THE ROLE OF ICTs IN DEMOCRATIZING PUBLIC INFORMATION ACCESS: A CASE STUDY OF THE KENYAN PARLIAMENT

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DECLARATION

This research project is my original work and has not been presented for examination in any other university.

Signed: _____ Date:_____

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K50/79636/2012

This research project has been subjected for examination with my approval as University supervisor.

Signed: _____ Date: _____

Mr. Dan Okoth

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Ali Abdulmajid Ahmed

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DEDICATION

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Table of Contents

List of Acronyms and Abbreviations

DOI	Diffusion of Innovation
EPRI	European Parliaments' Research Initiative
ICTs	Information Communication Technologies
IS	Information Systems
IT	Information technology
LEGCO	Legislative Council
MPs	Members of Parliament
PSC	Parliamentary Service Commission
PBU	Parliamentary Broadcasting Unit
TOE	Technology, Organization, Environment
UK	United Kingdom
CSOs	Civil-Society Organizations
G2C	Government to Citizens
G2G	Government to Government
G2B	Government to Business

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Operational Definitions of Terms

Biometrics: technologies that measure and analyze human body characteristics, such as DNA, fingerprints, eye retinas and irises, voice patterns, facial patterns and hand measurements, for authentication purposes.

Blog: a Web site that contains online personal reflections, comments, and often hyperlinks provided by the writer; also the contents of such a site.

Democratization: To democratize is defined as to change the governing structure of a society or group of people in order to make the governing body one that is ruled by the people, or to make something more widely available to everyone.

Digitalization: It is the integration of digital technologies into everyday life by the digitization of everything that can be digitized.

E-democracy: Combination of the words *electronic* and *democracy*) which incorporates 21st Century information and communications technology to promote democracy. That means a form of government in which all adult citizens are presumed to be eligible to participate equally in the proposal, development, and creation of laws. E-democracy encompasses social, economic and cultural conditions that enable the free and equal practice of political self-determination.

E-government: It refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government.

Email Newsletter: magazine available only in electronic form, for example on the World Wide Web.

Information Access: The ability and opportunity to obtain knowledge of classified information. Persons have access to classified information if they are permitted to gain knowledge of the information or if they are in a place where they would be expected to gain such knowledge.

Information communication technology: It is often used as an extended synonym for information technology (IT), but is a more specific term that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information. The term ICT is also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system

Internet: a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols.

Multimedia: content that uses a combination of different content forms. This contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material.

Parliament: The Parliament of Kenya is the bicameral legislature of Kenya. It consists of two houses: The Senate and The National Assembly.

Podcast: a digital medium consisting of an episodic series of audio, video, radio, PDF, or ePub files subscribed to and downloaded through web syndication or streamed online to a computer or mobile device.

Public Information: It is all information originating from the field of work of the public sector bodies and occurring in the form of a document, a case, a dossier, a register, a record or other documentary material drawn up by the body, by the body in cooperation with other body, or acquired from other persons.

Social Media: social interaction among people in which they create, share or exchange information and ideas in virtual communities and networks.

Website: a group of World Wide **Web** pages usually containing hyperlinks to each other and made available **online** by an individual, company, educational institution, government, or organization.

Web based discussion forum: An online venue that allows for the posting of and discussion of information related to a particular topic.

Wireless networking: method by which homes, telecommunications networks and enterprise (business) installations avoid the costly process of introducing cables into a building, or as a connection between various equipment locations.

Abstract

This study sought to investigate the role of ICTs in democratizing public information access. It was guided by four objectives: To determine digital options for capturing and recording parliamentary proceedings; to assess the utilization of information communication technologies in parliament; to find out the attitudes of MPs to digital media resources as well as their perception to its use and value; and to establish the extent to which use of digital platforms by parliament facilitate interactive public discussion. The study used a descriptive survey research design. The target population of this study was all Members of Parliament and Parliamentary Service Commission employees. There are 416 MPs and 532 employees of PSC according to Parliamentary Service Commission Strategic Plan 2008 – 2018 that was revised in 2012. The study sampled 10% of the MPs and Parliamentary Service Commission employees which translated into 98 respondents. Quantitative data from structured questionnaires was analyzed using descriptive statistics such as mean scores, frequencies and percentages. The results of quantitative data analysis were presented in charts and tables. Qualitative data was analyzed using content analysis. Results of qualitative data analysis were presented in prose or narrative format. The study revealed that internet, email (for correspondence) and websites are used to a moderate extent to gather information in parliament. The results indicate that websites and internet were used to a moderate extent to store information in parliament. The findings show that email (for correspondence), internet and websites were to a moderate extent used to disseminate information in parliament. The results show that Parliamentary Service Commission employees used email (for correspondence) often while Internet and websites were used to a moderate extent. The results show that websites, email (for correspondence) and internet were used in parliament for its daily operations. The results show that email (for correspondence),

Internet and websites were received well to a moderate extent. Email (for correspondence), Internet and websites were found to be embraced with speed by parliament to a moderate extent. Internet, email (for correspondence) and websites were used to a moderate extent in interacting with other arms of government. Internet and websites were found to be used to a moderate extent by parliament to interact with the public. Web-based discussion forum, biometrics, podcasts and blogs were not used at all by parliament to interact with the public. This study concluded that only a few digital options have been used for capturing and recording parliamentary proceedings and the few digital options have only been used to a moderate extent. The Parliamentary Service Commission employees used email (for correspondence) often while Internet and websites were used to a moderate extent in their day-to-day operations. The reception of new ICT by Parliamentary Service Commission employees can also be termed as moderate or lukewarm. Digital platforms used to facilitate interactive public discussion in parliament were rare. The fact that Internet and websites were only used to a moderate extent by parliament to interact with the public shows there is a digital gap in parliament that needs to be filled for interactive discussion with the citizenry. This study recommends that parliament should embrace digital options available for capturing and recording parliamentary proceedings. The government should ensure that parliament has the requisite capacity to adopt various digital options. The Parliamentary Service Commission should ensure that its employees are well trained to use all the available digital platforms and especially those that enable interaction with the public. Parliament should not over rely on the Kenya Broadcasting Corporation for its dissemination of information.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

An increasingly complex and uncertain social, political and economic environment has undermined the effectiveness of traditional approaches to policy making (Digital 4Sight, 2000). In the digital economy, translating shared visions of the future into effective policies and real world outcomes require major shifts in culture, structure and process. Shift in culture is where policy makers collaborate, engage citizens and share knowledge to create value and build legitimacy. Change in structure involves building multi-stakeholder policy to manage scale, complexity and uncertainty while as shift in process comprise of innovations that ensure policies are continuously responsive to the needs of citizens and the market. At the core of digital-era policy-making is an understanding that citizen-centric processes require active and informed participation by citizens themselves (Digital 4Sight, 2000).

The landscape of print, broadcasting and social media is changing rapidly all over the world and how it alters affects Parliament's ability to communicate and engage with the public it serves. The effectiveness of parliament is best judged not in terms of its ability to initiate or shape policies and laws, but as a forum in which public aspirations, anxieties and complaints can be aired and addressed, and the public voice can be heard in all of its pluralistic diversity (Coleman, 2006).

The advent of the Internet has increased the demand for access to the records of parliamentary proceedings in text, audio and video formats. Parliamentarians and staff, journalists and the

general public now expect proceedings to be made available in a timely and accurate way. Efficient publication of parliamentary proceedings online has become an important benchmark for evaluating the openness and transparency of a parliament, as well as a tool for enabling participation in the law-making process (United Nations & Inter-Parliamentary Union, 2014).

Many African countries have made significant gains in building democratic systems of governance that are based on popular control of decision-making and in which citizens are treated as equals. This has been made possible by availability and access to information by a greater number of citizens as a critical part of a functioning democracy and a country's development (Githaiga, Minnie, & Bussiek, 2011). The introduction of the Internet (Web 2.0) and mobile telecommunications in Africa at the beginning of the millennium has significantly altered political communication structure. The original structures have shifted from a top-down approach to a polycentric communications system. Thus, it can be said that political communication by the population is greater today than the mere expression of will in polls. The new technologies have promoted citizens' position to that of equal partners in the communications structure (Windeck, 2010).

Parliament as a representative institution, serves as a communication channel between the public and the process of governance (Coleman, 2006). The purpose of this study is to consider the way in which this relationship has been conceptualized and various predictions about how it might change in the age of digital interactivity. With the move towards a multi-layered devolved system of governance in Kenya, there are emerging opportunities particularly afforded by the interactive communication technologies, such as the internet and broadcasting to make representative institutions more transparently accessible and open to interactive discussion than before.

1.1.1 Parliament of Kenya

The advent of the present Parliament of Kenya can be traced back to 1906 when the British Government issued an Order in Council that established an Executive Council chaired by the Governor and later the setting up of a Legislative Council (LEGCO) in 1907. There was no direct representation of African interests as the Governor made all the nominations of the seven members of the LEGCO. This was until 1944 when Eliud Mathu was nominated to the Council. The LEGCO was re-constituted in 1958 to comprise thirty-six constituencies elected Members. At independence, the Parliament of Kenya was modeled along the Westminster parliamentary system with the exception of an Executive President. It was therefore, a mixture of both the presidential and parliamentary systems of government (Parliamentary Service Commission, 2012).

Kenya attained Independence in 1963 with a bicameral Legislature consisting of the House of Representatives with 129 Members and the Senate with 41 Members. In 1964 it became a Republic. A Constitutional amendment effected in 1967 saw the amalgamation of the two Houses to form the National Assembly of Kenya. The National Assembly comprised of 210 constituency elected members, 12 nominated members and two *ex officio* members, that is, the Speaker and the Attorney-General (Parliamentary Service Commission, 2012) until 2013 when the general election under a new Constitution was held. Since independence, there have been eleven uninterrupted Parliaments, the current one having been sworn-in on the first sitting held on 28th March 2013.

The Kenya Parliament, in line with its global peers, has been evolving as a democratic and transparent institution that consistently responds to the changing political environment.

Developing and executing legislative agenda and promoting a cohesive, peaceful, and progressive society have been overriding policies and strategic objectives of Parliament since Independence. During the early post-independence phase, emphasis was placed primarily on achieving nationhood and its attendant features, but successive Parliaments have asserted their representative mandate, they have developed oversight roles and accelerated the transformation of Kenya into a dynamic, prosperous and vibrant society. At the same time, significant emphasis has been placed on public participation and involvement in parliamentary processes. This has been consistent with the continuing trend of democratic pluralism in the country (Parliamentary Service Commission, 2012).

On August 27th 2010, the new Constitution of Kenya was promulgated with Parliament playing a central role in the process. The new Constitutional dispensation established a bicameral legislature known as the Parliament of Kenya consisting of the National Assembly and the Senate, composed of 350 and 68 members respectively (The Republic of Kenya, 2010). This is the single most significant change for the Parliament since independence. Members of Parliament were called upon to make their contribution in addressing the challenge of fully implementing the new Constitution, consolidating Parliament's role in strengthening political stability, national reconciliation, social harmony and expansion of democratic space, which are the foundations of Kenya's socio-economic development and stability. As the supreme legislative body, Parliament has continued to play a critical role in ensuring that the national agenda of maintaining political stability, so necessary for achieving a prosperous nation in the medium-term, is achieved (Parliamentary Service Commission, 2012).

The ultimate goal of any society striving for human development is to empower its citizens and place them at the centre of the development process by providing them with access to

information and knowledge. Governments, businesses and private citizens across the globe are only beginning to understand the profound implications of living in a hyper connected world. Policies and practices developed in an analogue world are clearly inadequate, and every day there are attempts to write new rules, or challenge existing ones (World Economic Forum, 2013). Governments worldwide are faced with the challenge of transformation and the need to reinvent government systems in order to deliver efficient and cost effective services, information and knowledge through information and communication technologies (Fang, 2002).

The mission of any Parliament is to promote democratic participation and accountability. A necessary step towards the achievement of this goal is to provide citizens with full and unhindered access to Parliamentary works and use of its information. The challenge is not only to provide universal access to information and to close the gap between the information-rich and information-poor, but also to increase the quality and usefulness of information that is made available to the society at large. Public accountability is the cornerstone of good governance and it is the main function of Parliaments to hold the Executive accountable for its actions to the public. Regrettably, it is in executing this specific function that Parliaments in Africa face a lot of hurdles. Legislatures in most African countries remain fairly weak and marginalized hence need for Parliaments to create better access for the people, especially for key national issues (Report of the Commission for Africa, March 2005, p. 90).

1.2 Statement of the Problem

The Constitution of Kenya promulgated in August 2010 is a major positive development in ensuring the free flow of information (Nyabuga & Booker, 2013). It provides for Parliament to conduct its business in an open manner, and its sittings and those of its committees to be open to

the public. Parliament is also mandated to facilitate public participation and involvement in the legislative and other business of Parliament and its committees and may not exclude the public, or any media, from any sitting unless in exceptional circumstances, the relevant Speaker has determined that there are justifiable reasons for the exclusion (The Constitution of the Republic of Kenya, 2010, Article 118).

Parliament serves as a communication channel between citizens and government; the function of elected representatives is to provide a link between rulers and ruled, authority and the consent that is essential for democratic legitimacy (Coleman, 2006). Parliament's approach to communications must evolve in response to the developing social, mobile, local, data and video communication trends (Allen et al., 2013). If the duty of representatives is to maintain the closest correspondence and the most unreserved communication with those they represent, parliaments must adopt communicative strategies which allow citizens to see in and scrutinize and parliaments to see out and learn from public discussion. New and emergent technologies could be used to transform the processes of Parliament and, in particular, its relationship with the public (Allen & Williamson, 2010). ICT provides many of the best opportunities to connect citizens to their representatives and political institutions, potentially resulting in a less remote system of democratic governance. The use of online resources presents significant logistical and transparency benefits not always present in conventional, offline engagement methods although these remain important (Hansard Society, 2007). Too little attention has been paid to the communicative relationship between representatives and citizens using emergent technologies. This situation has led to lack of understanding of the role of ICT in democratizing public information access. This study sought to investigate the role of ICTs in democratizing public

information access focusing on the use of digital media resources to enable communication between citizens, elected representatives and Parliament (as a corporate entity).

1.3 Research Objectives

1. To determine digital options for capturing and recording parliamentary proceedings
2. To assess the utilization of information communication technologies in parliament
3. To find out the attitudes of MPs to digital media resources as well as their perception to its use and value
4. To establish the extent to which use of digital platforms by parliament facilitate interactive public discussion

1.4 Research Questions

1. What digital options exist for capturing and recording parliamentary proceedings?
2. How is the utilisation of information communication technologies in parliament?
3. What are the attitudes towards information communication technologies in parliament?
4. To what extent use of digital platforms by parliament facilitate interactive public discussion?

1.5 Significance of the Study

The findings of this study will be of value to the citizenry, the government as well as other relevant policy makers with an interest in political communications. It will also benefit parliament and its audience by drawing lessons that can enhance interactive discussion and promote parliamentary processes and democracy.

1.6 Scope of the Study

This study focused on digital options for capturing and recording parliamentary proceedings, use and attitudes towards new information communication technologies, and digital platforms used by MPs and parliament to facilitate interactive public discussion. The study sought information from Members of Parliament and employees of Parliament of Kenya (employed by PSC) who are mandated to facilitate Members of Parliament in their legislative, representation and oversight role.

1.7 Limitations

This study was limited to Members of Parliament and PSC employees. Although all the Members of Parliament would have offered insights on the area of interest, this study did not include all of them due to feasibility of collecting data from all MPs and the political ramifications involved. The study may therefore not generalize the findings of some Members of Parliament and employees of PSC to represent Parliament of Kenya. However, it offers an overview and recommends for further study in regard to parliamentary communication in an age of digital interactivity. Data collection experienced some challenges owing to the busy schedule of the targeted respondents and procedures involved in obtaining secondary information. To address this challenge, the study used mixed method of data collection and sought the necessary permission in time.

1.8 Assumptions

This study had four assumptions:

i. That there will be no significant change in operations of Parliament of Kenya by the time this study is conducted.

ii. That the citizens and parliamentarians have embraced information and communication technologies and are willing to participate constructively in parliamentary processes.

iii. That Parliament of Kenya processes will be positively affected by digital interactive platforms.

iv. That cost implications have0 not hindered Parliament of Kenya to put in place necessary infrastructure for digital interactive communication.

1.9 Research Gaps

The empirical literature reviewed demonstrated glaring gaps. Almost all the reviewed studies were conducted in the United Kingdom (Williamson, 2010, 2009; Davis, 2009; Ferguson & Miller, 2007; Coleman, 2004) or Europe (Coleman, 2006; Akdogan, Buhl, McCarthy, & Nathanson, 2005). These studies' findings cannot be generalized for other geographical regions owing to differences in political environment, governance, communication infrastructure and technology level. This leaves out a lot to be studied in a context outside United Kingdom and Europe especially in Africa where governance and communication are in transformation.

Some of the studies on parliamentary communication in the age of digital interactivity, although important, are old (Ferguson & Miller, 2007; Coleman, 2006; Akdogan, Buhl, McCarthy, & Nathanson, 2005; Coleman, 2004). These studies may not comprehensively cover the situation at the moment given the fast changing political communication and advancing technology. The proposed study seeks to bridge these gaps by establishing the digital options for capturing and recording parliamentary proceedings, assessing the use of, and attitudes towards new information

communication technologies, and establishing the extent to which digital platforms used by parliament facilitate interactive public discussion in the 10th Parliament of Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of relevant theoretical literature to establish gaps in previous works. This informs the conceptual framework that guided this study.

2.2 Theoretical Framework

The digital era is characterized by widespread use of information technology for transacting business. Information technology (IT) is universally regarded as an essential tool in enhancing the competitiveness of the economy of a country. It is commonly accepted today that IT has significant effects on the productivity of organizations (Oliveira, Martins, & Lisboa, 2011). These effects will only be fully realized if and when IT is widely spread and used. It is crucial, therefore, to understand the determinants of IT adoption and the theoretical models that have arisen addressing IT adoption. There are three theories for IT adoption at the organization level used in information systems (IS) literature. The three theories are: Diffusion on Innovation (DOI), the Technology, Organization, Environment (TOE) framework, and Institutional Theory (Chong et al., 2009).

2.2.1 Diffusion on Innovation Theory

Diffusion on innovation (DOI) is a theory of how, why, and at what rate new ideas and technology spread through cultures and members of a social system, operating at the individual and organization level. DOI theory sees innovations as being communicated through certain

channels over time and within a particular social system (Rogers 1995). Individuals are seen as possessing different degrees of willingness to adopt innovations, and thus it is generally observed that the portion of the population adopting an innovation is approximately normally distributed over time (Rogers 1995). The theory espouses that there are four main elements that influence the spread of a new idea: the innovation, communication channels, time, and a social system. This process relies heavily on human capital. The innovation must be widely adopted in order to self-sustain. Breaking this normal distribution into segments leads to the segregation of individuals into the following five categories of individual innovativeness (from earliest to latest adopters): innovators, early adopters, early majority, late majority, laggards (Rogers 1995). The innovation process in organizations is much more complex. It generally involves a number of individuals, perhaps including both supporters and opponents of the new idea, each of whom plays a role in the innovation-decision (Oliveira et al., 2011).

Based on DOI theory at organization level (Rogers 1995), innovativeness is related to such independent variables as individual (leader) characteristics, internal organizational structural characteristics, and external characteristics of the organization. Individual characteristics describe the leader attitude toward change. Internal characteristics of organizational structure includes observations according to Rogers (1995) whereby: centralization is the degree to which power and control in a system are concentrated in the hands of a relatively few individuals; complexity is the degree to which an organization's members possess a relatively high level of knowledge and expertise; formalization is the degree to which an organization emphasizes its members' following rules and procedures; interconnectedness is the degree to which the units in a social system are linked by interpersonal networks; organizational slack is the degree to which uncommitted resources are available to an organization; size is the number of employees of the

organization. External characteristics of organizational refer to system openness (Oliveira et al., 2011).

2.2.2 Technology, Organization and Environment Framework

The TOE framework was developed in 1990 by Tornatzky and Fleischer. It identifies three aspects of an organization's context that influence the process by which it adopts and implements a technological innovation: technological context, organizational context, and environmental context. Technological context describes both the internal and external technologies relevant to the organization. This includes current practices and equipment internal to the organization as well as the set of available technologies external to the organization. Organizational context refers to descriptive measures about the organization such as scope, size, and managerial structure. Environmental context is the arena in which an organization conducts its business—its industry, competitors, and dealings with the government (Tornatzky and Fleischer, 1990).

The TOE framework as originally presented, and later adapted in IT adoption studies, provides a useful analytical framework that can be used for studying the adoption and assimilation of different types of IT innovation. The TOE framework has a solid theoretical basis, consistent empirical support and the potential of application to IS innovation domains, though specific factors identified within the three contexts may vary across different studies. This framework is consistent with the DOI theory, in which Rogers (1995) emphasized individual characteristics, and both the internal and external characteristics of the organization, as drivers for organizational innovativeness. These are identical to the technology and organization context of the TOE framework, but the TOE framework also includes a new and important component, environment context. The environment context presents both constraints and opportunities for technological

innovation. The TOE framework makes Rogers' innovation diffusion theory better able to explain intra-organization innovation diffusion (Hsu *et al.*, 2006).

2.2.3 Institutional Theory

Institutional theory emphasizes that institutional environments are crucial in shaping organizational structure and actions (Scott, 2001). According to the institutional theory, organizational decisions are not driven purely by rational goals of efficiency, but also by social and cultural factors and concerns for legitimacy. Institutions are transported by cultures, structures, and routines and operate at multiple levels. The theory claims that organizations become more similar due to isomorphic pressures and pressures for legitimacy. This means that organizations in the same field tend to become homologous over time, as competitive and customer pressures motivate them to copy industry leaders. For example, rather than making a purely internally driven decision to adopt e-commerce, organizations are likely to be induced to adopt and use e-commerce by external isomorphic pressures from competitors, trading partners, customers and government.

Several studies have taken an institutional approach to e-commerce or EDI diffusion and assimilation (Purvis *et al.*, 2001, Chatterjee *et al.*, 2002, Teo *et al.*, 2003). It is well known that mimetic, coercive, and normative institutional pressures existing in an institutionalized environment may influence organizations' predisposition toward an IT-based interorganizational system (Teo *et al.*, 2003). Mimetic pressures are observed when organizations adopt a practice or innovation imitating competitors (Soares-Aguiar and Palma-Dos-Reis, 2008). Coercive pressures are a set of formal or informal forces exerted on organizations by other organizations upon which the former organizations depend. Normative pressures come from dyadic relationships where companies share some information, rules, and norms. Sharing these norms through relational

channels amongst members of a network facilitates consensus, which, in turn, increases the strength of these norms and their potential influence on organizational behavior (Powell and DiMaggio, 1991). Some studies combine the TOE framework with the institutional theory (Gibbs & Kraemer, 2004; Li, 2008; Soares-Aguiar & Palma-Dos-Reis, 2008). The institutional theory adds to the environmental context of the TOE framework external pressures, which include pressure from competitors and pressure exerted by trading partners. Although the institutional theory is more inclined towards business organizations, it has valuable concepts for public organizations like parliament. This study will therefore rely on institutional theory in its conceptualization.

2.3 Empirical Review

Williamson (2010) used survey method distributed via social media (Facebook and Twitter) to establish how citizens in the United Kingdom participate online and connect with Members of Parliament (MPs) and Parliament. On the web-based tools used to contact, find out about or follow MPs, websites were found to be the most popular (82%). Blogs were also found to be a popular source of information (57%) but more respondents used Twitter (59%). Williamson (2010) reported that, when asked specifically about the UK Parliament's web presence, again the website proved the most widely used (78%). Parliament's Twitter feed was also rated very highly (63%) and 27% of respondents indicated they had used the Parliamentary YouTube site. Williamson (2010) further established that only 20% of respondents have ever visited the parliamentlive.tv website, slightly fewer than have used YouTube for this purpose. This led to Williamson (2010) concluding that his sample was text-led and, therefore, interested in the detail. As digital engagement increases amongst the wider public, the use of video content will increase to support the more detailed textual data that is also available (Williamson, 2010).

In another study, Williamson (2009) used a mixed-methods approach in a study on how Members of Parliament (MPs) use digital media to communicate with their constituents in the United Kingdom. The study established that ICT adoption patterns for MPs mirror those of the general public, with email the primary tool in use in their offices. MPs were found to use email (92%) and personal website (83%) mostly in communicating with their constituents. These rates of adoption were seen to diminish rapidly for other media, with only 11% of MPs blogging and 6% having used instant messaging to communicate with constituents (Williamson, 2009).

Davis (2009) did a re-evaluation of political communication based on Habermas' original theory of the public sphere. Davis (2009) presented Habermas' alternative framework for assessing communication in contemporary 'actually existing democracies'. The model was then tested with a case study of the UK parliamentary public sphere based on 95 semi-structured interviews with political actors (politicians, journalists and officials). Davis (2009) concluded that parliament today operates rather better, according to public sphere norms, than the public sphere described in Habermas' accounts of 18th and 19th-century England. Such a finding, on its own, is clearly at odds with public perception. Davis (2009) offers two explanations for this disparity and the (perceived) crisis of political legitimacy in UK politics. The first regards the impeded transfer of that public 'opinion and will formation' from parliament to government. The second relates to the faulty means of 'critical publicity' by which the process of governance is relayed back to ordinary citizens via the mediated public sphere. As such, even if the UK parliament is legitimately linked to, and adequately deliberates on, public 'opinion and will formation', it fails to transmit that, either upwards to government, or downwards to its citizenry (Davis, 2009).

Ferguson & Miller (2007) used a unique approach that saw formation of a diverse group of contributors, preparation of a brief and inviting of responses to provide solutions for parliament

for the future. Ferguson & Miller (2007) referred to this group of contributors as incubator group. Ferguson & Miller (2007) found that a number of common themes stood out across the incubator group submissions. These themes include convergence, time efficiency, convenience, constituency connections, data standards and trust. The findings from incubator group submissions led to Ferguson & Miller (2007) noting that there was a broad recognition - inside and outside of Westminster - that the UK Parliament has struggled with ICT, particularly the internet. They further observed that UK Parliament has approached internet-orientated ICT as a set of administrative tools that helped manage knowledge and staff, as a means of publishing and distributing information in the public domain, and as a facilitator of engagement. At times mobilization of ICT has been viewed as a responsibility for Parliament as a corporate entity, and at others as a concern of individual MPs and Peers. The result has been an uncoordinated, hesitant and costly application of ICT to core business areas (Ferguson & Miller, 2007).

Coleman (2006) did a survey of officials from 44 European parliamentary chambers. He sought to establish how parliaments, as representative institutions, serve as communication channels between the public and the process of governance. Coleman's (2006) findings suggest that digital information or communication technologies are being used widely, but that there is limited use of interactive features which allow citizens to comment and deliberate on policy issues (Coleman, 2006).

EPRI (European Parliaments' Research Initiative) Knowledge Project survey in 2005 across 24 European Union member countries established that Europe's early (ICT) adopter parliamentarians are mobile parliamentarians who use most ICTs themselves, using email and SMS daily and generally answer directly their own email correspondence. The study revealed

that representatives have more overall contact with their citizens and parties through the use of ICTs but are not necessarily reaching new citizens or groups (Akdogan, Buhl, McCarthy, & Nathanson, 2005).

Coleman (2004) used case study method to examine use of the internet to enhance representative democracy. Coleman (2004) focused on the online parliamentary consultations conducted on behalf of the UK Parliament between 1998 and 2002. Two out of the ten UK parliamentary online consultations were used as case studies: the Womenspeak consultation on domestic violence, and the consultation on the draft Communications Bill. The study established that online consultations provide a space for inclusive public deliberation. In addition, they generate and connect networks of interest or practice (Coleman, 2004).

2.4 Conceptual Framework

The conceptual framework shows the relationship of the variables. The independent variables are expected to influence the dependent variable. The independent variables of the study are three and include digital options for use in parliament, utilization of ICT and attitude by the users and organization towards new information communication technologies. The dependent variable is digital platforms' facilitation of interactive public discussion. This relationship is presented in the conceptual framework diagram.

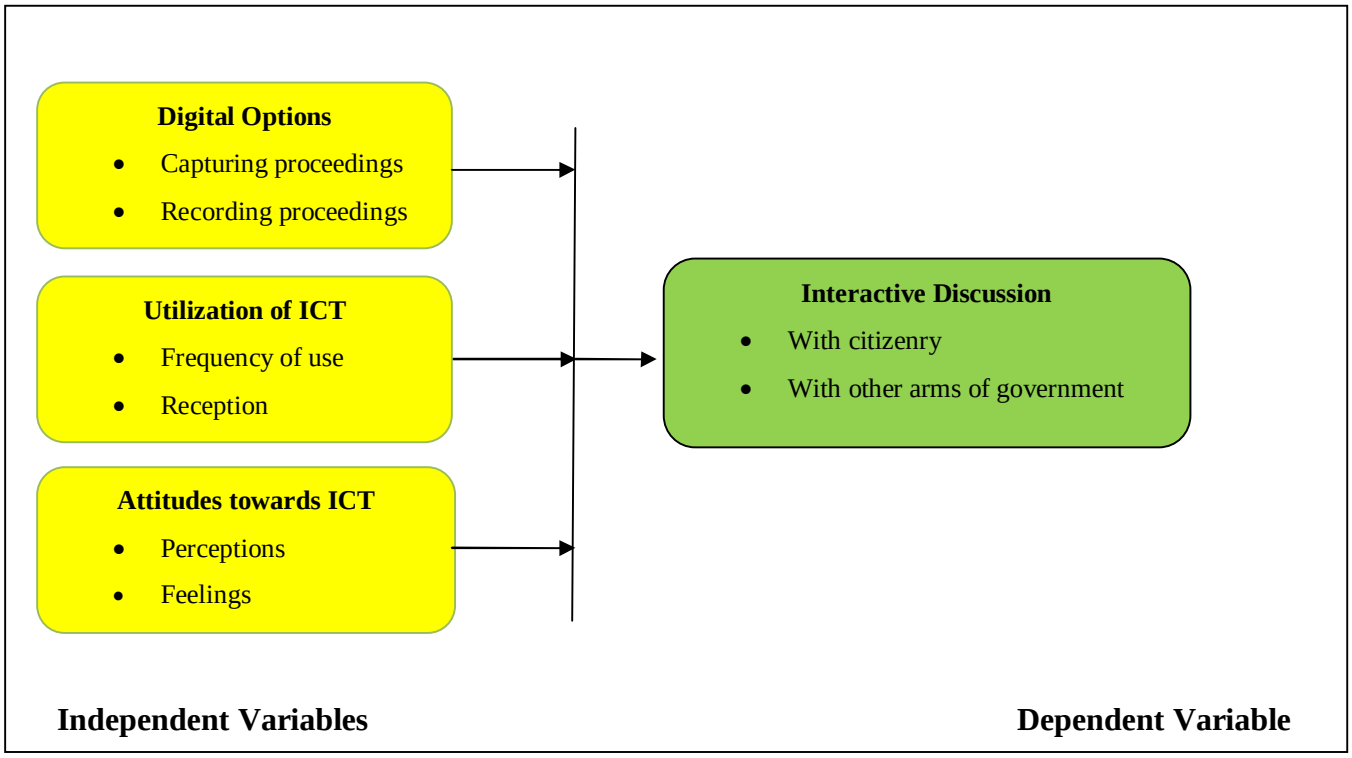

Figure 2.4 – Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the methods and procedure that were used to achieve the study objectives. It includes research design, target population, sampling and sample size, data collection, data analysis and presentation.

3.2 Research Design

The study used descriptive survey design. Descriptive survey used both quantitative and qualitative methods. Both primary and secondary sources of data were used. Primary sources involved the use of questionnaires and interviews with employees and Parliamentary Service Commission members respectively. Secondary sources involved political communications in print and electronic media. Content analysis was done to establish existing digital options and level of interactivity of parliament as a representative institution and its audience.

3.3 Target Population

The target population of this study were all Members of Parliament and Parliamentary Service Commission employees. There are 416 MPs and 532 employees of PSC according to Parliamentary Service Commission Strategic Plan 2008 – 2018 that was revised in 2012. This population had information of concern to this study as their role is representation, legislation, and oversight; while for PSC employees, their role is facilitating Members of Parliament in fulfilling their mandate.

3.4 Sampling and Sample Size

According to G.C. Ramamurthy (2011), sampling is the process in which the sufficient number of elements is selected from the population for the purpose of study. Mugenda and Mugenda (2003) states that 10-30% of a population is representative enough. The study sampled 10% of the MPs and Parliamentary Service Commission employees, which translated into 98 respondents. This study used multi-stage sampling to obtain the sample. Simple random sampling was used to select Members of Parliament while stratified random sampling method was used to select employees from four departments of Parliamentary Joint Services. These departments include Finance & Accounting, Administrative Services, Information & Research and Legal Services. Purposive sampling was used to select heads of the four departments and Hansard Editors of both National Assembly and Senate. Table 3.1 presents the sampling matrix.

Table 3. 1: Sampling Matrix

	Sampling method	Finance & Accounting	Administrative	Information &	Legal Services	Hansard National	Hansard Senate	Broadcasting	**Total**
Employees	Stratified random	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**49**
Heads of departments	Purposive	1	1	1	1	1	1	1	**7**
Members of Parliament	Simple random								**42**
Total		**8**	**8**	**8**	**8**	**8**	**8**	**8**	**98**

3.5 Data Collection

The study used both primary and secondary data. Primary data was collected using three sets of instruments for three categories of respondents; MPs, employees and heads of departments. A structured survey questionnaire was used to collect data from employees and MPs, while an interview guide collected data from heads of departments.

Drop-and-pick later method was used to collect data from the respondents. This allowed for ample time to respond to the questionnaire adequately, which is hard to achieve on the spot owing to the busy schedule of Members of Parliament and PSC employees. Face-to-face interviews method was used to collect data from heads of department. This category of respondents was in a position to provide insights on the topic of interest to this study owing to

their positions in the organization. Secondary data was collected from published reports, journals and archival sources of PSC.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

Quantitative and qualitative methods were used to process and analyze data. Quantitative data from structured questionnaires was analyzed using descriptive statistics such as mean scores, frequencies and percentages. The results of quantitative data analysis is presented in charts and tables. Qualitative data is analyzed using content analysis. Results of qualitative data analysis is presented in prose or narrative format.

The respondents were asked to indicate their gender. Majority of the respondents were male (65.4%) as compared to female who re 34.6%.

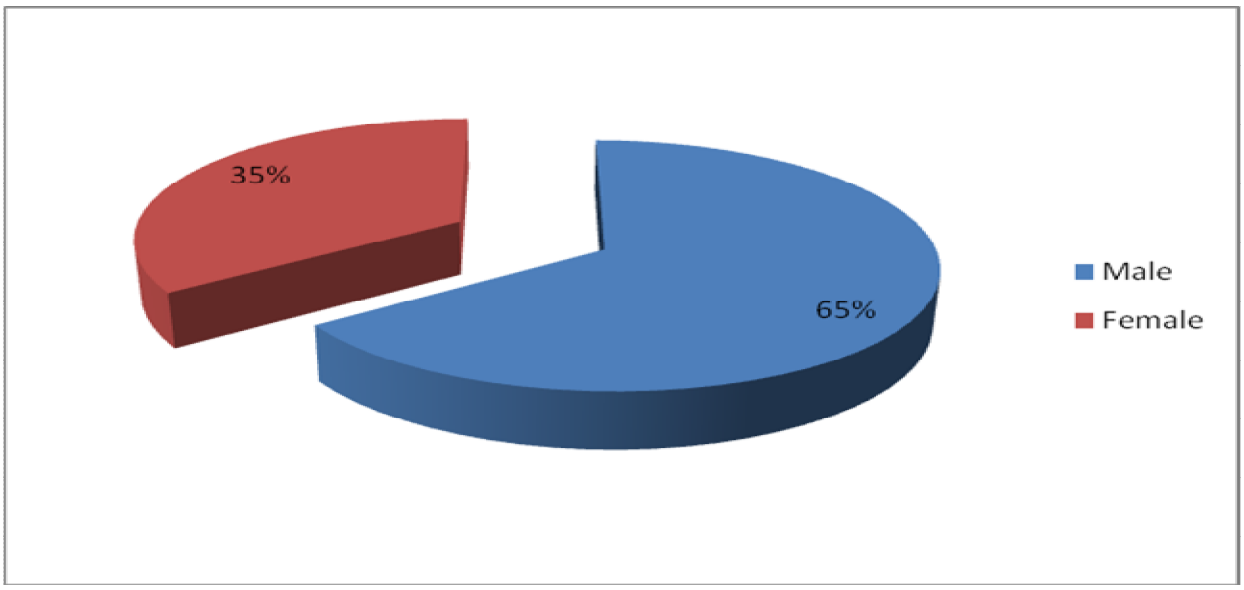

Figure 4. 1: Gender

These findings show that male respondents were the dominant and female respondents were few. This could be due to gender bias in employment and could be a reflection of many other organizations.

Table 4. 1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	34	65.4	65.4	65.4
	Female	18	34.6	34.6	100.0
	Total	52	100.0	100.0	

The researcher asked respondents to indicate their age bracket and majority were found to be in the age bracket of 31-40 years (61.5%). Respondents in the age bracket of 41-50 years were 26.9% while 11.5% were 51 years and above.

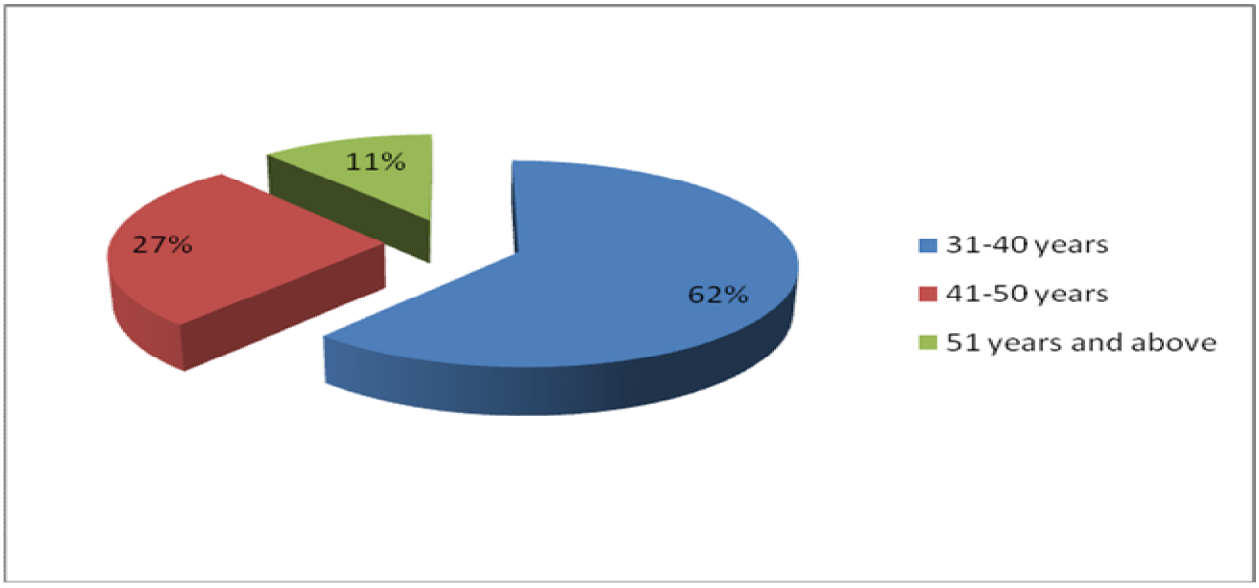

Figure 4. 2: Age Bracket

The respondents were in their youth or middle age which employees are most active and productive. There were also a significant number of employees in their 50s hence the organization has been able to balance new talent and experience.

Table 4. 2: Age Bracket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	"31-40 years"	32	61.5	61.5	61.5
	"41-50 years"	14	26.9	26.9	88.5
	"51 years and above"	6	11.5	11.5	100.0
	Total	52	100.0	100.0	

Half of the respondents were found to have a bachelor's degree as their highest academic qualification (50%). Respondents with a diploma were 15.4% while those with a post graduate degree were 34.6%.

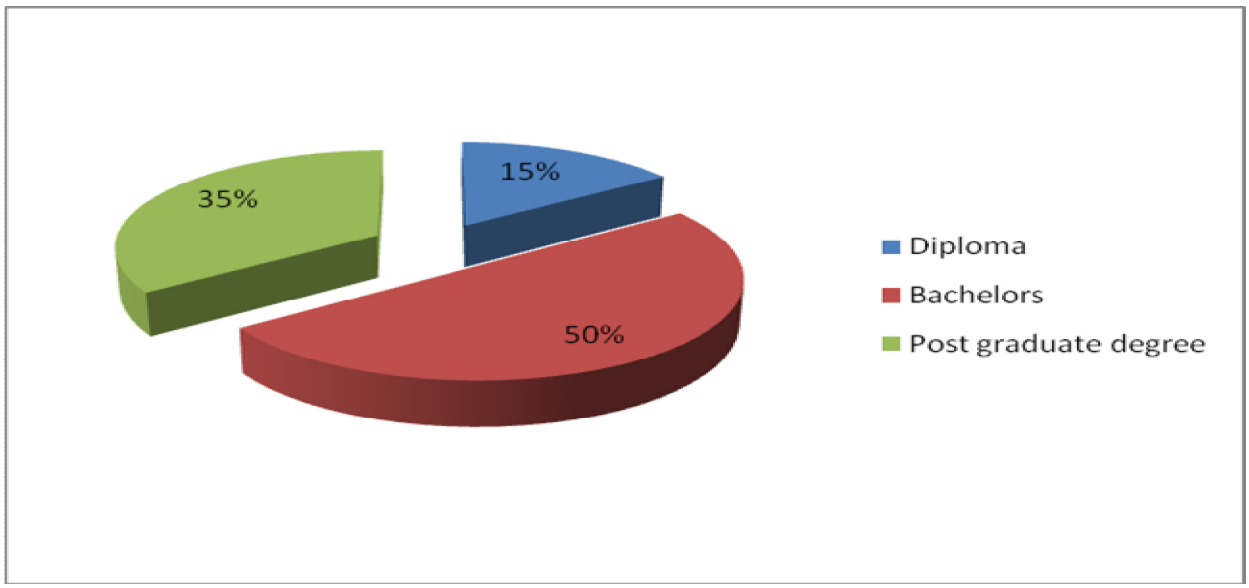

Figure 4. 3: Academic Qualification

The results show that employees have adequate academic qualifications. Higher academic qualifications are associated with better performance.

Table 4. 3: Academic qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	8	15.4	15.4	15.4
	Bachelors	26	50.0	50.0	65.4
	Post graduate degree	18	34.6	34.6	100.0
	Total	52	100.0	100.0	

Respondents were asked to indicate the duration they have worked for parliament. Majority of the respondents indicated they have worked for over 10 years (53.8%). Respondents who indicated they have worked in parliament for less than 3 years were 34.6% while those who had worked for 3-6 years and 7-10 years were 7.7% and 3.8% respectively.

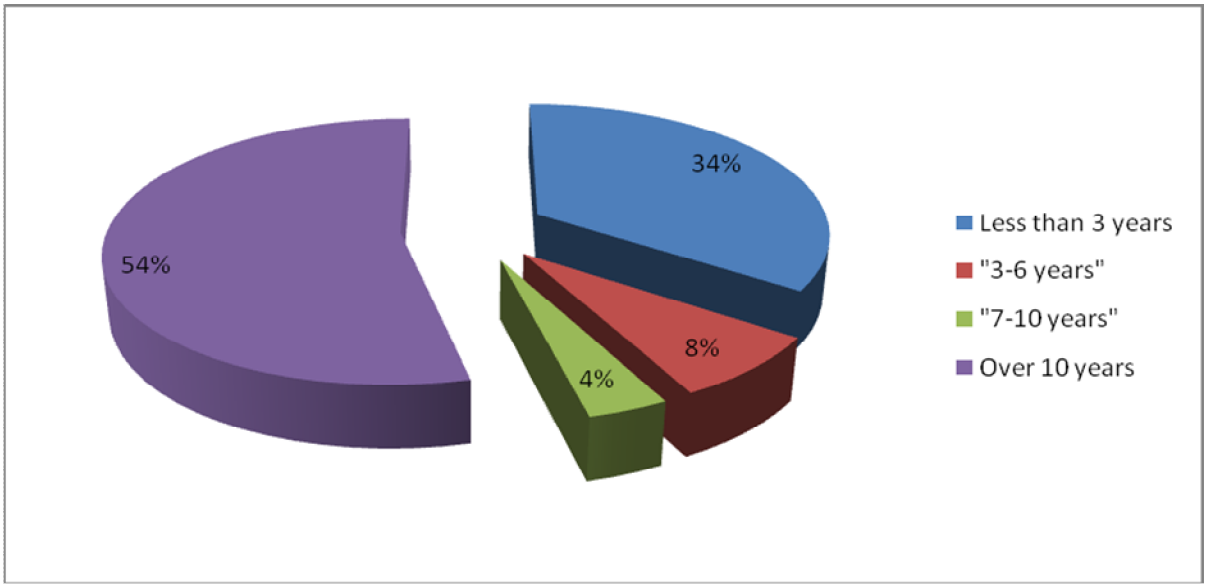

Figure 4. 4: Duration worked in the organization

The respondents having worked for many years in the organization were better placed to comment on the issue of parliamentary communication in the digital era.

Table 4. 4: Duration worked in the organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 3 years	18	34.6	34.6	34.6
	"3-6 years"	4	7.7	7.7	42.3
	"7-10 years"	2	3.8	3.8	46.2
	Over 10 years	28	53.8	53.8	100.0
	Total	52	100.0	100.0	

4.2 Digital Options for Capturing and Recording Parliamentary Proceedings

In an attempt to find out the digital options for capturing and recording parliamentary proceedings, respondents were asked to rate the extent to which a number of digital options are used to gather information in parliament. The respondents were to use a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent'. The results show that internet (M=3.92, SD=.845), email (for correspondence) (M=3.92, SD=.891) and websites (M=3.62, SD=.852) are used to a moderate extent to gather information

in parliament. Wireless networks (M=2.88, SD=1.243), social media (M=2.73, SD=1.282), instant messaging (M=2.72, SD=1.429), multimedia (M=2.65, SD=.892), uploading video/audio/photographs (M=2.38, SD=1.098), email newsletter (M=2.17, SD=1.049) and biometrics (M=2.16, SD=1.179) are used to a little extent. Blog (M=1.52, SD=.653) and web-based discussion forum (M=1.50, SD=.812) were found not to be in use at all for gathering information. Digital options that allow interactive discussion such as blogs, social media and web-based discussion forums were rated low for capturing and recording parliamentary proceedings.

Table 4. 5: Digital Options used to Gather Information in Parliament

	N	Mean	Std. Deviation
Internet	26	3.92	.845
Email (for correspondence)	26	3.92	.891
Websites	26	3.62	.852
Wireless networks	26	2.88	1.243
Social media	26	2.73	1.282
Instant messaging	25	2.72	1.429
Multimedia	26	2.65	.892
Uploading video/audio/photographs	26	2.38	1.098
Email Newsletter	24	2.17	1.049
Biometrics	25	2.16	1.179
Blog	25	1.52	.653
Web-based discussion forum	26	1.50	.812
Valid N (listwise)	21		

The researcher asked respondents to rate the extent a number of digital options were used to store information in parliament. They were to use a scale of 1-5 where 1 is ‘Not at all’, 2 ‘Little extent’, 3 ‘Moderate extent’, 4 ‘Great extent’ and 5 ‘Very great extent’. The results indicate that websites (M=3.50, SD=1.140) and internet (M=3.42, SD=1.027) were used to a moderate extent to store information in parliament. The findings also indicated that email (for correspondence),

multimedia, wireless networks, uploading video/audio/photographs, and instant messaging were only used to a little extent. Social media, biometrics, Email Newsletter, web-based discussion forum and blogs were not used at all for storage of information in parliament.

Table 4. 6: Digital Options were used to Store Information in Parliament

	N	Mean	Std. Deviation
Websites	26	3.50	1.140
Internet	26	3.42	1.027
Email (for correspondence)	26	2.92	1.294
Multimedia	25	2.64	1.221
Wireless networks	25	2.56	1.227
Uploading video/audio/photographs	25	2.56	1.158
Instant messaging	26	2.12	1.177
Social media	24	1.92	.929
Biometrics	23	1.91	.996
Email Newsletter	25	1.84	.987
Web-based discussion forum	25	1.44	.651
Blog	23	1.26	.541
Valid N (listwise)	18		

The researcher wanted to know the extent to which different digital options were used to disseminate information in parliament. Respondents were asked to use scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent'. The findings show that email (for correspondence) (M=3.96, SD=.871), internet (M=3.77, SD=.908) and websites (M=3.73, SD=1.002) were to a moderate extent used to disseminate information in parliament. These findings shows that digital options with the ability to support interactive discussions were rated low in use for dissemination of information in parliament.

Table 4. 7: Digital Options were used to Disseminate Information in Parliament

	N	Mean	Std. Deviation
Email (for correspondence)	26	3.96	.871
Internet	26	3.77	.908
Websites	26	3.73	1.002
Wireless networks	26	2.65	1.355
Social media	26	2.50	1.030
Multimedia	26	2.42	1.270
Uploading video/audio/photographs	26	2.35	1.198
Instant messaging	25	2.28	1.458
Email Newsletter	26	2.23	1.070
Biometrics	24	1.88	1.035
Blog	24	1.62	.970
Web-based discussion forum	24	1.50	.722
Valid N (listwise)	21		

Digital options for capturing and recording parliamentary proceedings have generally remained formal as informed from head of departments' interviews. Additional new media has however been adopted gradually. Email, internet and websites have been used for official communication. It is relatively difficult to have interactive digital options for capturing and recording parliamentary proceedings as argued by heads of departments. The heads of department noted that parliamentary proceedings are highly structured and have no room for interaction with the public when they are taking place. However, the heads of department indicated that the public can petition parliament on an issue through the official channels. The parliamentarians are representative of the people and therefore parliamentary proceedings are highly likely to be a reflection of what the public wants. If not, there are channels of voicing public feedback on issues handled by parliament. The heads of department cited that other digital options are being explored but they are in their nascent stage.

4.3 Use and Attitudes towards New ICT

The researcher wanted to understand the use and attitudes towards new ICT in parliament. Respondents were asked to indicate how often the Parliamentary Service Commission employees used digital platforms for transacting their day to day business. The respondents were to use a scale of 1-5 where 1 was “Not at all”, 2 “Rarely”, 3 “Occasionally”, 4 “Often” and 5 “Very Often”. The results show that Parliamentary Service Commission employees used email (for correspondence) (M=4.15, SD=.967) often while Internet (M=3.81, SD=1.059) and websites (M=3.40, SD=1.118) were used to a moderate extent. Multimedia, Wireless networks, Web-based discussion forum, instant messaging, uploading video/audio/photographs, Social media, Email Newsletter and Biometrics were only found to be used by Parliamentary Service Commission employees rarely while blogs were not used at all. These findings show that despite interactive discussion forums being popular in the public domain, they have not impacted use and attitudes towards new ICT in parliament in the same way.

Table 4. 8: Frequency of Use

	N	Mean	Std. Deviation
Email (for correspondence)	26	4.15	.967
Internet	26	3.81	1.059
Websites	25	3.40	1.118
Multimedia	25	2.92	1.152
Wireless networks	25	2.68	1.314
Web-based discussion forum	25	2.64	4.152
Instant messaging	26	2.58	1.419
Uploading video/audio/photographs	26	2.46	1.029
Social media	25	2.40	1.000
Email Newsletter	25	2.20	.913
Biometrics	24	2.00	.978
Blog	24	1.58	.776
Valid N (listwise)	18		

The respondents were asked to rate the extent that parliament as an organization used new ICT in its daily operations. Respondents were asked to use scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent'. The results show that websites (M=3.92, SD=.977), email (for correspondence) (M=3.88, SD=1.177) and internet (M=3.77, SD=1.275) were used in parliament for its daily operations. These results show that parliament as an organization has not adopted interactive digital options. Interactive digital options such as blogs and social media were rated low in use for its daily operations.

Table 4. 9: Extent that Parliament as an Organization used New ICT in its Daily Operations

	N	Mean	Std. Deviation
Websites	26	3.92	.977
Email (for correspondence)	26	3.88	1.177
Internet	26	3.77	1.275
Wireless networks	26	2.77	1.394
Uploading video/audio/photographs	25	2.64	1.186
Multimedia	26	2.54	1.208
Instant messaging	25	2.40	1.528
Social media	26	2.27	1.151
Email Newsletter	25	2.20	1.000
Biometrics	26	2.12	1.071
Web-based discussion forum	25	1.76	.926
Blog	26	1.38	.571
Valid N (listwise)	24		

The respondents were asked to describe the reception of new ICT by Parliamentary Service Commission employees. Respondents were asked to use scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent'. The results show that email (for correspondence) (M=3.96, SD=1.038), Internet (M=3.88, SD=1.130) and websites

(M=3.67, SD=1.129) were received to a moderate extent. Web-based discussion forums, blogs and social media were rated low in reception by parliamentary service commission employees.

Table 4. 10: Reception of New ICT by Parliamentary Service Commission Employees

	N	Mean	Std. Deviation
Email (for correspondence)	26	3.96	1.038
Internet	25	3.88	1.130
Websites	24	3.67	1.129
Social media	26	2.88	1.336
Uploading video/audio/photographs	26	2.85	1.084
Wireless networks	26	2.73	1.251
Multimedia	26	2.73	1.116
Email Newsletter	26	2.65	1.093
Instant messaging	26	2.50	1.241
Biometrics	26	2.08	.891
Blog	26	1.81	.801
Web-based discussion forum	24	1.79	.658
Valid N (listwise)	22		

The researcher wanted to know the extent to which parliament as an organization is embracing new ICT with speed. Email (for correspondence) (M=3.96, SD=.999), Internet (M=3.77, SD=1.107) and websites (M=3.38, SD=1.169) were found to be embraced with speed by parliament to a moderate extent. Web-based discussion forum and blogs were found not to have been embraced with speed by parliament. This is because they were rated low in the extent to which parliament as an organization is embracing them with speed

Table 4. 11: Extent to which Parliament as an Organization is Embracing New ICT with Speed

	N	Mean	Std. Deviation
Email (for correspondence)	26	3.96	.999
Internet	26	3.77	1.107
Websites	26	3.38	1.169
Social media	25	2.96	1.369
Multimedia	26	2.92	1.197
Instant messaging	26	2.88	1.366
Wireless networks	26	2.81	1.234
Uploading video/audio/photographs	26	2.65	1.164
Email Newsletter	25	2.32	1.180
Biometrics	26	2.27	1.079
Web-based discussion forum	26	1.96	1.148
Blog	24	1.96	.999
Valid N (listwise)	23		

The heads of departments were interviewed to offer insights on this issue. They indicated that Parliamentary Service Commission employees use new ICT such as blogs, web-discussion forums and social media but not in their work. The heads of departments indicated that their employees have formal and informal lives. It is in the informal lives that these employees use these new ICTs. This distinction between formal and informal has affected the use and attitude towards new ICTs in parliament.

4.4 Digital Platforms used to Facilitate Interactive Public Discussion

The researcher wanted to know the extent to which a number of digital options were used by parliament to interact with other arms of government. Internet (M=3.80, SD=1.041), email (for correspondence) (M=3.65, SD=.977) and websites (M=3.60, SD=1.155) were used to a moderate extent in interacting with other arms of government. Web-based discussion forums, social media and blogs would have facilitated parliament to interact with other arms of government. However, these digital options were rated low in use by parliament.

Table 4. 12: Digital Options used by Parliament to interact with other Arms of Government

	N	Mean	Std. Deviation
Internet	25	3.80	1.041
Email (for correspondence)	26	3.65	.977
Websites	25	3.60	1.155
Multimedia	26	2.92	1.197
Wireless networks	26	2.65	1.355
Email Newsletter	26	2.54	1.104
Uploading video/audio/photographs	25	2.44	1.044
Instant messaging	25	2.28	1.275
Social media	25	2.12	1.013
Biometrics	26	1.96	1.038
Web-based discussion forum	26	1.85	1.047
Blog	26	1.77	.863
Valid N (listwise)	22		

The respondents were asked to rate the extent to which a number of digital options were used to interact with the public. Internet (M=3.65, SD=1.263) and websites (M=3.62, SD=1.267) were found to be used to a moderate extent by parliament to interact with the public. Email (for correspondence) (M=2.65, SD=1.355), multimedia (M=2.56, SD=1.387), wireless networks (M=2.50, SD=1.364), uploading video/audio/photographs (M=2.38, SD= 1.203), social media (M=2.36, SD=1.350) and Email Newsletter (M=2.19, SD=1.386) were used by parliament to interact with public to a little extent. Web-based discussion forum (M=1.85, SD=1.156), biometrics (M=1.81, SD=1.021), podcasts (M=1.81, SD=1.096) and blogs (M=1.69, SD=1.011) were not used at all by parliament to interact with the public. Web-based discussion forums, social media and blogs would have facilitated parliament to interact with the public. However, these digital options were rated low in use by parliament.

Table 4. 13: Digital Options used to Interact with the Public

	N	Mean	Std. Deviation
Internet	26	3.65	1.263
Websites	26	3.62	1.267
Email (for correspondence)	26	2.65	1.355
Multimedia	25	2.56	1.387
Wireless networks	26	2.50	1.364
Uploading video/audio/photographs	26	2.38	1.203
Social media	25	2.36	1.350
Email Newsletter	26	2.19	1.386
Instant messaging	26	1.96	1.280
Web-based discussion forum	26	1.85	1.156
Biometrics	26	1.81	1.021
Podcasts	26	1.81	1.096
Blog	26	1.69	1.011
Valid N (listwise)	24		

The interview with the heads of departments supported these findings. The heads of departments indicated that though the new media is acceptable to the general public. It is considered more informal than formal. In most cases, the new media has been used as an additional channel of communication but not the official channel. This is why it has been hard for parliament to interact with the other arms of government using new media such as blogs, social media and web-based discussion forums.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary of the study, conclusions and recommendations. The study sought to answer the following research questions: What digital options exist for capturing and recording parliamentary proceedings? How is the utilization of information communication technologies in parliament? What are the attitudes towards information communication technologies in parliament? To what extent use of digital platforms by parliament facilitate interactive public discussion?

5.2 Summary

The function of elected representatives in parliament is to provide a link between rulers and ruled. If the duty of representatives is to maintain the closest correspondence and the most unreserved communication with those they represent, parliaments must adopt communicative strategies which allow citizens to see in and scrutinize and parliaments to see out and learn from public discussion. Too little attention has been paid to the communicative relationship between representatives and citizens. This study sought to investigate the role of ICTs in democratizing public information access focusing on the use of digital media resources to enable communication between citizens, elected representatives and Parliament (as a corporate entity). Four specific objectives were used to achieve this goal. They included: To determine digital options for capturing and recording parliamentary proceedings; to assess the utilization of information communication technologies in parliament; to find out the attitudes of MPs to digital media resources as well as their perception to its use and value; and to establish the extent to which use of digital platforms by parliament facilitate interactive public discussion. A

descriptive survey research design was used for this study. The target population of this study was all Members of Parliament and Parliamentary Service Commission employees. Ninety eight (98) respondents were sampled using multi-stage sampling. Data analysis was done using descriptive and content analysis. Results are presented in tables and descriptive narrative form.

The study showed that internet, email (for correspondence) and websites are used to a moderate extent to gather information in parliament. The results indicate that websites and internet were used to a moderate extent to store information in parliament. The findings show that email (for correspondence), internet and websites were to a moderate extent used to disseminate information in parliament. The results show that Parliamentary Service Commission employees used email (for correspondence) often while Internet and websites were used to a moderate extent. The results show that websites, email (for correspondence) and internet were used in parliament for its daily operations. The results show that email (for correspondence), Internet and websites were received well to a moderate extent. Email (for correspondence), Internet and websites were found to be embraced with speed by parliament to a moderate extent. Internet, email (for correspondence) and websites were used to a moderate extent in interacting with other arms of government. Internet and websites were found to be used to a moderate extent by parliament to interact with the public. Web-based discussion forum, biometrics, podcasts and blogs were not used at all by parliament to interact with the public.

5.3 Conclusions

This study concluded that only a few digital options have been used for capturing and recording parliamentary proceedings. In addition, these few digital options have only been used to a moderate extent. They include internet, emails and websites. They have been used to gather, store and disseminate information in parliament.

The Parliamentary Service Commission employees used email (for correspondence) often while Internet and websites were used to a moderate extent in their day-to-day operations. The other digital options have not been used and especially those that enables more interaction with internal and external audiences. The reception of new ICT by Parliamentary Service Commission employees can also be termed as moderate or lukewarm. This is demonstrated by the fact that email (for correspondence), internet and websites were found to be embraced with speed by parliament to only a moderate extent.

Digital platforms used to facilitate interactive public discussion in parliament were rare. This was illustrated by the fact that Internet, email (for correspondence) and websites were only used to a moderate extent in interacting with other arms of government. The fact that Internet and websites were only used to a moderate extent by parliament to interact with the public shows there is a digital gap in parliament that needs to be filled for interactive discussion with the citizenry. Important digital platforms that would have enabled interactive communication such as web-based discussion forums, podcasts and blogs were not used at all by parliament to interact with the public.

5.4 Recommendations

This study recommends that parliament should embrace digital options available for capturing and recording parliamentary proceedings. The government should ensure that parliament has the requisite capacity to adopt various digital options. In facilitating parliamentarians to execute their mandate, Parliamentary Service Commission employees should be in the first lane of using digital options in their work. The Parliamentary Service Commission should ensure that its employees are well trained to use all the available digital platforms and especially those that enable interaction with the public.

The Parliamentary Service Commission should create a conducive environment for reception of new ICT. Currently, parliament does not have a good reception of new ICT. This can be changed through training and encouraging employees to use new ICT in their work. The attitude towards new ICT is also a challenge. The Parliamentary Service Commission should change this situation through careful analysis and formulation of strategies, including formulation and adoption of an ICT/Internet Strategy/Policy that will empower employees and parliamentarians to use digital platforms. This will enable parliamentarians to interact with the public in their work.

The digital platforms that facilitate interactive public discussion like web-based discussion forums have not been used in parliament. The Parliamentary Service Commission should put in place measures that should see this happen. This can be done through implementation of Parliamentary Service Commission Strategic Plan 2012-2018 that seeks to enhance the level of ICT usage in parliament as well as enhancing the level of interaction between parliament and internal as well as external audience.

The parliamentary website needs further improvement to make it more accessible and intuitive in relation to users' interests. The website needs to be upgraded and relaunched to ensure that it is interactive and appealing. Similarly, the deliberations of committees, particularly select committees, should be posted on the website and made more accessible, timely, and searchable. Individual Members of Parliament should be encouraged to have interactive personal websites and blogs which have inbuilt interactive features like response forms and web links, which allow visitors to feedback straight from the page. This will enhance interaction with their constituents. There is need for Parliament to urgently produce a communications strategy (to include application of the internet and social media strategy) and to redevelop its corporate website. This is in realization of the importance of the internet in fostering relationships with the public. There

is a need for Parliament to move away from dependency on traditional mass communications to more sophisticated social media models of engagement which have greatly been adopted by the general public. Parliament's website should do more than simply reproduce the paper outputs of Parliament's work online. Parliament should think about the ways that it could use its website as an engagement tool, while providing individuals with information about their representatives in both Houses.

ICT should be used to improve communication within Parliament, across its committees and between both Houses. Members of Parliament and their staff should harness new technologies to enhance the efficiency and effectiveness of their Parliament and constituency/county offices. The internet should be used as a public engagement tool – the approach used should allow for appropriate levels of participation in committee inquires and corporate outreach work. Online technologies should be used to open parliamentary business and data up to greater public scrutiny. Parliament should learn from good practice in the use of ICT by other private and public sector bodies both within Kenya and internationally.

The Parliamentary Broadcasting Unit should utilize all broadcasting frequencies at its disposal to cover activities taking place in Parliament, unlike the current scenario where KBC has certain fixed hours to air the proceedings of the House in plenary and committees. A channel should be dedicated to the Parliamentary Broadcasting Unit which will allow call-ins and messaging services just like in the Lok Sabha Channel in India. Parliamentary plenary and committee debates should be webcasted online to cater for the audience in the diaspora.

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APPENDICES

Appendix I: Questionnaire for PSC Staff

Introduction

This questionnaire has four sections A-D. It seeks information on parliamentary communication in an age of digital interactivity. You have been requested to assist in the study by objectively responding to the questions in this questionnaire. You are not required to indicate your name anywhere in the questionnaire. The information obtained will be used exclusively for academic purposes. Thank you for your assistance.

Section A: Demographic Information

1. Kindly indicate your gender.

   Male [ ] Female [ ]

2. What is your age bracket?

   20-30 years [ ] 31-40 years [ ]

   41-50 years [ ] 51 years and above [ ]

3. What is your highest academic qualification?

   O Level [ ] Diploma [ ]

   Bachelors degree [ ] Post graduate degree [ ]

4. How long have you worked in this organization?

   Less than 3 years [ ] 3-6 years [ ]

   7-10 years [ ] Over 10 years [ ]

Section B: Digital Options for Capturing and Recording Parliamentary Proceedings

5. In a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent', to what extent are the following digital options used to gather information in parliament?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					

Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

6. In a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent', to what extent are the following digital options used to store information in parliament?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

7. In a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent', to what extent are the following digital options used to disseminate information in parliament?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

Section C: Use and Attitudes Towards new ICT

8. How often do Parliamentary Service Commission employees use the following digital platforms in transacting their day-to-day business?

	Not at all	**Rarely**	**Occasionally**	**Often**	**Very often**
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

9. In a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent', to what extent has Parliament as an organization used the following new ICT in its daily operations?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

10. How would you describe reception of the following new ICT by Parliamentary Service Commission employees?

	1	2	3	4	5
Email (for correspondence)					

Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

11. How would you describe the speed of the following embracing new ICT by Parliament as an organization?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

Section D: Digital Platforms Used to Facilitate Interactive Public Discussion

12. In a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent', to what extent are the following digital options used by parliament to interact with other arms of government?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					

Biometrics systems					
Wireless networks					

13. In a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent', to what extent are the following digital options used by parliament to interact with the public?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Podcasts					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

Appendix II: Questionnaire for MPs

This questionnaire has four sections A-C. It seeks information on parliamentary communication in an age of digital interactivity. You have been requested to assist in the study by objectively responding to the questions in this questionnaire. You are not required to indicate your name anywhere in the questionnaire. The information obtained will be used exclusively for academic purposes. Thank you for your assistance.

Section A: Digital Options for Capturing and Recording Parliamentary Proceedings

In this section, use a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent'.

1. To what extent do you find the following digital options useful for gathering information in parliament? Kindly tick where applicable.

	1	**2**	**3**	**4**	**5**
Email (for correspondence)					
Email Newsletter					
Websites					
Twitter					
Facebook					
Google+					
WhatsApp					
Instant messaging					
Blog					
Web-based discussion forum					
Uploaded video/audio/photographs					
Multimedia (computers, laptops, ipad, etc)					
Video conferencing					
Internet					
Biometrics systems					
Wireless networks					

2. To what extent are the following digital options useful in storing information in parliament?

	1	**2**	**3**	**4**	**5**
Email					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					

Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

3. To what extent are the following digital options used to disseminate information in parliament?

	1	**2**	**3**	**4**	**5**
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

Section B: Use and Attitudes Towards new ICT

4. How often do Members of Parliament use the following digital platforms in transacting their day-to-day business?

	Not at all	**Rarely**	**Occasionally**	**Often**	**Very often**
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

5. In a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent', to what extent has Parliament as an organization used the following new ICT in its daily operations?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

6. How would you describe reception of the following new ICT by Parliamentarians?

	Very poor	**Poor**	**Neutral**	**Good**	**Very good**
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

7. How would you describe the speed of the following embracing new ICT by Parliament as an organization?

	Very slow	Slow	Moderate	Fast	Very fast
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

Section C: Digital Platforms Used to Facilitate Interactive Public Discussion

In this section, use a scale of 1-5 where 1 is 'Not at all', 2 'Little extent', 3 'Moderate extent', 4 'Great extent' and 5 'Very great extent'.

8. To what extent are the following digital options used by parliament to interact with other arms of government?

	1	2	3	4	5
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

9. To what extent are the following digital options used by parliament to interact with the public?

	1	**2**	**3**	**4**	**5**
Email (for correspondence)					
Email Newsletter					
Websites					
Social media					
Instant messaging					
Blog					
Web-based discussion forum					
Uploading video/audio/photographs					
Podcasts					
Multimedia					
Internet					
Biometrics systems					
Wireless networks					

Appendix III: Interview Guide

Introduce the interview by stating clearly the purpose of the study and information you intend to get from the interviewee. After obtaining informed consent carry on with the interview guided by the following questions:

1. What are the digital options used to gather information in parliament?
2. What are the digital options used to store information in parliament?
3. What are the digital options used to disseminate information in parliament?
4. How often do Parliamentary Service Commission employees use digital platforms in transacting their day-to-day business?
5. How has Parliament as an organization used new ICT in its daily operations?
6. How would you describe reception of new ICT by Parliamentary Service Commission employees?
7. How would you describe the speed of embracing new ICT by Parliament as an organization?
8. What are the digital options used by parliament to interact with other arms of government?
9. What are the digital options used by parliament to interact with the public?
10. Which technologies do MPs use to communicate with constituents?
11. How long have they been using these technologies?
12. Of the technologies used, how are they rated in terms of their ability to support communication with constituents (and vice versa)?
13. What could improve the way that MPs use digital technologies?

14. How has the use of new technology affected the way MPs communicate with their constituents?

15. What are the advantages and disadvantages of new technologies for MPs?

16. What would you recommend in regard to parliamentary communication in an age of digital interactivity?