

**T.C.
SAKARYA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES**

**A COMPARATIVE STUDY OF E-GOVERNMENT
POLICIES: AN ALTERNATIVE MODEL PROPOSAL
FOR E-GOVERNMENT SUCCESS IN AFRICA**

MASTER'S THESIS

Malang B.S. BOJANG

**DEPARTMENT : Political Science and Public Administration
SUBFIELD : Public Administration**

Thesis Supervisor: Assoc. Prof. Özer KÖSEOĞLU

AUGUST-2017

T.C.
SAKARYA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES

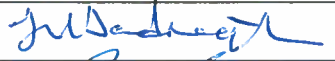


**A COMPARATIVE STUDY OF E-GOVERNMENT
POLICIES: AN ALTERNATIVE MODEL PROPOSAL
FOR E-GOVERNMENT SUCCESS IN AFRICA**

MASTER'S THESIS

Malang B.S. BOJANG

Department: Political Science and Public Administration

**“This thesis dated on 15.08.2017 has been accepted unanimously/with majority of votes by
the examination committee”.**

JURY MEMBERS	CONVICTIONS	SIGNATURE
Assist. Prof. Dr. Uğur SAĞIROĞLU	Successful	
Assist. Prof. Dr. Adem AKBUK	Successful	
Assoc. Prof. Dr. Özgür KÖRÖĞLÜ	Successful	



SAKARYA
ÜNİVERSİTESİ

SOSYAL BİLİMLER ENSTİTÜSÜ
YÜKSEK LİSANS/DOKTORA İNTİHAL YAZILIM RAPORU BEYAN BELGESİ

Tez Başlığı: A COMPARATIVE STUDY OF E-GOVERNMENT POLICIES: AN ALTERNATIVE MODEL PROPOSAL FOR E-GOVERNMENT SUCCESS IN AFRICA

Yukarıda başlığı belirtilen tez çalışmamın toplam 73 sayfalık kısmına ilişkin *Sakarya Üniversitesi Lisansüstü Yönetmeliği Madde 28* uyarınca aşağıda belirtilen filtrelemeler uygulanarak alınmış olan ve 18/07/2017 tarihinde Sosyal Bilimler Enstitüsü tarafından şahsıma iletilen *Turnitin* intihal tespit programı raporuna göre tezimin benzerlik oranı %15'tir.

Uygulanan filtrelemeler:

- 1) Kaynakça hariç
- 2) Alıntılar dahil
- 3) 5 kelimedenden daha az örtüşme içeren metin kısımları hariç

Bu bilgiler doğrultusunda tez çalışmamın herhangi bir intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Gereğini saygılarımla arz ederim.

Öğrenci

Malang B.S. Bojang

ÖĞRENCİ BİLGİLERİ

Adı – Soyadı : Malang B.S. Bojang
Öğrenci Numarası : 1460Y03027
Ana Bilim Dalı : Siyaset Bilim ve Kamu Yönetimi
Programı : Kamu Yönetimi
Statüsü : Y. Lisans Doktora Bütünleşik Doktora

Doç.Dr. Özer KÖSEOĞLU

DECLARATION

I declare that this thesis is written in accordance with the scientific code of ethics and that, this work is original and where the works of others used, it has been duly acknowledged. There is no falsification of used data and that no part of this thesis is presented for study at this university or any other university.

Malang B.S. BOJANG

15.08.2017



ACKNOWLEDGMENTS

I am grateful to Allah (SWT) for His guidance to complete this work. A heartfelt appreciation to the Turkish Government and the People's Republic of Turkey for the opportunity and the enabling environment created to pursue this degree program. As a graduate student, I am most fortunate to be taught by outstanding figures in Political Science and Public Administration, and my gratitude goes to Sakarya University especially the teaching staff at the department of Political Science and Public Administration.

I am grateful to my supervisor Assoc. Prof. Özer Köseoğlu for his research assistance and commitment to reviewed this project. In his capacity as my research guide, I have benefitted not only from his academic advices but also brotherly ideals of humanity. I could not have asked for a better supervisor. Appreciation and thanks to my lecturer and a true friend Assist. Prof. Dr. Yasin Kerem Gümüş for his wisdom and words of encouragement throughout this study. This project reflects many intellectual influences and therefore, my debt is to all my colleagues at Sakarya University, University of West Bohemia, and University of The Gambia.

I have been the beneficiary of numerous suggestions for the improvement of this work. I am particularly grateful to Ebrima Camara, Salifu Manneh, Bai Jammeh, Isatou Jeng, Ebrima Nyass and Muhammed Lamin Darboe. Special thanks to Lamin M. Senghore and William Bwando for their unwavering moral support. Finally, I am highly indebted to my parents (Binta and Sainey Bojang) for their moral and financial support throughout my academic life. I am also grateful to my grandmother and siblings for their support.

Malang B.S. BOJANG

15.08.2017

CONTENTS

CONTENTS	i
ABBREVIATIONS	iii
LIST OF TABLES	iv
LIST OF FIGURES	v
LIST OF GRAPHS	vi
ABSTRACT	vii
ÖZET	viii
INTRODUCTION	1
CHAPTER 1: CONCEPTUAL CLARIFICATION AND LITERATURE REVIEW	7
1.1. Key Concepts	7
1.1.1. e-Government	7
1.1.2. e-Governance	9
1.1.3. Policy Success	10
1.2. Literature Review	12
1.2.1. Analysis of the Challenges and Failures of e-Government	12
1.2.2. Analysis of e-Government Successes and Dimensions	17
CHAPTER 2: THEORETICAL FRAMEWORK AND METHODOLOGY	24
2.1. Research Framework	24
2.2. Methodology of the Research	25
2.2.1. Research Design and Sampling Technique	25
2.2.2. Data Collection Method	26
2.2.3. Theoretical Model	27
2.2.4. Indexes	30
CHAPTER 3: ANALYSIS AND INTERPRETATION OF CASES	32
3.1. Critical Analysis of the Cases Using United Nations Biannual e-Government Survey	32

3.3.1. Brief e-Government Policy Analysis and Initiatives of the Cases	32
3.3.2. Analysis and Interpretation of Cases Using United Nations Biannual e- Government Survey 2008-2016.....	36
3.3.3. Findings and Results	43
CHAPTER 4: PROPOSED ALTERNATIVE MODEL FOR E-GOVERNMENT SUCCESS IN AFRICA.....	46
4.1. Alternative Model Proposal.....	46
4.4.1. Alternative Model for e-Government Success in Africa	46
4.4.2. Variables in the Model.....	47
4.4.3. Phases of the Model.....	50
CONCLUSION AND POLICY RECOMMENDATIONS.....	54
REFERENCES	59
RESUME.....	73

ABBREVIATIONS

ADU	: Digital Agenda Uruguay
AGESIC	: The Agency for Electronic Government and Information System
BHCSI	: Bahrain Consumer Satisfaction Index
D&M MODEL	: DeLone and McLean IS Success Model
e-GOV	: e-Government
EGDI	: e-Government Development Index
EPI	: e-Participation Index
G2E	: Government To Employee
HDI	: Human Development Index
ICTs	: Information and Communication Technologies
IDA	: Infocomm Development Authority
IMF	: International Monetary Fund
iN2015	: Intelligent Nation 2015
IT	: Information Technology
IS	: Information System
NGOs	: Non-Governmental Organisation
UN	: United Nations
OGP	: Open Government Partnership
OSI	: Online Service Index

LIST OF TABLES

Table 1: A brief table of Literature at a glance on key scholar’s findings and results.....	19
Table 2: A brief table of Literature at a glance on key success stories and policy recommendations	22
Table 3: United Nations e-Government Development Index (EGDI) 2012-2014 Comparison.....	39
Table 4: Online Service Index (OSI) 2014.....	40
Table 5: E-Participation Index (EPI) 2014.....	40
Table 6: Index of Economic Freedom 2014.....	41
Table 7: Human Development Index (HDI) 2014.....	42
Table 8: World Bank Governance Indicator 2014.....	42

LIST OF FIGURES

Figure 1: Theoretical Model showing the causality of the five dimensions.	29
Figure 2: Alternative e-Government success model for Africa	50



LIST OF GRAPHS

Graph 1: UN e-Gov Survey of Country Cases Ranking 2008-2016.....	36
Graph 2: UN e-Gov Development Index of Country Cases 2008-2016	38



Title of the Thesis: A Comparative Study of e-Government Policies: An Alternative Model Proposal for e-Government Success in Africa	
Author: Malang B.S. BOJANG	Supervisor: Assoc. Prof. Özer KÖSEOĞLU
Accepted Date: 15.08.2017	No. of Pages: viii (pretext) + 73 (main body)
Department: Political Science and Public Administration	
<p>e-Government has emerged as the innovation of the 21st century. Both developed and developing countries are modernizing and transforming their public administration through the use of internet. The benefits of e-Gov are enormous and it includes greater accountability of the government, increases efficiency, reduces cost, and improves the standard of living for global citizens. However, e-Gov in developing countries is still pose with implementation challenges and these has led to massive e-Gov project failures. To this end, this study aims at determining why and what factor(s) make some developing countries successful in e-Gov development, while others failed with similar attributes. This thesis also identified implementation challenges of e-Gov in developing countries especially those in Africa. Employing the United Nations e-Gov survey 2008-2016 as well as a complementary model framework, data has been collected for this study from secondary sources. Our case study includes six countries from three regions: Tunisia and Mauritius (Africa), Chile and Uruguay (Americas), and Singapore and Kingdom of Bahrain (Asia). The results of this study show that political and bureaucratic commitment, economic development, right policies, participation in e-Services, and socio-cultural development are sufficient or necessary factors for e-Gov development. Further findings indicate that our cases have a comprehensive programmes which are implemented in phased manner coupled with effective monitoring mechanism. We equally observed inadequate online consultation and citizen's feedback in all our cases except Uruguay. An adaptation model from DeLone and McLean's IS success model is proposed as an alternative for e-Gov success in Africa. Policy recommendation for e-Gov development in Africa is also highlighted.</p>	
Keywords: e-Government, e-Governance, Information and Communication Technologies, e-Government in Africa.	

Tezin Başlığı: E-Devlet Politikalarının Karşılaştırmalı Analizi: E-Devlet Uygulamasının Afrika'da Başarılı Olabilmesi İçin Alternatif Bir Model Önerisi

Tezin Yazarı: Malang B.S. BOJANG

Danışman: Doç.Dr. Özer KÖSEOĞLU

Kabul Tarihi: 15.08.2017

Sayfa Sayısı: viii (ön kısım)+ 73 (tez)

Anabilimdalı: Siyaset Bilim ve Kamu Yönetimi

E-devlet uygulaması 21. yüzyılda ortaya çıkan bir yeniliktir. Hem gelişmiş hem de gelişmekte olan ülkeler kamu yönetimlerini internet kullanımını arttıracak şekilde modernize etmektedirler. E-Devlet uygulaması hükümetlere izlenebilirlik, etkinlik, maliyetlerin azalması, vatandaşların yaşam standartlarının artması gibi sayısız fayda sağlamaktadır. Bununla beraber, çoğu gelişmekte olan ülke e-devlet uygulamasının hayata geçirilmesinde ciddi sıkıntılar yaşamaktadırlar. Bu bağlamda, bu tezin amacı neden bazı gelişmekte olan ülkeler e-devlet uygulamasında başarılı iken diğerlerinin başarısız olduğunu ortaya koymayı amaçlamaktadır. Bu tez aynı zamanda özellikle Afrika'da yer alan gelişmekte olan ülkelerin e-devlet uygulamasında karşılaştıkları sorunları ortaya çıkarmayı amaçlamaktadır. Tezin yazımı aşamasında Birleşmiş Milletlerin 2008-2016 yıllarını kapsayan E-Devlet Uygulamalarına Yönelik Araştırması gibi ikincil kaynaklar kullanılmış ve model bir çerçeve ortaya konulmuştur. Bu çalışma üç bölgeden altı ülkeyi örnek çalışma alanı olarak incelemiştir; Tunus ve Moritus (Afrika), Şili ve Uruguay (Amerika), Singapur ve Bahreyn (Asya). Çalışmanın sonuçları bize politik ve bürokratik özveri, ekonomik gelişmişlik, doğru politikalar, E-hizmetlere katılım ve sosyo-kültürel gelişmişliğin E-devlet uygulamasının gelişimi için gerekli olan faktörler olduğunu göstermektedir. Çalışma ayrıca örnek olarak alınan ülkelerde e-devlet'in etkili bir denetim sistemi ile beraber başarılı bir şekilde uygulandığını göstermektedir. Çalışma sırasında Uruguay hariç diğer örnek ülkelerde yetersiz online müzakere ve vatandaşların geri bildirimini ile karşılaşmıştır. DeLone ve McLean's IS başarı modeli Afrika'da e-devlet uygulamasının başarılı olabilmesi için alternatif bir model olarak sunulmuş ve politika önerileri getirilmeye çalışılmıştır.

Anahtar Kelimeler: E-Devlet, E-Yönetim, Bilgi ve İletişim Teknolojileri, Afrika'da E-Devlet.

INTRODUCTION

a. Background and Scope

Electronic government (shortly e-Gov) has been one of the buzzword of recent times. In fact, e-Gov is the innovation of the 21st century. This is because many governments around the globe are reforming their service delivery system via the use of Information and Communications Technologies (ICTs) to attain greater efficiency in public sector. These potential benefits of e-Gov were echoed by stakeholder and supranational bodies like United Nations (UN), World Bank, International Monetary Fund (IMF), just to name a few. To aid our understanding of e-Gov, it is worthwhile to note that e-Gov is not purely a project centered on technology and cannot succeed with technology per se. Electronic government is not simply a matter of giving government officials computers or automating old practices (info Dev, 2002).

While e-Gov aimed at modernizing and reforming public administration (for example, see, Azab et al., 2009; Becker et al., 2004; Al-Khouri, 2011), the promises would be of great benefit to world governments. To some scholars, the benefits of technological innovations allow overcoming the inefficiency, to achieve optimal governance results, providing new opportunities for Non-Governmental Organization (NGOs), businesses and public institutions interaction, governance transparency, clearer decision-making (Saparniene, 2013), cost saving, greater accountability of the government, increases efficiency, shorter processing time, reducing corruption among the government employees, lowering the administrative burden and greater constituency participation (Finger and Pécoud, 2003), enhancing the managerial effectiveness and increasing productivity (Yildiz, 2007).

However, it appears that developing nations continues to struggle with ICT revolution while developed economics have already started bearing fruit of e-Gov (Verma, 2005). For developing countries especially those in Africa, it is important to know their e-Readiness and draw lessons from the success and failure of the various e-Gov projects in both developed or developing countries.

Although e-Gov has reached third world nations, but it still pose a challenge including those in Africa to “govern, serve its citizenry and, ultimately, improve the human development conditions for its people” (Gant, 2008). Being digital changes everything. As Barrenechea and Jenkins (2014) noted, if you are not an e-Gov, you are out of ‘Government’. In a digital, information-based economy, governments must modernize to survive. If they don’t they face becoming irrelevant. In democratic societies, when a government becomes irrelevant, it loses its effectiveness to govern. This technological revolution is no longer an option but a necessity for world governments for better governance and economic development. Big governments are characterized with wastefulness, ineffectiveness, coupled with bureaucrats unwillingness to open and give information (Stahl, 2005). However, e-Gov aimed at reforming the traditional way of doing things in public sector, to enhance better service delivery and promote efficiency.

b. Problem Statement and Importance of the Research

Much has been said and written about e-Gov in transforming relations among government institutions, businesses and citizens through the use of ICT. The potential promises are huge, however, much of these goals were far reach for many developing countries especially those in Africa. Many are limited in scope and are not comprehensive, while others face the issue of finance.

According to a study carried out by Heeks (2003), “35% of e-Gov implementations in developing countries can be classified as total failures (project never started or started but immediately abandoned) and 50% are partial failures (major goals are not attained and/or there are undesirable outcomes)”. Heeks and Stanforth (2007), estimate expenditure of “\$3 trillion on Information Technology (IT) projects by governments during the ten (10) years between 2000 and 2010; with an overall failure rate of around 60%, thus wasting huge amounts of Money” (Heeks and Stanforth, 2007). These are disturbing fact especially in developing countries with few resources at their disposal. Rorissa and Demissie (2010) contend that, there is a lack of literature on e-Gov and argued that the current status of e-Gov services in African countries is not well documented in detail and hence the need for further research.

Another justification for this thesis is that a few scholars have discussed e-Gov issues in Africa and provide an alternative model for its successful implementation. For instance, Heeks (2002) used design-reality framework to examine the failures and successes of e-Gov in developing countries. The study by Nkohkwo and Islam (2013) assessed the implementation challenges of e-Gov in Sub-Saharan Africa.

However, none of the foregoing studies focused on or provide an alternative framework for e-Gov success in Africa per se. This study tries to fill part of this void in previous research and hope to contribute to the literature by proposing an alternative model which was adopted from DeLone and McLean's Information System (IS) success model for e-Gov success in Africa. It is noteworthy to mention that the significance of this study cannot be over emphasized as it requires developing a field research for testing the renewed model.

c. Objectives

The aim of this paper is to determine as to why and what factor(s) makes some developing countries get the result they got (succeed), the challenges they faced and why others with similar outlook failed to meet desired outcomes of e-Gov projects. It would also seek to identify the main implementation challenges of e-Gov in developing countries more so in Africa and to propose a model that might suit African countries for better application of e-Gov. This study, therefore, seeks to answer the following questions: Why do some developing nations succeed in e-Gov while others failed with similar features; how can e-Gov as bureaucratic reform lead to development in Africa; what are the main factors that impede the implementation of e-Gov in developing countries most especially in Africa; can we draw lessons from experiences of a group of country cases that have rapid advances in their e-Gov implementation and develop an alternative model to improve e-Gov success in Africa?

d. Methodology

The methodology of this study (research strategy) is more pertinent to our case study. In the case study, we collected secondary data including policy documents, e-Gov strategic plans, programs and policies etc, and used secondary data analysis method. The framework for this study is based on UN e-Gov surveys (2008—2016), as well as

empirical and theoretical literature on e-Gov in secondary sources. In addition to the UN e-Gov surveys (2008—2016), a complementary model is developed to show the causality on countries success in UN e-Gov ranking. The targeted population (sampling size N) for this study includes three (3) regions: Africa, Americas and Asia. Out of this, a small sample size (n) includes Tunisia and Mauritius (Africa), Chile and Uruguay (Americas) and Singapore and The Kingdom of Bahrain (Asia) respectively were chosen as cases. The rationale behind our chosen cases includes the following: These countries have rapid advancement in e-Gov implementation at national and international level. The chosen cases are developing nations face with similar challenges in building e-Gov projects. In other words, countries in Latin America, Asia, and Africa face comparable challenges with regard to adoption of e-Gov (for example, see, Chua, 2012; Ha, 2013; Srivastava and Teo, 2007). These countries (the cases) because of their history and geography, has specific attributes such as relatively low human development index, a large middle class and relatively developed broadband infrastructure (Sadok et al. , 2016).

In addition to the UN e-Gov surveys (2008—2016), a complementary model is developed to show the causality on countries success in UN e-Gov ranking and it consists of five dimensions: political dimension; economic dimension; policy dimension; international dimension; and socio-cultural dimension. In turn, these dimensions or variables are measured using international indexes: World Bank Governance Indicator; Index of Economic Freedom; Online Service Index (OSI); effective participation of cases in international organization and e-Participation Index; and Human Development Index (HDI) respectively. We modified ‘DeLone and McLean's IS success model’ for e-Gov success in Africa. From the wider literature, we observed e-Gov adoption as one of the main challenges developing countries are facing and Africa is not an exception. With the variables in our model, we hoped it could address the issue of adoption and trust. However, the alterative model is subjected to further validation and empirical test.

e. Limitation of the Research

The study relied on secondary sources and as such, it is difficult to ascertain with certainty the reliability and validity of items used in composing the various measures or

indexes. Therefore, we cannot over generalize from the research findings and also due to the diverse nature of Africa, we recommend for a further empirical testing and validation of the alternative model developed. In selecting our cases for this study, the UN e-Gov survey ranking (2008-2016) were used to guide the selection. We cannot rule out selection bias. However, we could have used Japan, South and North Korea, United States, Canada, etc, but we found out that these countries are out of touch with other cases in terms of socio-economic development levels.

Moreover, more countries could have been added to the analysis. However, for a qualitative case study designed for Master's thesis, we selected six (6) cases in high caution depending on various criteria. Another limitation is about the methodology that this study employs. We preferred qualitative methodology as opposed to quantitative methodology which may lead to much more challenges such as difficulties with finding relevant data set for a proper analysis, developing econometric models. Further, we could have used meta-analysis—which uses one index to show the trends in a given data, which was more complex. Another limitation of this study is language barriers as the Kingdom of Bahrain, Chile, Uruguay either used Arabic or Spanish respectively. On many occasion the

researcher uses the English version of the original policy documents and legal regulations.

e. Structure of the Research

A reminder that this study is divided in to four (4) chapters. The first chapter deals with conceptual clarification and the literature review. Key concepts such as e-Gov, e-Governance, and policy success were defined for clarity purpose. This study also builds on previous scholarly works and aimed to fill part of the void created in previous research, and learning from success stories of other developing nations.

The second segment of the study examined the methodology and theoretical framework. The methodology of this study (research strategy) is more pertinent to our case study. We collected secondary data and used secondary data analysis method. United Nations e-Gov surveys (2008—2016), as well as a complementary model is developed to show the causality on countries success in UN e-Gov ranking.

The third chapter looks at critical analysis of the cases using UN biannual e-Gov survey. Several elements might support one or another approach's success or failure; every country has its own cultural elements and uniqueness to consider, and these were all further assessed in this chapter. The results and findings of this study are also discussed in this chapter.

In the fourth segment, an alternative model for e-Gov success in Africa is developed and discussed. The model is modified from the famous DeLone and McLean's (D & M model) IS success model. Conclusion and policy recommendations for successful approaches to e-Gov in developing countries including those in Africa were discussed.



CHAPTER ONE: CONCEPTUAL CLARIFICATION AND LITERATURE REVIEW

Electronic government is a buzzword in recent times. This is because it has received increased attention from donor agencies and world governments for its effective transformation of public sector. However, e-Gov research lacks from definitional vagueness of the e-Gov concept and various methodological limitations (Yildiz, 2007:646). On this background, this paper explored some scholarly concepts for clarity purpose and select the one that fits the present studies.

1.1. Key Concepts

For the present study, key concepts such as e-Gov, e-Governance and policy success would be defined for clarity. The starting point of this study is to have a grasp understanding of key concepts as we certainly cannot escape the pluralistic definition of concepts in the field of social sciences.

1.1.1. Electronic Government (e-Gov)

The term e-Gov has been used differently among scholars in the field of public administration and information systems. It has been given different names by scholars. To some scholars, it is digital government, one-stop government, and online government. While digital government is the most commonly used term in the U.S, e-Gov is prevalent elsewhere. The term e-Gov emerged in the late 1990s, but the history of computing in government organizations can be traced back to the beginnings of computer history. A literature on “IT in government” goes back at least to the 1970s (see, Kraemer, et al, 1978, Danziger and Andersen, 2002). It was born out of the internet boom. However, it is not only limited to internet use (Grönlund and Horan, 2005:714).

Electronic government and e-governance has become an integral part of public administration reforms around the world. There are many scientific studies conducted by many researchers on conceptualization definitions of e-Gov and e-Governance (Yildiz, 2007; Palvia and Sharma, 2007; Jaeger and Thompson, 2003; Anttiroik, 2007). However, we classified some of the scholarly and organizational definition of e-Gov in

to two (2) categories—those who view e-Gov as transforming traditional government using ICT in its activities; and the modern concept that resulted in changes in public sector functions, in relations among the government, businesses and the citizens.

Some scholars and practitioners view e-Gov as utilizing the internet and the world-wide-web for delivering government information and services to citizens (Alomari et al. 2010; Rorissa and Demissie, 2010; Stefanovic et al. 2016; World Bank; United Nations, 2005). While we acknowledged this definition, but it creates void in the overall purpose of our study and e-Gov in general. This definition focuses attention on ‘why’ countries are implementing e-Gov rather than on the ICTs tools themselves. The e-Gov goes beyond the simple exercise of putting information and services online. Traditionally, e-Gov has long been understood as the use of ICT in order to modernize public administration, paying particular attention to the possibilities of the internet use in the process of public sector development.

Other scholars also defined e-Gov as the delivery of national or local government information to citizens, businesses and other governmental agencies through digital means (Palvia and Sharma, 2007; Anttiroik, 2007; Backus, 2001; Dada, 2006; AlAwadhi and Morris, 2009). Yet again, this definition seems incomplete as it aimed at mere delivery of information and services to citizens and businesses and ignore an important dimension of e-Gov which is employees (G2E) and the net benefits of e-Gov.

e-Gov lacks universally accepted definition, and there are myriad definitions that attempt to adequately conceptualize e-Gov programs (Yildiz, 2007). Although, definitions on e-Gov may vary among scholars, what is apparent is the common theme of internet and information technology in providing services to citizens and businesses. e-Gov calls for optimization of service delivery by the government, and local government the whole day. To this end, this study adopted the definition of Working Group on e-Gov in the Developing World. The Group defines e-Gov as the use of ICTs [including internet, telephone, community centers, wireless devices or other communications systems] to promote more efficient and effective government, facilitate more accessible government services, allow greater public access to information, and make government more accountable to citizens” (Working Group on e-Government in the Developing World 2002: 1). This definition is adopted since our focus is on the use

of ICT in government and the delivery of information to provide services to citizens in local or national government, private businesses, that may use ICT to manage effectively and efficiently, and to make government more accountable to citizens. This definition did not only focus on why governments implement e-Gov but also on ICTs usage and its net benefits in administrations. Obviously, the idea of spreading the use of ICT in the processes of government has contributed to improving the efficiency of government operations. The original idea of e-Gov has been attributed to the public's need for access to the government decisions and documents via electronic means, the need of public electronic services, and opportunities to participate in the decision-making process, and to consult with the government institutions.

1.1.2. e-Governance

Some scholars suggest that e-Gov is only a subset of e-Governance while others contend that e-Gov and e-Governance cannot be defined in the same way and must be viewed differently (see, Palvia and Sharma, 2007; A.V. Anttiroik, 2007). e-Governance is a broader term (Al Athmay, 2013) comprising a range of relationships and networks in the government, related to the use and application of ICT. As argued by Heeks (2003), e-Governance goes beyond the provision of simple service and builds an external interaction with diverse stakeholders of government. It is a concept that defines the impact of technology on governance practices, the relationship between the government and the public, NGOs and private sector entities. e-Governance covers the entire range of government steps develop and administrate, and to ensure successful implementation of e-Gov services offered to the public (Saparniene, 2013:2).

The e-Governance Institute of Rutgers University defined e-Governance as: “ e-Governance involves new channels for accessing government, new styles of leadership, new methods of transacting business, and new systems for organizing and delivering information and services. Its potential for enhancing the governing process is immeasurable” (cited in Finger and Pécoud 2003: 59). The focus in this definition is on process and interaction of government and citizen, and appears to overlook the impact of ICTs on governance practices, the nexus between the government and the public, NGOs and private sector entities.

According to Palvia and Sharma (2007), e-Governance refers to “the way managers and supervisors use IT and internet to execute their functions of supervising, planning, organizing, coordinating, and staffing effectively”. It appears that e-Governance is a broader concept and includes the use of ICT by government and businesses to promote greater citizen participation (Palvia and Sharma, 2007:3). This definition also creates void in the overall purpose of this study. The above definition also pay more attention on management process of government. However, e-Governance covers the entire range of government steps, develop and administrate, and to ensure successful implementation of e-Gov services offered to the public.

On this background, this study adopted the definition given by the Commonwealth Centre for Electronic Governance. It defines “e-Governance as a tool and about choice of citizen. It is about providing citizens with the ability to choose the manner in which they wish to interact with their governments”. This definition is adopted because the success of e-Gov squarely centered on citizens. e-Gov can only succeed if citizens are willing to used ICT applications and interact with governments and businesses. It is important to note that the concept of e-Governance has a link with terms like e-Democracy, e-Participation, and e-Services.

For this conceptual framework, government is the unity of analysis or rather administration whose interface with citizens, businesses, non-state actors are said to be improving via the delivery of information through internet and other related devices.

1.1.3. Policy Success

A conceptual definition of policy success must accommodate public policy. Analysis of public policy involves a range of actors (McConnell, 2010a) and takes place in many forums with different outcomes. Public policy covers the broad range of government activities—everything that government does or fails to do so (Dye, 2005). Policy is conceived of as a process, the activity of formulating and implementing policies. Policy is about decisions, about power to allocate resources, decision about who gets what, when and how. It is simply a plan of actions to guide decisions. Claims of policy success are in abundance. Yet there is surprisingly little written on the subject. Far more has been written on policy failures—it is understandable that failure is of greater interest than success. Policy success and failure are slippery concepts. This is because policy

success is in the eye of the beholder and today's technological success maybe a failure in decades to come due to the relative nature of the term 'success'. According to Heeks (2003) success occur when most stakeholder groups attained their major goals and did not experience significant undesirable outcomes.

Policy success has three realms or dimensions: processes, programs and politics. Process success deals with policy making and its legitimacy, programme success focus on evidence based policy making, meeting the objectives and producing desire outcomes, and finally, political success equates to what government does—

oversee policy programme and taking decisions (McConnell, 2010b). Our focus here is programme success (meeting desire outcome of e-Gov). We classified three variations of policy success: bureaucratic; result-based; and universal norm. For bureaucratic one, a policy is successful if it is executed in accordance with its objectives. The second variation is that a policy is right or accurate if it meets the desire outcomes set. Finally, the last variation is based on universal human values—policy that protect these values. The problem with bureaucratic measure of success is that a policy may be successful implemented but be undesirable to many in the society and the universal norms seem too political and politics is frequently partisan. Our argument here is that, a policy is successful if it achieves the goals that proponents set out to achieve. What matter is what works well.

The logic is that achieving policy success resides in good policy design and policy success relates to goal achievement. This study adopted the definition given by McConnell (2010a). He defines policy success as follows: "A policy is successful if it achieves the goals that proponents set out to achieve and attracts no criticism of any significance and/or support is virtually universal" (McConnell, 2010a:351). We opted for this definition because our focus is on meeting the desire outcomes of e-Gov in developing countries. In addition, the definition also recognizes that not everyone will perceive government's achievements as successful.

1.2. Literature Review

1.2.1. Analysis of the Challenges and Failures of e-Government

A few scholars have discussed e-Gov issues in developing countries including Africa and provide an alternative framework for its successful implementation. For instance, Heeks (2002) used design-reality framework to examine the failures and successes of e-Gov services in developing countries. The study by Nkohkwo and Islam (2013) assessed the implementation challenges of e-Gov initiatives in Sub-Saharan Africa. None of the foregoing studies focused on alternative framework for e-Gov success in Africa per se. This thesis tries to fill part of this void in previous research by proposing an alternative framework for e-Gov success in Africa through learning from success stories of other developing nations.

Electronic government is often heralded as a way forward for governments around the world to achieve efficiency and better service delivery to both citizens and businesses. This has made e-Gov not just an option but a necessity for countries aiming for better governance. This is because the benefits of adopting e-Gov are enormous: efficiency and effective government, greater participation, transparent government, better services delivery, reduction of massive corruption just to name a few. However, despite these promises, e-Gov implementation still poses a threat in most developing countries more so in Africa. Analysis of the reasons behind success and failure of e-Gov projects is still an interesting domain of investigation (Elkadi, 2013).

Scholarly investigations on e-Gov have focused primarily on the impacts and outcomes of ICTs for the private sector (Ndou 2004) and the public sector has been sidelined because it tends to lag behind in the process of technology adoption and business reinvention. African governments are beginning to acknowledge the significance of ICTs in government and private sector despite the challenges it faced in adoption of ICTs (see, Heeks, 2002; Thomas et al., 2004; InfoDev, 2004).

Although e-Gov is a global phenomenon, simply transferring ICT solutions and related organizational concepts from developed to developing countries seems inappropriate. Arguably, e-Gov is an imported concept based on imported designs and it is diffusing slowly within Africa due to inadequate e-Readiness for e-Gov (Heeks, 2002; Schuppan,

2008). Similarly, inadequate infrastructure, low literacy, poor economic development, and differing of cultural factors are prevalence in Africa (Rorissa and Demissie, 2010). Most, if not all, currently published e-Gov initiatives and strategies are based on successful experiences from developed countries, which may not be directly applicable to developing countries (see, Chen et al., 2006; Mutula, 2013) due to socio-cultural, political and economic factors.

It appears that evaluating e-Gov success or failure pose many difficulties. Heeks (2002), “laments that the first difficulty is the subjectivity of evaluation. The second difficulty is the timing of evaluation—today’s information system success may be tomorrow’s information system failure, and vice versa” (Heeks 2002). This study, therefore, shall explore a comparative study on e-Gov successes and failures of multiple cases using global (UN e-Gov Survey) e-Gov survey of 2008-2016.

While e-Gov aims at modernizing and reforming public administration (for example, see, Azab et al., 2009; Becker et al., 2004; Al-Khour, 2011), the promises are of great benefit to world governments. To some scholars, the benefits of technological innovations allow overcoming the inefficiency, achieving optimal governance results, providing new opportunities for NGOs, businesses and public institutions interaction, governance transparency, clearer decision-making (Saparniene, 2013), cost saving, greater accountability of the government, increasing efficiency, ensuring shorter processing time, reducing corruption among the government employees, lowering the administrative burden and improving constituency participation (Finger and Pécoud 2003).

Although, much of the literature see IT as an instrument of administrative reform and that IT has the potential for dramatically changing organizations (see, Torres et al., 2005). However, Kraemer and King (2003) argued even more strongly than before that IT is not a catalyst for administrative reform in government. They contend that pro-IT proponent never backed their argument: “Proponents of the reform position recognize this point, but they respond with the claim that the potential of IT is not being realized because top managers fail to utilize the technology properly: they fail to "distribute" the technology efficiently, "empower" lower level staff, "re-engineer" the organization

along with computerization efforts, and become hands-on "knowledge executives" themselves" (Kraemer and King, 2003:6).

Most of the challenges developing countries encounter is poor coordination among various government institutions regarding the inadequacy of ICT policies and master plans to guide investments (Gichoya, 2005). Another challenge that every government face in implementing successful e-Gov is the citizens' acceptance and usage. Therefore, educating and training of the citizens on e-Portal services must not be overlook to avert this challenge (Sarrayrih and Sriram, 2015).

Heeks (2001) contends that countries faced a number of challenges. First, the strategic challenge of ICT infrastructure: the pre-conditions for e-Governance and secondly, the tactical challenge of closing design—reality gaps: adopting best practice in e-Governance projects in order to avoid failure and to achieve success. Heeks (2001) further documented that surveys of e-Governance initiatives in developing countries are incredibly rare and it needs to be addressed coupled with sustainability failure—an initiative that succeeds initially but then fails after a year or so.

Evans and Yen (2006), opined that Africa has what it takes to develop e-Gov but at the present is greatly affected by the digital divide. There is a huge disparity between rural communities and urban centers in terms of having access to internet and other ICTs (Evans and Yen, 2006: 225). Similarly, Nkohkwo and Islam's (2013) research findings show that ICT infrastructure, human resources, legal framework, internet access, the digital divide, and connectivity are among the most common challenges to the successful implementation of e-Gov in Sub-Saharan African countries.

Ran Kim (2012) reported that setting up the right institutions presents a major challenge for many countries, including countries already experiencing some success in e-Gov. Most are still seeking the appropriate institutional solution. Institutional arrangements profoundly influence technology and its application in governments; that is, e-Gov, and the way governments provide services, interact with their citizens and deliver for stakeholder value. He further argues that e-Gov development typically takes place within countries' existing institutions and institutional arrangements; including particularly, the positioning of e-Gov leadership and responsibilities within public sector institutions.

Heeks and Santos (2009) argued that poor adoption rates could be blamed for some e-Gov project failures. e-Gov systems therefore face enforcement challenge. They explained further by arguing that e-Gov adoption involves two groups of actors with potentially differing interests—that is, innovation designers and bureaucrats. Literature on e-Gov adoption in developing countries in general and specifically in African and Arab countries cite frustrating stories of systems failure. (Al Athmay et al., 2013:89).

Again, another fundamental challenge facing the adoption of e-Gov in developing countries especially those in Africa is the issue of trust. In their study on e-Gov utilization services, Carter and Bélanger's (2005) findings indicate that "perceived ease of use of e-Services, compatibility and trustworthiness in the systems are significant predictors of citizens intention to use an e-Gov service". Similarly, Meftah et al. (2015) contend that there is strong evidence of a significant relationship between culture, awareness and trust and adoption of e-Gov.

Al Athmay et al. (2013) outlined some challenges face by developing Arab countries in the adoption of e-Gov. Among the challenges include lack of proper government information, poor marketing of e-Gov services, inadequate coordination, and poor evaluation of e-Gov projects (Al Athmay et al. ,2013:87-8). Similarly, Ndou (2004) corroborates that developing nations have limited capacity coupled with political, social and economic constraints (Ndou, 2004:16).

Most of the scholarly research conducted on e-Gov failures concludes that one of the major reason why most e-Gov project failed in developing countries is because of the wide gap between the ICT design and the reality of the system. There are managerial deficiency and poor structures, staffing, and less-serious gaps around some of the e-Gov system components (see, Lessa et. al 2012; Heeks 2002; Dada 2006). However, the methodology and model (Heeks archetypes model, 2003) used for this analysis is too simplistic and can be applied to any organization (Dada, 2006). Further, there are several socio-cultural factors that may impede the design-reality model in various developing countries. Dada (2006) recommended for further research to this effect in developing countries.

Studies indicate that most e-Gov initiatives in developing countries fail in some way (see, Ndou, 2004; Dada, 2006). According to a study carried out by Heeks (2003), "35%

of e-Gov implementations in developing/transitional countries can be classified as total failures (project never started or started but immediately abandoned) and 50% are partial failures (major goals are not attained and/or there are undesirable outcomes)".

According to Gao & Gunawong (2014), many e-Gov projects are very complex, involving multiple tasks, such as constructing a large-scale ICT infrastructure, restructuring public activities, and providing broad ranges of public services. Due to these complexities, e-Gov projects are generally at risk of having undesirable objectives. In essence, e-Gov failure is a widely existing but poorly understood phenomenon due to implementation challenges.

Corruption is among the serious contextual constraints that face e-Gov success in both developed and developing nations. Although corruption exists in all countries but its intensity differ from country to country. Regrettably, it is most common in third world nations. Similarly, Andersen and Rand (2006) argued that ICT could be effective in the fight against corruption.

Heeks (2002) opines that the high rate of e-Gov initiative failures could be due to poor IS in developing countries. There is a high rate of IS failures in developing countries and we should seek answers to understand 'why'. These project failues are an issues due to opportunity cost which are often high in developing world (Heeks, 2002:103). Similarly, Dada (2006) also argues that it is not just e-Gov application, but IS in general fail in developing countries. Many of the failures of e-Gov could be blamed to the model borrowing of information system from the developed nations to developing countries without considering impeding factors such as economic, cultural, infrastructural, political and social.

In his study on e-Gov failures, Dada (2006), concludes that the expectations attach to e-Gov applications were unrealistic and as such leads to failures. However, it appears that Dada (2006) overlook cultural, political, and economic factors that might have led to failures of e-Gov project, coupled with the various e-Gov policies across different countries. Besides, there are some success stories of e-Gov as in Korea, Singapore, Kingdom of Bahrain etc.

The UN report quotes Garner Research statistics that indicate e-Gov projects fail at the rate of 60%. Evans and Yen (2006) asserted that there are specific reasons that the failure rate for projects may be high in government applications, such as governments do not have the ability to adapt as public organizations do, the political environments shift rapidly and can be difficult for government program to have a completely transparent structure.

Richard Heeks (2003) who conducted a comprehensive research on why e-Gov project fail in developing countries noted that failures come at a high price for the world's poorer countries. He argues that they try to implement big projects at the same time which often leads to failure. Heeks (2003) therefore recommends the adoption of 'KISS': Keep it Small and Simple (Heeks, 2003:11).

1.2.2. Analysis of e-Government Successes and Dimensions.

Although most e-Gov projects in developing countries failed to meet the intended goals, however, some e-Gov projects have equally flourished in developing countries too. For example, Brazil, India, Singapore, Chile, etc has registered some success stories. e-Gov can make a valuable contribution to development. Information technology is a catalyst for administrative reform in developing countries. For example, Singapore though limited in natural resources but exploit the potentials of ICTs in transforming her economy and hence national development (Chua, 2012).

Evans and Yen (2006) applaud Singapore and Chile for their success stories in e-Gov development in their respective regions. Singapore provides lot of online transaction and information for citizens and businesses. Equally, Chile is also commended for its online transaction ability as well as the ability to make bids and solicitations for contracts (Evans and Yen, 2006:222). These enhances participation in government and also improved relations among governments, businesses and citizens.

As a nation-state, Singapore has transformed in to a small smart city, well-informed, and well-wired public. It is interesting to note that singapore have a stable and committed government that aimed at harnessing the potential of ICT to benefit the public. Singapore's success can be blamed on the policies and strategies adopted by the government coupled with effective evaluation held at specific interval (Ke, 2004). Ojo

(2014) also did an extensive research on e-Governance grass root development in Nigeria, and concludes that, e-Governance allows effective participation of the local people. Al Athmay et al. (2013) also asserted that the success of e-Gov from Gulf nations is due to infrastructure, education, citizen-friendly portals and online applications coupled with government commitment (Al Athmay et al. ,2013:84).

Heeks (2001) hails the Chilean tax return model as a great success. The system is a great success as it reduces costs and increased speed and accuracy of service. Citizens find the system easier, faster, and more accurate than traditional paper-based services which is time consuming. Whereas processing a tax return had previously taken 25 working days ... the new online package was delivering online assessments in just 12 hours (Heeks, 2001:11).

Again, previous research have shown that e-Gov success depends on adoption of e-Services and several factors influenced citizens to adopt ICTs and other e-Services. These include usefulness, trust, data security, internet safety (see, Carter and Belanger, 2003; Huang et al. 2002; Hung et al. 2006).

There is need to set out a robust plan and strategy, and learn from success stories. These will be of great essence for the adoption of e-Gov. It is also important to conduct periodic evaluations to understand how citizens perceive e-Gov from different perspectives such as usefulness and ease of use (Davis, 1985, 1989), and satisfaction (DeLone and McLean, 1992) of e-Services.

Azab et al. (2009) in their article on assessing e-Gov readiness in Egypt, recommend that in order to reach success in applying e-Gov, public agencies should realize the importance of the integration and transformation between all e-Gov building blocks: IT strategy, processes, technology, and people. Wang and Liao (2008) argued that information quality, system quality, service quality, use, user satisfaction, are all valid measures for e-Gov success.

Table 1. A brief table of Literature at a glance on key scholar’s findings and results.

DIMENSIONS	FINDINGS AND RESULTS	REFERENCES
CORRUPTION	Political and economic corruption are blame for many e-Gov projects failures. Information and finance are abuse or divert to personal gains. These have led to many e-Gov projects and service being abandon or the desire outcomes or objectives not achieved.	Aladwani (2015)
	Successful e-Gov services will reduce corruption in developing nations where e-Gov is assumed to be higher than in advance economics.	Mistry and Jalal (2012)
	ICT and e-Gov policies are strong and effective mechanism to fight against administrative corruption.	Andersen and Rand (2006)
LEADERSHIP, POLITICAL WILL, AND PEOPLE-CENTRIC	Political will and bureaucratic support is necessary for e-Gov to triumph in Africa. However, one might argue that it is not too strong a factor. If the public are satisfied with the state of affairs, politician may relax on e-Gov policies.	Altman (2002)
	e-Gov strategies and policies had a greater impact on people than on e-Gov Readiness (EGR) of countries. The focus of ICT policies and strategy should be on people.	Azab et al. (2009)
	Many e-Gov projects failed to meet there intended objectives due to poor coordination, little or no information sharing, no robust strategic plan and policies, poor governance and lack or inadequate of periodic evaluation. These are critical issues African countries faced.	Al Athmay et al. (2013)

	Leadership and political willingness to policies and programmes are necessary for e-Gov projects to succeed in developing economics. Equally, commitment and effective implementation is necessary.	Ha and Coghill (2006)
INFORMATION SYSTEM GAPS AND WEBSITE DESIGN	Many African countries lack web presence for local administration. Often a times they follow a top-down approach which often lead to failure. e-Gov should be all inclusive and not just at the top officials.	Rorissa and Demissie (2010)
	Size of gap that exists between 'realities' and 'design of the e-Gov project' are huge in developing economics. The wider the gap, the more project fail. Equally, the smaller the gap, the greater the chance of success.	Heeks (2003)
	ICT per se is not a reform strategy or tool for public administration. In fact, it is a catalyst for rigid management structure.	Kraemer and King (2003)
	Arab and African countries are pose with challenges of human capacity and infrastructure. To succeed in e-Gov projects, they must concentrate in their service delivery system and literacy in ICT and other technologies.	Al Athmay et al. (2013)
	In many third world nations, IT appears to be a vague concept, and this make it difficult for governments to invest in a system that they had little knowledge. This unwillingness poses a threat to e-Gov success in developing countries.	Chen et al. (2006)
	Political will is an important factor to improve e-Gov performance and national development.	Stier (2015)

POLITICAL COMMITMENT	If interpersonal trust is high and citizens are satisfied with system of government, e-Gov is less likely to develop.	Altman (2002)
SOCIO-CULTURAL AND ECONOMIC FACTORS	The problem of data security, privacy laws, legal system, poor website design, inadequate information, limited number of internet users as in the case of many developing countries, low IT literacy, and poor standard design are to be blamed for the poor adoption of e-Gov. The main concern of citizens is the fear that their information could be misused, or breach their privacy rights.	Alomari et al. (2010)
	The issue of age, gender, culture have all impacted on e-Gov in Africa.	Olaitan (2015)
	With its diversity, developing nations face the problems of gender, poverty, age, digital divide, social exclusion towards e-Gov. These are impeding factors that needs to be address.	Bhuiyan (2011)
	Various culture impacts on attitudes of citizens to adopt e-Services. Nations with high uncertainty avoidance tend to have a high level of e-Gov services adoption, and countries with individualism culture tends to have a high level of e-Gov orientation.	Aida and Majdi (2014)

Table 2. A brief table of Literature at a glance on key success stories and policy recommendations.

DIMENSIONS	SUCCESS STORIES AND POLICY RECCOMENDATIONS	REFERENCES
CITIZEN-CENTRIC APPROACH	The success of e-Gov to a large extent depends on citizens' trust to adopt the systems that are of quality and easy to use. The information has to be reliable.	Al-Awadhi and Morris (2009)
	e-Gov success depends on adoption of e-Services. Factors like usefulness, ease of use, perceived risk, trustworthiness are necessary or sufficient for e-Gov success.	Carter and Belanger, (2003)
ICT INFRASTRUCTUE	Government employees needs to be aware and train about e-Gov strategy. They need to know the potential benefits of e-Gov, how it will make their work easy, and so on. These would ensure their support and willingness leading to the success of the overall e-Gov project.	Azab et al. (2009)
	e-Gov policies and strategies has transformed Singapore in to a smart city and to a growing economy.	Chua (2012)
INVESTMENT IN EDUCATION	Governments should initiate policies that are gear towards e-Gov development in Africa. And also train local government personnel.	Ojo (2014)
	Good performance of some Gulf states on e-Gov is made due to high ICT literacy rate, good internet facilities and online services.	Al Athmay et al. (2013)
POLITICAL STABILITY AND ORGANIZATI NAL STRUCTURES	The government commitment in e-Gov services and policies are to be blamed for the rapid success of Singapore.	Ke (2004)
	Institutional arrangements profoundly influence technology and its application in governments; that is, e-Gov, and the way governments provide services, interact with their citizens and deliver for stakeholder value.	Kim (2012)

E-GOV STRATEGIES, MODELS	A holistic approach is needed for e-Gov to succeed. Information quality, systems quality, and service quality are important dimensions for e-Gov adoption in developing world.	Wang and Liao (2008)
	Chilean tax return model was a great success. It has reduced time and cost due to online tax system.	Heeks (2001)
	The need to set out a robust strategy and learn from success stories will be of great essence for the adoption of e-Gov.	Mishra and Mishra (2011)



CHAPTER TWO: THEORETICAL FRAMEWORK AND METHODOLOGY

2.1 Research Framework

Although e-Gov has dramatically developed over the past years, but it is a new research area that catch the attention of scholars. However, there is inadequate clarity and rigor about e-Gov research methods (see, Heeks and Bailur, 2007; Yildiz, 2007). Similarly, Mutula (2013) asserted that e-Gov is still new in the field and does not have a well-established theoretical underpinning. To this end, our framework is UN e-Gov surveys 2008—2016, as well as theoretical literature on e-Gov in secondary data. This research used the bi-annual e-Gov survey conducted by UN—to measure the successes and discrepancies of the country cases from 2008—2016, and we also developed a complementary theoretical model using political, economic, socio-cultural, policy, and international dimensions. These variables or dimensions are measured using international indexes: For political variable, measured with World Bank Governance Indicator; economic variable, Index of Economic Freedom; socio-cultural variables, HDI; policy variable, OSI; and international variable, effective participation of cases in international organization with regard to e-Gov and EPI respectively.

Although there are some yardstick that could have been used in determining the successes and failures of e-Gov, however, this thesis opted for UN e-Gov survey for the following reasons. Firstly, UN e-Gov survey provides comprehensive collection of UN global survey regarding the status of e-Gov and related practices around the world. The UN survey assess countries performance in e-Gov development and ranking of 192 UN member states (which includes my cases). Secondly, the UN e-Gov Development Index (EGDI) consist of three sections and sub-sections in each. These includes: OSI, Telecommunication Infrastructural Index, and HDI. It is only apparent that these are the essentiality in any e-Gov development across the world. Undoubtedly, any country or region that strives in all three will not only triumph in the ranking but also in the governance process as well.

In addition, the UN e-Gov survey's conceptual framework is based on the following guiding principles. First, e-Gov is seen as an end. The end is development. If adopted

effectively, e-Gov can contribute to eradicating extreme poverty, economic development, citizen participation in government and a total inclusion of all. Second, the survey and its results acknowledged the development level of each country concerned. The assessment of the online presence of governments highlighted by the survey does not provide a distorted picture of the progress made—and challenges faced—by member states. Third, the survey focus social inclusion, protection of the earth for all. Finally, the survey assesses e-Gov readiness worldwide, taking the view that the ultimate objective remains the “inclusion of all” in development (UN e-Government Survey 2014). Further, the UN e-Gov also consider websites of government and their web portal to deliver public good, and enhance participation of citizens in decision-making especially those that affect their lives. The willingness and capacity of countries to develop ICT for e-Gov development is assessed.

2.2. Methodology of the Research

2.2.1. Research Design and Sampling Technique

The methodology or research strategy employed in this thesis is more pertinent to the country cases chosen. Considering the study present, we used purposive sampling method. The targeted population (sampling size N) of this research includes three (3) regions: Africa, Americas and Asia. Out of this, a small sample size (n) includes Tunisia and Mauritius (Africa), Chile and Uruguay (Americas) and Singapore and The Kingdom of Bahrain (Asia) respectively are chosen as cases. We choose these countries because of a number of reasons. Firstly, all the chosen countries are developing nations that encounter similar problems in e-Gov

development. These challenges includes adoption of e-Gov services, data security, and political support. In other words, countries in Latin America, Asia, and Africa are face with similar issues such as adoption and application of ICTs and other e-Gov services. Therefore, a focus on these regions is indeed welcoming and timely to e-Gov literature. Singapore like other country cases used, has features of political will coupled with public and bureaucratic support for e-Gov policies and projects. A quality information system, privacy laws, user adoption capability, good internet broadband, just to name a few are the reasons behind Singapore’s success in e-Gov (Chua, 2012). The success of Singapore in e-Gov has been internationally recognized (Ha, 2013).

Secondly, these country cases have relative middle class, good internet facility, relatively high ICT literacy (Sadok et al., 2016). Although it is true that these countries have their own uniqueness, but also there are some commonalities. These commonalities are assumed due to the fact that these countries share some socio-economic, institutional and bureaucratic structures. Further, these countries are all regional leaders in e-Gov development. All the selected cases have relatively demonstrated success in e-Gov and therefore the lesson learned from it may benefit other developing nations which have similar socio-economic conditions and legal framework to the ones of the selected cases. Mauritius have setup institutional and regulatory frameworks solely dedicated for the development of e-Gov adoption which is critical for e-Gov success (Nkwe 2012).

Finally, odd as it may sound, scholarly research (Azad et al., 2010; West, 2007; Ifinedo & Singh, 2011) and international bodies have shown that (InfoDev, 2004; Accenture, 2001; UN Public Administration Programme, 2010) third world nations still lag behind in the adoption of e-Gov development especially those in Africa, Asia, and Latin America (Ifinedo 2012). Electronic government still face important challenge to weak institutional frameworks and governance structures like those in Africa and Latin America (Sanabria et al. 2014). These country cases do not only fits our study purpose but also best our research study.

2.2.2. Data Collection method

In this study, we explored secondary data and also used secondary data analysis method. We decided to used secondary data sources for our case study since it is an accepted norm in social science research.

Data for the study have been adapted from the internet, policy documents and strategy, action plan of e-Gov and policies (of countries involved), archival records on policy documents, and e-Gov master plans of the country cases, analysis of pattern of the bi-annual UN e-Gov survey (2008—2016), academic journals, policy reports, conference proceedings, newspapers etc. (to be used in literature review on successes and constraints of e-Gov development in developing world).

2.2.3. Theoretical Model

In addition to the UN e-Gov surveys 2008—2016, a complementary model was developed to show the causality on countries success in UN e-Gov ranking. Undoubtedly, the foundation of these rankings reflects the countries' economic, socio-cultural, policy orientation, international commitment and political development. Investment in telecommunication, education in ICT, and provision of online service are important attributes for e-Gov development. This supporting methodological model is used because of inadequate theoretical underpinning of e-Gov. The model has five dimensions: political dimension; economic dimension; policy dimension; international dimension; and socio-cultural dimension. In turn, these dimensions or variables are measured using international indexes: World Bank Governance Indicator; Index of Economic Freedom; OSI; effective participation of cases in international organization and EPI; and HDI respectively. It is important to note that this study used the 2014 indexes to measured the variables so as to compared with 2014 UN e-Gov ranking to show the causality in the rank.

In our complementary theoretical model, we attempted to show the nexus between the five dimensions and e-Gov success or development. We have long argued that these dimensions are sufficient or necessary conditions for e-Gov to triumph in developing countries. As mentioned earlier, e-Gov is still at infant stage with little theoretical support, however, this model aimed to support our framework of UN global e-Gov survey. We hoped to see a positive correlation between the variables and countries e-Gov success. This is because of any significant improvement in political development will eventually spur economic development which in turn might contribute positively towards e-Gov success. The same can be true for socio-cultural, international participation in e-Gov projects, and accurate policies.

Arguably, e-Gov development has daunting implementation and adoption challenges. However, these challenges are not only severed but also more compelling in developing countries with weak institutional and ICT infrastructural deficiency like those in Africa, Asia and Latin America. Some of these challenges could be technical, cultural, economic, political, and legal (Hwang et al. 2004).

In figure 1 below, shows the nexus between the dimensions and e-Gov success. It in turn shows the nexus among the various variables. We have observed that these dimensions have relations that could lead to e-Gov development. For instance, the political dimension has relation to policy dimension. This is because political office holders or politician needs to approved policies that are made by bureaucrats. Likewise, good ICT policies without political will is tantamount to failed and unproductive policy. Good and workable policies on e-Gov development, leadership commitment are all necessary conditions for e-Gov to succeed in developing countries. Fiscal policy, rules and regulation, e-Gov adoption policy and strategy, political and bureaucratic support, data security and privacy laws, e-Gov strategy and master plan are all necessary conditions.

There is also a relation between political and economic dimensions. Economists often argue that economic growth and free market economy are the key to creating and consolidating democracy; while political scientists posit that without

significant improvements in governance, legal, and political institutions, economic growth will not be sustainable (Elone, 2008:1). The political situation of a country, leadership commitment, administrative reforms, financial challenges, cost of internet and e-Gov services are all necessary factors to considered for e-Gov success. Nkohkwo and Islam (2013) contend that top management support, leadership, public and private sector support, development of human capability, are significant in e-Gov initiatives.

Further economic development also impacts on people's way of life. People can only be aware, educate and perhaps modernize if they attain certain level of economic development. One fundamental attributes of e-Gov success is citizens. This is so because e-Gov can only triumph if people are willing to embrace change, adopt new technology and do away with primitive and out dated system of interactions with governments. Digital culture, literacy, poverty, demography, corruption, culture, and unemployment all have bearing on e-Gov success. Socio-cultural dimension also needs political decision on key responsibility and the problems consumers (Citizens) may have faced. Accessibility, easy-to-use, user confidence and trust are key important factors to be considered.

International variable has a correlation with both policy and political dimensions. Effective participation at international level needs political approval not only to participate but also to implement policies at national level. Political and bureaucrats support would enhance sustainability of e-Gov projects. This is true because e-Gov development cannot take place without right and accurate policies and laws. However, this is often absent in many developing economics perhaps because politicians see e-Gov as a threat to their position (Nkohkwo and Islam, 2013).

Complementary Theoretical Model

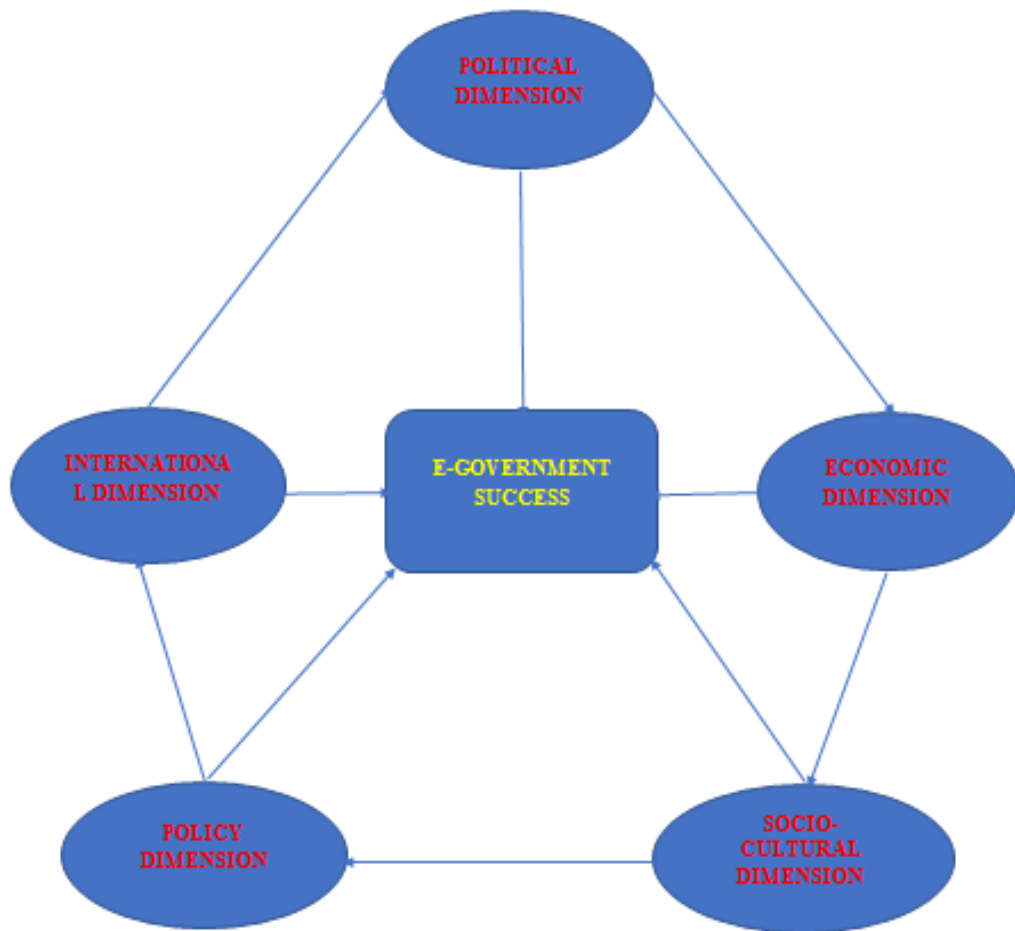


Figure 1. Theoretical Model showing the causality of the five dimensions.

2.2.4 indexes

The World Bank Governance Indicator (Worldwide Governance Indicator) consist of six composite indicators and it includes voice and accountability; political stability and absence of violence/terrorism; government effectiveness; regulatory quality; rule of law; and control of corruption. These indicators also depend on various variables collected from NGO surveys and other international bodies (Kaufmann et al. 2010).

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: A long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions. It assessed the education, health, birth rate, life expectancy of a given country. It also measures the standard of living of a particular country and the availability of other social services (UNDP Human Development Report 2014).

E-Participation Index (EPI) consist of e-Information, e-Consultation and e-Decision-making. A scale of 0-4 is used in assessing countries performance (UN e-Gov survey 2008). Online information and online consultation of countries are assessed looking at the online participation of public and business of a country. Many countries be it developed and developing are pose with meeting these standard. The same is true for e-Decision-making.

The Index of Economic Freedom examine the economic freedom of countries, their economic development and so on. It is assumed that individual should be free to pursue their various economic interest in a market that is totally free from government restrictions.

The Online Service Index (OSI) is based upon a four-stage model, which builds upon the previous levels of sophistication of countries online presence. These includes standard website, and government being online. Data quality, security laws and policies are also assessed.

Stage I - Emerging: A government with web page, including various department and ministries to share and interact with citizens and businesses through the internet and other ICT services.

Stage II - Enhanced: Governments provide credible and vital information to public and businesses. Equally information about government policy must be accessible to the public. Government provide forms, laws, and newsletter to citizens.

Stage III – Transactional: Governments start to communicate with citizens and transform his relation through effective use of ICT. It includes paying taxes online, applying for ID cards, birth certificates, passports and license renewals.

Stage IV – Connected: Governments becomes a connected body that responds to the needs of its citizens and businesses through the use of internet (UN e-gov survey 2008).

CHAPTER THREE: ANALYSIS AND INTERPRETATION OF CASES

3.1. Critical Analysis of the Cases Using United Nations Biannual e-Government Survey

3.3.1. Brief e-Government Policy Analysis and Initiatives of the Cases.

It appears that there is some significant amount of confusion around e-Gov development overall. One might have argued that there is no right or wrong approach to the development of e-Gov. Several factors are involved in e-Gov successes and failures; every country has its own uniqueness to consider (Al-Khoury, 2014). Both developed and developing world invest heavily on e-Gov and yet its goals are far from reaching. This section of the study shall critically analyze the country cases using UN biannual e-Gov survey. Our case study includes Uruguay, Chile, Singapore, The Kingdom of Bahrain, Tunisia, and Mauritius.

Despite being the second-smallest country in South America and having only 3.3 million people, Uruguay is known for its innovation regarding technology and social policy. In 2007, Uruguay created a national e-Gov agency. The Agency for Electronic Government and Information Society (AGESIC) was the basis for the country's swift progress in e-Gov. Broad access to ICT; providing user support for ICT initiatives and consultations; simplifying procedures and processes are all functions and duties of the agency (For example, see, Digital Agenda Uruguay 2015; Al-Khoury, 2014). The agency was fundamental in creating a national e-Gov platform, and enhanced the development of the country's e-Gov services. One potent factor behind Uruguay's success is the political will coupled with the commitment from multi-stakeholders.

The AGESIC developed a road map strategy to meet the digital objectives of the country—Agenda for Uruguay 2011-2015 (ADU). It was approved by a 'Presidential Decree' November 23rd 2011. The ADU 2011-2015 is a road map and a digital policy of Uruguay aimed at transforming public and private sectors (see, Digital Agenda Uruguay 2015; Open Government in Uruguay, Self-assessment Report, 2013; Parra, ?). It is important to note that ADU is a stakeholders commitment and not a government plan.

Chile is a highly-centralized state. Starting in 2008, the Chilean Government enacted the Law 20.285 and other data regulations to protect citizens' informational rights (Sanabria et al., 2014). A South American nation with a population of 17.6 million has long had one of the highest internet penetration levels of all the countries in Latin America and the Caribbean. This has been used as a tool to transform the country's economic and social development. It has also aided the government to be effective and more transparent in quality service delivery. To that end, the government developed an IT strategic plan from 1998–2000 (World Bank PremNonte, No. 50). Chile has achieved its e-Gov success due to three main factors: a continuous long-term strategy, efficient policy-making and its modern socio-economic qualities (Mickoleit, 2015).

Unlike other countries in the region, Chile began e-Gov policy and strategy as early as the 2000s, when its first webpage for official use called "Easy Errand," was created. By 2004, Chile had designed its first digital agenda that led up to today's 2013-2020 version. The Chilean approach is open access to public information and increased public participation in government activities.

Singapore is a very small city-state in Southeast Asia with a population of about 5.7 million inhabitants. Its management of physical and social resources has been considered one of the critical success factors of national survival. Singapore is a success story of the ongoing technological revolution and this has transformed her economy and national development with little natural resources (Chua, 2012). Singapore launched the National Computerization Plan (NCP) in 1981 to increase computer literacy and the creation of jobs in the public sector. Today, infocomm has transformed the life of Singaporeans in one way or another.

Further, the Singapore e-Gov Masterplan 2011 – 2015 (or e-Gov2015) dawned an era of "government-to-you" approach to a "government-with-you" delivery of e-Services (Singapore e-Government Master Plan 2011-2015). Infocomm Development Authority (IDA)'s 10-year masterplan; Intelligent Nation 2015 (iN2015) are the many policy commitments of Singapore's Government (Infocomm Development Authority of Singapore, 2013). Singapore is a true definition of a success story in e-Gov development. In fact, it is not only a regional leader but also a world leader in terms of e-Gov (Ke and Wei, 2004).

The Kingdom of Bahrain is a small Arab monarchy in the Persian Gulf with a population of about 1.3 million. The e-Gov Authority in Bahrain has map out a systematic strategy for effective and efficient delivery of services via electronic means. As one of the strategies to achieve Vision 2030 (an economic plan), the government of Bahrain has introduced the e-Gov agency program that was previously launched by the deputy Prime Minister H.E. Shaikh Mohammed bin Mubarak al-Khalifa on May 23rd 2007 (see Gharleghi et al. 2015; Bahrain e-Government Authority, 2011). The first e-Gov strategy of Bahrain covered 2007-2010. The strategy is translated into various e-Gov channels and more than two hundred e-Services (National e-Government Strategy 2016).

The second phase of Bahrain e-Gov strategy covered the period 2011-2016. What is more fascinating with the case of Bahrain is the consumer satisfaction index which evaluate the progress made and satisfaction level. The latest Bahrain Customer Satisfaction Index (BHCSI) is the first model in the region designed based on international standards for government services. This study is carried-out in collaboration with the University of Bahrain as a mean to maintain the professionalism and transparency.

Bahrain e-Gov Authority believes that the success of e-Gov relies heavily on citizens' awareness and participation toward e-Gov services. Therefore, the e-Gov Authority marketed and embark on awareness campaigns through advertisements

in print, audio and visual media for sensitizing the public on the e-Gov policies and programs (Bahrain e-Government Authority, 2014).

A North African country, Tunisia with a population of about 11.1 million began to experience ICT in 1980s and the year 1996 marked the launch of internet services in the country as well as the promotion of ICT as part of national development plans. Tunisia has a relative good HDI coupled with large middle class. These characteristics make it unique and different from many other developing countries (Aida and Majdi, 2014). The evolution of e-Gov in Tunisia was made in five phases:

1. Preliminary phase (1980-1999): During this phase, Tunisia started the introduction of IT in public administration;

2. The first generation of public web sites: The information phase (2000-2002), the purpose of this phase is to have an online presence on the internet to exploit this new communication channel;
3. The second generation of public web sites: The interaction phase (2003-2005), at this stage, the organization provides a link to more personal communication with citizens by implanting an electronic delivery service that uses email, search engine, download forms and specifications online;
4. The orientation towards the online services: The transaction phase (2006-2009), this phase is the extension of the interaction phase;
5. The integrated administrative services (2009 -2014): The integration phase: the integration of services is a fully integrated electronic service delivery of various organizations on the same portal (Mellouli, 2014:115-6).

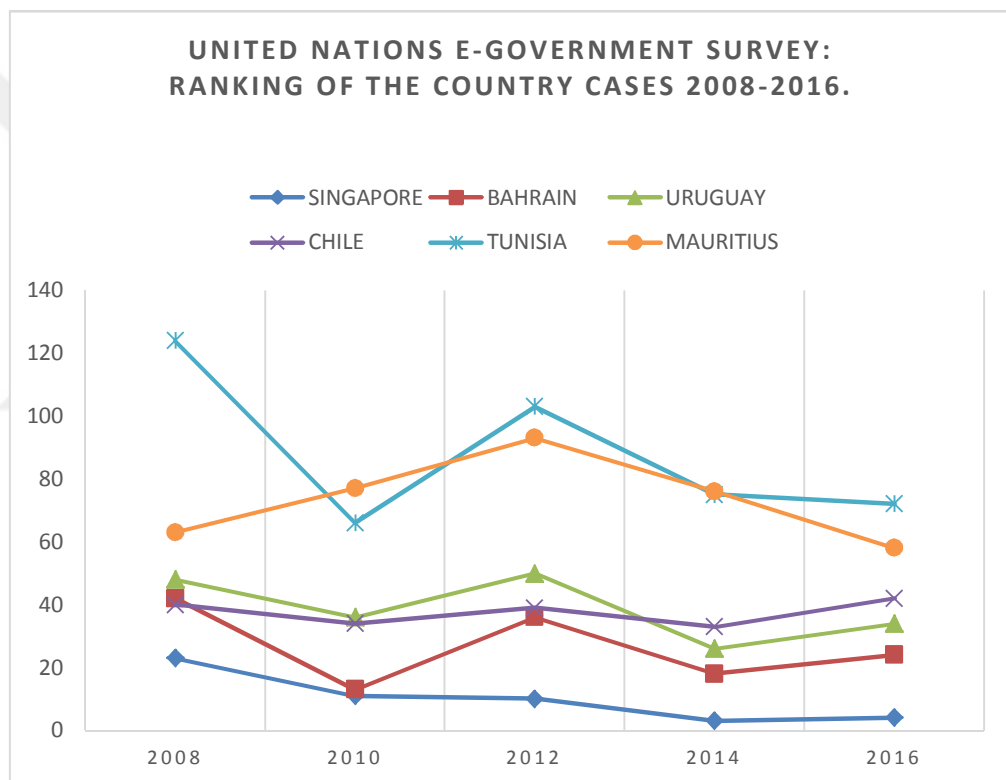
The e-Gov Unit which was established in 2005, is coordinated by the presidency. Behind the success story is the commitment and political will of the Government of Tunisia.

Mauritius with a population of about 1.3 million has moved from a low-income to a middle-income country through the use of ICT and other e-Gov policies and strategies. Confronted with the economic challenges of the 21st century, the vision of the Government of Mauritius is to transform the economy via ICT and to be a lead model in Africa (National ICT Policy 2007-2011). The Government of Mauritius started its computerization journey in the 1990s (e-Government Strategy 2013 – 2017). Ever since, the government came up with some fascinating strategies and policies ranging from the National ICT Strategic Plan (NICTPS) 2011-2014; e-Gov Strategy 2013-2017; and e-Gov MasterPlan.

The Government of Mauritius asked help from The Commonwealth Centre for Electronic Governance (CCEG) in developing e-Gov masterplan and to be overseen by Office of the Prime Minister (Brown, 2002).

3.3.2. Analysis and Interpretation of Cases Using United Nations Biannual e-Government Survey 2008—2016.

Although the chosen countries may have registered relative success in global e-Gov, it does not mean that their system were not constrained. In fact, all the chosen cases are developing nations faced with similar challenges in e-Gov development. In other words, countries in Latin America, Asia, and Africa are faced with adoption challenge on e-Gov. However, it is significant to note that these country cases have their own uniqueness (see chapter two). We used UN e-Gov survey (2008-2016) to analyze and interpret countries progress in rankings.



Graph 1. UN e-Gov survey of country cases ranking 2008-2016

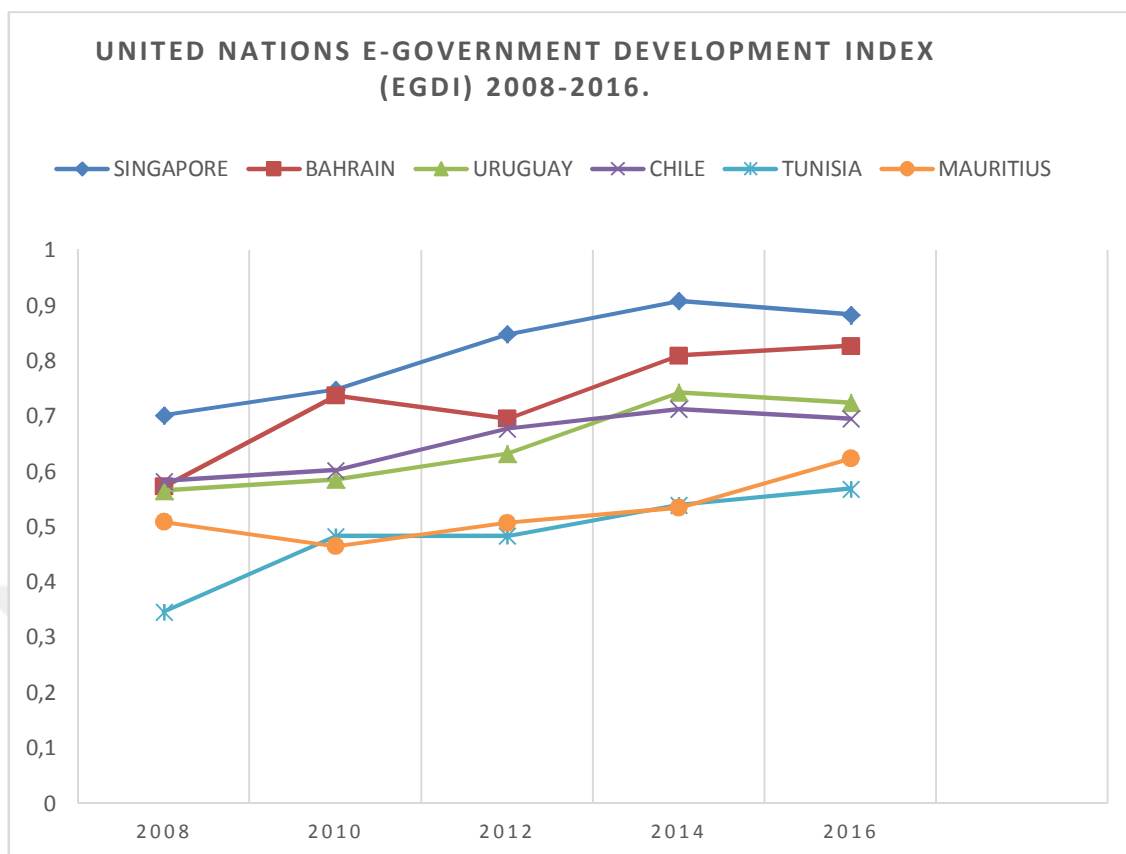
Source: Author's compilation from UN e-Gov Survey 2008-2016

From Graph 1 above, it has been observed that all the countries has made a remarkably progress in their e-Gov ranking from 2008-2010 with the exception of Mauritius that fell below -11 in 2010. Singapore, Kingdom of Bahrain, Uruguay, Chile, and Tunisia all made a steady progress in the 2010 e-Gov ranking moving up the ladder from 2008 rank. Between 2008 and 2010, Tunisia has made remarkable progress in terms of

improving its UN e-Gov ranking, jumping 58 points up to rank 66th worldwide after being ranked at 124th in the UN e-Gov survey in 2008. In 2008, Mauritius made a fascinating improvement in its ranking beating oil rich country of Saudi Arabia who was ranked 70th and technological giant China ranked 65th. Political endorsement, good technological infrastructure, accurate policies, citizen adoption and awareness of e-Gov services, effective collaboration between public and private sector are the reasons for the progress made by these countries. It is not only political will that matters but commitment to the road map and strategies to achieved the desire goals of e-Gov.

Between 2010 and 2012, Singapore better her ranking by moving to 10th position in 2012. The Kingdom of Bahrain, Chile, Uruguay, Tunisia, and Mauritius all encountered setback in their 2012 ranking. Tunisia had the biggest setback moving down below the pecking order to -37 (from 66th in 2010 to 103th in 2012). It appears that the 2011 Tunisian civil unrest is to be blamed for the decrease in rank.

From 2012-2014, all the country cases made significant and steady progress in their ranking. The most remarkably came from the island nation of Singapore moving to 3rd position worldwide. However, between 2014 to 2016, only Tunisia and Mauritius improved from their 2014 ranking to 72th and 58th respectively in 2016. Singapore, Kingdom of Bahrain, Chile, and Uruguay all drop below from their 2014 rank in 2016. Although all these countries have made significant strides and success over the years in their development in e-Gov services but there are discrepancies in their ranking. This is partly due to low adoption rate of e-Gov services. e-Gov success depends on the willingness of citizens to adopt new innovation, and that other developing countries especially those in Africa needs to learn from the success stories and challenges of these countries.



Graph 2. UN e-Gov development index of country cases 2008-2016

Source: Author's compilation from UN EGDI 2008-2016

In EGDI, the world averages are as follow: 2008 world average is 0.4514; 2010 average is 0.4406; 2012 average is 0.4882; 2014 average is 0.4712; and 2016 world average is 0.4992.

In Graph 2, we observed that between 2008 and 2016 all the country cases with the exception of Tunisia, scored above the world average in EGDI. In 2008, Tunisia fell below world average (0.4514) but scored above regional average (0.3403). The same is true in 2012 where it failed to meet world average but scored above regional average (0.2780). As indicated above, political unrest in 2011 were to be blamed for Tunisia's discrepancies.

Table 3. United Nations e-Government Development Index (EGDI) 2012-2014 Comparison

COUNTRY	2014 EGDI	2014 RANK	2012 RANK	RANK CHANGE
SINGAPORE	0.9076	3	10	+7
BAHRAIN	0.8089	18	36	+15
URUGUAY	0.7420	26	50	+24
CHILE	0.7122	33	39	+6
TUNISIA	0.5390	75	103	+28
MAURITIUS	0.5338	76	93	+17

Source: Author's compilation from UN e-Gov Survey 2012-2014

From Table 3 above, it is quite fascinating to notice strong growth in all the six countries (Bahrain, Singapore, Uruguay, Chile, Tunisia, and Mauritius). Between 2012 and 2014, Singapore improved its 2012 rank to 3rd in 2014, moving +7 points above the ladder. Bahrain, Uruguay, Chile, Mauritius all registered steady growth in e-Gov rank moving up +15, +24, +6, +17 respectively. The most fascinating development came from Tunisia whose ranking improved to +28. Despite its political impasse in 2011, Tunisia jump from 103th in 2012 to 75th in 2014.

The study reveals that there is a nexus between e-Gov rankings and the five variables (political, economic, policy, socio-cultural, and international dimensions) used. It appears that an improvement in all the five dimensions of any country will obviously lead to an increase in ones e-Gov ranking. Thus, we further observed that all these dimensions are necessary conditions to meet the desire outcome of e-Gov. The indexes used to measure these variables validate the aforementioned claim.

Table 4. Online Service Index (OSI) 2014

Country	OSI	Emerging %	Enhanced %	Transactional %	Connected %	Total %
BAHRAIN	0.9370	94	80	84	74	82
CHILE	0.8189	100	57	70	71	73
MAURITIUS	0.4724	88	64	9	21	44
SINGAPORE	0.9921	100	89	88	71	87
TUNISIA	0.6378	91	61	33	53	58
URUGUAY	0.8504	94	70	72	68	75

Source: Author's compilation from UN e-Gov OSI 2014

From Table 4 above, we observed that all the country cases have made a steady progress in the emerging and enhanced stages of the OSI. With the exception of Mauritius, all registered strong growth in the transactional and connected stages. In the transactional stage, Tunisia score 33 and Mauritius 9 which was far below the average. Although Mauritius and Tunisia did pretty well in the first two stages of OSI, but they need to improve in the 3rd and 4th stages respectively. Our interpretation of the good performance of these country cases on OSI is because of high literacy in ICT and good e-Gov plans and programs, coupled with high speed internet broadband.

Table 5. E-Participation Index (EPI) 2014

Country	Rank	EPI	e-Info. %	e-Consul. %	e-Dec-Mak. %	Total %
BAHRAIN	14	0.8235	85.19	81.82	22.22	74.14
CHILE	7	0.9412	92.59	95.45	33.33	84.48
MAURITIUS	59	0.5294	81.48	27.27	0.0	48.28
SINGAPORE	10	0.9020	96.30	90.91	11.11	81.03
TUNISIA	33	0.6471	81.48	54.55	0.0	58.62
URUGUAY	3	0.9804	88.89	95.45	66.67	87.93

Source: Author's compilation from UN e-Gov EPI 2014

In Table 5, the study reveal that all the country cases achieved steady progress in e-Information and e-Consultation stages. It is quite interesting to notice Uruguay strong growth in EPI ranked 3rd worldwide and beating Singapore. On an average basis, these

countries performed better compare to many developing countries. However, our data on EPI indicate a lack of online consultation and on decision-making in all the country cases with the exception of Uruguay. These has led to their low scores in e-Decision-making (see Table 5). On an international level, these countries have all effectively participated in regional and international summit, workshops and conferences on the development of e-Gov. All initiate Open Government Partnership (OGP). For example, The OGP membership of Tunisia is an indication of how much the Tunisian Government is committed to establish a new governance system more transparent and more responsive especially after the Tunisian revolution.

Table 6. Index of Economic Freedom 2014

Country	World rank	Regional rank	Free. from Corption	GovtSpending	Trade freedom	Govt exp.	GDP growth
BAHRAIN	13	1	49.4	71.4	78.6	30.9	3.9
CHILE	7	1	72.3	83.8	82.0	23.2	5.5
MAURITIUS	8	1	53.4	81.8	88.6	24.7	3.3
SINGAPORE	2	2	91.9	91.2	90.0	17.1	1.3
TUNISIA	109	11	39.2	63.8	61.8	34.8	3.6
URUGUAY	38	5	70.6	68.0	83.5	32.6	3.8

Source: Author’s compilation from Index of Economic Freedom 2014

Table 6 above shows that Singapore, Chile, Bahrain and Mauritius are all regional leaders in economic freedom. These countries have registered strong economic growth for development and are also able to curtailed on the rate of corruption—which is one of the hindrance of e-Gov development. One explanation of this could be online tax services of these countries thereby reducing cash transaction in hands. For instance, Tunisia, Chile, and Singapore has excellent e-Procurement system and online tax filing services. Tunisia e-Procurement system (TUNEPS) for public tendering and online tax filing services called e-Tasrih are success stories where some three thousand five hundred (3500) companies pay tax online.

Table 7. Human Development Index (HDI) 2014

COUNTRY	HDI RANK	HDI VALUE	MEAN YEARS OF SCHOOLING	GROSS NATIONAL INCOME PER CAPITA (\$)
BAHRAIN	45	0.824	9.4	38,599
CHILE	42	0.832	9.8	21,290
MAURITIUS	63	0.777	8.5	17,470
SINGAPORE	11	0.912	10.6	76,628
TUNISIA	96	0.721	6.8	10,404
URUGUAY	52	0.793	8.5	19,283

Source: Author’s compilation from HDI 2014

In Table 7, we also realized that Singapore, Bahrain, and Chile are considered countries with ‘very high human development’, and Uruguay, Mauritius, and Tunisia are term countries with ‘high human development’. These countries have registered relatively high literate rate, and their Gross National Income (GNI) per capita improved significantly—necessary conditions for e-Gov development.

Table 8. World Bank Governance Indicator 2014 (Percentile Rank)

Country	Voice and Acct.	Pol. Stability	Govt Effectiveness	Regulatory Quality	Rule of Law	Control of Corpt.
BAHRAIN	11.33	14.56	72.60	74.04	68.27	64.42
CHILE	80.30	63.11	84.13	91.83	87.98	90.87
MAURITIUS	73.40	71.36	82.69	80.77	78.85	67.79
SINGAPORE	45.32	92.23	100	100	95.19	97.12
TUNISIA	49.75	15.05	48.56	40.87	53.37	55.77
URUGUAY	82.76	83.50	71.15	69.71	75.96	89.90

Source: Author’s compilation from World Bank Governance Indicator 2014

For the political dimension, we observed in Table 8, that all the country cases with the exception of Bahrain and Singapore have achieved passed the percentile average on voice and accountability. Bahrain and Tunisia also score low on political stability. The overall performance on government effectiveness, rule of law, regulatory quality, and

control of corruption were relatively high in 2014 World Bank Governance survey. In comparing the strong performance of these country cases in UN e-Gov ranking in 2014 with relation to the five indexes used to measure the variables, we observed that these countries are successful due to their steady growth in political, economic, policy, socio-cultural, and international dimensions. This study therefore argues that these dimensions are necessary condition for e-Gov development and hence one of the many reasons why these countries succeeded and other developing countries failed. Other developing countries especially those in Africa needs to learn from the success stories of these countries and their challenges so as to improved their e-Service delivery system.

3.3.3. Findings and Results

The findings of this study indicate that political commitment, economic development, right policies including data security and privacy laws, effective participation in e-Services, and socio-cultural development are sufficient or necessary factors for e-Gov success/development. While we acknowledged the significance of political will, certain necessary conditions needs to be meet. The study also reveals that policy and international variables are not strong enough (but necessary) to develop e-Gov. Rather political endorsement, economic development including technological infrastructure, and socio-cultural variables (high IT literacy, trust, age, satisfaction and adoption) are found to be strong in e-Gov development and hence its success. Undoubtedly, the foundation of UN e-Gov rankings reflects these country cases economic, socio-cultural, and political development and thus the reason why they succeeded and others failed.

Similarly, the above result validates and correspond with Nkohkwo and Islam (2013) whose results also showed that ICT infrastructure, human resources, legal framework, internet access, digital divide, and connectivity are among the most common themes on the challenges to the successful implementation of e-Gov initiatives in Sub-Saharan African countries. Political situation, leadership, public administration reforms, economic development, culture, digital culture, corruption, financial constraints, and cost of e-Gov services, all affect the success of e-Gov development in Africa, an assertion supported by other scholars such as Aladwani (2015), Mistry and Jalal (2012), Andersen and Rand (2006), Ndou (2004), Azab et al. (2009), Heeks (2001).

Further, while our study might have acknowledged the significant triumph made by Chile, Uruguay, Singapore, Bahrain, Tunisia, and Mauritius in e-Gov development, but we also found out that these countries are face with daunting challenges when it comes to adoption of e-Gov. Unfortunately, many of the citizens in these countries still prefer the traditional mode of transactions of face-to-face, than using internet interaction. The issue of trust, and culture still pose a threat to adoption of ICTs. These have bearing impacts on citizen's intention to use the internet to conduct their daily activities, a claimed supported by scholars like Aida and Majdi (2014), Gharleghi et al. (2015), Ndou (2004), Heeks (2002).

Our result further shows that these countries (Tunisia, Mauritius, Chile, Uruguay, Singapore, The Kingdom of Bahrain) has a comprehensive programmes which are implemented in a phased manner coupled with effective periodic monitoring and evaluation. For instance, BHCSI is the first model in the region designed based on international standards for government services. This index used to monitor and evaluate customer satisfaction, the awareness level of the e-Gov services, the impact the services has on customers as well as the level of interaction with government entities. The e-Gov Authority in Bahrain is keen on taking citizens' opinions into consideration and operating in accordance.

The success of Singapore has not only been demonstrated via economic achievements, but also through several achievements in e-Gov. Therefore, the lessons learnt from Singapore's successful e-Gov may benefit other developing countries which have similar socio-economic conditions and legal frameworks to the ones in Singapore.

Another fascinating success story is the Chilean e-Procurement service. The Government of Chile, through the Ministry of Finance, has embarked on a program to strengthen the management of government procurement and contracts.

The program is comprised of a variety of initiatives, among them the introduction of e-Commerce and new procurement management methods, the optimization of certain items of expenditure and the harmonization of public procurement policies and practices. This practice is more efficient, transparent and makes government more accountable for its actions.

The study also reveals a lack of online consultation and citizens' feedback on decision-making and this has contributed to their (cases) low scores in e-Decision-making (see Table 5). Online consultation and e-Decision-making still pose a challenge in many developing nations especially in Africa. Evidently, Mauritius and Tunisia is a vivid example as they scored low in online consultation. In fact, the same is true for all the other country cases with the exception of Uruguay who scored above average (see Table 5). In addition, cultural barriers, poor adoption rate, all affect perception of citizen and their confidence in information system.



CHAPTER 4: PROPOSED ALTERNATIVE MODEL FOR E-GOVERNMENT SUCCESS IN AFRICA

4.1 Alternative Model Proposal

4.4.1. Alternative Model for e-Government Success in Africa

Electronic government is a global phenomenon that has increasingly attract the attention of governments and policy makers amongst others (Azab et al. 2009). e-Gov is a necessity for world governments that are soliciting for better governance and economic development. Although e-Gov systems are many, but not all are created equal. Many are limited in terms of comprehensive approaches for a successful e-Gov program. In some, the problem of good internet facility, low ICT literacy, inadequate political will, and digital divide are all constraints that affects the development of e-Gov. Digital government still pose a challenge to many African governments and hence too many e-Gov project failed. Conversely, there are insufficient technical and human infrastructure in many third world nations including those in Africa (Heeks, 2002). The lack of literature on African e-Gov, inadequate evaluation, more focus on case studies, digital divide, and trust are all partly blamed for e-Gov failures in Africa.

Slow diffusion of e-Gov within Africa coupled with inadequate e-Readiness (Heeks, 2002) and diverse social and cultural barriers are to be blamed for the high rate of e-Gov project failures. Heeks (2002) argues that e-Gov projects failed in Africa because of huge digital divide among communities and to address these tactical challenges, stakeholders must sensitized the public, he noted. To this end, an alternative model for e-Gov success in Africa is timely and indeed welcoming.

Our alternative model is modified from D&M IS success model. The original model has some shortcomings. One fair criticism and recommendation label against the model is the need for further validation. It was initially designed to measured e-Commerce system success and therefore require further test on e-Gov success. The model was first published in 1992 and was based on theoretical and empirical IS research in the 1970s and 1980s (DeLone and McLean, 2003). The IS has changed and progressed during the last decade and new technological innovation has emerged ever since. Therefore, as technology evolves, we must keep abreast with such changes. Similarly, academic

research into the measurement of IS effectiveness has developed over the years. Arguably, these demerits of the model are fair enough and thus even acknowledged by DeLone and McLean (2003). Another demerit of the model is that lot of questions were and still raise on its success or effectiveness. Scholars are in contention to find which constructs best suit the model. Further, “DeLone and McLean asked for the model to be validated and updated and urged further scholarly investigation into the model” (Wang and Liao, 2008:719).

Although IS success models have received little research on updating and validating the original model (For example, see, DeLone and McLean, 2003; Wang and Liao, 2008). We observed from the literature that e-Gov services will fit good on the updated model. We have long argued in this study that e-Gov success does not depend on technology per se but on ‘citizens’. Therefore, information provided needs to be of top quality that could warrant high IT adoption in developing countries especially those in Africa. Further our model would also be beneficial since it is built on key construct as citizen trust, political will, readiness and willingness of bureaucrats to adopt new technology etc. These variables are crucial to e-Gov success in developing nations.

4.4.2. Variables in the Alternative Model

The original model is a multidimensional and interdependent construct and there is relations among various dimensions (DeLone and Mclean, 2003). Our model is important because of high data quality which will lead to high adoption rate for both public and private sector. Further, the importance of our alternative model cannot be over emphasized as it contains variables such political and bureaucratic will, trust, sensitization etc. These variables would help overcome the problems of adoption of e-Gov in Africa.

Can this model be a success in Africa? Arguably ‘yes’ it can fit good in Africa. We observed in the literature that African e-Gov lack information quality and their websites rarely updated. Further, inadequate political and bureaucratic support in Africa also leads to massive insecurity among citizens. Our model aimed at addressing these issues of data security, trust, and privacy laws. The following variables are examined below:

Information quality: It deals with how accurate, timely, complete, vital, and consistency the information provide is to the public (DeLone and Mclean, 2003). How accurate the information is; how timely, relevance and consistent the information is; all affect user intention to use. As mentioned earlier, many government websites in Africa provide little input in providing accurate, timely, consistent and relevant information. For instance, Uruguay has a reliable and effective technology solutions. Internet protocol version 6 installed on all central government IT equipments directly connected to the internet, by 2015 (Digital Agenda Uruguay 2011-2015).

System quality: System quality has to do with the individual impact on ICTs. It is about data quality, reliability, functionality, portability, and flexibility. These sub-variables all have bearing on citizens. People may be willing to use if the data or information provided is of quality, and the system portable and flexible. For example, Tunisia integrated electronic service delivery of various organizations on the same portal (Mellouli, 2014).

Service quality: The effectiveness of the model depends on service quality. Here the focus should be product. It deals with the expectations and perceptions of the citizens, their satisfaction levels in the service provided to them, and priorities for improvements (e-Government working group, 2007). Accordingly, the success of e-Gov to a greater extent depends on “service quality” and arguably the most vital variable (DeLone and Mclean, 2003).

Intention to use and use: The “Intention to use” deals with peoples attitude, whereas “use” concentrate on behavior. People can only ‘use’ ICTs systems if it easy to use, accessible and quality. These are influential on user perception to use the IS systems. This also depends on government and stakeholder commitment and support, and online provision of service (for details, see the phases of the model).

User satisfaction: As in the original D&M model, both use and satisfaction of user are related. If government concentrate on increasing satisfaction level of citizen, this will be a positive impact on use and intention to use e-Gov systems. (DeLone and Mclean, 2003). Many a times in developing economics, governments hardly update their webpage and as such discourages the public from using such sites.

Net benefit: The impact of e-Gov services are huge. These benefits include competitive advantage, strategic benefits, and informational benefits. The ICTs must be able to improve the user's output per time used. Customer satisfaction and the way management regulates work should be improved.

Sensitization, awareness, and e-Lifestyle: Indeed e-Gov initiatives are across Africa but little is known about it. Therefore, there is dire need of public sensitization in the media outlets. Citizen-centric e-Services will triumph and thus should be all inclusive. This awareness creation will lead citizen to adopt e-Lifestyle (for details, see the phases of the model).

Citizen trust: We have long argued that citizen trust depends on privacy laws, data security, data quality and good and timely service, ease to use the system are positive means to gain public trust. According to Aida and Majdi (2014), Tunisian national culture is characterized by high uncertainty avoidance—explain the extent to which members of society feel threatened by unknown situations. Tunisian now prefer online transaction instead of traditional way of doing business. However, there is still issues of trust in the system and this has impacted on adoption of e-Services.

Political will, stakeholder and private sector support: Political endorsement, stakeholder and private sector support are all crucial in e-Gov success in Africa. If only we have committed leadership and stakeholder support, can e-Gov succeed.

Readiness and willingness of bureaucrats to adopt new technology: This is of fundamental importance for e-Gov to be successful in Africa—The will to 'Open Government'. This is one of the success stories of Tunisia. For instance, the Government of Tunisia have realised the potentials of e-Gov in transforming the economy and thus, public are more than ever willing to adopt the system. The country's e-Readiness is relatively good coupled with good internet and political and bureaucratic support (Aida and Majdi, 2014).

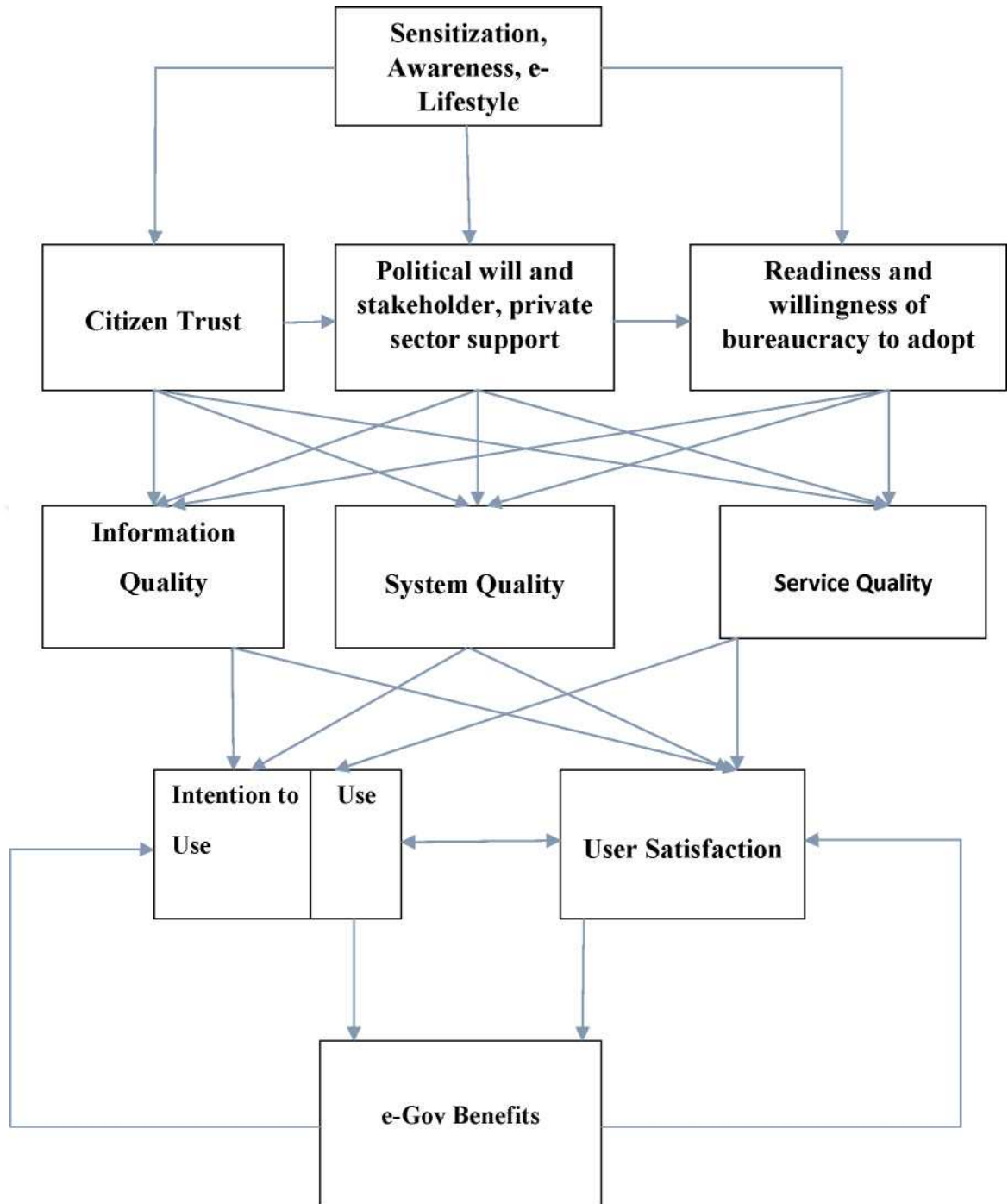


Figure 2. Alternative e-Government success model for Africa

4.4.3. Phases of the Model

In Figure 2 above, the model is from an adaptation of the famous D&M model in the context of e-Gov. Although the original model consists of six dimensions: information quality, system quality, service quality, use, user satisfaction, and perceived net benefit,

but the alternative model in Figure 2 is updated to meet the needs in Africa by adding five necessary dimensions: e-Gov initiatives, sensitization, awareness, and e-Lifestyle, citizen trust, political will, stakeholder and private sector support, readiness and willingness of bureaucrats to adopt new technology. Electronic government is complex and needs to be approach holistically. Therefore, any successful e-Gov project must be simple or KISS (Keep It Short Simple). On this note, this alternative model for Africa would be implemented in a phase manner. This would further enable for the easy monitoring and evaluation of the various phases. The model comprises of five (5) dependent phases (see the model in Figure 2).

In the literature, we observed that e-Gov has already arrived in Africa (see Chapter one) and hence we need not include the initiative stage in our phase. Although we tactically exclude initiatives stage, however, we are compelled to highlight its significance. Electronic government success depends on citizens. The people are the most important asset in any e-Gov project and must therefore be given priority. Scholars recognized the problem of low-level of citizens' participation and adoption toward e-Gov. Although many African governments have passed this stage, but more concentration should be on citizen-centric e-Gov initiatives. African governments and other stakeholders must embark on various e-Gov initiatives and should view digital government as not only a necessity but also a precondition for socio-economic development and better governance. These e-Gov initiatives must provide comprehensive and comparative model for e-Gov project. For e-Gov development in Africa, there is a need for robust strategy and policy for better adoption.

Sensitization, awareness, and e-Lifestyle is positioned in the first stage of the alternative model. Awareness of e-Gov is about knowledge and recognition, human has over e-Gov services. Awareness is very important in the success of e-Gov development. Behavioral change from the citizens and public servants starts with enlightenment about e-Gov systems, and its potential benefits. It is about informing and marketing by the government and stakeholders to its citizens and employees. Although e-Gov has reached Africa, but it is disheartened to know that many Africans are still not aware of it presence let alone its potential benefits. The governments and stakeholders needs to sensitized the public about the benefits of e-Gov through radio talk shows, TV

programs, graphics, billboards, audio clips on government websites for the disables in society. For e-Gov to be successful in Africa, all sectors of the society must be included in the process including the disables. Awareness creation is of great essence to successful e-Gov projects in Africa.

Further, citizen should be view as customers and the government and various stakeholders must readily provide internet connection at a cheaper rate in order to promote e-Lifestyle in Africa. Unless internet is cheap and affordable, the gap of digital divide will be worsen in societies. The adoption and acceptance of a new way of doing things—an e-Lifestyle, e-Learning, e-Entertainment, e-Communications and e-Transactions are compelling reasons why people must be connected (Mahizhnan and Andiappan, 2002).

The second phase includes citizen trust, political will, readiness and willingness of bureaucrats to adopt new technology, stakeholder and private sector support. Gharlegghi et al. (2015) citing Kim Lean (2008) states that trust comes about if the websites are legal, ethical and trustworthy. This will boost confidence level of the user. Most of e-Gov authorities in Africa are facing a major problem in the issue of trust towards e-Gov and the government themselves due to high level of political corruption. For successful e-Gov projects in Africa, there must be a high level of trust on government and that of the internet.

Gharlegghi et al. (2015) contend that the citizen's trust in their government also impacted on e-Gov development. Trust in e-Gov websites is related to trust in government. This issue of trust must be tackled by governments in Africa for e-Gov to be successful. In addition, any successful e-Gov projects need political blessings to succeed. Political support and endorsement are necessary condition for e-Gov development in Africa. The political willingness also needs to be complemented with stakeholders and private sector support to succeed in Africa. Similarly, the willingness and readiness of bureaucrats to adopt new technological innovations will not only make e-Gov projects to succeed but will also make their job easier in a more effective and efficient way (see Chapter Three).

The third phase of the alternative model includes information quality, system quality, and service quality, which arguably has impact on people's intention to use ICT

systems. The quality in information, system, and service are all necessary conditions for e-Gov development in Africa. System quality are measured in terms of ease-of-use, functionality, reliability, flexibility, data quality, portability, integration, and importance. Information quality are measured in terms of how accurate, timely, complete, significant, and consistency it is to the public (DeLone

and McLean, 2003). Unless African governments incorporate the above-mentioned variables in their e-Gov projects, success would remain far-fetching. People can only use ICTs application if the systems are of quality, information provided are of significant and quality and above all the services provided ease to use and beneficial to the public. These have direct impact on the fourth phase.

The fourth stage is the intention to use, use, and satisfaction of the user. There will be no e-Gov without people, therefore the importance of citizen in e-Gov cannot be over emphasized. People tend to use system if the information provided is of quality, ease to use, data quality, accurate and consistent information. These are critical issues that pose challenge in many African e-Gov projects. On many occasion African governments websites are not updated or poor data management. We observed that if African governments can improve on quality in data, ICT systems, and e-Service, these would lead to the overall e-Gov development in the continent.

The final phase is e-Gov benefits. The benefits are enormous. Arguably, if this model is put in to practice in a phase manner coupled with effective monitoring and evaluation plan, it may lead to potential net benefit of e-Gov in Africa. Due to the diverse nature of Africa, we recommend for a further development and validation of this alternative model.

CONCLUSION AND POLICY RECOMMENDATIONS

It noteworthy to mentioned the lesson learnt from our country cases which African government could borrowed. These lessons include both success stories of the countries and their implementation challenges in e-Gov. One fundamental lesson learnt is political and bureaucratic endorsement. Political support is the foundation for e-Gov success coupled with bureaucratic willingness to adopt new technologies. This gesture alone will go a long way in changing the mindset of citizens in Africa. Regrettably, African Heads of States, politician and bureaucrats see e-Gov as a threat to their power on information. This unwillingness to open government has not only made growth stagnant in Africa but also increases corruption. We observed that Singapore, Tunisia, Chile, Mauritius, Uruguay, and Bahrain all enjoyed strong political support and hence the will to 'Open Government'.

Another important lesson drawn from our country cases is that of continuous long term clear strategy, e-Gov masterplans and efficient policies that are implemented in phased manner. We observed that all the country cases have a comprehensive road map plans and strategies on where they are now on e-Gov development, and where they want to be in the future. This policy guide is vital in e-Gov development and we hoped that African government could learned from this. Arguably, majority of African government seriously lack strategic policies and masterplan on e-Gov and thus not surprising for massive e-Gov project failures. We further observed from our country cases that, e-Gov masterplans are implemented in phase manner or stage after stage. This implementation strategies are seriously lacking in Africa, and occasionally wants to implement 'big'.

We also derived from our cases the challenges of adoption, data security, privacy laws and the issues of trust. Almost all our cases faced and are still facing these challenges. We observed that citizens willingness to adopt ICTs still pose a challenge in our country cases. Online consultation, e-Dicision-making are areas which they need improvement. African countries can learn from these experiences and improve on providing data security, and implementing privacy laws. These might boost citizens trust and their will to use ICTs.

Digital government is the innovation of the 21st century and its importance in transforming the way government does business cannot be over emphasized. We often blamed government of being bureaucratic, slow and lack of innovation in this ever-changing world. It is with hope that e-Gov could transformed our public service to be more responsive to contemporary demands from the public. The modernization of countries using technology has immense benefits in transforming public administration. These benefits include fast service delivery, accountability and transparency, effective and efficient government, reduce corruption among government employees, and increase business opportunities, just to name a few. However, it is gloomy that these benefits are far fetching among third world nations especially those in Africa. We acknowledged some Africa governments achievement in e-Gov development but many of the projects failed to meet the intended goals. It is true that some developing countries has triumph in providing online transactions, notably Chile, Bahrain, Mauritius, South Africa and Tunisia, etc, but there is still need for more improvement especially in online interactions.

The study employed UN e-Gov surveys 2008—2016, as well as secondary data. We used the biannual e-Gov survey conducted by UN to show the successes and inconsistencies of our cases. A complementary model was developed to show the causality on countries success in UN e-Gov ranking using five dimensions (economic, social-cultural, policy orientation, international commitment and political development). An alternative success model for e-Gov in Africa was developed. It was an adaptation from the D&M model that is further developed to suit the need of our study.

In our analysis, the results reveal that political endorsement, economic development, accurate policies including data security and privacy laws, effective participation in e-Services, and socio-cultural development are sufficient or necessary factors for e-Gov success/development in developing world.

Chile, Uruguay, Singapore, Bahrain, Tunisia, and Mauritius all succeed in e-Gov development due to these necessary conditions. What is more fascinating is the fact that other developing countries with similar attributes to our cases failed in their bid for e-Gov development. Our interpretation is that many developing countries lack these sufficient factors for e-Gov success. We observed many discrepancies among various e-

Gov policies in Africa. The issue of data security and privacy laws still pose a challenge to many developing nations. This is further exacerbated with lack of political and bureaucratic will for change. This is because bureaucrats are unwilling to open up. And political leaders are also unwilling to open up for political accountability and scrutiny. This has led to massive political and bureaucratic corruptions in developing countries especially those in Africa.

In our study, we observed a similar challenge for all the country cases. Chile, Uruguay, Singapore, Bahrain, Tunisia, and Mauritius, all faced the problem of adoption of e-Gov services. Several reasons could be blamed for these. Our interpretation indicates the issue of trust and divergent cultures as the main hindrance to successful adoption of e-Gov services. If only stakeholders can ensure data security, and government implement privacy laws can e-Gov triumph. These assurance from stakeholders can go a long way in gaining citizen trust. We opined that the issue of culture can be resolved through enlightenment and education of e-Gov and e-Gov applications.

An overwhelming majority of e-Gov projects in developing economics failed woefully (Heeks,2003). However, these failures are not that all bad but rather a lesson to learn from. Lesson can be learned from successful experiences from developed nations and even some developing countries like Singapore, and Chile. Perhaps some of these experiences may not be applicable but others can surely be applicable in developing countries with similar attributes.

Our study also shows that Chile, Uruguay, Singapore, Bahrain, Tunisia, and Mauritius did not only have a comprehensive programmes and policies that are implemented in phased manner, but also these masterplans are periodically revisited for improvement. It is not that many developing nations do not have a sound e-Gov policies but keeping abreast with such policies for improvement is the problem. Digital government policies can only be successful if it is citizen centric. Online consultations among governments, businesses, and citizens seem very low in developing countries, an assertion supported by UN global e-Gov survey in 2014. On this background, this study recommends some useful hints for successful e-Gov development in Africa:

- The need to improve the basic ICT infrastructures for e-Gov development in Africa. Electricity, internet, computers, online government websites etc, are still a challenge to many countries in Africa. These are necessary conditions for successful e-Gov development and its inadequacies could hinder the success of e-Gov.
- There is need for political and bureaucratic endorsement in e-Gov projects, which arguably is seriously lacking among African governments. Some might have perceived e-Gov as a threat, while to others, it is a witch hunting tool that unmasked their ill-behaviors in governments. With political will, data security and privacy laws could be guaranteed and hence increase citizen trust in the system which is critical in e-Gov success.
- There is also the need for increase awareness by stakeholders. Although e-Gov has arrived in Africa but little is known about the concept and surprisingly even among bureaucrats. To many, e-Gov is all about computerization. e-Gov has surpassed this traditional definition. Stakeholders must come up with strategies and actions plan to enlighten the masses about e-Gov and its potential benefits. This can be done using various medium such as television, print medias, audio clips, billboard, charts etc. e-Gov can only be successful if people are involved in the process.
- Digital divide and e-Readiness: Enables stakeholders to understand and know the current state of ICT infrastructures. Previous studies have shown that digital divide between developed economics and developing nations are huge, even in rural-urban societies in developing world. There is serious need to bridge these gaps and the wider it becomes the more constraints it is to achieve e-Gov success or goals.
- Further, more investment is needed in human resources development. Citizens should be trained to handle online transactions at ease. Government employees should also be train regularly to keep abreast with recent innovations. Again, there is need for greater coordination among various government departments and the same is true for information sharing.
- Mobile Government (m-Gov): Mobile penetration in Africa is incredibly higher and this could help reduce the digital gap between communities. m-Gov has a transformatonal capacity to both extending access to e-Services and expanding delivery

of new services via SMS (Short Message Service). This would enhance civic participation in government and thus transparent democracy.

Although there are some commonalities among the country cases chosen, however, this study acknowledged the socio-cultural difference among the chosen countries, coupled with the fact that no yardstick was used in classifying developing countries used. Therefore, we could not generalise our research findings. Can high socio-cultural disparity be blamed for poor implementation in Africa? How can the proposed alternative model enhance implementation of e-Gov in Africa and what are the implications? There is need for further research to answer the above mentioned questions.

With our alternative model, developing nations especially those in Africa can use it as a guide to future e-Gov projects. We recommend its usage on the ongoing e-Gov projects in Africa. Electronic government is an interesting and quite new area; therefore, we recommend further research on e-Gov adoption, implementation problems and challenges in Africa. Although we did not choose to measure the various dimensions or variables of our alternative model, therefore, we recommend for further research in measuring the variables in the model and empirical testing it.

REFERENCES

Books

BARRENECHEA, Mark J. and JENKINS, Tom (2014), "E-Government or Out of Government," First Edition, Published by Open Text Corporation 275 Frank Tompa, Drive Waterloo, Ontario, Canada ISBN 978-0-9936047-2-0

CHUA, Jeannie (2012), "The e-Transformation Journey of Singapore," Chapter 2, Springer New York.

DYE, Thomas R (2005), "Understanding public policy," 11th edition, New Jersey: Pearson Prentice Hall

McCONNELL, Allan (2010b), "Understanding Policy Success: Rethinking Public policy" Palgrave Macmillan publishers limited, USA, New York.

The e-Government handbook for developing countries. A project for InfoDev, Centre for democracy and technology, November 2002.

SANABRIA, Pablo et al. (2014), "E-Government Practices in South American Countries: Echoing a Global Trend or Really Improving Governance? The Experiences of Colombia, Chile, and Brazil" M. Gascó-Hernández (ed.), Open Government, Public Administration and Information Technology 4, DOI 10.1007/978-1-4614-9563-5_2, © Springer Science+Business Media New York, pp.17-26

Articles

ADEYEMO, Adesesan B. (2011), "E-government implementation in Nigeria: An assessment of Nigeria's global e-gov ranking", Journal of Internet and Information System, Vol: 2, No:1, pp.11-19.

AIDA, Allaya and MAJDI, Mellouli (2014), "National Culture and E- Government Services adoption Tunisian case," International Journal of Business & Economic Strategy (IJBES) Copyright IPCO, Vol:1, pp.1-5

- ALADWANI, Adel M. (2015), "Corruption as a source of e-Government projects failure in developing countries: A theoretical exposition," *International Journal of Information Management* Vol:36, pp.105–112. <http://dx.doi.org/10.1016/j.ijinfomgt.2015.10.005> 0268-4012/ Elsevier Ltd. All rights reserved.
- AL ATHMAY, Alaa-Aldin Abdul Rahim A. (2013), "e-Governance in Arab Countries: Status and Challenges," *Global Journal of Business Research*, Vol:7, No:5.
- ALAWADHI, Suha and MORRIS, Anne (2009), "Factors Influencing the Adoption of E-government Services," *Journal of Software*, Vol:4, No:6, pp.584-590
- AL-KHOURI, Ali M. (2011), "An Innovative Approach for e-Government Transformation," *International Journal of Managing Value and Supply Chains (IJMVSC)*, Vol:2, No:1, pp.22-43
- AL-KHOURI, Ali M. (2014), "Global e-Government: What needs to be Learned? A Reflection on UN e-Government Survey 2014," *International Journal of Innovation and Applied Studies*. ISSN 2028-9324, Vol:7, No:1, pp. 262-272, *Innovative Space of Scientific Research Journals* <http://www.ijias.issr-journals.org/>
- ALOMARI, Mohammad K. et al. (2010), "Measuring Social Factors in E-government Adoption in the Hashemite Kingdom of Jordan," Griffith University, Australia
- ALTMAN, David (2002), "Prospects for e-Government in Latin America: Satisfaction with Democracy, Social Accountability, and Direct Democracy," *International Review of Public Administration*, Vol:7, No:2, pp.5-20
- AZAB, Nahed Amin et al. (2009), "A Suggested Framework for Assessing Electronic Government Readiness in Egypt," *Electronic Journal of e-Government*, Vol:7, No:1, pp.11-28, available online at www.ejeg.com

- BHUIYAN, Shahjahan (2011), "Modernizing Bangladesh public administration through e-governance: Benefits and challenges," *Government Information Quarterly*, Vol:28, No:1, pp.54-65
- CARTER, Lemuria and BÉLANGER, France (2005), "The utilization of e-government services: citizen trust, innovation and acceptance factors," *Info Systems*, Vol:15, pp.5–25. Blackwell Publishing Ltd
- CHEN, Y. N. et al. (2006), "E-Government Strategies in Developed and Developing Countries: An Implementation Framework and Case Study," *Journal of Global Information Management*, Vol:14, No:1, pp.23-46, Copyright, Idea Group Inc.
- CIBORRA, Claudio and NAVARRA, Diego D. (2005), "Good Governance, Development Theory, and Aid Policy: Risks and Challenges of E-Government in Jordan," *Information Technology for Development*, Vol:11, No:2, pp.141–159, Published online in Wiley InterScience (www.interscience.wiley.com)
- CIBORRA, Claudio (2005), "Interpreting e-government and development Efficiency, transparency or governance at a distance?" *Information Technology & People*, Vol:18, No:3, pp. 260-279. Emerald Group Publishing Limited 0959-3845 DOI 10.1108/09593840510615879
- DADA, Danish (2006), "The Failure of E-Government in Developing Countries: A Literature Review," *The Electronic journal on Information Systems in Developing Countries*, Vol:26, No:7, pp.1-10
- DANZIGER, James. N. and ANDERSEN Kim. V. (2002), "The Impacts of Information Technology in Public Administration: An Analysis of Empirical Research from the "Golden Age" of Transformation," *International Journal of Public Administration*, Vol:25, No:5, pp.591-627
- DAVIS, Fred. D. (1989) "Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology", *MIS Quarterly*, Vol. 13, No. 3, pp. 319-339

- DELONE, William. H. and MCLEAN, Ephraim. R. (1992) "Information Systems Success: The Quest for the Dependent Variable", *Information Systems Research*, Vol.:3, No:1, pp. 60-95
- DELONE, William H. and MCLEAN, Ephraim R. (2003), "The DeLone and McLean Model of Information Systems Success: A Ten-Year Update," *Journal of Management Information Systems / Spring* , Vol:19, No:4, pp. 9–30. M.E. Sharpe, Inc. 0742–1222 / 2003 \$9.50 + 0.00.
- ELKADI, Hatem (2013), "Success and failure factors for e-government projects: A case from Egypt," *Egyptian Informatics Journal*, Vol:14, pp.165–173. <http://dx.doi.org/10.1016/j.eij.2013.06.002>
- EVANS, Donna and YEN, David C. (2006), "E-Government: Evolving relationship of citizens and government, domestic, and international development," *Government Information Quarterly* Vol:23, pp.207–235. doi:10.1016/j.giq.2005.11.004
- FINGER, Matthias and PÉCOUD, Gaëlle (2003), "From e-Government to e-Governance? Towards a model of e-Governance," *Electronic Journal of e-Government*, Vol:1, No:1, pp.52-62), available online at www.ejeg.com
- GCHARLEGHI, Behrooz et al. (2015), "Adoption of E-Government among Bahraini Citizens," *Asian Social Science*, Vol:11, No:4, pp.141-149, ISSN 1911-2017 E-ISSN 1911-2025 Published by Canadian Center of Science and Education
- GICHOYA, David (2005) "Factors Affecting the Successful Implementation of ICT Projects in Government" *The Electronic Journal of e-Government*, Vol:3, No:4, pp 175-184, available online at www.ejeg.com
- GRÖNLUND, Åke and HORAN, Thomas A. (2005), "Introducing e-Gov: History, Definitions, and Issues," *Communications of the Association for Information Systems*: Vol:15, No:39. Available at: <http://aisel.aisnet.org/cais/vol15/iss1/39>
- GUPTA, M. P. and JANA, Debashish (2003), "E-government evaluation: A framework and case study," *Government Information Quarterly* Vol:20, pp.365–387. doi:10.1016/j.giq.2003.08.002,

- GUTIERREZ, Claudio et al. (?), “E-Government in Chile and the Adoption of xml as Standard”
- HA, Huong (2013), “E-Government in Singapore: Critical Success Factors,” Copyright, IGI Global. DOI: 10.4018/978-1-4666-4173-0.ch009
- HA, Huong and COGHILL, Ken (2006), “e-Government in Singapore — a SWOT and PEST analysis,” *Asia-pacific social science review*, pp.103-130
- HEEKS, Richard (2002), “Information Systems and Developing Countries: Failure, Success, and Local Improvisations,” *The Information Society*, Vol:18, pp.101–112, copyright Taylor & Francis 0197-2243/02 DOI: 10.1080/01972240290075039
- HEEKS, Richard and STANFORTH, Carlyne (2007), “Understanding e-government project trajectories from an actor-network perspective,” *European Journal of Information Systems*, Vol:6, No:2, pp.165-177
- HEEKS, Richard and BAILUR, Savita (2007) “Analyzing e-Government Research: Perspectives, Philosophies, Theories, Methods, and Practice”, *Government Information Quarterly*, Vol:24, No:2, 243265, which has been published in final form at: <http://www.sciencedirect.com/science/article/pii/S0740624X06000943>
- HO, Alfred. T.K. (2002), “Reinventing Local Government and the E-Government Initiative,” *Public Administration Review*, Vol:62, N:4, pp.434-444
- HUANG, Wayne et al. (2002), “An empirical investigation of the adoption of e-government in Australian citizens: some unexpected research findings” *Journal of Computer Information Systems*, Vol:43, No:1, pp.15-22.
- HUNG, Shin Y. et al. (2006), “Determinants of user acceptance of the e-government services: The case of online tax filing and payment system”, *Government Information Quarterly*, Vol:23, pp.97-122.
- IFINEDO, Princely (2012), “Drivers of e-Government Maturity in Two Developing Regions: Focus on Latin America and Sub-Saharan Africa,” *Journal of Information Systems and Technology Management*, *Revista de Gestão da*

Tecnologia e Sistemas de Informação. Vol:9, No:1, pp. 05-22 ISSN online: 1807-1775 DOI: 10.4301/S1807-17752012000100001

JAEGER, Paul T. and THOMPSON, Kim M. (2003), “E-government around the world: Lessons, challenges, and future directions,” *Government Information Quarterly*, Vol:20, pp.389–394

KE, Weiling (2004), “Successful e-Government in Singapore. How did Singapore manage to get most of its public services deliverable online?” article in *communications of the acm* · June doi: 10.1145/990680.990687

KE, Weiling and WEI, Kwok Kee (2004), “Successful E-Government in Singapore,” Article in *Communications of the ACM*, DOI: 10.1145/990680.990687 · Source: DBLP Inn See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/220422089>

KUMAR, Rajendra and BEST, Michael L. (2006), “Impact and Sustainability of E-Government Services in Developing Countries: Lessons Learned from Tamil Nadu, India”, *The Information Society*, Vol:22, No:1, pp.1-12.

LIM, Ai Ling et al. (2013), “E-government and e-governance concepts and constructs in the context of service delivery,” *African Journal of Business Management*. Vol:7 No:28, pp. 2817-2826, DOI: 10.5897/AJBM2012.1595 ISSN 1993-8233, Academic Journals <http://www.academicjournals.org/AJBM>

MAHIZHNAN, Arun (1999), “Smart cities:The Singapore case,” *Cities*, Vol:16, No:1, pp.13–18, Elsevier Science Ltd. All rights reserved Printed in Great Britain 0264-2751/99

MAHIZHNAN, Arun and ANDIAPPAN, Narayanan (2002), “e-Government: The Singapore,” *Tamil Internet*, California, USA

MATES, Pavel et al. (2013), “Toward e-government project assessment: European approach,” *Preliminary Communication*, Vol:31 No:1, pp.103–125, UDC 351.712.025:342.51.35:004.77

- McCONNELL, Allan (2010a), "Policy Success, Policy Failure and Grey Areas In-Between," International public politics, Vol:30, No:3, doi:10.1017/S0143814X10000152. Cambridge University Press
- MISHRA, Alok and MISHRA, Deepti (2011), "E-Government – Exploring the Different Dimensions Of Challenges, Implementation, and Success Factors," The Data Base for Advances in Information Systems, Vol:42, No:4
- MISTRY, Jamshed J. and JALAL, Abu (2012), "An Empirical Analysis of the Relationship between e-government and Corruption," The International Journal of Digital Accounting Research, Vol:12, pp. 145 – 176 ISSN: 1577-8517
- MUTULA, Stephen M. (2013), "e-Government Divide: Implications for sub-Saharan Africa," In Information Ethics for Africa: Cross-cutting Themes. Pretoria: ACEIE, pp.59-69
- NDOU, Valentina (2004), "E-Government for Developing Countries: Opportunities and Challenges", The Electronic Journal on Information Systems in Developing Countries, Vol:26, No:1, pp.1-24
- NKOHKWO, Quinta Nven-akeng and ISLAM, Sirajul M. (2013), "Challenges to the Successful Implementation of e-Government Initiatives in Sub-Saharan Africa: A Literature Review" Electronic Journal of e-Government, Vol:11, No:2, pp253-253, available online at www.ejeg.com
- NKWE, Nugi (2012), "E-Government: Challenges and Opportunities in Botswana," International Journal of Humanities and Social Science, Vol:2, No:17, pp.39-48
- OJO, John Sunday (2014), "E-Governance: An imperative for sustainable grass root development in Nigeria," Journal of Public Administration and Policy Research. Vol 6, No:4, pp. 77-89. DOI: 10.5897/JPAPR2013.0264
- OLAITAN, Akinleke Wasiu (2015), "The Contributory Effects of Socio-Cultural Factors on e-Government Adoption Among Nigerians," Global Journal of Politics and Law Research Vol:3, No:1, pp.91-104, Published by European Centre for Research Training and Development UK (www.eajournals.org)

- OMARI, Asem (2013), "Technology Adoption in the Arabian Gulf Countries: The case of e-Government," *International Journal of Computer Science, Engineering and Information Technology (IJCEIT)*, Vol:3, No:3, pp.1-8
- PALVIA, Shailendra C. J. and SHARMA, Sushil S. (2007), "EGovernment and E-Governance: Definitions/Domain Framework and Status around the World," *Foundations of E-government*, Computer Society of India.
- RORISSA, Abebe and DEMISSIE, Dawit (2010), "An analysis of African e-Government service websites," *Government Information Quarterly* Vol:27, pp.161–169. 0740-624X/\$, Published by Elsevier Inc. doi:10.1016/j.giq.2009.12.003
- SADOK, Moufida et al. (2016), "ICT for Development in Tunisia: Going the last mile," *Technology in Society*, Vol:46, pp.63-69
- SARRAYRIH, Mohammad A. and SRIRAM, B. (2015), "Major challenges in developing a successful e-government: A review on the Sultanate of Oman," *Journal of King Saud University, Computer and Information Sciences*, Vol:27, pp.230–235. <http://dx.doi.org/10.1016/j.jksuci.2014.04.004>
- SCHUPPAN, Tino (2009), "E-Government in developing countries: Experiences from sub-Saharan Africa," *Government Information Quarterly*, Vol:26, No:1, From Implementation to Adoption: Challenges to Successful E-government Diffusion, pp.118-127.
- SRIVASTAVA, Shirish C. and TEO, Thompson S. H. (2007), "E-Government Payoffs: Evidence from Cross-Country Data," *Journal of Global Information Management*, Vol:15, No: 4 edited by Felix B. Tan, IGI Global
- STAHL, Bernd Carsten (2005), "The Paradigm of E-Commerce in E-Government and E-Democracy," Copyright Idea Group Inc.
- STIER, Sebastian (2015), "Political determinants of e-government performance revisited: Comparing democracies and autocracies," *Government Information Quarterly* Vol:32, pp.270–278. <http://dx.doi.org/10.1016/j.giq.2015.05.004> 0740-624X/ Elsevier Inc. All rights reserved

SUGUMARAN, Harikrishnan and AL-KHAJA, Zakareya Ahmed (2014), "Bahrain Governance Framework: Towards Efficient Use of IT. Journal of Inspiration Economy," Scientific Publishing Center, University of Bahrain J. Ins. Econ. 1, No:1, pp.131-146 Website: <http://journals.uob.edu.bh>, ISSN (2384-4752)

WANG, Yi-Shun and LIAO, Yi-Wen (2008), "Assessing eGovernment systems success: A validation of the DeLone and McLean model of information systems success," Government Information Quarterly, Vol:25, pp.717-733. doi:10.1016/j.giq.2007.06.002

YILDIZ, Mete (2007), "E-government research: Reviewing the literature, limitations, and ways forward," Government Information Quarterly 24, PP.646-665. DOI: 10.1016/j.giq.2007.01.002

Conferences and Working Paper Series

ANDERSEN, Thomas and RAND, John (2006), "Does E-Government reduce corruption", University of Copenhagen, Department of Economics, Working Paper. <http://bit.ly/XYNVKq>

BACKUS, Michiel (2001), "E-Governance and Developing Countries," RESEARCH REPORT No. 3.

BECKER, Jörg et al. (2004), "eGovernment Success Factors," Conference Paper in Lecture Notes in Computer Science. DOI: 10.1007/978-3-540-30078-6_87 · Source: DBLP

CARTER, Lemuria and BÉLANGER, France (2003), "Diffusion of innovation & citizen adoption of e-government", The Fifth International Conference on Electronic Commerce (ICECR-5), Pittsburg, PA, pp.57-63.

FRAGA, Edward (2002), "Trends in e-Government in Digital Era: How to Plan, Design, Secure, and Measure eGovernment," Government Management Information Science (GMIS) Conference, Santa Fe, New Mexico

GANT, Jon P. (2008), Electronic Government for Developing Countries, was commissioned by the International Telecommunication Union Telecommunication Development Sector's ICT Applications and Cybersecurity Division.

GAO, Ping and GUNAWONG, Panom (2014), "Understanding e-Government Failure from an Actor-Network Perspective: The Demise of the Thai Smart ID Card," Centre for Development Informatics Institute for Development Policy and Management, SEED. University of Manchester. The iGovernment working paper series

HEEKS, Richard & SANTOS, Rita (2009), "Understanding Adoption of eGovernment: Principals, Agents and Institutional Dualism," Centre for Development Informatics Institute for Development Policy and Management, SED. University of Manchester. The iGovernment working paper series. Paper No. 19

HEEKS, Richard (2002), "eGovernment in Africa: Promise and Practice," Institute for Development Policy and Management University of Manchester. The iGovernment working paper series. Paper No. 13

HEEKS, Richard (2001), "Understanding e-Governance for Development," Institute for Development Policy and Management. University of Manchester, iGovernment working paper series. *Paper No. 11.* **View/Download from:** http://www.man.ac.uk/idpm/idpm_dp.htm#ig

HEEKS, Richard (2003), "Most eGovernment-for-Development Projects Fail: How Can Risks be Reduced?" Institute for Development Policy and Management, University of Manchester. iGovernment Working Paper Series. Paper No. 14

HELBIG, Natalie C. et al. (2005), "Understanding the Complexity in Electronic Government: Implications from the Digital Divide literature," Proceedings of the Eleventh Americas Conference on Information Systems, Omaha, NE, USA August 11th-14th 2005

Index of Economic Freedom 2014 Survey

- JEANNE Elone, J. (2008), "African Civil Society, Democracy and Development", Draft Research Question.
- KAUFMANN, Daniel et al. (2010), "The Worldwide Governance Indicators: Methodology and Analytical Issues," Access the WGI data at www.govindicators.org
- KIM, Ran (2012), "Institutions and e-Government Development: Trends and Issues," E-Government Technical paper. United Nations Department of Economic and Social Affairs (UNDESA) Division for Public Administration and Development Management (DPADM)
- KRAEMER, Kenneth L., et al. (1978), "Local Government and Information Technology in the United States, Paris," OECD Informatics Studies #12.
- KRAEMER, Kenneth L. and KING, John L. (2003), "Information Technology and Administrative Reform: Will the Time After E-Government Be Different?" Center for Research on Information Technology and Organizations, University of California, Irvine www.crito.uci.edu. Paper prepared for the Heinrich Reinermann Schrift fest, Post Graduate School of Administration, Speyer, Germany. September.
- LESSA, Lemma et al. (2012), "Steering e-Government Projects from Failure to Success: Using Design-Reality Gap Analysis as a Mid-Implementation Assessment Tool," Centre for Development Informatics Institute for Development Policy and Management, SED University of Manchester. The iGovernment working paper series. Paper No. 22
- MELLOULI, Majdi (2014), "Electronic Government Projects: Study of Tunisian Case," International Conference on Innovation & Engineering Management (IEM-2014) Proceedings - Copyright IPCO-2014 ISSN 2356-5608, pp.115-117
- ORNAGER, Susanne and VERMA, Neeta (2005), "e-Government Tool kit for developing countries," This Toolkit has been prepared by National Informatics Centre (NIC), Department of Information Technology, Ministry of

Communication &IT, Government of India at the behest of UNESCO, New Delhi,
Asia-Pacific Bureau for Communication and Information

PORRÚA, Miguel A. (2013), “E-Government in Latin America: A Review of the
Success in Colombia, Uruguay, and Panama,” Organization of American States.
The Global Information Technology Report 2013

SAPARNIENE, Diana (2013), “From e-Government to e-Governance: e-Initiatives in
Europe,” Access on 24/10/2016 via
www.nispa.org/files/conferences/2013/papers/201306191000380

TORRES, Lourdes et al. (2005), “E-government and the transformation of public
administrations in EU countries: Beyond NPM or just a second wave of reforms?”
Documento de Trabajo 2005-01. Facultad de Ciencias Económicas y
Empresariales, Universidad de Zaragoza.

United Nations Development Program. Human Development Report 2014. Access via
<http://hdr.undp.org/en/content/human-development-index-hdi>

United Nations Survey 2008: From E-Government to Connected Governance.
www.unpan.org/e-government

United Nations Survey 2010: Leveraging E-Government at a Time of Financial and
Economic Crisis. www.unpan.org/e-government

United Nations Survey 2012: E-Government for the People. www.unpan.org/e-government

United Nations E-Government Survey 2014: E-Government for the Future We Want.
www.unpan.org/e-government

United Nations Survey 2016: E-Government in Support of Sustainable Development.
www.unpan.org/e-government

Working Group on E-Government in the Developing World (2000), “The 2002
Roadmap for E-Government in the Developing World: 10 Questions E-
Government Leaders Should Ask Themselves,” Pacific Council on International
Policy, The Western Partner of the Council on Foreign Relations.

Dissertation

DAVIS, Fred. D. (1985) "A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results". Doctoral Dissertation, MIT Sloan School of Management, Cambridge, MA

National policy documents

Bahrain eGovernment programme, Looking beyond the obvious 2009

BROWN, David (2002), "Government of Mauritius E-Government Master Plan: A Public Policy Forum Report Prepared for the Commonwealth Centre for Electronic Governance," November 18, 2002.

Innovation, Integration, Internationalization. Report by the iN2015 Steering committee. An Intelligent Nation, a Global City, powered by Infocomm.

Infocomm Development Authority of Singapore. "Singapore's experience: Initiatives to promote e-Participation". UN Expert Group Meeting "E-Participation: Empowering People through Information Communication Technologies (ICTs)" 24-25 July 2013.

Kingdom of Bahrain eGovernment Authority 2014. Customer satisfaction index 2014

Kingdom of Bahrain eGovernment Authority 2011

Kingdom of Bahrain eGovernment Authority 2014

MICKOLEIT, Arthur (2015), "Do you "Like" your government as much as Chileans Like theirs?" Directorate for Public Governance and Territorial Development, with inputs from Karen Schramm and Sofia Varas of Chile's Ministry General-Secretariat of the Presidency, Sources: <http://oecdinsights.org/2015/06/10/chile-leading-but-lacking-in-e-governance/> access on 16 July 2016 at 1:53pm

Open Government in Uruguay: Self-assessment Report September, 2013

PARRA, Diana (?), “Digital Agenda Uruguay: Agency for e-Government and Information Society”

www.itu.int/net4/wsis/stocktaking/projects/FileManager/DownloadProjectFile?

Republic of Mauritius, e-Government Strategy 2013 – 2017. Central Informatics Bureau
Ministry of Information and Communication Technology August 2013

Republic of Tunisia, Presidency of the Government. E-Government Unit. Workshop on
“Leadership Capacity-Development for Improved Delivery of Public Services in
Africa using ICT” Addis Ababa, 23-25 July 2012.

The Singapore e-Government Masterplan 2011 – 2015 (or eGov2015)

Summary National eGovernment strategy 2016 (The kingdom of Bahrain)

Internet

The Commonwealth Centre for Electronic Government

[www.electronicgov.net/pubs/research_papers/eged/chapter1 pp11-12](http://www.electronicgov.net/pubs/research_papers/eged/chapter1_pp11-12) access
access on 13/04/2016

RESUME

Malang B.S. Bojang born on the 13th of January 1988, in The Gambia. Like normal Gambian students, I went through Primary, Junior and Secondary school. After Senior School graduation in 2006, I got admitted at the University of The Gambia where I studied Political Science and Development studies. I completed my degree program in 2011. On September 2014, I won the Turkish Government scholarship and got admitted to Sakarya University, Department of Political Science and Public Administration.

