practice which relates to improvement and corrective actions is quality audit. In addition, Benchmarking is a influential tool to use as a continuous process of evaluating a firm's products, services, and processes against its roughest competitors or industry leaders. Quality related data also should be combined with employees' performance standards at the different level within firms.

Quality System Improvement

Quality system is defined as "the organizational structure, procedures, processes and resources needed to implement quality management"(ISO 8402, 1994). Three main practices should be identified when quality system establishment; quality manual, procedures, and work instructions. Finally, quality system should be continuously improved and maintained (Randall, 1995).

Faculty Members Participation

Employee (i.e. faculty member) participation can be defined as "the degree to which employees in a firm engage in various quality management activities" (Juran

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and Gryna, 1993). Teamwork is a key characteristic of faculty member's participation. Teamwork can be groupedinto collaboration between managers and non-managers, between different functions (Dean and Bowen, 1994).

Moreover, for gaining effective faculty member participation, they should be committed to their jobs and report their own working problems as well as problems they discover in other areas of the firm(Deming, 1986).

Education and Training

Training refers to the achievement of specific skills or knowledge, while Education attempts to provide employees with general knowledge that can be applied in many different settings (Cherrington, 1995).Employees at different organization levels should participate in specific work-skills training. In addition, employees should accept quality perception education in order to improve their commitment to quality. New employees should take more education on quality awareness.

Education learning outcomes

This best practice includes all issues are related to the evaluation of curriculum and program learning outcomes such as: exams, assignments, and assessment activities.

III. COMPANY'S PROFILE

KFU is one of the largest educational institutions in the Eastern province in Saudi Arabia. It is a distinctive center for providing knowledge and developing professional, administrative and leadership skills.

Vision

Excellence in education and scientific research; and leadership in community engagement.

Mission

To provide quality education and lifelong learning, encourage innovation and scientific research, strengthen community engagement and to prepare qualified and competent people within a motivating environment that are up to date with modern technology.

Values

Loyalty, Quality, Institutional work, Transparency, Justice, Innovation, and Lifelong learning

King Faisal University is a public university with the main campus in the city of Hufuf in Al-Hassa, Saudi Arabia founded in 1395 AH/ 1975E. King Faisal University was initially established with four colleges; the College of Agricultural and Food Sciences and the College of Veterinary Medicine and Animal Husbandry at the main campus in Al-Hasa; and the College of Architecture and Planning and the College of Medicine and Medical Sciences in Dammam. In later years, the following colleges were established: (College of Education, College of Administrative sciences, College of Science, College of Computer Science and Information Technology, College of Clinical Pharmacy, College of Medicine, College of Engineering, Community College in Baqiq, College of Dentistry, College of Applied Studies and Community Services, College of Arts and College of Law). In 1430 H/2010 E, the Dammam campus became completely independent and the University of Dammam "Imam Abdurrahman Bin Faisal University" was established. At present, King Faisal University includes (16) colleges with a total of (110) academic programs for Diploma and Bachelor levels, and (35) academic programs for postgraduate studies. Furthermore, it has a Veterinary Teaching Hospital and (8) research centers providing services in different scientific and applied fields.

The number of full-time students enrolled in the undergraduate program at KFU has reached (40,000) male and female students, and about (2000) male and female students enrolled in the MA program. While the number of part-time students enrolled in the Distance Learning Program has reached to (150,000) male and female students.

Around (4000) full-time students and (9000) part-time students complete their studies every year and obtain undergraduate and postgraduate degrees in different academic disciplines. Furthermore, KFU has more than (1600) employees including administrators and technicians, and about (2000) faculty members. Figure 1 shows the KFU main statistics.

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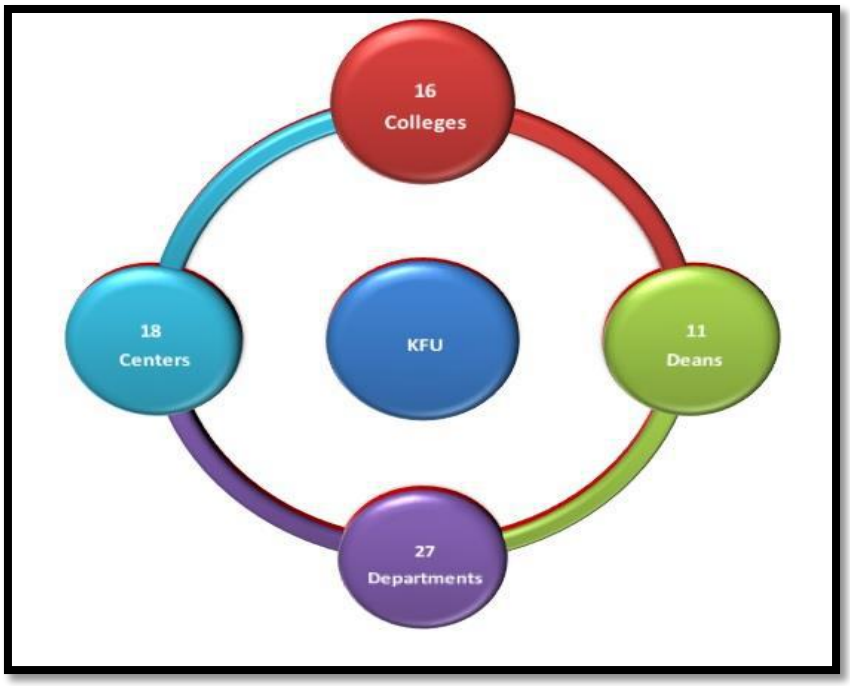

Figure 1: KFU Statistics

IV. FINDING AND DATA ANALYSIS

Before the actual data collection, the survey was sent and reviewed by some experts who were knowledgeable in survey design. Based on their feedback, the initial version was modified and a pilot test conducted. As part of the pilot test, the instrument was emailed to two experts (two Academic staff) in order to solicit their feedback on the survey. Then the survey was revised based on the pilot test results. The key reason for deploying the pilot test was to make the survey items more understandable and well written.

As mentioned earlier in chapter 1, the main audience of this project was the KFU faculty members. This section starts with a demographic analysis. The demographic part of the survey can be divided into two groups. The first describes the personal and organizational information. The second part shows the familiarity of quality assurance best practices.

The survey included 21 respondents who worked in the different colleges at KFU. At the beginning of the questionnaire, respondents were asked to specify their gender. The results show that the majority of participants were male faculty members (18 out of 21) (Figure 2).

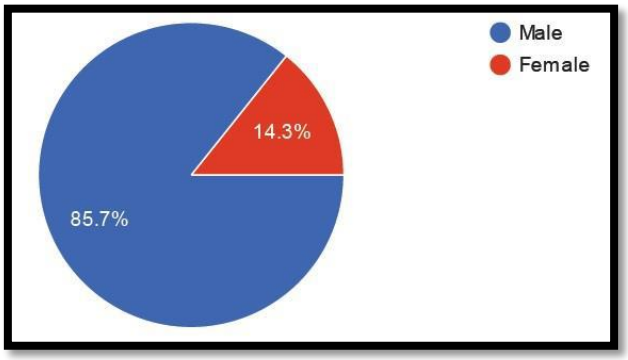

Figure 2: Gender

V. CONCLUSION AND RECOMMENDATIONS

Most of the Saudi Arabian educational institutions still not mature enough to deal with these practices.

Due to the lack of the research in this area, there is a scarcity of literature on the quality best practices investigation particularly in Saudi higher education context. For the body of knowledge, by empirically examining the questionnaire developed for this study, the results reported contribute to and enrich the literature in this area.

The research found that there is an increased awareness among the faculty members within KFU, of the importance of pursuing quality. Generally, they accept the fact that quality is the basis for moving organizations forward.

Main findings

The study concludes with very interesting and important venues. Table 4 below summarizes the main research findings.

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Table.4: Main Findings summary

Quality Best Practices	Main Findings (KFU case study)
Leadership	The survey analysis showed that • There was strong evidence that top management empowerment had been implemented. • Top managers often organized discussion meetings after quality problems had happened
Vision and Plan Statement	The data analysis indicated that • The organization had a long-term vision statement that had been drawn up several years ago and many faculty members were clear as to what the vision statement was. • KFU has long-term overall business performance plans. • KFU put its quality improvement plans in terms of quality problems that it had.
Evaluation	The survey analysis showed that • There is a need to increase the faculty members' awareness regarding benchmarking, internal and external quality audits. • Overall agreement regarding the quality improvement.
Quality System Improvement	The data analysis indicated that KFU sometimes did not follow these documents very well. In reality, KFU did not use these quality tools. These according to the luck of recognition of faculty members
Faculty Members Participation	The results suggest that • There is an overall agreement regarding having cross-functional teams within KFU. • More than 65% of participants agree that their feedback were highly considered however, 57% only implemented in the evaluation.
Education and Training	The survey analysis showed that • Sufficient resources for employee education and training were provided by KFU. • Quality awareness education was sufficiently conducted even though top and middle managers. • Training for quality management knowledge was sufficient (71% was agreed with this).
Education learning outcomes	The data analysis indicated that The vast majority of participants showed their agreement regarding all statements for this quality best practice.

Limitations and Suggestions for Future Research

Although this study provides insights into the Saudi Arabian higher education context, it has some limitations. This study was limited to a specific geographical region (i.e. Saudi Arabia). The results obtained may have been influenced by Saudi higher education system and quality best practices across the organizations sampled (i.e. KFU) or participant in the research. To reach a greater generalizability, future research would benefit from a larger sample size, as well as greater diversity of higher education contexts.

Another limitation is that the number of KFU faculty members is 2000, however, only 21 was participated in this study due to the time constrain.

Consistent coordination as well as faculty awareness, training and development need further attention. Suitable system support to help saving faculty member's time in filling in the same information multiple times would be helpful.

The quality team should not act as big bully but rather facilitate faculty empowerment and engagement to collect meaningful feedback is crucial too. Quality team should work will a clear strategy and should set realistic deadline

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for any assigned task. The management also needs to get involved with the quality committee more seriously.

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