Critical Success Factors Identified

within Moroccan Public Higher Education Institutions

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Abstract

Total Quality Management is a concept which any educational institution can attain through a variety of critical success factors. This concept is one of the steps necessary to maximize success in improving quality in higher education institutions. Hence, this qualitative study used a semi-structured interview, endeavors to identify and analyze some of the critical success factors which have significant impact in Moroccan public higher education institutions under the framework of Total Quality Management. As a result of in-depth semi-structured interviews with three experienced university professors in selected public universities in the economical capital city of Morocco, this study is contributing to the literature by empirically determining the critical success factors of the TQM mostly needed in the public higher education institutions. The findings of this study bring an understanding of how certain critical factors are perceived in the Moroccan public higher education context. In addition to expand the body of the current literature, the study findings also provide knowledge that can be used as a basis to address the management needs of quality in higher education institutions. In addition, this study is the first of its kind to be addressed in the Moroccan setting / North African region.

Keywords: Critical Success Factors (CSFs), Higher Education Institutions (HEIs), Total Quality Management (TQM), Qualitative Research Methods

1. Introduction

1.1 Moroccan Higher Education Context's

Morocco is a North African Arab country, which has many shared values with the rest of the Arab World, including religion, language, history and certain traditions (A. J. W. Ali, Rachid, 1995). However, the Kingdom remains distinguished from other Arab countries in the Middle East and North Africa because it was colonized by France and Spain. This resulted in Morocco enfolding both the French and Spanish languages, not only as part of its social fabric, but in certain educational aspects as well.

The roots of higher education (HE) in Morocco date back to the mid-ninth century. The oldest university worldwide is Al-Quayraouine University in Fez (Fry et al., n.d.), an institution that has been in continuous operation for 1,160 years. The Moroccan higher education system is made up of both public and private institutions. It includes 247 public schools and 203 private institutions. This number includes 13 public universities and 8 private universities.

Notwithstanding their long history, Morocco's HEIs have encountered a series of impediments since the country earned its independence from France in 1956 (El Fasi, 1962). Although the country has taken action and implemented various reforms to improve the HE sector, more work still needs to be done to enhance HEIs in Morocco (Ministry of National Education, Higher Education, the Professional Training and Scientific Research, 2008). In addition, the Moroccan scholar Ouakrime (2003), cited in Lazrak's study about issues in Moroccan HE (2017), gave a chronological roadmap of the Moroccan HE development. He stated that there are three core factors that impacted the development of institutions of higher education in Morocco are mainly: French colonization, the introduction of the Arabization policies, and need for higher education institutions to cater for the growing requirements of the Moroccan economy (Lazrak, 2016). Therefore, the French established the foundations of HEIs in terms of organization. Today there are three major divisions - public institutions, the newer public schools and the

semi-public non-profit institutions. Of the non-profit type, Al-Akhawayn University is the only one at present that is modeled after the American university system. Moreover, after the independence of Morocco, in his speech of 1999, King Hassan II[1]announced his plan to implement educational reforms in response to various dysfunctions in the Moroccan educational system. The core objectives of the reforms were focused on efficient organizational and academic management of educational institutions. The King stated that HEIs must be entirely responsible for their roles in the system and be fully autonomous in their decision-making process (Siham Lekchiri, 2018). Several reforms have now been implemented that resulted in significant collaboration between the institutions and the Ministry of Education, most notably benefiting the strategic planning of management, rulemaking, and assessments. Therefore, understanding the factors which enhance the quality of the educational system is necessary to determine critical success factors. To this end, the implementation of TQM principals has proven a great success within HEIs in different countries, as we will develop furthermore in our literature review. Due to the lack of studies in the North African region, as acknowledged in the literature review, the outcomes of this qualitative study will help us to understand which CSFs university professors consider to be relevant and effective within the scope of their practices. In addition, these findings add to the current literature of HEIs from North Africa.

2. Literature Review

2.1 TQM Literature Review

The roots of applying TQM in HEIs date back to the 1980's in countries such as the US, the UK and Australia. In these countries, TQM was implemented in three main areas: curriculum, non-academic functions and academic administration. As HEIs began to adopt TQM principles, 160 universities in the USA took independent initiative to implement TQM activities (Koch, 1998), while the impetus to introduce TQM in the UK stemmed from government action (Owlia, 1997). A 1998 survey on HEIs in the UK shown that the UK HEIs were hardly involved in TQM and had a lack of interest in adopting it in the future (Kanji, 1999).

Hence, some studies (without empirical aspects) have highlighted the need of applying TQM tools in HEIs, and how this approach has been, and can be used in this field. Leaders in HE need to test their institutions' ability to resist pressures, understand the hostility towards the elites that are being produced and address serious financial difficulties (Todorut, 2013; Rezeanu, 2011). These issues can negatively influence HEIs' function and their mission to deliver a higher level of quality education. Thus, TQM became an approach to fill the gap in HEIs, providing an integrative approach involving all the stakeholders (faculty members, support staff, etc.) improving the teaching quality for students and the work practices for the faculty members and staff (Vazzana, 1997).

In another example, in the case study research on Romanian higher education, Moldovan (2012) has hypothesized a relationship between TQM and various strategic issues faced by universities, taking Petru Maior University of Tirgu Mures (UPM) as a case of study. However, the results of the study showed that the Quality Defensive Strategy regarding teaching and scientific research correspond to the requirements of ISO9001 standard and the international accreditation ARACIS performance indicators.

Nonetheless, other practical studies have focused on the CSFs to achieve excellence in HEIs using different methods. For instance, in the Philippine HE context, the results show that only four main factors are crucial and should be implemented: continuous empowerment, quality improvement, leadership commitment and stakeholder satisfaction (Rodriguez, Valenzuela, & Ayuyao, 2018). Additionally, in Indian engineering education institutions, the critical success factors were quality mission, vision statement, top management commitment and visionary leadership, as identified by the scholar Mehta (2014) in his study, applying an interpretative structural modeling for determining the appropriate TQM principals in Indian context. In another example, according to a recent study on the Spanish public HE, focusing on promoting excellent management of educational institutions, Spain has selected EFQM (European Foundation for Quality Management) excellence model for education as the mainstay of its TQM, and used Delphi-Method based on qualitative principals for obtaining the required results (Mateos-Ronco and Mezquida, 2018).

Utilizing TQM practices has been popular in Turkish HEIs since the late 1990's. Hence, attempting to find out the critical factors in the Turkish universities in Istanbul, the scholar Bayraktar (2008) developed a method designed to assess the extent of TQM implementation in HEIs. The critical factors identified proved useful for Turkish decision makers and researchers from other countries, in addition to their contribution in understanding and evaluating TQM practices. Lastly, a recent study on assessing an outcome criteria of implementing TQM in the Ghanaian higher education context, has developed through Exploratory Factor Analysis (EFA) five major core areas that every Higher Education Institution (HEI) is expected to operate that constitute the philosophy of TQM (Kwarteng, 2021).

Process of searching the relevant articles.

In the following table, we present our search process for two databases, from which we have obtained the relevant articles focusing on critical success factors in the context of TQM.

Table 1. Search Query of the Literature Review on Science Direct database

Database	Science Direct
Search Topic	'Total Quality Management' AND 'Higher Education'
Publication Year	All years
Language	English
Document Types	Research Articles
Search fields (advanced research)	Title, author, source, abstract and descriptor
Number of hits	**55**

Table 2. Search Query of the Literature Review on Web of Science database

Database	Web of Science
Search Topic	'Total Quality Management' AND 'Higher Education'
Publication Year	[1989-2018]
Language	English
Article types	Research articles
Database	Web of science Core Collection
Number of hits	87
Web of science categories	Management (44), Education Educational Research (36), Education Scientific Discipline (6)
Search fields (advanced research)	Topic

Titles and abstracts of the articles found through the search procedures were evaluated for relevance. If the paper appeared to be eligible, the full text document was obtained and screened for inclusion. We obtained 142 papers, and 29 papers met eligibility criteria for this review. The 74 articles deemed ineligible were excluded because they did not focus on critical success factors.

3. Theoretical Framework

3.1 TQM

Total Quality Management (TQM), as an educational management framework, is adhered to in an academic context. According to Edward Sallis (2014), today's HEIs are in need of TQM tools, of which the identification of critical success factors is one. According to this scholar, "no institution can purchase TQM "off the peg". It has to be customized so that it harmonizes with and develops from the existing culture. TQM should be developed from existing good practice within the institution. Quality already exists in educational institutions. What TQM does is to build on existing quality and develop it into continuous quality improvement." This idea has been supported by other scholars in their studies (Alimohammadlou & Eslamloo, 2016; Rezeanu, 2011; Todorut, 2013).

Furthermore, the adoption of TQM into universities has continued to be a common point of discussion and research by a panel of academicians and scholars. In fact, the literature review paper mapping the Australian perspective of TQM acknowledged that the debate was contentious between those who view TQM as a new management method that does not have universal application, and those who see it as a positive major paradigm shift. On the other hand, Sallis (2014), has developed the previous idea by looking at customer needs. According to his viewpoint, educational institutions have an obligation to make learners aware of the variety of learning methods available to them by applying ISO9000:2000 to education. However, he highlights the difficulty in the notion of conformity of product, which can be complicated to translate in an educational setting when the product is defined as the student. However, ISO9000:2000 is nowadays about process and can be applied to service organizations and to educational establishments.
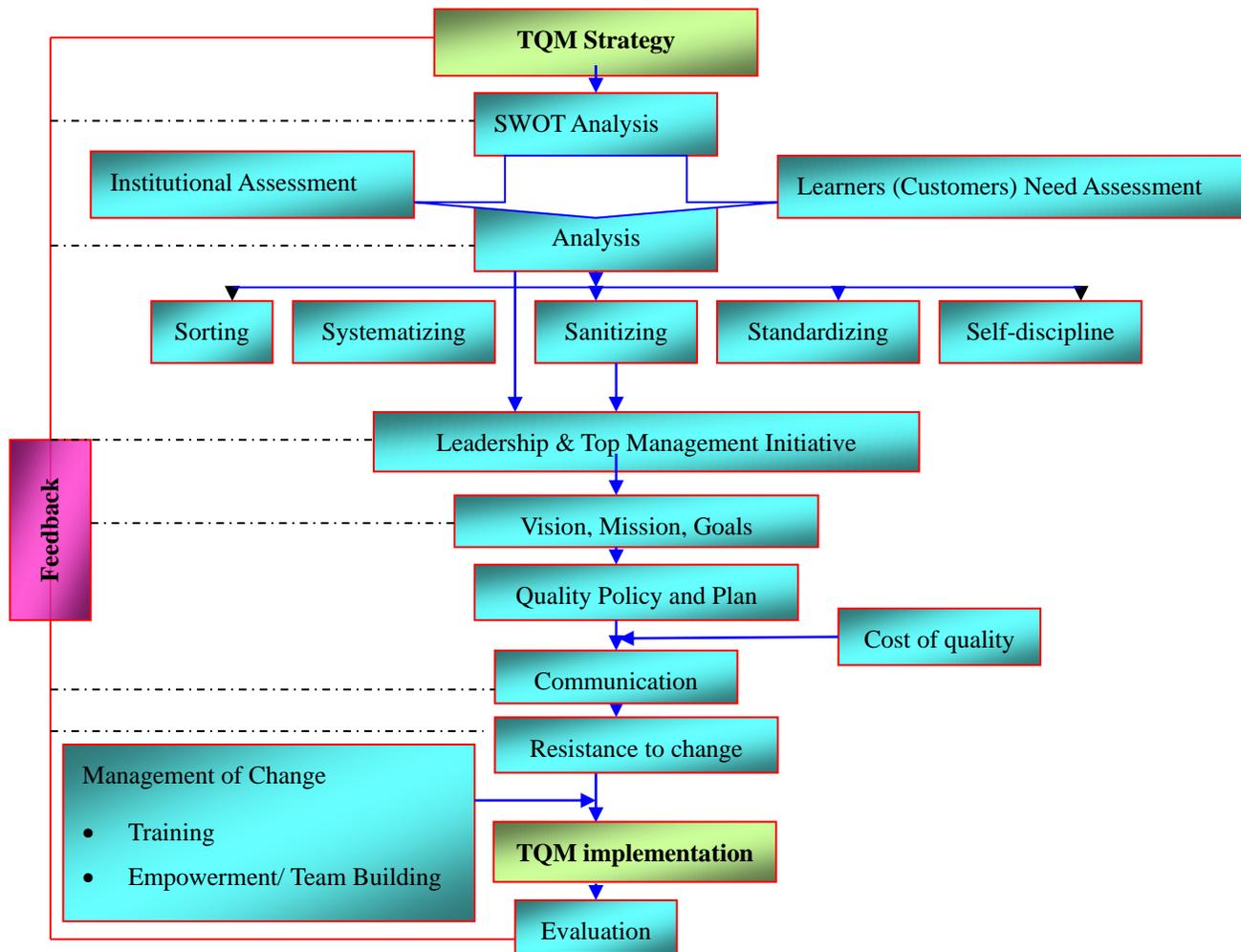
Figure 1. Framework of TQM. Source: (Mukhopadhyay, 2005)

3.2 Critical Success Factors

In his book referring to *Total Quality Management in Education,* Sallis (2014) acknowledged that critical success factors stem from TQM principles. Thus, he defines critical success factors in this way: "Critical success factors (CSFs), sometimes called moments of truth, are the indicators of what must be achieved if an institution is to satisfy its customers and its mission statement. They are the next stage in the strategy process and provide a guide to the key quality characteristics of the institutions. CSFs are the key activities that the institution identifies for itself".

Therefore, his emphasis regarding the importance of listing CSFs is to concentrate on the words 'critical' and 'successes'. In his chapter on strategy, he says that the tools employed for establishing mission, goals and analyzing strengths, weaknesses, opportunities and threats translate well in the HEI context. The tools themselves are simple and easy to apply. They force raising a question of why the institution exists, for whom it exists, and whether it is pursuing the right goals. Moreover, he divided the CSFs of HEIs into internal and external. These factors include: an accessible admissions system; learning modes which meet learner needs; properly functioning teams; improved examination pass rates; learners' social development; personal, cultural and ethical values; improvements in teaching and learning strategies; involvement of the majority of staff in improvement teams; improved progression rates (e.g. into employment and further higher education).

These critical success factors have been successfully used in different countries in the lens of using TQM principles to understand and determine the vital factors that should be implemented in HEIs for achieving quality. This is the reason why the focus of this study will be on understanding these critical success factors within the Moroccan public HEIs.

4. Problem Statement

4.1 Context and Significance

After the success of TQM implementation in developed countries, such as the US, the UK and Australia (Vazzana, 1997), the literature in the implementation of TQM in HEIs have shown that the tools of TQM greatly improve the ability of HEIs to identify the gaps in these institutions and propose improvements in specific areas, depending on each country's educational system and paradigms (Rezeanu, 2011; Todorut, 2013). Therefore, in his study of the 3D view of issues of quality in higher education, Hrnciar (2017) acknowledged that the extent of using a systematic approach to quality management in higher education institutions varies from country to country. While some are leaders in awareness and use of TQM, others are only starting out with such approaches. In addition, recent literature shows that different countries have different CSFs that identify the main areas in need of improvement in HEIs (Al-Bashir, 2016; N. A. Ali et al., 2010; Aminbeidokhti, Jamshidi, & Hoseini, 2016; Asif & Searcy, 2014; Bayraktar et al., 2008; Chen, Chen, & Padro, 2017; Habbal & Jreisat, 2018; Liao, Chang, & Wu, 2010; Megnounif et al., 2013; Mehta et al., 2014; Rodriguez et al., 2018; Sunder, 2016). These factors should be used with awareness by the stakeholders of HEIs. However, there is surprisingly little regard placed on studying how public HEIs perceive the critical success factors of TQM principals, especially in the Moroccan / African region. Only one study has been done on managerial and leadership effectiveness as one aspect of TQM in Moroccan HEIs (Siham Lekchiri, 2018). More research is needed in order to give a more complete picture and enable decision-makers to fill the gap in public Moroccan higher education.

4.2 Purpose and Research Questions

The purpose of this qualitative study is to understand the perception of the Moroccan public university professors towards the CSFs of their practices, and to what extent they are aware of these factors' impact and influence on the improvement of education quality in its broader sense.

Thus, shedding the light of the mentioned knowledge gap, our research solicits the following research questions:

1. How do university professors perceive the critical success factors' in public HEIs?

2. What critical success factors are perceived as having a significant impact on public Moroccan HEIs?

3. How does an understanding of CSFs by university professors contribute to the improvement of teaching practices?

To achieve this objective, following Creswell's and Marriam's guidelines of conducting qualitative research, we have used the interview method for gathering our data. We interviewed three university professors working in eight public higher education faculties in Casablanca. These professors are very experienced and have been working in the research sites for at least nine years. Therefore, they are our purposeful participants according to Patton (1990), Creswell (2011) and Tisdell (2015), as cited in their chapters discussing the collecting of qualitative data.

5. Research Methodology

Following Marriam's guidelines (2015), our research methodology section includes: how the sample was selected; how data was collected and analyzed; and measures taken to ensure the validity and reliability of this study.

5.1 Sample and Research Site

Since we are investigating the critical success factors enhanced in Moroccan public HEIs, we have chosen the in-depth interview to extract these CSFs. Because our study is a pure qualitative research, our sampling was purposeful sampling according to Patton (1990) as cited in Creswell's and Marriam's (2015) books in their chapters on the collecting of qualitative data. Thus, since we sought the understanding of Moroccan academicians in public HEIs, we selected three university professors working in the public higher education faculty in Casablanca.

The selected participants' extensive knowledge of Moroccan higher education institutions enabled us to obtain highly relevant data through the interviewing process.

As mentioned previously, the Moroccan public higher education system consisted of 13 public universities and 5 private universities. Thus, for our qualitative study we chose three university professors working on various faculties that are part of public higher education universities in Casablanca. These professors are distributed through the selected faculties respectively: (1) Faculty of Juridical Economics and Social Science (FJESS) and (2) UIC (International University in Casablanca) and (3) Faculty of Science Ain Chock (FSAC), Khalid Nicholas, from Academy of Management and Policy for postgraduate studies.

In order to obtain permission to conduct the study at each research site, we contacted the gatekeepers, as mentioned

by Creswell. For this study, the gatekeepers were the deans of each university. The deans facilitated access to the faculty and supported us throughout the data gathering process.

5.2 Data Collection

In our instrument creation we utilized Kvale's (2006) seven stages of an interview investigation: thematizing, designing, interviewing, transcribing, analyzing, verifying and reporting. These seven concepts provided the structure for our semi-structured interview design.

Hence, following Creswell's advice (2011), as qualitative researchers we applied for the appropriate permissions for the study including those related to the participants and the research sites according to accepted practice. Our semi-structured interview form was developed from the framework of the TQM, including the main components causally related to the critical success factors, the interview consisted of 7 questions. Because some participants were not familiar with the qualitative approach to educational research, we briefed them on our methods to improve the experience and the outcome. We assured all parties that we would protect the anonymity of participants and provided consent forms detailing all aspects of the briefings. Moreover, we sent the participants our interview design which included our interview questions prior to the date of the interview.

We collected our data using video, audio recordings and notation, which helped us identify themes in the analysis stage.

6. Analysis

Acknowledged by the Moroccan scholar Lazrak, (2017), Morocco is bilingual country, so the interviewing process was conducted in both languages Arabic and French. This created more interaction and clearer communication with our participants, providing greater certainty that our interview questions were understood. After gathering our data, the interviews were transcribed verbatim. After transcription of the French version, we sent a draft to all of the interviewees involved in the study, allowing them to confirm its accuracy. Afterward, we translated the draft from French to English after consulting with a language expert who is majoring in Linguistics and teaching in University of Human Sciences in Morocco to ensure the accuracy of the interview content and began the coding process with the English version of our data. The coding process we used involved the content analysis of the interviews, using a qualitative data analysis computer program. For this we used Nvivo software version 11. We have found that Nvivo offers a complete toolkit for rapid coding, thorough exploration, and rigorous management and analysis. Moreover, to increase the reliability of the data, our goal was to interview university professors whose field is management or educational policies. We were also concerned with exploring the general social processes that these professors employ to identify CSFs.

6.1 Coding and Indexing of the CCFs

For the sake of validity, the data collection and analysis conducted in this study was valid, reliable, and trustworthy, we were coached and mentored on the use of interviewing as a way of gathering data. To ensure internal validity, reliability, and consistency, the process of triangulation was performed according to Strauss's method. Triangulation was achieved by interviewing highly experienced university professors in the field of public school management and policy. We have confidence that the information obtained is particularly relevant because the participants have experience with quality management concepts.

Table 3. Emergence of similar critical success factors as related studies

Code/Category	Quotations from the interviews	Findings from other related articles	Related similar studies from the literature review
Balancing fees vs delivering higher level of quality	Including the pressure to lower or maintain fees due to competition among schools	Serious financial difficulties that hinder HEIs' ability to deliver a higher-quality level of education	(Todorut, 2013), Rezeanu, 2011)
Holistic view of the organization	The university should have a holistic view of the organization	TQM is integrative approach involving all stakeholders	(Vazzana, 1997)
Achieve excellence	Quality in HE is the ability to consistently meet the expectations of the client in the delivery of the institution's service	Focused on the critical success factors to achieve excellence in HEIs using different methods	(Rodriguez, Valenzuela, & Ayuyao, 2018).
Quality Concept/ Offer the best/ Ensuring confidence/ Achieve the expectation	Quality is the ability of the system to provide high quality in its service delivery or improvement so that it achieves the expectations of the client	Quality mission	(Mehta, 2014)

6.2 Accomplishing University Goals and Monitoring Performance

The main source of data for this study came from semi-structured interviews. Three interviews were conducted with university professors who are leaders in the field of management and policies in different Moroccan public HEIs. Within the interview protocol, the following issues were addressed: quality in higher education institutions; university professors' perceptions about the CSFs affecting quality in HEI; indicators of measuring university performance; manner in which university services add value to students' experience; competency-based education in HEI; the beneficial role of social networking and social media in the teaching methods and curricula; professors' viewpoints and predictions of the significant trends and challenges facing Moroccan HEIs.

The interviews with participants required almost one hour each. Ethical issues including privacy and confidentiality were discussed with each interviewee during the pre-interview phase and were adhered to throughout the study.

Notable interviewees participating in this study were: a lecturer and academic in the Academy of Management and Policy for postgraduate studies in higher education, teaching Management and Policies in different Schools and faculties with more than 10 years of experience; an expert in management and quality, teaching management courses among the faculty of Economic and Juridical Sciences, with more than 15 years of experience as a university professor. Introductory information about the participants is provided in the following table.

Table 4. The Interviewees

Pseudonym of the Interviewee	Years of Teaching Experience	Department of Faculty	Profession
Khalid Nicholas	10 years	Academy of Management and Policy for postgraduate studies	Academic and lecturer in multiple universities in Morocco and abroad
Chafii	15 years	UIC (International University in Casablanca) and Faculty of Economic and Juridical Science	Academic and teacher educator in higher schools of management and public faculty of Economic and Juridical Science
Dania	9 years	Faculty of Technical Sciences	Assistant professor and Academic in public faculty of Technical Sciences

Open coding:

University Professor

It is necessary to address the concept of quality in higher education institutions, especially universities. Quality is the ability of the system to succeed in its service delivery or make improvements so that it meets the expectations of the customer in regard to this service or in its contribution to the educational experience.

Key point: the core of quality in higher education is the ability to meet the expectation of the customer.

Codes: **Quality of HE is to meet customer expectations, ability to deliver higher quality in HE**.

Emergence of category "quality mission".

In the following, we present another category called "human capital", which represents the most important critical success factor because it has been reported by our interviewees frequently.

Table 5. The emerging codes and concepts

Codes	Concept	Category
There are several factors of success for any educational institution	Human capital	
Meeting customer expectations	Plan assessment of educational institutions	Integrate and focus on human capital in the pursuit of objectives
The human element		
Develop a holistic view of the organization		
Strategic planning		
The leadership shall implement the management plan and initiatives with objectives in mind		Exploiting intellectual abilities"
There are several indicators used to govern the achievement of university goals and performance through the following:	Demonstrating student performance	
Graduation rates.	Average university stakeholder salary	
Registering student performance.		
High school enrolment rates in mathematics, social sciences and English specialties.		
The amount of time allotted for the school day.		
Average salary of lecturers		
Average salary of administrators		

Open coding:

University Professor 3

Quality is the ability of the system to provide high quality in its service delivery or make improvements so that it achieves the expectations of the client in regard to this service or in its contribution to the educational experience. Training the student on the mechanisms of self-learning and ways of exploiting their intellectual abilities with continuous development.

6.3 Emergence of Category "Customer Focus"

Shapiro (1988) focused on the idea that market-orientation should be treated as synonymous with customer-orientation. TQM practices associated with customer orientation promote learning and innovation processes by inspiring sources of innovative ideas. Thus, the codes "mechanisms of self-learning" and "exploiting intellectual abilities" led to the emergence of the category "customer focus" as another critical success factor.

6.4 Emergence of the Category "Continuous Improvement"

Expert 1: The community college provides many practical opportunities for graduates with competence and abilities and gives them the opportunity to exercise their abilities and develop them through intensive courses and continuous use of those skills over time.

Expert 2: A quality university is the institution that remains a pioneer in its academic course and consistently offers excellence while continuously developing in response to domestic and global influences.

Continuous improvement requires an organizational culture that constantly encourages members to innovate, instills confidence and provides a rich and diverse set of resources and opportunities (Abrunhosa & Sa, 2008). Several studies have demonstrated that organizations which implement TQM principles and approaches tend to be more

innovative (Monila, Llorens-Montes, & Ruiz-Moreno, 2007; Prajogo & Sohal, 2001; Sa & Abrunhosa, 2007; Singh & Smith, 2004).

Figure 2. Generation of the codes in Nvivo v.11 (Word Cloud)

Word Cloud representing the vocabulary generated after coding to highlight the aspect of the critical success factors generated from the interviews with the expert's professors in higher education. The word cloud assist policy design through an understanding of the best managerial practices that should be established and implemented in the higher education institutions (e.g., Continuous development, offering excellence while continuously developing in response to domestic and global influences, focusing on human capital…etc.)

7. Results and Discussion

7.1 Best Managerial Practices for Moroccan Public Higher Education Institutions

The analytical technique we followed in this study yielded eight best managerial practices suitable for Moroccan public HEIs. The data analysis allowed us to derive a behavioral statement, managerial statement and quality statement. The following table summarizes the framework of the identified critical success factors in the context of Moroccan HEIs.

These study findings are significant in highlighting what constitutes critical success factors for Moroccan public HEIs and therefore establish a focal point for developing best managerial practices.

The Moroccan university professors in HEIs view as critical success factors those which integrate and focus on human capital while addressing educational objectives. A CSF demonstrates active support of human capital and emphasizes the achievement of student expectations as well as those of the university professors and other faculty members. The objective of this focus on human capital is to foster more autonomy and empower professional growth within the scope of the quality mission established by policy makers.

Table 6. Framework of the best managerial practices for Moroccan HEIs

Best Managerial Practices
(1) *Training students on mechanisms of self-learning*
(2) *Utilizing intellectual abilities with continuous development*
(3) *Integrating and focusing on human capital within the objectives of the educational institution*
(4) *Providing many practical application opportunities for graduates with competence and abilities*
(5) *Giving students the opportunity to hone their abilities through intensive courses*
(6) *Offering excellence while continuously developing in response to domestic and global influences*
(7) *Increasing the average salary of university stakeholders*
(8) *Considering the challenges in revenue as universities and colleges lower fees in response to competition*

7.2 Implication for Research and Practice in Moroccan Public Higher Education

In today's university context, quality mission, continuous development, student focus and human capital are critical ingredients for both competitiveness and quality management.

Referring to the practical application, the findings can be used to illuminate critical success factors in Moroccan public HEIs and therefore establish a framework upon which best managerial practices may be developed.

These success factors have brought to light areas in need of improvement including, of particular interest, student focus, human capital, continuous development and quality mission. In a similar studies undertaken by Kanji and Tambi (1999) among HEIs in the UK, and Rodriguez (2018) for the HEIs in the Philippines, it was evident that continuous development had the highest degree of criticality in TQM. Hence, by offering training to the faculty members and making human capital a focal point in the governance of the Moroccan public university system, quite the same perception of Ghanaian students who considered the human and non-human aspects of quality dimensions to be more relevant to them when they sought admission into the University (Kwarteng, 2021). Decision-makers may better ensure achievement of the quality mission and also integrate an evaluative process that facilitates continuous development.

Filling the gap in Moroccan public higher education requires an integrative approach in which all stakeholders, from the faculty members to the students, are taken into consideration in order to achieve the university's goal of total quality. Since in modern research, education is regarded as a behavioral model in which management models play an important role (Horban et al., 2020). We found that Moroccan HEIs need to make additional efforts to achieve the satisfaction of their main customer - the students, by professionally managing its human capital.

The findings of this article will contribute to the literature review, as there is only one other paper on the topic of critical success factors in North African higher education. That study was conducted in Algeria.

8. Limitations and Recommendations

This research was intended to generate much needed knowledge on the topic of success factors in the Moroccan HE sector, considering the lack of empirical evidence encountered during the literature review, especially in the North Africa countries. It is necessary to note, however, that several limitations were expected and encountered.

The first one was related to the scope of the study, which included three public university cases in Casablanca. The findings could only apply to a limited population of the HEIs. Consequently, the findings cannot be generalized to all Moroccan public HEIs. The second one is related to the participant sample, which was limited to three university professors. Increasing the number of purposeful participants may have impacted the findings.

Therefore, this research does not directly provide a multi-directional, all-inclusive comprehension of critical success factors within the Moroccan HEIs context. Nonetheless, it guarantees a one-sided hierarchical view. Also, accounting the nature of the data collected, which was primarily based on self-reported perceptions from the university professors, some data might be biased and subjective.

Regarding the above limitations, it is recommended that further replication studies in Moroccan public HEIs, as well as in other countries, are conducted using Mixed Methods Research. This will ascertain that more thorough analysis is done to better understand the perceptions of university professors and deans in various settings. The findings will either confirm the congruence of or present differences in findings. Cross-case studies would also aid in providing more empirical evidence on the topic, resulting in a nation-specific and global framework of perceived critical success factors in higher education in North African nations with educational environments similar to Morocco.

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