



**DEVELOPING A MODEL FOR MEASURING  
PERFORMANCE OF UNIVERSITIES IN FRAGILE  
COUNTRIES AND ITS APPLICATION IN SOMALI  
UNIVERSITIES**

**BY**

**SHAFIE SHARIF MOHAMED**

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## ABSTRACT

Different quality awards and excellence models have been developed in the past decades which include ISO, Deming Prize, Malcolm Baldrige National Quality Award, and European Foundation Quality Management. These models are successfully applied in the developed countries rather than fragile countries. Geographically, economically, socially and politically fragile countries are different from developed countries. Fragility is generally a combination of poverty, conflict, and instability. Fragile states have three characteristics, 1- the legitimacy of the government is weak, 2- governments do not have the capacity to provide basic services to their people, and 3- ongoing prolonged conflict. Centre for Strategic and International Studies (CSIS) states that characteristics of a fragile state are the combination of weak governance, ineffective national institutions, armed groups, extreme inequalities of income and education, weak rule of law, low government legitimacy, and high corruption. The purpose of this study is to develop a performance measurement model applicable for universities in fragile countries. Relative and Absolute measurement of AHP method have been applied in the study. To seek an answer to the first research question “what are the criteria and sub-criteria that should be included in the model to measure the performance of universities in the fragile countries?” the researcher interviewed 30 experts from eleven universities in top four fragile countries namely, Somalia, Afghanistan, Sudan, and Chad. To answer the second research question “What are the priorities of the criteria and sub-criteria to be included in the model?” 36 items questionnaire were distributed to collect data through “pairwise comparison matrix”. Data were collected from 55 respondents belonging to 20 universities in top four fragile countries. To answer the third research question, “What is the performance level of universities in Somalia as a fragile country?”, universities were evaluated against the developed model, academicians and administrative staff were asked to rate 24 questions based on the intensities: E-excellent, G-good, A-average, S-satisfactory, P-poor: Data were collected from 71 respondents from 15 universities in Somalia. Findings of the first research question indicate that criteria were clustered and categorized into nine main criteria and 24 sub-criteria. A total of 33 criteria were found from the respondents. Findings of the second research question indicate the overall weights of the criteria and the sub-criteria derived from all respondents. Weightage assigned fragile countries model are below other models such as MBNQA. Based on findings of third research question, six leading universities in Somalia are Hargeisa, Amoud, Muqdisho, Simad, Banadir and East Africa. In conclusion, the study provides criteria and sub-criteria applicable to measure performance of universities in fragile countries. The model is appropriate to evaluate universities in the fragile countries.

## ملخص البحث

تم في العقود الماضية تطوير عدد من مكافآت الجودة ونماذج التميز ، وتضمنت تلك المكافآت والنماذج مقاييس المنظمة الدولية (الأيزو)، و جائزة ديمنج، ومكافأة مالكولم بالدريج القومية للجودة، والمؤسسة الأوروبية لإدارة الجودة، وتم تطبيق هذه النماذج بنجاح في الدول المتقدمة أكثر من تطبيقها في الدول الهشة. وتختلف الدول الهشة جغرافياً واقتصادياً واجتماعياً وسياساً عن الدول المتقدمة. والهشاشة عموماً هي مزيج من الفقر، والصراعات، وعدم الاستقرار. وتتصف الدول الهشة بثلاث صفات هي: 1- تكون شرعية الحكومات فيها ضعيفة. 2- لا تملك الحكومات القدرة على توفير الخدمات الأساسية لشعبها. 3- كما تكون الصراعات فيها ممتدة عبر الزمان. وقد صرح مركز الدراسات الاستراتيجية والعالمية أن خصائص الدولة الهشة هي مزيج من الإدارة الضعيفة، والمؤسسات القومية غير الفاعلة، والجماعات المسلحة، والتفاوت الحاد في الدخل والتعليم، وضعف سيادة القانون، وضعف شرعية الحكومة، وزيادة معدل الفساد. تهدف هذه الدراسة إلى تطوير نموذج قياس أداء يناسب الجامعات في البلدان الهشة، وفي تحليل البيانات تبنت الدراسة طريقة القياس النسبي والمطلق في عملية التدرج التحليلي. وسعيًا لإجابة السؤال الأول في الدراسة " ما المعايير والمعايير الفرعية التي يجب تضمينها في نموذج قياس أداء الجامعات في البلدان الهشة؟" ولأجل تحديد هذه المعايير والمعايير الفرعية أجرى الباحث مقابلات مع ثلاثين خبيراً من إحدى عشرة جامعة في أربعة دول تعد الأكثر هشاشة؛ وهي: الصومال وأفغانستان والسودان وتشاد. وللإجابة عن سؤال الدراسة الثاني "ما الأولويات في المعايير الأساسية والمعايير الفرعية التي يجب تضمينها في النموذج؟" تم استخدام استبانة من 36 بنداً لجمع البيانات من خلال "مصفوفة المقارنة المزدوجة"، وتم جمع البيانات؛ 55 استجابة من عشرين جامعة من جامعات الدول الأربع المذكورة. وسعيًا للإجابة عن السؤال الثالث من أسئلة الدراسة "ما مستوى أداء الجامعات في الصومال بوصفها دولة هشة؟"، فقد تم تقييم الجامعات مقابلة على النموذج المطور، وطُلب من الأكاديميين والموظفين الإداريين ترتيب 24 سؤالاً بناء على عامل الشدة (ممتاز، جيد، متوسط، مقبول، ضعيف) وتم جمع البيانات من 15 جامعة في الصومال؛ من 71 مفحوصاً. وفي الختام قدمت الدراسة معايير أساسية، ومعايير فرعية يمكن تطبيقها لقياس بيئة الجامعات في البلدان الهشة، وأشارت النتائج أيضاً إلى الوزن الإجمالي للمعايير الأساسية والمعايير الفرعية المستمدة من المشاركين في الدراسة، ويُعدّ النموذج مناسباً لتقييم الجامعات في البلدان الهشة، كما أن المشاركين على معرفة بمعايير التقييم، والمعايير الفرعية في النموذج.

## **APPROVAL PAGE**

The thesis of Shafie Sharif Mohamed has been approved by the following:

---

Rafikul Islam  
Supervisor

---

Dolhadi Zainudin  
Co-Supervisor

---

Wan Rohaida  
Internal Examiner

---

Asma Bahurmoz  
External Examiner

---

Mohamed Nasir Hj Saludin  
External Examiner

---

Imad Fakhri Tahay Alshaikhli  
Chairperson

## DECLARATION

I hereby declare that this thesis is the result of my own investigation, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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*This Thesis is dedicated to  
Most Loving Parents, Wife and Children  
Whose Compassion for me Flows like a Waterfall  
That Continually Nourishes My Soul*

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## LIST OF ABBREVIATIONS/ACRONYMS

AAU	Association of African Universities
ADF	African Development Fund
AVU	African Virtual Universities
CEO	Chief Executive Officers
DP	Deming Prize
EC	European Commission
EFQM	European Function Quality Management
EU	European Union
HEIs	Higher Education Institutions
ICT	Information Communication Technology
ICU	Islamic Courts Union
IDB	Islamic Development Bank
IDP	Internal Displaced Camps
ILO	International Labour Organization
IMCL	International Management Consultants Limited
ISO	International Organization for Standardization
KM	Knowledge Management
KPI	Key Performance Indicators
MBNQA	Malcolm Baldrige National Quality Award
MoE	Ministry of Education
MOHE	Ministry of Higher Education
NGOs	Non-Governmental Organizations
NIST	National Institute of Standards and Technology
NQA	National Quality Award
NRC	Norwegian Refugee Council
OIC	Organization of Islamic Cooperation
OUM	Open University Malaysia
PSU	Puntland State University
PCM	Pairwise comparison Matrix
QAA	Quality Assurance Agency
QFD	Quality Function Deployment
QS	Qacquarelli Symonds
SEM	School Excellence Model
SFG	Somali Federal Government
SNU	Somali National University
SWOT	Strength Weakness Opportunity Threat
TFG	Transitional Federal Government
TNG	Transitional National Government
TOT	Training for Trainers
TPS	Toyota Production System
TQC	Total Quality Control
TQM	Total Quality Management
UEE	Universities Entering Exam
UN	United Nation
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program
UNESCO	United Nations Educational Scientific and Cultural
UNOSOM	United Nations Operation in Somalia
USC	United Somali Congress

VoC

Voices of Customer

## **DEFINITION OF TERMS**

Absolute Measurement	Alternatives are compared with a standard in one's memory that has been developed through experience (Saaty, 2006)
Benchmarking	is the search for the best industry practices which will lead to exceptional performance through the implementation of these best practices (Partovi, 1992)
Fragile country	The capacity of state structures in delivering key services needed for poverty reduction, development, security and the protection of human rights (FASID, 2009).
Fragility	is a combination of poverty, conflict, and instability. It is a measure of the extent to which the actual institutions and political process of a state accord with the strong image of a sovereign state (Carment and Samy, 2012).
Higher education	Education beyond high school, specifically that provided by colleges and graduate schools, and professional schools. (UNESCO, 2006)
Models	Models characterized by the need to evaluate a finite set of alternatives with respect to multiple criteria. (Choo et al., 2000)
QFD	as a methodology for the development of features, attributes, or functions that give high quality products or services (Ahmed (2006)
Quality	as fitness for use. Juran (1981)
Quality control	Develop a process which can produce the product and optimise the process (Kolesar, 2008).
Relative measurement	Elements are compared with each other to derive values for them that are meaningful on a ratio scale. (saaty, 2006)
Standard curriculum	defines the appropriate content standards for each university level in each course to provide a uniform set of learning standards for every university.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.0 BACKGROUND OF THE STUDY**

After Taylor's 1911 discovery of scientific management, measuring performance became a priority for many universities, and quality performance competitiveness became a way of life. However, after the 1980s, competition increased significantly, and many national and international performance measurement models were launched as nations began to place greater emphasis on improving the quality of their education and other services. Asif and Searcy (2014) argue that the growing competition among universities increases the need for performance measurement models. Performance measurement models have received much attention from academic researchers. Bobe and Kober (2015) argue that governments start to place pressure on the public and private universities to meet minimum standards of performance indicators.

Different models have been developed in the past decades to measure performance which includes ISO, Deming Prize, Malcolm Baldrige National Quality Award, and European Foundation Quality Management. Performance measurement models promote awareness of performance excellence and its application in academia is one of the key success factors that can help institutions improve their performance and stay competitive (Bourne et al., 2013).

The usefulness of performance measurement models in the education sector has accelerated after member countries of international organisations such as the World Trade Organisation (WTO) signed an agreement about international service trade including 'education services'. The agreement resulted in quality performance

competition among countries. Hence, global universities are undertaking initiatives to adopt excellence models to develop their performance to meet global quality standards.

Nearly every country has a performance measurement model or quality policy/strategy. Talwar (2009) found that there are more than 94 quality performance awards and excellence models at the international level, with additional national quality awards in 77 countries.

### **1.1 OBJECTIVES BEHIND EXCELLENCE MODELS**

Excellence models were created to improve the performance of organisations. Osseo et al. (2007) confirm 76 countries have excellence models and quality awards. Quality awards and excellence models like the Malcolm Baldrige National Quality Award (MBNQA) were launched to improve the performance of American companies (Islam, 2007). The European Foundation for Quality Management (EFQM) was introduced to measure and improve the quality of European companies (Bou-Llusar et al., 2009). Countries develop excellence models because they want to improve the quality of their products and services (Del Mar, 2011). Measurement models have had an influence on the quality culture of countries (Watts & McNair, 2012).

In addition to quality awards and excellence models, there are also quality acts. For instance, countries such as Malaysia have guidelines to review work processes, which enforces Development Administration Circular No.1 of 2002. The circular enforces that all civil services in Malaysia should apply ISO 9000 to improve the quality of services provided by government agencies. The main objective behind quality awards, excellence models, and quality acts is to improve countries' quality performance of their products or services. The following will introduce the