UNIVERSITY OF NAIROBI

SCHOOL OF COMPUTING AND INFORMATICS

Assessing E-participation System Success: Case of Murang'a County

BY

PAUL MAINA IRUNGU

P54/6525/2017

SUPERVISOR:

CHRISTOPHER MOTURI

August 2019

A research project report submitted in partial fulfillment for the degree of Masters of Science in Information Technology Management in the department of Computing and Informatics in the University of Nairobi.

DECLARATION

I hereby declare that this project is my own original work and has not been submitted before to any institution for assessment purposes.

Further, I have acknowledged all sources used and have cited these in the reference section.

Signature: _____   _____

Paul Maina Irungu   **Date**

P54/6525/2017

This research project report has been submitted for examination with my approval as the University Supervisor.

Signature: _____   _____

Christopher A. Moturi   **Date**

Director, ICT Centre

University of Nairobi

DEDICATION

I dedicate this research project to God, my mother, my family and friends.

ABSTRACT

Background

Among the several objectives of electronic government (e-government) initiatives is to reach a sizeable populace that can be involved in decision making while formulating policies through public opinions. In order to achieve this goal, different jurisdictions collect public sentiments and make citizens contented with such projects by guaranteeing ICT platform acceptance in relation to their corresponding success. Moreover, County Governments are using e-participation systems and social media for reaching citizens and enhancing the e-participation level.

Purpose

Assessing the success of e-participation system from users' perspective.

Problem

This study endeavored to ascertain which aspects in the e-participation system are relevant for its success.

Methodology

The study adopted a quantitative approach that used self-administered questionnaire to collected data that was designed to fit the six constructs of D&M IS success model from reviewed literature.

Findings

E-participation system under consideration is successful from users' standpoint. There is also an interrelationship between the electronic participation system and the D&M IS Success Model. The results also illustrate no support between links on information quality to citizen satisfaction and service quality to system usage.

Limitation

This cross-sectional study is limited to Kenya. With regard to e-government systems, the paper focuses on e-participation system.

Originality/value of study

The research adds to the evaluation of electronic participation tools in a developing country, Kenya. It points out which dimensions of the e-participation systems are relevant for their success.

Conclusion

The improvement of the e-participation System from users' perspective can be achieved through enhancing the qualities of the system relevant for the corresponding model constructs. Based on the results, increasing the information and service qualities can cause the improvement in general citizen satisfaction and usage of the system.

Recommendation

Future studies are encouraged to employ longitudinal approach instead of the current cross-sectional approach. Consequently, comparative studies would help in debunking the cultural context of e-participation perceptions.

Key words: e-government, D&M IS success model, e-participation, information systems success model dimensions, usage, citizen satisfaction, ICTs.

ACKNOWLEDGEMENT

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

D&M   DeLone and McLean

EPI   E-Participation Index

ICT   Information and Communication Technology

IS   Information Systems

NB   Perceived Net Benefits

IQ   Information Quality

SQ   System Quality

SVQ   Service Quality

US   Citizen Satisfaction

U   System Usage

SEM   Structural Equation Modeling

CHAPTER 1: INTRODUCTION

1.1 Background

The United Nations scheme categorizes three stages of electronic engagement as follows: information provision; citizen consultation and citizen's active participation (UN, 2012). This framework denotes that e-information level deals with government presentation of information related to policy formulation posted on their ICT platforms while at e-consultation level, the government engages the e-society by posting questions online through focus groups, chat rooms and even surveys whereby citizens views are collected based on the deliberations at stake. The last level defined by the framework is the e-decision making which allows empowered e-society to engage independently in policy making.

Without a doubt, one of the changes in outlook achieved by the establishment of the Constitution of Kenya 2010 is the rebuilding of the Kenyan lawmaking body by presenting the Senate. This makes Kenya very unique with devolution being central yet embracing county devolved structures with a national government. The Constitution of Kenya 2010 under article 10 envisages a democratic state through participation of the people in promoting transparency and accountability for sustainable development as provided for in the values and principles of governance at all levels of Ministries, Counties and Agencies. To realize this function, County Government Act, 2012 contemplates that ICT platforms should be developed to ease online public participation in accordance with the spirit of supreme law of the land. In agreement with this, the Murang'a County Assembly has developed a comprehensive bespoke web portal with different features that enhances the e-participation. The features include, social media links embedded in the website, a fully integrated e-petition, e-participation forum, events calendar and a document management system for archiving Hansard records.

1.2 Problem statement

With the rise of the Internet technologies, individuals are increasingly interacting with G2C hence the necessity to quantity the success of G2C e-government systems (Yi-Shun & Yi-Wen

2008). Thus, this study sought after the aspects in the e-participation system that are relevant for its success.

1.3 Purpose of the Study

Assessing the success of e-participation tool from citizens' view point.

1.4 Research Objectives

i.   Evaluate e-participation tool success from citizens' view point.
ii. Validate the model through Structural Equation Modeling (SEM).

1.5 Research Questions

i.   How successful is e-participation system in Murang'a County from the users' perspective?
ii. To what degree does the six dimensions in Information Systems Success Model consistent with e-participation system?

1.6 Research outcomes and significance to key audience

Policy makers will be guided on ways of implementing successful e-participation systems. This will in turn help them improve on e-administration, e-service and engage an e-society.

1.7 Extent of the study

The focal point of this inquiry is on evaluating success of e-participation tool as used in Murang'a County Assembly website portal.

1.8 Assumptions and Limitations of the research

The presumption made is that the respondents will answer the survey honestly. The study uses one model of assessment known as the D&M IS Success Model for evaluation. In addition, the study is based on one particular country, Kenya whose findings may not be applicable to other jurisdictions.

CHAPTER 2: LITERATURE REVIEW

This part converses information derived from previous revisions that are related to the recent study and has focused more on the concepts that will be investigated in evaluating e-participation systems.

2.1 Electronic Government (e-government) overview

Tores et al., (2005) states that in the early 1990's, different jurisdictions all over the world attempted to disburse information to its citizenry as well as businesses through online platforms.

In the late 1990's, e-government initiatives have been initiated by different governments in an attempt to availing info and integrated service delivery channels to both populace and enterprises (Torres, Pina & Acerete, 2005). Singh, Kar, & Ilavarasan (2017) avers that governments have had tremendous gains in streamlining government functions through ICT. In the same token, ICT brings transparency to the functioning of the government agencies and departments (Yi-Shun & Yi-Wen 2008). Both local and national governments have embraced the digital revolution inform of ICT platforms, internet-based content and applications that provide improved service delivery for the general public (Ondego and Moturi, 2016).

Misuraca (2006) posits that ICTs are largely used for public service delivery. He affirms applications of ICTs tools acts like an enabler of digital government strategies apart from being tools of public service delivery.

Ndou (2004) defines e-government from its key applications: e-administration whereby government internal workings are digitized and its processes computerized and automated; e-citizens and e-services are public facing interface with government applications providing ease of information access and services that are seamlessly automated whilst e-society is a virtual society that interacts with the government.

Ndou (2004) highlights that there is e-Government web of interrelationships that include G2G, G2C, G2B services, and G2E. He asserts that citizens benefit a lot from the e-government as opposed to businesses.

Omariba and Okebiro, (2015) notes that there are three fields of application whereby ICTs are largely leveraged at both public and private: e-administration deals with improving the state sector by application of ICTs in processing information; e-services helps the public sector being accountable to the public as well as making the state officers and other government officials accountable for their deeds whilst in office. Lastly, e-democracy helps the public to provide information between itself and its citizenry and thus improves on public participations as enshrined in the supreme law.

2.2 e-participation

E-engagement (electronic participation) is a multifaceted field involving different actors leading an online engagement activity with the intention of influencing information availability, platforms, content, applications and accessibility (Bagui, Weimann & Johnston, 2016). Based on the United Nations (2014), e-engagement is a method of connecting residents by delivery of service design and decision making in policy formulation with an aid of ICTs in enhancing participation that is all-encompassing and purposeful.

The e-government Survey of 2018 measures e-participation via EPI based on how citizens are involved in their active deliberative process, and availability of online state consultations that give online information. The e-participation tools are identified on different government portals by assessing their availability based on this criterion. The survey observed that governments are facilitating the businesses and citizens to contribute their ideas as well as providing a platform for them to give feedback.

The survey shows that among the 62 countries with very high EPI levels are in European countries contributing about 70 per cent. 24 per cent with the very high EPI level in the 193 member states are from Asia constituting 36 per cent with the very high EPI levels. This is followed by America with 26 per cent, Oceania's with 14 per cent and lastly Africa with 7 per cent worldwide.

The global leaders identified by the survey are Denmark, Finland and Republic of Korea while Spain, America, Japan, Australia, New Zealand, United Kingdom and Netherlands followed closely (UN, 2018). The survey identified different strategies used in implementing the e-participation projects. For instance, Denmark's Digital strategy for 2016-2020 is engendered in its ICT masterplan while Australia has devised a digital service standard that ensures e-service is accessible to its citizenry. Japan has mooted a Digital Government Idea Box as an avenue to engage its citizen in matters e-participation.

Some of the associated benefits that accrues when implementing successful e-participation is that decision making is done effectively in the context of political environment and governments appreciates citizenry participation which enables government's decision to be legitimized. In addition, citizens trust towards its government principle of inclusivity is improved since they perceive their government being more responsive and transparent (Mossberger et al., 2008).

2.3 e-participation in Africa

Agenda 2063 adopted by the African Union postulates that all development agenda should be driven by the people through their active role socially, economically, politically and environmentally. In particular, it mentions that disadvantage groups including women and youth should be empowered (UN, 2016). There are some countries in East, West, South and horn of Africa that avails information in open standard which helps its populace to participate in deliberative processes in their respective governments (UN, 2018).

In Mozambique, there is an e-service powered by web and short messaging service that is designed to overcome barriers to entry in urban areas by supporting marginalized populace. Members of the public use the Monitoria Participativa Maputo to report any garbage related issues for faster intervention by the local council (UN, 2016).

Dar Es Salaam, Tanzania faced a rare cholera outbreak especially in Tandale (UN, 2016). Tanzanians used OpenStreetMap (OSM) technologies to respond to the outbreak by

identifying the affected regions, they also located victims and provided important information on water catchment areas and sanitation.

In Kenya, the government has empowered the citizens to recommend what data should be released through a portal. The data can also be used to solve many problems in innovate ways by targeting people core needs (UN, 2016). The constitution of Kenya, 2010 has enshrined fundamental principles of public engagement in order to promote an open society. This initiative was geared towards helping vulnerable groups to access data. KODI has several features that include data release calendar, journals discussion fora and a blogpost for information dissemination (UN, 2016).

2.4 Evaluation of Information Systems

Frewer and Rowe (2005) describes evaluation being a pre-set measure that is contrasted with an activity.

There are studies that mainly deal with government offering services to its populace as well as the general pubic conducting affairs with its government (Reddick, 2005). However, it's been highlighted that there is an inclination of studies offering government services to its citizenry (Helbig et al., 2009; Reddick, 2009).

2.5 IS Success Model 2003

Figure 2.1 shows a broadened model that has been used by different researchers in application of their IS evaluation endeavors.

The success constructs as depicted by DeLone and McLean are illustrated by the associated arrows on their model. DeLone and McLean (2003) states that their framework can be deciphered in the following way: the qualities of the systems can be accessed and ultimately influence the net benefits accruing negatively or positively based on the continuous and discontinuous usage and user satisfaction of an IS by the end users.

Figure 2.1: Update D&M IS Success Model (2003)
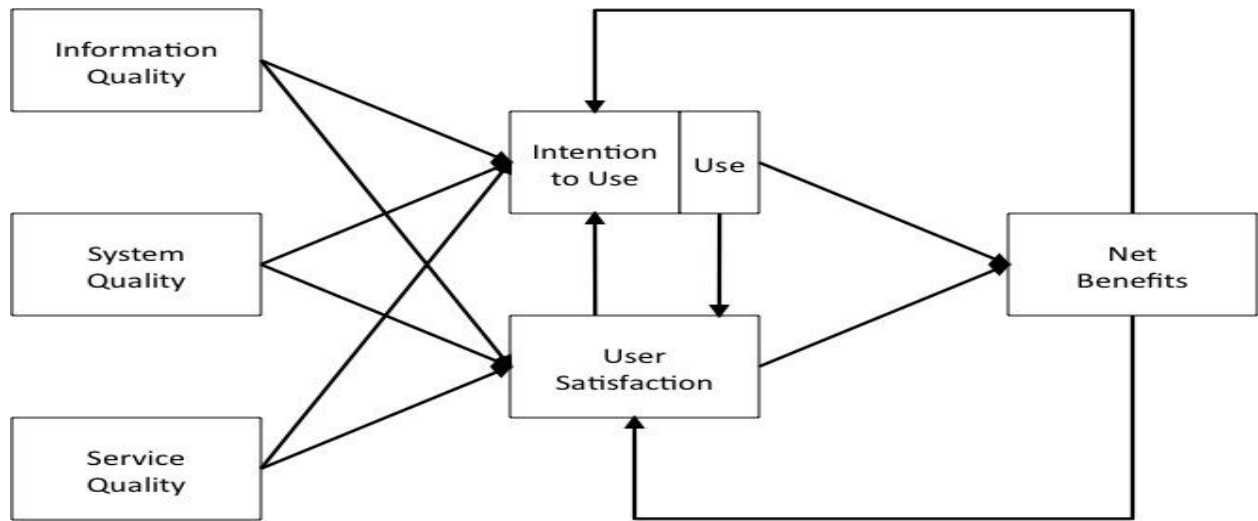
Below are six dimensions of the D&M IS success model and are explained as follows:

2.5.1 System Quality

The technical and the prototype outlook of a system quality should form the basis upon which IS performance is hinged (Gable et al, 2008). Different researchers have tried to measure this construct by use of the following assess criteria depicted in the table below.

Table 2.1: Typical system quality constructs measurement.

Constructs	References from literature
Easy to Use	Doll and Torkzadeh (1988)
Access	Srinivasan (1985)
Consistency	Srinivasan (1985) and Belardo, Karwan and Wallace (1982)
Reaction time	Iivari, 2005, Hamilton & Chervany, 1981
System precision	Sedera and Gable, 2004,

Adaptableness, accessibility, consistency, reaction time, usability.	DeLone & McLean (2003)
Content, appropriateness	Doll and Torkzadeh (1988)

2.5.2 Information Quality

The dimensions success on the quality of information requires necessary features of an IS output. In agreement with this, DeLone & McLean (2003) posits that information quality of websites should be bespoke, comprehensive, applicable, straightforward and protected so that users keep coming back to surf. Below table shows how other researchers have used this construct.

Table 2.2: Typical information quality constructs measurement.

Constructs	References from literature
Timeliness	Srinivasan (1985)
Accuracy	Iivari, 2005
Dependability	McKinney et al., 2002, Bailey & Pearson, 1983
Timeliness & Content	Hamilton & Chervany, 1981

2.5.3 Service Quality

Alhendawi & Baharudin (2017) declares that this attribute was not there in the initial D&M IS success model hence it was augmented later in the updated model a decade later. This attribute is represented by the support given by the ICT department to the end user in terms of support; this include the training on the usage of varied applications and use of helpdesk or even closing on open tickets in an application.

Table 2.3: Typical service quality constructs measurement.

Constructs	References from literature
Reliability	Srinivasan (1985)
Responsiveness	Belardo, Karwan and Wallace (1982)
Safe transactions	Parasuraman et al., 2005
System availability	Balaban et al., 2013
Efficiency, Fulfilment, Privacy	Parasuraman et al., 2005
Feedback, Services	Teo, Thompson & C. Srivastava, Shirish & Jiang, Li. (2009)

2.5.4 Use

DeLone and McLean (2003) attributes this indicator by the actions taken by the end users in accessing the website, surfing the site with aim of getting information and doing online transactions. In the same way, they remark constructs like timeliness, usage and accessibility can be used to measure an Information system. Other researchers have measured use as tabulated below.

Table 2.4 Typical System Usage constructs measurement.

Constructs	References from literature
Real Usage	Davis (1989)
Dependent	Wang, 2008

Intent to reuse & use   Davis, 1989, Wang, 2008

2.5.5 User Satisfaction

Ideally, these attributes measure the level of satisfaction when an end user utilizes an Information system (Kettinger & Lee 1994 & Jaeger 2003). Table 2.5 presents some examples of commonly construct measurements used.

Table 2.5: Typical user satisfaction constructs measurement.

Constructs	References from literature
satisfaction, accomplishment and expectations,	Luarn & Lin (2003)
Success attribution and need fulfilment	Oliver (1980, 1997)

2.5.6 Net Benefits

The Perceived Net Benefit attribute comprises the degree of benefits based on the end user perception of any IS. Some typical measures used by Etezadi-Amoli and Farhoomand's (1996) are job improvement, ease of work, time saving and meeting clients' needs. The table underneath shows different constructs.

Table 2.6: Typical Net Benefits constructs measurement.

Constructs	References from literature
Work improvement, eases work, time is saved, satisfy the job needs	Etezadi-Amoli & Farhoomand, 1996
Work is simplified	Davis, F. D. (1989) and Iivari, J. (2005)
Usefulness	Iivari, J. (2005)
Success attribution & need fulfilment	Oliver, 1980

2.6 Adoption of IS Model, 2003

D&M IS success model of 2003 has got six dimensions that hypothesizes an association amongst the usage of the system and end user satisfaction versus the quality of information, system and service. DeLone and McLean (2003) asserts that continuous usage of the IS system will lead to user satisfaction since they are both interrelated in the updated model. In the same vein, certain benefits will be realized due to this association. Ultimately, the net benefits that accrues will either be negative or positive and as such different stakeholders will be influenced on whether to continue using the IS or not.

This study will adopt the updated IS model of 2003 and use the dimensions with their corresponding items that are acknowledged in the literature.

The usage of electronic participation isn't mandatory but rather optional, hence the choice of the use as a variable closer to the meaning of success than the intention to use which indicates mandatory usage. The sixth dimension of the IS model will be referred to as citizen perceived usefulness towards using e-participation system for Murang'a County specific G2C system.

Figure 2.2: Visualized Hypothesis
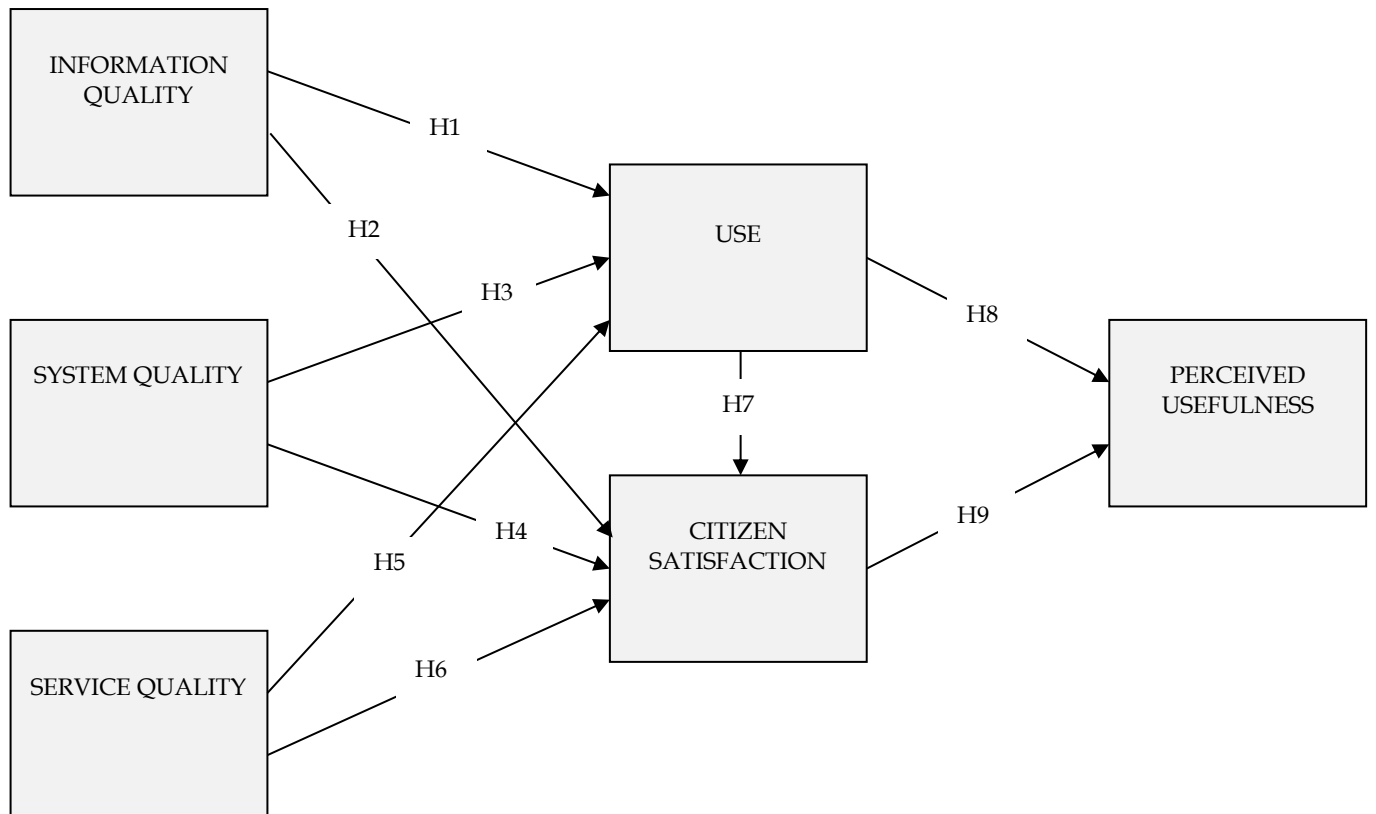
Due to the fact that this study was taken at a particular time and constrained therein, the association arrows depicted from the perceived net benefits to both system usage and citizen satisfaction will be omitted.

Below framed hypothesis will thus be formulated.

Table 2.7: Framed Hypothesis

H1: Information quality has a significant effect on the use of e-participation.

H2: Information quality has a significant effect on the citizen satisfaction of e-participation.

H3: System quality has a significant effect on the use of e-participation.

H4: System quality has a significant effect on the citizen satisfaction of e-participation.

H5: Service quality has a significant effect on the use of e-participation.

H6: Service quality has a significant effect on the citizen satisfaction of e-participation.

H7: The use affects the citizen satisfaction on e-participation.

H8: Use has a significant effect on the perceived usefulness of e-participation.

H9: Citizen satisfaction has a significant effect on the perceived usefulness of e-participation.

CHAPTER 3: RESEARCH METHODOLOGY

This section entails research design, method used in collecting data, data analysis methods, validity testing and ethical considerations that were used to evaluate the e-participation system in Murang'a County Assembly.

3.2 Research Design

This inquiry used a method based on the research onion which has been used to frame the problem following a holistic quantitative design and drawing from a positivist perspective (Saunders, Lewis, and Thornhill, 2009).

3.3 Population

A populace is a gathering of people, articles or things from which tests are taken for estimations; a whole gathering of people or components that share at any rate one thing for all intents and purpose; or the huge gathering from which the sample is taken (Kombo and Tromp, 2006). According to Schildler and Cooper (2003), the applicable populace is the complete gathering of components about which derivations are made. A population is an assembly of people who take part in a shared distinctive interest (Linda et al., 2008). The study population was the citizens of Murang'a County Assembly who were conversant with e-participation system. This population is based on Kenya National Bureau of Statistics (KNBS) that estimated it to be 942,581 as at 2009 national census.

3.3.1 Sample Frame

The list from the Murang'a county constituencies was used to construct the sampling frame for the purposes of this study.

3.3.2 Sampling Design

Random sampling was applied by the researcher by coding each of the seven constituencies in Murang'a County for purposes of obtaining a representative sample.

3.3.3 Sample size

Samples are representative of a target population that could be studied (Orodho & Kombo, 2002). It can also be defined as part of the population that is observed for the purposes of making scientific statements about the population.

$n = N / (1 + Ne^2)$

n = 942,581/(1 + 942,581 * 0.05^2)

n = 399.83

n = 400

3.4 Data Collection

Surveys and experiments are used to gather quantitative data (Kalof, Dan & Dietz, 2008). Oates (2005) accentuates that empirical research is widely done through the usage of surveys hence quantitative method approach is applied.

Data was collected from Citizens of Murang'a County through a structured questionnaire. The data collection tool was divided into seven parts. The initial part captured preliminary demographic inquiries whilst the rest contained questions that measured the D&M six dimensions. See Appendix III.

3.5 Data Analysis

Quantitative data analysis methods were applied due to the quantitative nature of this study. For instance, each nature of analysis had a different statistical measure applied to it. Descriptive statistics was applied for analyzing the system evaluation and Partial Least Squares was used for testing the hypotheses while SEM was used for model validation.

3.5.1 System Evaluation

Descriptive statistics measures were calculated using IBM SPSS Statistics 23 which were used to evaluate the e-participation system in Murang'a County.

For ease of data being interpreted and certain patterns to be revealed, descriptive statistical analysis was used. Histograms, charts and frequency distributions including relative percentages were used to depict data in a summarized graphical form. Data was summarized in their numeric values.

3.5.2 Model Validation

A structural technique (Partial Least Squares) is used to predict dependent variables from independent variables with a view to validating and testing Information System Success Model. The structural model lays down the associations of the constructs as depicted on the D&M updated IS success model whilst outer model specifies the relationships between the questionnaire items for a latent variable (Chin, 1998).

The model assessment which was followed in this study was based on Lohmöller, (2013).

3.6 Reliability and Validity

For the survey instrument to be reliable, an assessment of it was done through measuring its internal consistency which is referred to as cronbach's alpha or coefficient alpha (Cronbach, 1951). This measure is widely used in calculating how well a single latent construct is explained by a set of indicators. The acceptable limit value for coefficient alpha is 0.7 although in some cases 0.6 is still within range (Hair et al., 1998).

Additional measure called composite reliability was calculated to establish how reliable is the instrument. This measure gives a hint of how well the indicators describe the measurement model. A threshold of 0.7 is recommended, however, if the threshold is exceeded, this signifies that the indicators describes each construct very well (Chin, 1998).

Average variance validity has been suggested by Fornell et al., (1981). Nevertheless, Henseler et al., (2009) specifies that when measuring the validity of the survey, both the convergent and discriminant validity is to be examined. On average, an indicator should be a latent construct greater than half of the variance.

Discriminant validity is used to check the discrepancies between the constructs which can show different concepts (Chin, 1998). Thus, cross-loadings allows some evaluation to be done on the indicator level whilst discriminant validity is assessed at the dimension part (Henseler et al., 2009 & Fornell et al., 1981).

3.7 Ethical Consideration

The respondents were protected from any superfluous costs of the data collection process.

Respondents were communicated before the self-administered questionnaire were distributed concerning the aim of the study that addressed objectives of the research. Anonymity, consent and privacy was assured to the respondents and maintained throughout the exercise.

Israel (2003) emphasizes that accurate and accessible data can be availed to researchers if only they apply themselves to certain code of conduct during the research process.

CHAPTER 4: DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 Introduction

This section contains data analysis approach used, presentation of the findings and discussion of study. All proposed hypotheses are then assessed against the results obtained to reach a conclusion on whether there was evidence to support them or not.

4.1 Demographic Characteristics

Out of 116 responses, 63 were women whilst 53 were men. This constituted about 54% women while 46% were men in regards to gender distribution.

The age group of 30-39 were the majority totaling to 57 in which 15 were men and 42 were women. However, the age group below 29 had the lowest numbers of women and men that numbered to 11.

In response to the question about frequency of internet usage, 97% of the citizens agreed that they use the internet almost every day whilst the rest of the citizen use the internet at least once a week.

4.2 System Evaluation

The results are discussed below in regard to the assessment of the system for each construct and its associated questionnaire items or indicators. Response analysis for all questions were measured.

4.2.1 System Quality (SQ)

Table 4.1: Descriptive statistics on System quality

Measurement Item	μ	σ
SQ1: e-participation system for Murang'a County is easy to use	3.53	1.361
SQ2: e-participation system for Murang'a County is user friendly	4.03	1.261
SQ3: When using the e-participation system for Murang'a County, I get the information in time	4.12	1.217
SQ	**3.89**	**0.828**

The above table shows the μ and σ statistics of the questionnaire items of system quality as well as the summation mean value of 3.89 +/- 0.828. The results indicate a positive response for the items used to measure this construct.
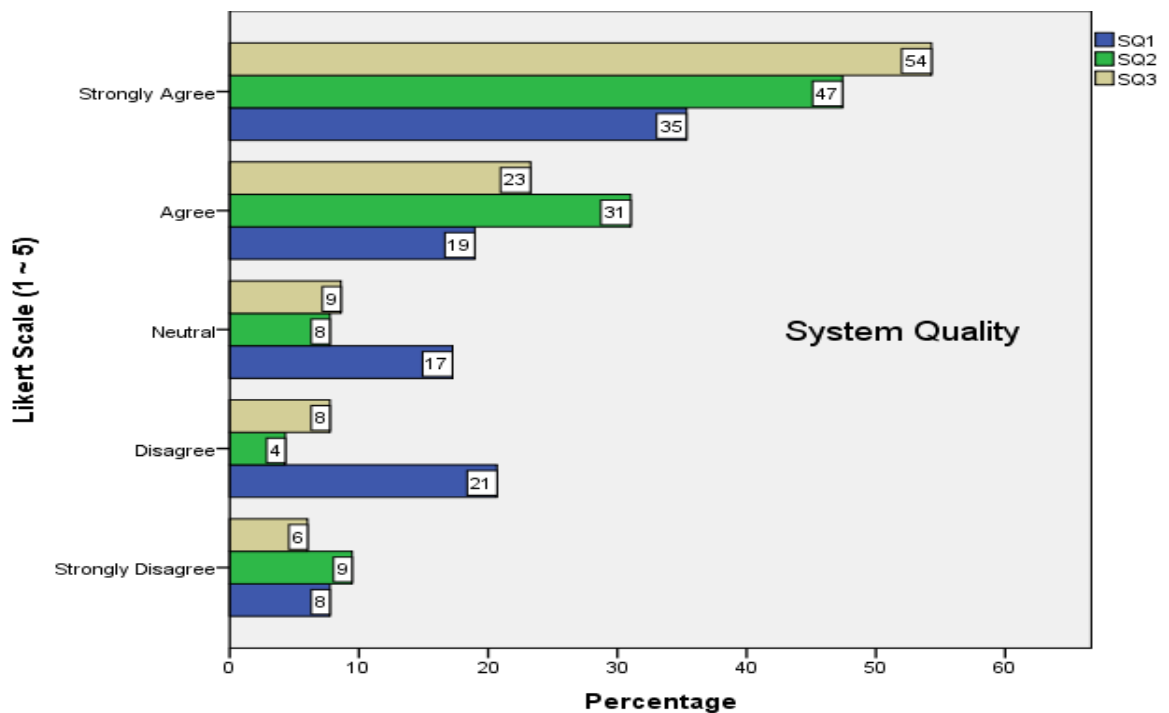
Figure 4.1: Percentage response rates on system quality

54% of the respondents are satisfied when getting the information online on time whilst 21% disagree that using e-participation is easy. 31% of the citizens agrees e-participation is friendly to use but 9% disagree on the same. 17% are not sure of the system quality features.

4.2.2 Information Quality (IQ)

Table 4.2: Descriptive statistics on Information quality

Measurement Item	μ	σ
IQ1: e-participation system for Murang'a County provides the accurate information that I require.	4.0862	1.269
IQ2: e-participation system for Murang'a County provides satisfactory information.	3.7328	1.130
IQ3: e-participation system for Murang'a County provides updated information.	3.6034	1.094
IQ	**3.8075**	**0.799**

An overall mean value of 3.8075 +/- 0.799 indicates citizens were contended with information quality aspect of e-participation.
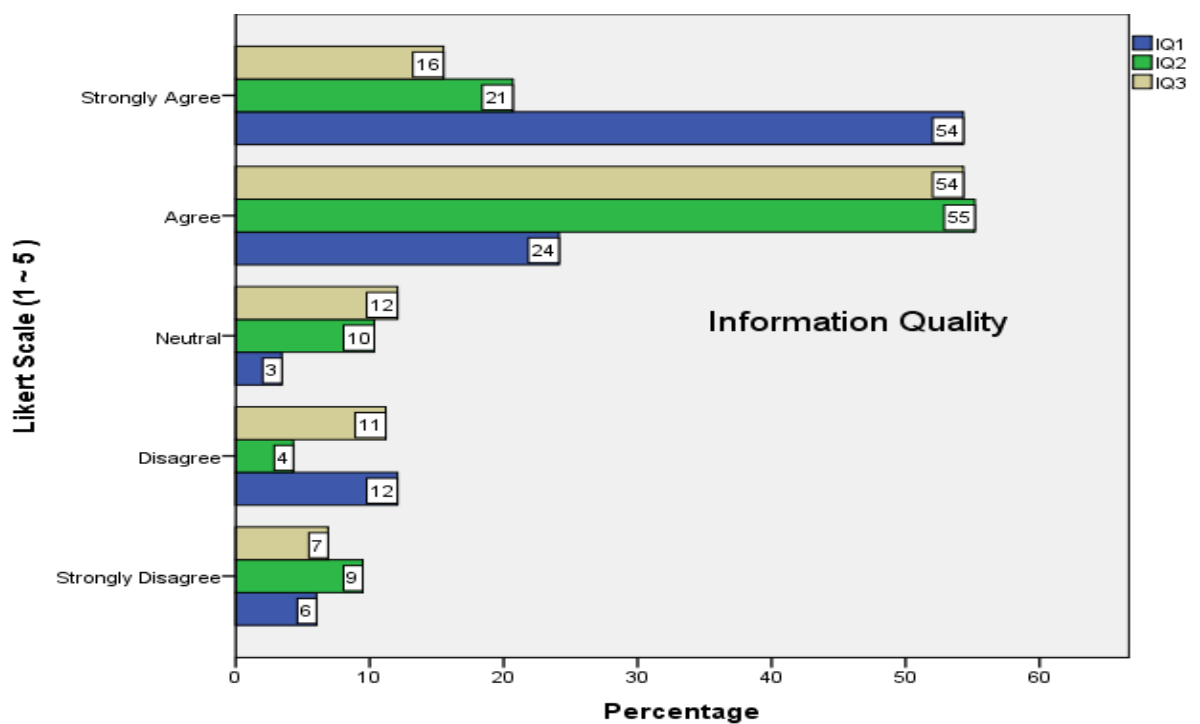
Figure 4.2: Percentage response rates on information quality

50% of the citizens are gratified by the information presented by e-participation as being accurate, satisfactory, and updated. For item regarding whether information presented is up-to-date, 12% of the respondents are not sure while 11-7% are not satisfied. 6-12% of the respondents don't agree that they get information in time from the e-participation system.

4.2.3 Service Quality (SVQ)

Table 4.3: Descriptive statistics on Service quality

Measurement Item	μ	σ
SVQ1: Am secured when using electronic participation forum in e-participation system (logged in).	3.6207	1.192
SVQ2: e-participation system provides dependable services (online forums)	4.0172	1.305
SVQ3: e-participation system is always available for use.	3.6379	1.197
SVQ	**3.7586**	**0.97**

Results for the service quality construct revealed 3.75886+/- 0.97 (table 4.3). This reveals that the responds are in agreement with all the items.
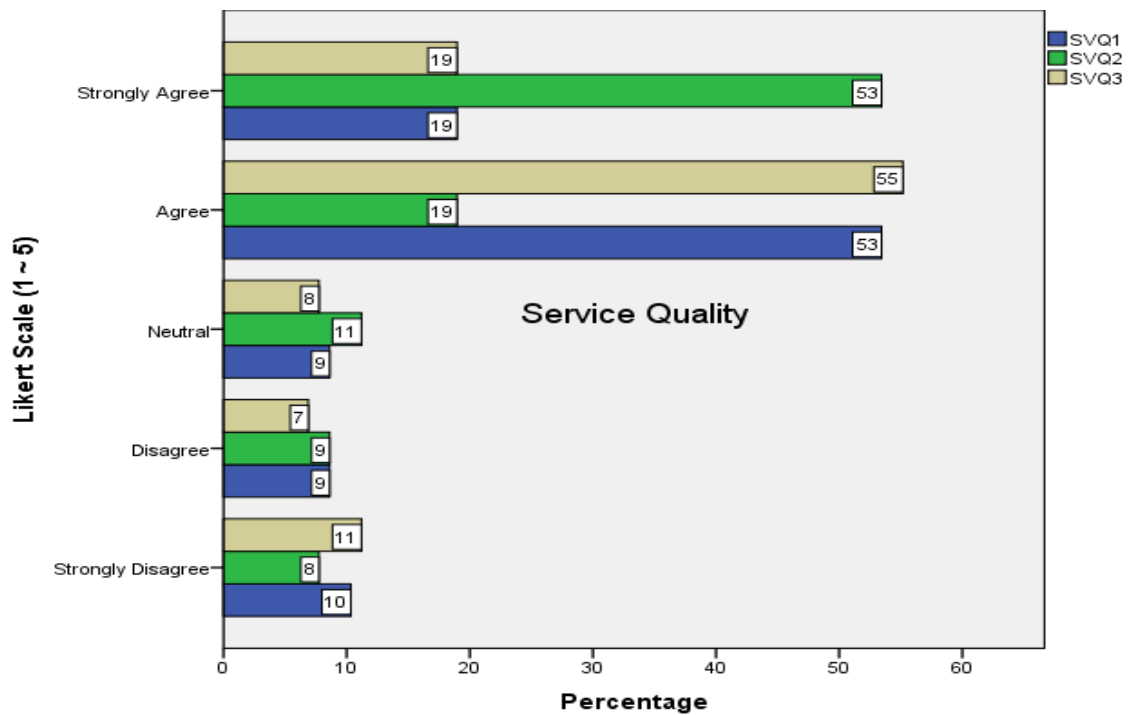
Figure 4.3: Percentage response rates on service quality

Above 50% of the respondents were satisfied in terms of having received dependable services (online forum), felt safe when logged in and were sure that the system is available all the time. About 7-10% weren't satisfied with the safety, availability and dependability of services provided by the e-participation system.

4.2.4 System Usage (U)

Table 4.4: Descriptive statistic for System Usage

Measurement Item	μ	σ
U1: I often use the e-participation for Murang'a County	3.8793	1.12
U2: I am dependent on the e-participation for Murang'a County	4.0776	1.359
U	**3.9784**	**0.986**

An overall mean value of 3.9784 +/- 0.986 for the usage construct denotes that there is an agreement with items used in this construct as shown in the table above.
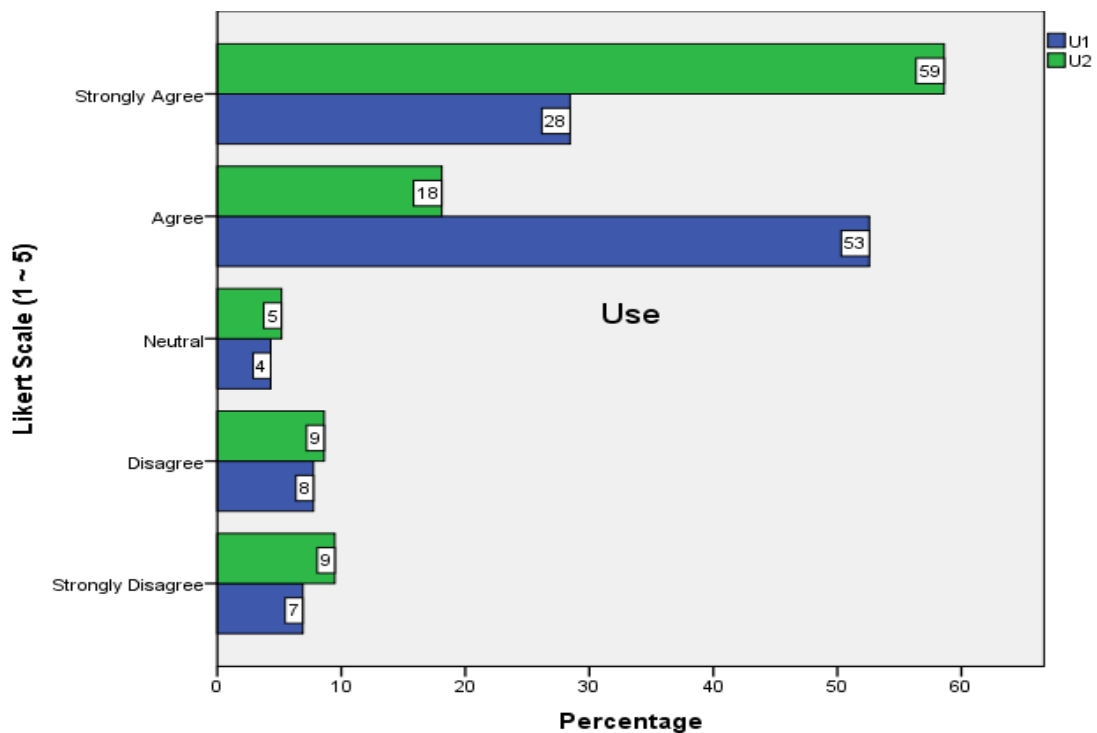
Figure 4.4: Percentage response rates System Usage

53% of the citizens agreed they are dependent on the e-participation whilst about 59% strongly agreed that they frequently use e-participation. About 8-9% felt that they don't frequently use the system and are not dependent on it.

4.2.5 Citizen Satisfaction (US)

Table 4.5: Descriptive statistics on Citizen Satisfaction

Measurement Item	μ	σ
US1: e-participation system for Murang'a County gives me contentment.	3.8362	1.265
US2: The e-participation system for Murang'a County has met my expectations	3.8448	1.131
US	**3.8405**	**0.932**

The citizens are in agreement with the questionnaire on item having a mean value of 3.8405 +/- 0.932.
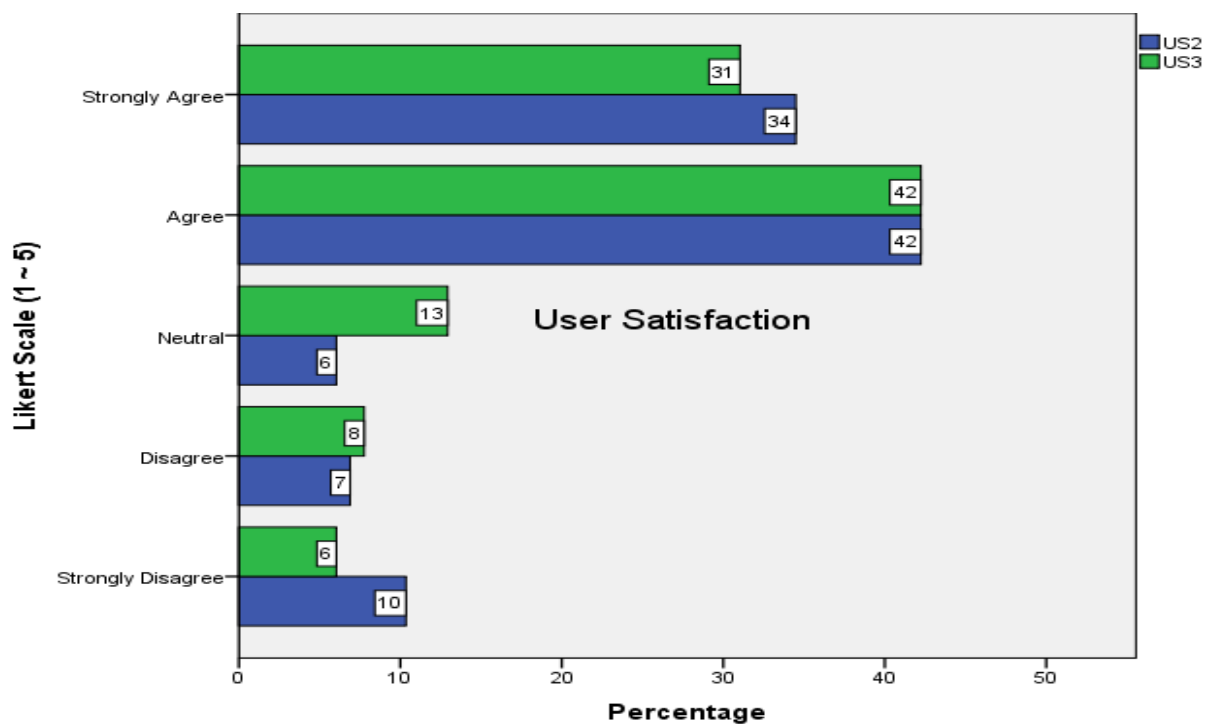
Figure 4.5: Percentage response rates on Citizen satisfaction

Over 30% strongly agreed on the two items of being satisfied while using the system and at the same time having met their electronic service expectation endeavors. Moreover, there was number of respondents who were neutral, disagreed and even strongly disagreed that ranged from 6-13% on different items.

4.2.6 Net Benefit (NB)

Table 4.6: Descriptive statistics on Net Benefit

Measurement Item	μ	σ
NB1: e-participation system for Murang'a County makes my electronic participation easier	4.0172	1.021
NB2: e-participation system for Murang'a County spares my time.	4.1552	1.092
NB3: I made the right decision in using e-participation for Murang'a County	4.1207	1.073
NB	**4.0977**	**0.631**

The mean score for the construct is 4.0977 +/- 0.631 indicate an agreement with the overall evaluation.
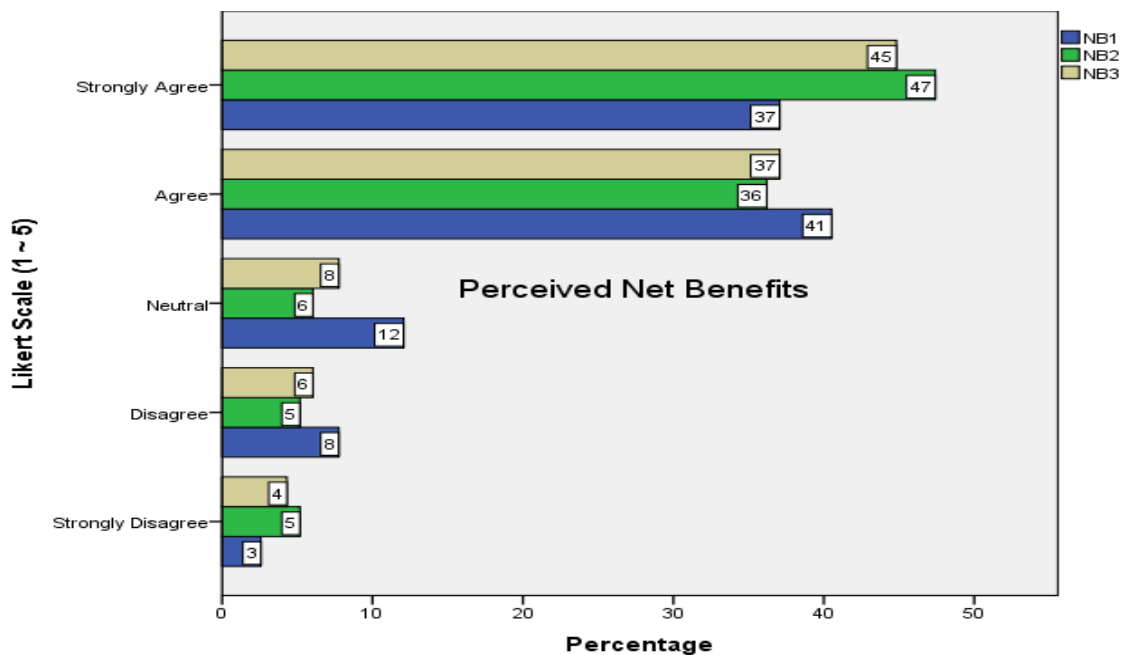
Figure 4.6: Percentage response rates on Net Benefits

47% of the citizens thought that using e-participation system saves them time whilst 45% of the citizens felt that they made the right choice for using e-participation system. In agreement with this, 41% felt that using e-participation system made it easier for them to participate online.

4.3 Model Validation

This segment reveals findings based on the distribution analysis. Assessment in the outer model was performed to ensure it's both reliable and valid. Hypotheses were tested on the model for validation.

4.3.1. Distribution analysis

The distribution of data gathered was analyzed by inspecting survey so as to confirm their normal distribution before the validation of both measurement and structural models. Distributions displaying skewness or kurtosis exceeding +1 or -1 is considered nonnormal (Hair et al., 2017, p. 61).

Table 4.7: Values of Skewness and kurtosis

Item	Skewness	Kurtosis
SQ1	-0.369	-1.218
SQ2	-1.346	0.779
SQ3	-1.325	0.677
System Quality	-1.076	1.354
IQ1	-1.256	0.277
IQ2	-1.26	0.997
IQ3	-0.978	0.274
Information Quality	-0.894	0.556
SVQ1	-1.045	0.179
SVQ2	-1.13	0.022
SVQ3	-1.122	0.335
Service Quality	-1.303	1.411
U1	-1.306	1.093
U2	-1.286	0.228
Use	-1.18	0.833
US2	-1.156	0.303
US3	-1.045	0.468
User Satisfaction	-0.918	0.41
NB1	-1.081	0.732
NB2	-1.537	1.841
NB3	-1.406	1.496
Net Benefit	-0.91	0.761
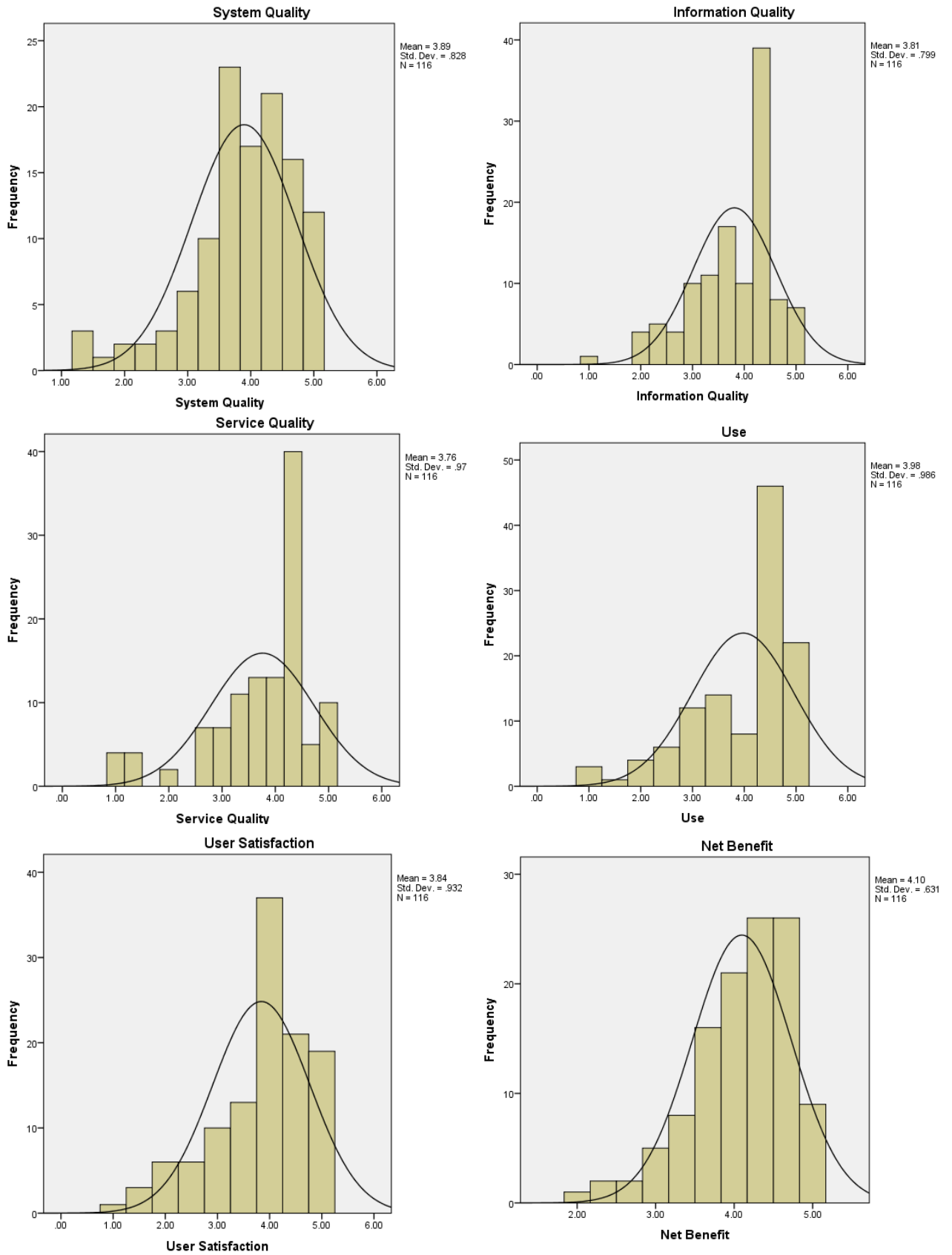
Figure 4.7: Responses distribution of each model construct

4.3.2 Assessing the Measurement Model

This sub-section defines tests taken in the evaluation of the measurement model that showed associations amongst the six dimensions and their indicator variables. The model was examined and confirmed to exhibit acceptable standard limits of reliability and validity.

4.3.2.1 Reliability Analysis

Gefen et al., (2000) directs that values of reliability should be around or even higher than 0.7. Nunally (1978) asserts that values of both internal consistency and composite reliability to range from 0.8 to 0.9.

Below calculations were done on the models constructs.

Table 4.8: Internal Consistency and Composite Reliability

Construct	Cronbach's Alpha	Composite Reliability
IQ	0.82	0.89
NB	0.94	0.96
SVQ	0.86	0.91
SQ	0.76	0.86
U	0.72	0.88
US	0.84	0.93

From the above Table 4.8, both the internal consistency and reliability has the of 0.7 that exceeded the set standards.

4.3.2.2 Validity Analysis

Convergent validity was examined by measuring the manifest variables of the models' dimension. Convergent validity measures the same construct and shows that they are related. AVE is measured through computing a weighted average and weighting each mean square by its degrees of freedom (Bagozzi & Yi 1988; Fornell & Larcker 1981).

Table 4.9: Average Variance Extracted

Dimension	AVE
Information Quality	0.74
Net Benefit	0.9
Service Quality	0.78
System Quality	0.69
System Usage	0.78
Citizen Satisfaction	0.86

The standard of 0.5 for all constructs has been surpassed since the AVE ranged from 0.69 to 0.9 as shown above. It's evident that convergent validity test has been surpassed. For the measurement model to pass the discriminant validity test, the change shared amongst the dimension with the rest in the model should be greater in the AVE (Chin, 1998).

Table 4.10 Inter-construct correlations

	Information Quality	Net Benefit	Service Quality	System Quality	Use	User Satisfaction
Information Quality	0.86	0.63	0.75	0.72	0.65	0.66
Net Benefit		0.95	0.76	0.81	0.7	0.86
Service Quality			0.88	0.77	0.58	0.77
System Quality				0.83	0.64	0.82
System Usage					0.88	0.67
Citizen Satisfaction						0.93

The shaded cells denote the square roots of the AVE for each dimension item being higher than that of their corresponding other construct indicating constructs in the model having different concepts measured. Thus, it indicates outer model validity (Heeler & Ray, 1972).

The below table fulfills the validity test of cross loadings (Chin 1998; Fornell & Larcker, 1981).

Table 4.11 Factor loadings and cross loadings

	Information Quality	Net Benefit	System Quality	Service Quality	Use	User Satisfaction
IQ1	0.83	0.6	0.81	0.76	0.51	0.69
IQ2	0.86	0.49	0.49	0.54	0.57	0.44
IQ3	0.89	0.51	0.55	0.62	0.6	0.55
NB1	0.59	0.94	0.76	0.68	0.64	0.79
NB2	0.64	0.95	0.82	0.77	0.66	0.81
NB3	0.56	0.96	0.73	0.72	0.69	0.86
SQ1	0.42	0.43	0.6	0.39	0.51	0.29
SQ2	0.66	0.79	0.94	0.71	0.59	0.84
SQ3	0.68	0.74	0.9	0.76	0.52	0.79
SVQ1	0.61	0.68	0.64	0.91	0.58	0.66
SVQ2	0.66	0.71	0.72	0.87	0.44	0.78
SVQ3	0.73	0.63	0.67	0.86	0.53	0.59
U1	0.63	0.58	0.53	0.5	0.86	0.46
U2	0.53	0.65	0.59	0.53	0.9	0.7
US2	0.61	0.8	0.73	0.66	0.64	0.92
US3	0.61	0.8	0.79	0.77	0.61	0.93

4.3.3 Structural Model Evaluation

The confirmation of the validity and reliability of the Outer model necessitated the valuation of the inner model. The R^2 scores were used to evaluate whether the model had the predictive power. The values of the constructs were all above the moderate level having R^2 values of U, US and NB as 0.48, .075 and 0.77 respectively.

The effect size of net benefits was found to be at 1.23 which meant that it was on a large level whilst the effect size of system usage on net benefits was found to be at 0.12 signifying a small level. A thousand resamples was executed on a resampling bootstrapping of 116 observations.
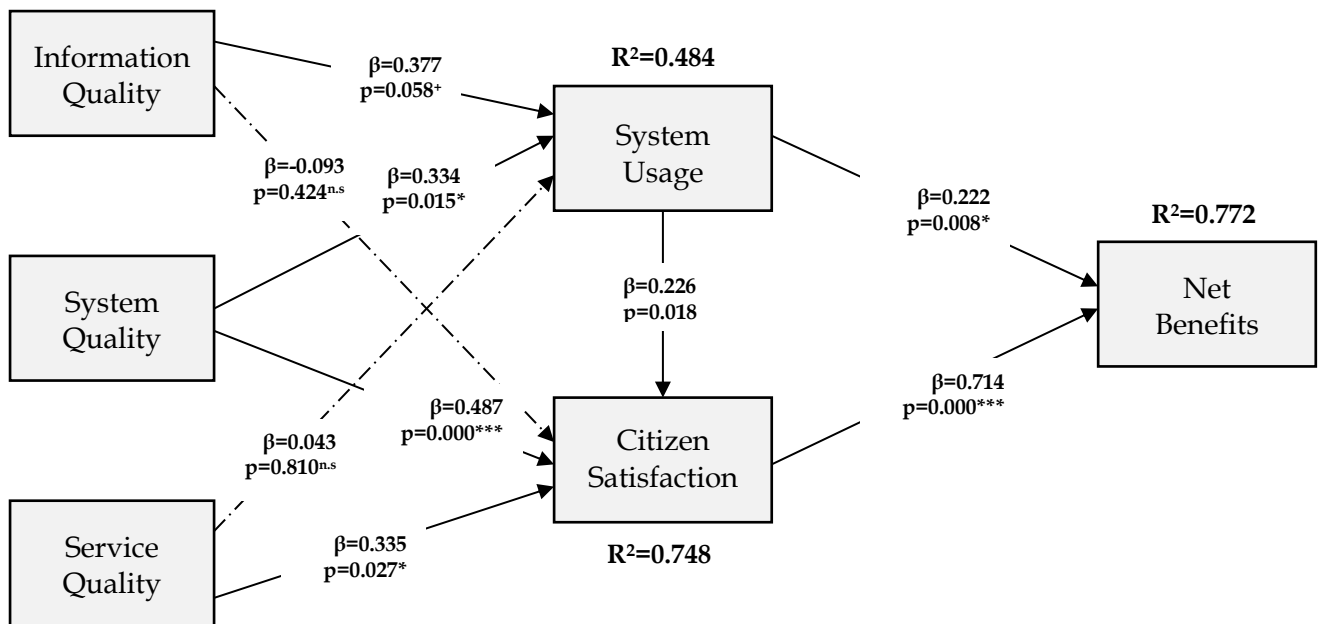
notable+ at p less than 0.100   ** notable at p less than 0.010

notable n.s. at p>0.100

notable* at p less than 0.050   notable*** at p less than 0.001

Figure 4.8: Structural Analysis Results

The β-value from information quality to system usage is 0.377 having t value equals to 1.754 with a p figure of 0.080 signifying marginal support of H1. The β-value from IQ to US is -0.093 with t value 0.794 and a p value less than 0.0427 denoting no support for H2. The β-value from system quality to system usage is 0.334 having t figure of 2.383 with p of 0.017 meaning H3 is supported. The β-value from system quality to citizen satisfaction is 0.487 having t 3.724 with p of 0.000 indicating support for fourth hypothesis. β-value of SVQ to U is 0.043 having t as 0.239 with p figure of 0.811 which denotes no support for H5. The β-value from service quality to citizen satisfaction is 0.335 having t 2.325 with p figure of 0.020 indicating support for the sixth hypothesis. β-value from U to citizen satisfaction 0.226 having a t figure of 2.442 with p of 0.015 that supports H7. The β-value from U to NB of 0.222 having t 2.700 with p 0.007 that support H8. The β-value from citizen satisfaction to NB is 0.714 having a t 12.224 with p figure of 0.0000 denoting support towards H9.

The hypotheses were subjected to the test by evaluating the structural paths of the model. If the corresponding β-value had a positive sign and had p value less than 0.05, then the hypotheses were deemed to be supported by the data. The f^2 was calculated (Cohen, 1988).

The p 0.058, 0.424 and 0.810 on IQ to U, IQ to US and SVQ to U respectively indicates no relation whatsoever. The possible reasons for this result could be smaller number of statements regarding use in the survey (for hypotheses regarding usage). However, the findings confirm qualities of e-participation service and system had a noteworthy impact on citizen approval and can therefore be considered as system success factors.

Table 4.12 Hypothesis test results

Hypothesis	Beta coefficient	f²	supported	Effect
H1: IQ → U	0.377	0.105	no	-
H2: IQ → US	-0.093	0.012	no	-
H3: SQ → U	0.334	0.078	yes	Medium
H4: SQ → US	0.487	0.315	yes	Large
H5: SVQ → U	0.043	0.001	no	-
H6: SVQ → US	0.335	0.145	yes	Medium
H7: U → US	0.226	0.105	yes	Medium
H8: U → NB	0.222	0.119	yes	Medium
H9: US → NB	0.714	1.226	yes	Large

notable* at < 0.05

notable** at < 0.01

notable*** at < 0.001

notable+ at < 0.100

result size: >0.35 – Large

>0.150 & ≤0.35 – Medium

<0.020 & ≤ 0.150 - Small

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Achievements

Objective one: *Evaluate the e-participation system success from users' perspective.*

The scrutiny of the outcomes reveal that the e-participation is successful from the citizens 'perspective as most were gratified. Findings were different from authors whose conclusions shows populace trust their government more than they trust technology whilst using e-government systems (Teo et al., 2009).

Objective two: *Validate the model through Structural Equation Modeling (SEM)*

Results of the assessment depicts applicable interrelationships for the e-participation system when assessed through the constructs as illustrated and contextualized in the D&M IS success model. Apart from the other associations hypothesized, links in information quality and system usage (H1), IQ and U and SVQ and U had no relationship. In conclusion, in the context of e-participation system, D&M IS Model is applicable on a considerable level of confidence when used for evaluation.

5.2 Research Assessment

Whetten (1989) suggested the use of seven critical questions to determine whether a study has made positive contributions to a particular study area. This paper has thus been assessed based on the framework as follows:

What is new? Does the research make a significant, value-added contribution to the current thinking?

In answering the questions of how successful is e-participation system from the users' perspective? and to what degree does the six dimensions in Information Systems Success Model consistent with e-participation system? The study established there is indeed interrelationship between the D&M IS success model dimensions with those of the e-participation system that even the descriptive statistics showed general success rate of the same. This study agrees with other studies in the field of e-participation (Al-Quraan & Abu-Shanab 2015).

So what? How will the research change the practice of ICT success evaluation?

The research results will enable ministries, counties and agencies to enhance their interactions with citizens in their bid to comply with the law. In addition, varied government agencies will be in a position to carry out an assessment that seeks to include citizens in their electronic service strategy delivery.

Are the underlying logic and supportive evidence compelling?

The results of this study agree with past findings. This shows the robustness of the model which can be applied to any Information System.

Why now? Is it of interest to the people?

The Supreme law of Kenya envisages that legislative and executive arms of government should develop e-participation tools to aid in public participation. As such, some county governments have complied and developed ICT platforms to engage the public. This means deployed systems have to be evaluated in order to ascertain value for money in accordance to the principles of financial prudence. This study will help these entities to make sound ICT investment decisions backed by research findings. In addition, institutions involved in public participation will learn from the evaluated system and develop electronic strategies that will enhance democracy at the local level.

Who else including academic researchers are interested in this research?

The initial beneficiary of this study is Murang'a County Assembly. Other interested parties are policy makers and development partners.

Limitations and Recommendations for Further Research

The research concentrated in one country whose findings aren't applicable to other jurisdictions or countries. With regard to e-government systems, the paper focuses on e-participation system.

REFERENCES

Alhendawi, K.M. & Baharudin, A., (2017). The Assesment of Information System Effectiveness in e-Learning, e-commerce and e-Government Contexts: A Critical Review and Conceptual Model. *Journal of Theoretical and Applied Information Technology.* 95. 4897-4912.

Al-Quraan, H., & Abu-Shanab, E. (2015). Predictors of E-Participation Levels: The Case of Jordan. *The 7th International Conference on Information Technology (ICIT 2015)*, Amman, Jordan, 12-15 May, 2015, 325-331.

Bagozzi, R.P. & Yi, Y., 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), pp.74–94.

Bailey, J. E., & Pearson, S. W. (1983). Development of a tool for measuring and analyzing computer user satisfaction. *Management Science*, 29(5), 530–545.

Bagui, L., Weimann, P., & Johnston, K. (2016). *Characterising e-Participation in sub-Saharan Africa:* A thematic review of the literature.

Balaban, I., Mu, E., & Divjak, B. (2013). Development of an electronic Portfolio system success model: An information systems approach. *Computers & Education*, 60(1), 396–411.

Belardo, S., Karwan, R.K, and Wallace A.W., (1982). DSS Component Design Through Field Experimentation: An Application to Emergency Management. *Proceedings of the Third International Conference on Information Systems.* pp 93-108.

Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modelling in G. A. Marcoulides (ed.), Modern Methods for Business Research. *Lawrence Erlbaum Associates, Mahwah, NJ*, pp. 295-336.

Cronbach, L.J, (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334.

County Government Act, 2012

Constitution of Kenya, 2010

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.).* Hillsdale: Lawrence Erlbaum.

Doll, W. J., & Torkzadeh, G. (1988). The measurement of end-user computing satisfaction. *MIS Quarterly*, 12(2), 258–274.

DeLone, W., & McLean, E. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9–31.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 318–340.

Etezadi-Amoli, J., & Farhoomand, A.F. (1996). A structural model of end user computing satisfaction and user performance. *Information & Management*, 30(2), 65-73.

Fornell, C. & Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. *Algebra and Statistics. Journal of Marketing Research,* 18(3), pp.381–388.

Iivari, J. (2005). *An empirical test of the Delone–Mclean model of information system success.* The DATA BASE for Advances in Information Systems, 26(2), 8–27.

Frewer, LJ, Rowe, G., (2005). *Evaluating public participation exercises: strategic and practical issues.* In: OECD (ed) Evaluating public participation in policy making. OECD, Paris, pp 85–108

Gefen, D., Straub, D.W., and Boudreau, M.C. 2000. Structural Equation Modeling and Regression: Guidelines for Research Practice. *Communications of the Association for Information Systems* (4:7), pp. 1-70.

Hamilton, S., and Chervany, N. L. (1981). Evaluating information system effectiveness – part I: Comparing evaluation approaches. *MIS Quarterly*, 5(3), 55–69.

Hair, J. F., Anderson, R. E., Tatham, R. L. & Black, W. C. (1998), *Multivariate Data Analysis*, Fifth edition, Prentice-Hall International, Inc.

Heeler, R.M. and Ray, M.L., (1972). Measure Validation in Marketing, *Journal of Marketing Research*, 9 (November), 361-70.

Helbig, N., Gil-Garcia, R., and Ferro, E., (2009). Understanding the complexity of electronic government: Implications from the digital divide literature. *Government Information Quarterly* 26(1), pp 89-97.

Henseler, J., Ringle, C. M., Sinkovics, R. R. (2009): The use of partial least squares path modeling in international marketing, in: Sinkovics, R. R. / Ghauri, P. N. (eds.), *Advances in International Marketing* (AIM), Vol. 20, pp. 277-320.

Israel, G.D., (2009). Determining sample size. *PEOD*. 6. 1-7.

Jaeger, P.T. (2003), The endless wire: E-government as global phenomenon. *Government Information Quarterly*, 20(4), 323-331.

Kenya National Bureau of Statistics 2009

Kalof, L., Dan, A., Dietz, T. (2008). *Essentials of social research*. McGraw-Hill Education (UK).

Kettinger, W.J., & Lee, C.C. (1994). Perceived service quality and user satisfaction with the information services function. *Decision Sciences*, 25(5), 737-766.

Kombo, K.D., and Tromp, A.L.D. (2006). *Thesis Writing: An Introduction.* Nairobi: Pauline's Publications.

Linda K., Amy D., Thomas D. (2008), *Essentials of social research*, McGraw Hill Open University press.

Luarn, P & Lin, H. (2003), A customer loyalty model for e-service context, *Journal of Electronic Commerce Research*, Vol. 4, No. 4

Lohmöller, J. B. (2013). *Latent variable path modeling with partial least squares*. Springer Science & Business Media.

Gable, G. G., Sedera, D., & Chan, T. (2008). Re-conceptualizing information system success: The IS-impact measurement model. *Journal of the Association for Information Systems*, 9(7), 377–408.

McKinney, V., Kanghyun, Y., & Zahedi, F. M. (2002). The measurement of web-customer satisfaction: An expectation and disconfirmation approach. *Information Systems Research*, 13(3), 296–315.

Misuraca, G.C. (2006). E-Governance in Africa, from theory to action: A practical-oriented research and case studies on ICTs for Local Governance. *ACM International Conference Proceedings Series*, 151: 209–18.

Mossberger, K., C. J. Tolbert, and R. S. McNeal. (2008). *Digital citizenship: the internet, society, and participation*: MIT Press.

Ndou, D.V. (2004). e-Government for developing countries: Opportunities and challenges. *The Electronic Journal on Information Systems in Developing Countries*, 18(1): 1–24.

Nunnally, J.C., 1978. *Psychometric theory* 2nd ed., New York: McGraw-Hill Book Company.

Orodho, A. J., & Kombo, D. K. (2002). *Research methods*. Nairobi: Kenyatta University, Institute of Open Learning.

Oates, B. J. (2005). *Researching information systems and computing*. Sage.

Oliver, R. L. (1980) A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions, *Journal of Marketing Research*, Vol. 17, No. 4, pp. 460-469

Oliver, R. L. 1997. Satisfaction: *A Behavioral Perspective on the Consumer*. New York: McGraw-Hill.

Omariba B.Z. and Okebiro O.J. (2015). Characterizing e-participation levels in e-governance. *International Journal of Scientific Research and Innovative Technology,* Vol 2, No. 1.

Ondego, B. and Moturi, C. (2016) Evaluation of the implementation of the e-Citizen in Kenya. *International Journal of Applied Information Systems* 10(4):13-21.

Parasuraman, A Parsu & Zeithaml, Valarie & Malhotra, Arvind. (2005). E-S-Qual: A Multiple-Item Scale for Assessing Electronic Service Quality. *Journal of Service Research*. 7. 213-233.

Reddick, C. (2005). Citizen interaction with e-government: From the streets to servers? *Government Information Quarterly* 22(1), pp 38-57.

Reddick, C. (2009). The adoption of centralized customer service systems: A survey of local governments. *Government Information Quarterly* 26 (1), pp 219-226.

Srinivasan, A. (1985). Alternative Measures of System Effectiveness: Associations and Implications. *MIS Quarterly* 9 (3), pp 243-253.

Schindler, D. R. and Cooper, P. S. (2003). *Business Research Methods*. Eighth Edition. New York, NY. McGraw-Hill.

Saunders, M., Lewis, P. & Thornhill, A., 2009. *Research methods for business students 5th ed.*, London, UK: Prentice Hall.

Sedera, D., & Gable, G. (2004). A factor and structural equation analysis of the enterprise systems success measurement model. *In Proceedings of the 25th international conference on information systems* (ICIS 04), Washington.

Singh, Harjit & Kar, Arpan & Ilavarasan, Vigneswara. (2017). *Assessment of e-Governance Projects:* An Integrated Framework and its Validation. 124-133.

Teo, Thompson & C. Srivastava, Shirish & Jiang, Li. (2009). Trust and Electronic Government Success: An Empirical Study. *Management Information Systems.* 25. 99-132.

Torres, L., Pina, V., & Acerete, B. (2005). E-government developments on delivering public services among EU cities. *Government Information Quarterly*, 22(2), 217-238.

Wang, Y.-S., Wang, H.-Y., & Shee, D. Y. (2007). Measuring e-learning systems success in an organizational context: Scale development and validation. *Computers in Human Behavior*, 23(4), 1792–1808.

Wang, Yi-Shun & Liao, Yi-Wen. (2008). Assessing eGovernment systems success: A validation of the DeLone and McLean model of information systems success. *Government Information Quarterly*. 25. 717-733.

Whetten, D.A., 1989. What constitutes a theoretical contribution? *Academy of Management Review*, 14(4), pp.490–495.

UN (2012). United Nations E-Government Survey 2012, E-government for the people.

UN (2014). United Nations E-Government Survey 2012, E-government for the future we want.

UN (2016). United Nations E-Government Survey 2012, E-government in support of sustainable development.

UN (2018). United Nations E-Government Survey 2012, Gearing E-government to support transformation towards sustainable and resilient societies.

APPENDICES

Appendix I: Questionnaire Design

Attribute	Statements	References
Information Quality	e-participation system for Murang'a County provides the accurate information that I require.	Doll and Torkzadeh (1988)
	e-participation system for Murang'a County provides satisfactory information.	
	e-participation system for Murang'a County provides updated information.	
System Quality	e-participation system for Murang'a County is easy to use	Doll and Torkzadeh (1988)
	e-participation system for Murang'a County is user friendly	
	When using the e-participation system for Murang'a County, I get the information in time	
Service Quality	Am secured when using electronic participation forum in e-participation system (logged in).	Parasuraman et al., (2005),
	e-participation system provides dependable services (online forums)	Teo et al., 2009
	e-participation system is always available for use.	
System Usage	I often use the e-participation for Murang'a County	Wang, Wang & Shee (2007)
	I am dependent on the e-participation for Murang'a County	
User Satisfaction	e-participation system for Murang'a County gives me contentment.	Luarn & Lin (2003), Oliver (1980, 1997)
	The e-participation system for Murang'a County has met my expectations	
Net Benefits	e-participation system for Murang'a County makes my electronic participation easier	Etezadi-Amoli & Farhoomand (1996), Oliver (1980, 1997)
	e-participation system for Murang'a County spares my time.	
	NB3: I made the right decision in using e-participation for Murang'a County	

Appendix II: Introductory Letter

Dear Respondent,

<u>RE: RESEARCH DATA COLLECTION</u>

My name is Paul Maina, a Masters student at the University of Nairobi. I am collecting data to for my project that concerns an evaluation of e-participation service in e-government website of Murang'a County Assembly.

I humbly request that you to take time and fill the attached questionnaire. Please read the accompanying instructions and respond accordingly.

The data provided and information from end users is significant in order to achieve the research aim and objectives.

I would like to assure you that all data and information will be regarded as strictly confidential, as well as your identity.

Thank you in advance,

Yours Truly,

Irungu, Paul Maina

P54/6525/2017

Have you ever used e-participation service in e-government website in Murang'a County? (select by marking ☑ suitable answer)

[ ] Yes   [ ] No

(If Yes, proceed to answer the questions below.

If **No**, do not proceed. Thank you for your time)

PRELIMINARY QUESTIONS

Demographic Information

1. Select your age bracket below (select by marking ☑ suitable answer)

   [ ] Below 29

   [ ] 30 - 39

   [ ] 40 - 49

   [ ] 50 - 59

   [ ] 60 and above

2. Gender (select by marking ☑ suitable answer)

   [ ] Male

   [ ] Female

3. How frequently do you use the Internet? (select by marking ☑ suitable answer)

   [ ] Almost every day

   [ ] At least once a week

   [ ] At least once a month

   [ ] Less than once a month

EVALUATION OF AN E-PARTICIPATION WEBSITE IN MURANG'A COUNTY

Please tick ☑ the appropriate box to indicate your level of agreement in regard to the following statements that pertains to your involvement on e-participation service in e-government website in Murang'a County.

Please fill in the number that best describes your opinion

INFORMATION QUALITY	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
IQ1: e-participation system for Murang'a County provides the accurate information that I require.					
IQ2: e-participation system for Murang'a County provides satisfactory information.					
IQ3: e-participation system for Murang'a County provides updated information.					
SYSTEM QUALITY	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SQ1: e-participation system for Murang'a County is easy to use					
SQ2: e-participation system for Murang'a County is user friendly					
SQ3: When using the e-participation system for Murang'a County, I get the information in time					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SERVICE QUALITY					
SVQ1: Am secured when using electronic participation forum in e-participation system (logged in).					
SVQ2: e-participation system provides dependable services (online forums)					
SVQ3: e-participation system is always available for use.					

SYSTEM USAGE	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
U1: I often use the e-participation for Murang'a County					
U2: I am dependent on the e-participation for Murang'a County					

CITIZEN SATISFACTION	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
US1: e-participation system for Murang'a County gives me contentment.					
US2: The e-participation system for Murang'a County has met my expectations					

NET BENEFITS	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
NB1: e-participation system for Murang'a County makes my electronic participation easier					
NB2: e-participation system for Murang'a County spares my time.					
NB3: I made the right decision in using e-participation for Murang'a County					