FACTORS INFLUENCING PROCUREMENT PERFORMANCE OF INDEPENDENT ELECTORAL AND BOUNDARIES COMMISSION

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ABSTRACT

Electronic voting (also known as e-voting)   encompasses both electronic means of casting votes and counting of votes. It can include punched cards, optical scan voting systems and specialized voting kiosk, transmission of ballots via telephones, private computer networks or the internet. A pilot program for Kenya's 2013 General Election, IEBC successfully registered 1.5 million Kenyans in 1600 registration sites in 18 of Kenya's 210 voting constituencies. Kenya chose fingerprint and facial biometrics for voter identification, and to ensure a clean voter list also elected to do multi-biometric matching. Failure of the Electronic Voter identification devices (EVID) and the Results Transmission Systems (RTS) acquired through second tender arose from the misunderstandings and squabbles within IEBC during the procurement stage. This study adopted a descriptive survey design. The study was conducted at the IEBC head office and included the general public. The population comprised of 450 employees of IEBC. Stratified proportionate random sampling technique was used to select the sample. The study grouped the population into the various employment levels that is top, middle and low level management. From each stratum the study used a proportion of 15% from each stratum to select 68 respondents. Primary as well as secondary data were collected. Primary data was collected using questionnaires. Secondary data was obtained from relevant literature review from studies, journals, magazines and the internet. Secondary information was collected from reports, business magazines and other relevant materials. The completed questionnaires were tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 20 to analyze the data. Descriptive statistics such as mean and standard deviation were used. Tables, pie charts, and graphs were used to present responses and facilitate comparison.

Key Words: procurement performance, Independent Electoral and Boundaries Commission

Introduction

The contributions by Bratton and van de Walle (1997) and Nohlen (1999) voluminous reviewing of elections in Africa remain the primary authorities on comparative African politics. One of the understudied areas – despite its focal interest in comparative politics – is the study of electoral systems. A few recent contributions deserve to be mentioned. Reynolds and Sisk's (1998) analysis of the potential of electoral systems for conflict management in Africa, Bogaards' (2000) discussion of the consequences of electoral laws, as well as Horowitz (1991) work on constitutional recommendations for divided societies, and Foweraker and Landmann (2002) study of the effects of electoral systems on democratic performance are especially insightful. Barkan's (1998) study stands out as the only one of its kind on agrarian societies that has sought to develop and challenge theoretical insights in the field of comparative politics based in Africa. Africa has been the scene of dramatic democratic reforms. The 1990s saw a significant transformation of the political landscape of the entire continent. The collapse of previously autocratic regimes paved way for democratic institutionalization (Gyimah-Boadi 2004; Bratton & Van de Walle 1997). More significant was the return of multiparty politics. In spite of this, there is a growing pessimism among many scholars in their assessment of progress of democratic consolidation in Africa. Rarely do their accounts reveal any positive contribution of governance institutions to democratic consolidation (Joseph 1999; Monga 1999; Bratton and Van de Walle 1997). These discourses present a debilitating performance of key governance institutions such as the Judiciary, Parliament and the Executive, among others, without a reference to the electoral institution that is expected to hold credible elections (CDD 2005; Gyimah-Boadi 2004).

There are different types of electronic voting systems with the advent of technology to avoid electoral frauds like paper based electronic voting, Direct Recording Electronic Voting and public network Direct Recording Electronic Voting. Very few researches have been carried out on mobile voting. One such system proposed (Wireless Mobile Voting, 2000) is where the voting machine works on an embedded system with a touch pad and a memory unit kept at the server in the main office. In another development, a voter is identified using a wireless certificate without additionally registering (Kim & Hong, 2007) when a user votes using his mobile terminal such as a cellular phone or a Personal Digital Assistant (PDA).

Global perspective

Biometric technologies, allowing the automatic identification of people using voice patterns, eye scans, handwriting style, faces, hands or fingerprints, have been suggested for use in the election process for eliminating fraud (Gentles, 2011). Fingerprinting, hand shape, and eye scanning have been used in the United States in driver licensing. Fingerprinting systems are being introduced into the election process in several countries, such as the Philippines, Jamaica, Argentina, and Cambodia (Gentles & Suresh, 2011). Voting process in today's era is behind its time in respect of the usage of modern ICT. The voting process is being seen mostly as a manual and paper based one. This process can be overwhelming, time-consuming and prone to security breaches by hackers and electoral fraud. Over the years technology related systems were being developed

to resolve some of the issues like electoral fraud, impersonation, double voting etc (Pfitzmann & Ahmad-reza, 2010). One such system is Electronic based voting that has been actively used for voting in countries like India. However, these systems seem to be prone to electoral frauds and voters have to make tremendous effort to cast their ballots. In countries that are better developed like in India, electronic voting (e-voting) is made possible and this technique encapsulates both electronic means of casting of votes and also counting of votes (Electronic Voting, 2009). This process cleared up lots of problems and barriers faced by the paper based voting process.

Just recently in 2012, the Fijian Government in the south pacific chose ESI Inc. (Electoral Services International) from among 11 proposals, consisting of four Fijian firms and seven international firms from Australia, Bangladesh, Belgium, Canada, Spain, and two from the United States. The decision process took more than three months, with presentations and extensive question and answer sessions. In choosing to use the ESI Inc. solution, Fiji has followed recommendations made by the European Union's report on Fiji's 2006 elections, which cited irregularities with voter registration and voting practices.

Kenyan perspective

As a pilot program for Kenya's 2013 Presidential Election, Electoral Services International Inc. (ESI) successfully registered 1.5 million Kenyans in 1600 registration sites in 18 of Kenya's 210 voting constituencies. Completed in time for a 2010 Kenyan referendum, participants were able to use their new voter cards for the first time to vote in the referendum. Kenya chose fingerprint and facial biometrics for voter identification, and to ensure a clean voter list also elected to do multi-biometric matching. As part of the exercise, a pilot project in selected constituencies using biometric voter identification was also conducted to avoid ballot stuffing. Kenya, ICTs is not left out, the Electoral Commission of Kenya (ECK) recorded increased participation by registering the highest number of voters in the elections with an informed mind (Kenya: ICT Polls, 2007).

Statement of the Problem

According to republic of Kenya (RoK, 2013) the BVR kits used in compiling the register of prospective voters were acquired by the use of a single sourced tender after IEBC was unable to procure them competitively due to vested interests among top electoral officials (RoK, 2013). Findings by the International Center for Policy and Conflict (ICPC) indicate that the process of acquiring the biometric kits and the voter identification devices was riddled with controversies that threatened to derail confidence in the voters' roll (ICPC, 2013).

A report by IEBC (2013) showed that the failure of the Electronic Voter identification devices (EVID) and the Results Transmission Systems (RTS) acquired through second tender from Face Technologies of South Africa mainly arose from the misunderstandings and squabbles within IEBC during the procurement stage. Further statistics from the Africa Centre for Open Governance (AfriCOG) show that presidential elections were petitioned in the Supreme Court (AfriCOG, 2013). About 8.0% of the polling streams observed that the EVIDs were

malfunctioning by 11.30 am on the Election Day and by 8.30 pm, 55.1% of the streams observed that the EVIDs had completely failed (ELOG, 2013).

Local studies that have been done include Kegoro (2013) who conducted a study on the shortcomings of IEBC during the 2013 general elections. To date, there is limited research that has been carried out to determine exactly what could have contributed to the massive failure of the intertwined electronic voting system. Therefore to bridge this gap, the study seeks to determine the procurement performance of independent electoral and boundaries commission (IEBC) during the general election period 2013 in Kenya.

Theoretical Review
The Corporate Accountability Theory

This theory holds that corporations are responsible to and subject to the will of the people, that is to say, society. The managers and executives of corporations are the employees of the business's shareholders (public) (Barberis, 1998). As such, they have a contractual and moral-responsibility to their employers: That responsibility is to conduct the business in accordance with their desires, which generally will be (according to this study) to conduct free and fair elections while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom (Friedman, 1990).

Thus, it is the moral duty of corporate executives to carry out the wishes of the shareholders, who invest in order to make a profit.. Managers cannot morally engage in any activity that reduces the corporation's profitability. Dawn (1994) believes corporations to be on the same level as government, by necessity they must be limited: Corporations are effectively like states, private governments with vast economic, political, and social impact. According to Friedman (1990), democratic society, even if it encourages such groupings for private economic purposes, should not suffer such public power without public accountability.

The corporate accountability theory rests upon two major assumptions. The first is that corporations are "creatures of the state," This assumption means that corporations are created by, and indeed could not exist without, government charters. The second assumption is that corporations, because of their size and economic power, are on the same level as governments. They possess as much "public power" as do states; therefore they, like governments, must be constitutionally limited (Friedman, 1990).

Technology Acceptance Model

The Technology Acceptance Model (TAM) is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, notably: Perceived usefulness (PU) - This was defined by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job

performance". Perceived ease-of-use (PEOU) - Davis defined this as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989).

In elections, biometric products remove the need for passwords and Personal Identification Numbers or PINs. Biometric systems exchange knowledge with individual's features such as finger print or proximity identification. It makes it comfortable and fast to record features. Contrary to passwords and PINs, biometric features are dynamic – meaning that they have the capability to change overtime. This continues to be the most challenging property of the biometric system itself (Ortega *et al*, 2004).

Around the world, and in advanced civilizations, or in the developed world, e-Voting is probably the most security sensitive process handled electronically nowadays. This is so because the worst-case scenario is really very catastrophic (National Science and Technology Council, 2007). One of the main issues to stress is the difference between biometric authentications compared to 'classic' authentication such as those with smart cards. The well-known concept of card readers with fingerprint authentication is different from biometric authentication. In other words, biometric inputs on smart cards are read not to authenticate the voter's information on the smart card, but to authenticate the smart card itself. In that regard, the voting system in this manner does not interact in any shape or form with the biometric characteristics of the voter, but helps in authenticating the voter's smart card. Other issues with the biometric system are its young age, with a set of standardization effort going on (Jain *et al*, 2006).

In this research, a critical factor for a biometric user authentication mechanism is its acceptance with its users. Voting is mostly a matter of trust. Regardless of its actual security, a voting system (electronic or not) is only as good as its acceptance with its users. Therefore, any introduction of a new voting system requires a good deal of work to increase its acceptance with the future users. This is especially true with biometric systems. Increasing the acceptance of such e-Voting systems is probably a slow process (Campbell, 1997).

New Public Management Theory

The theoretical underpinnings of ICT application in public services come from the new public management (NPM) which originated in the late 1970s in the United Kingdom, Australia and New Zealand. Since then, it has come to dominate thinking about the public sector reform and is hailed as a new paradigm. Different factors led to the emergence of NPM, some of which are: fiscal crises of governments, poor performance of the public sector in different arenas, imperious bureaucracy, lack of accountability, corruption, changes of people's expectations and the emergence of better alternative forms of service delivery (Common 1999; Minogue 1998). In other words, large government was poorly performing being non-accountable and irresponsive to the beneficiaries, while on the other hand there has seen a wave of competitive private sector customer oriented strategy. All these called for customer oriented, result driven and effectively enterprising government. NPM emphasized the need for "modern" bureaucracy with no "traditional" bureaucracy so as to "reinvent" government and changing its role from "rowing" to

"steering". Thus, NPM heralds the transformation of the citizen into a customer of public services, who pays for public services, and hence has choice and the exit option, and the opportunity to give feedback on public service delivery (Prakash & Singh). As per NPM philosophy modern government should be customer oriented, competitive and result oriented, and thus ICT has a room to play for enhancing the effectiveness of government services. In short, as a strong theoretical foundation, the concept of new public management is used to strengthen the need and importance of ICT in the public sector.

Game Theory

As game theory has swept through economics and related disciplines, among its many payoffs have been new insights into that most fundamental of business processes, competition. A perfectly competitive firm does not pay attention to what any of the other firms in the industry are doing. Instead, it passively accepts the going market price (Brewer *et al,,* 1995). Any "rivalry in the market" is assumed away. The new game-theoretic models, by contrast, view competition as a process of strategic decision-making under uncertainty; they depict people and firms engaged in competition. Revealing information is seen to be one of competition's effects. Bidding competition can also serve to reveal another kind of information. At the time of bidding, however, no one knows what this value is. Each bidder has an estimate of value, which is subject to error (Chao & Wilson, 1996).

Bidders are now faced with the risk of the winner's curse. The winner is likely to be the bidder who has most overestimated the item's value. There is a tendency, therefore, for the winning bidder to overbid. Bidders can avoid the winner's curse by bidding cautiously: recognizing they will win only if they have relatively high estimates, and discounting their estimates. The winning bid then is on average below the item's true but unknown value; but with more and more bidders the price approaches the true value, and with a very large number of bidders, comes very close to it (Wilson, 1977; Ilgrom, 1979). This is a remarkable result. So one person knows the true value; each individual's estimate may be highly imperfect. But the price is an accurate value estimate. The competitive process serves to aggregate the scattered information.

Agency Theory

The agency theory describes the development of ICT in organizations. The dramatic decline in the costs of hardware and the trend towards the increased power of microcomputers and minicomputers has enabled significant growth in ICT investment (Aineruhanga, 2004). The success stories of many countries may be attributed in large part to their adoption of policies and strategies that focused on the use and exploitation of information and communications technology (ICT). These include: strong government commitment and support for ICT development in the form of policy incentives; increasing levels of investment in ICT research and development projects; liberalized and accelerated investments in key infrastructure and telecommunications facilities; increasing manpower development and skills training, particularly in ICT (Kashorda & Waema, 2007). ICT expertise and knowhow are a vital component of the support infrastructure. Developing and maintaining computerized information and

communication systems require a large pool of competent ICT professionals for systems beyond office productivity and clerical applications (KIC, 2006).

Most government agencies are essentially left to themselves to establish or adopt available ICT industry standards. While most internationally recognized standards for hardware, software, and data communication protocols and equipment can be adopted readily or with certain modifications, the establishment of data and application standards is equally important. Having common data and application standards in government is essential for compatibility, for sharing databases, and minimizing redundancy and inaccuracies in common and/or integrated applications.

The challenge, therefore, is to ensure interoperability and compatibility among the different information and communication systems of government. The immediate task is to formulate, disseminate and enforce a common set of ICT standards for all government organizations. Their numbers vary in proportion among the different departments. Ironically, some departments have very small proportions of their people using computers and this indicates the need for massive training and change management in government agencies to retool the existing manpower pool being tapped for ICT functions. Since the current remuneration package for government personnel is relatively low compared to the prevailing market rates, agencies find it difficult to recruit and maintain qualified ICT personnel.

It is also imperative that agency heads be educated on ICT to raise their appreciation level of the importance of ICT in improving workplace processes and for policy formulation and administration. The variety in the size and nature of the ICT staff in different government organizations (for example some are bureaus, some are divisions, while others do not exist as formal structures) also partly accounts for the varying levels of computerization efforts in government.

Conceptual Framework

A conceptual framework is a logically developed, described and elaborated network of interrelationships among variables integral in the dynamics of a situation being investigated. It explains the theory underlying these relationships and describes the nature and direction of these relationships. A variable is a measurable characteristic that assumes different values among the subject. It is therefore a logical way of expressing a particular attribute in a subject (Mugenda &Mugenda , 2003). A dependent variable is the variable of primary interest to the researcher. The dependent variable will be the procurement performance of IEBC. An independent variable is the one that influences the dependent variable in either a positive or negative way. According to Judd *et al,* 2001) a moderating variable is a variable that influences, or moderates the relation between two other variables and thus produces an interaction effect.

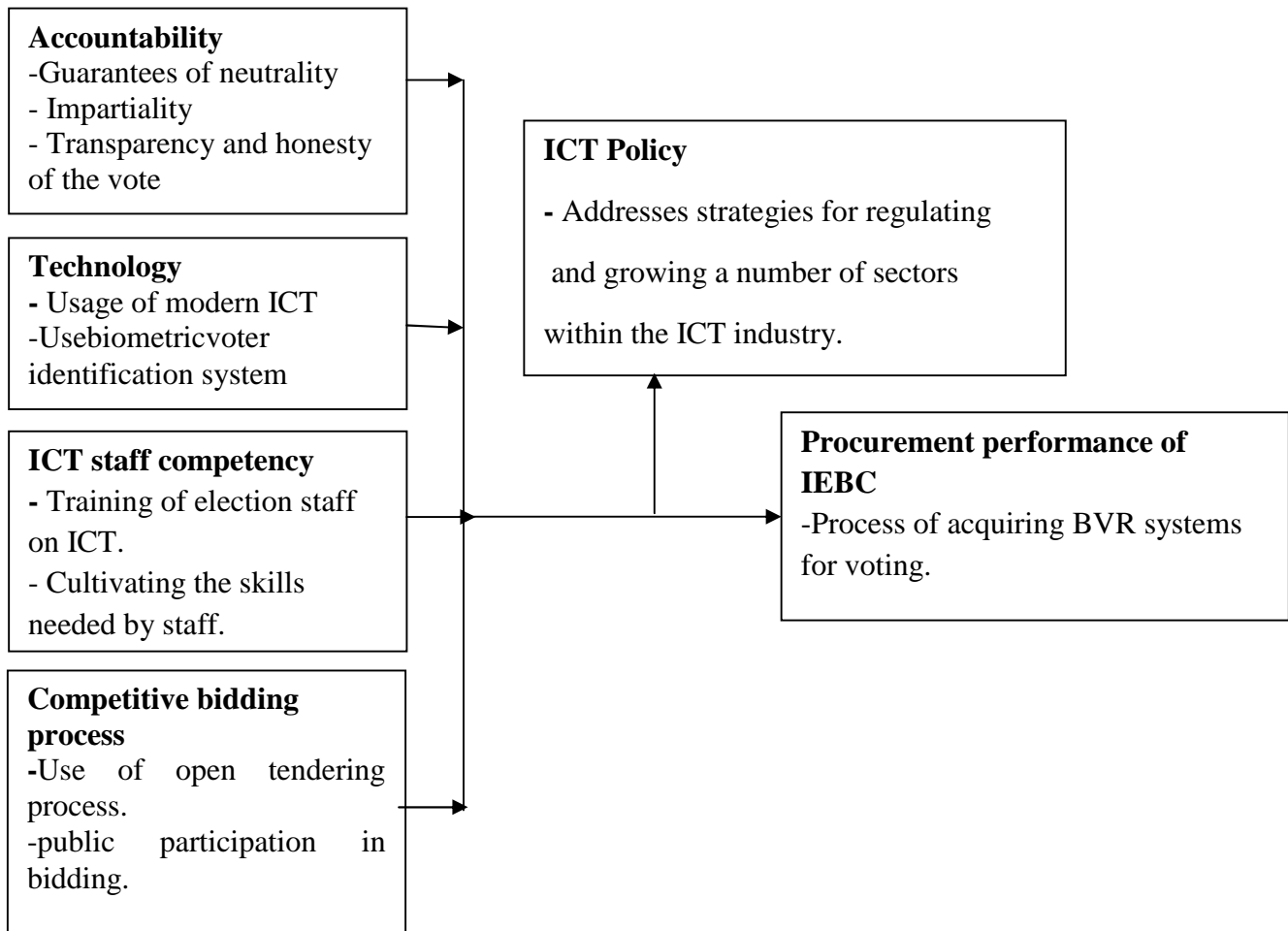*Independent Variable*   *Moderating variable*   *Dependent Variable*

Figure 1: Conceptual Framework

Empirical Review
Accountability

A study by Ismaila, Hounkpe, Jinadu, and Kambale (2011) found that the political obligation of accountability extends to representatives in the administrative districts in charge of steering the electoral process at the community level. This systematic infiltration of the whole chain of the electoral process by the government and its territorial branches was quickly perceived as a negative factor limiting the unfolding of the democratic process in the new African democracies under formation. It is not able to provide the traditional minimum guarantees of neutrality, impartiality, transparency and honesty of the vote.

The study also found out that on the security of the electoral system, there is a difference in the views of the administration responsible for elections and those of certain stakeholders in the electoral process. According to the administration, great strides have been made. This opinion is

based on the use of biometrics that allow voters' fingerprints to be checked automatically before their voters' card is even produced. In addition, the electronic data is matched to the national identity card. In addition to measures to verify the identity of voters, the system for the allocation of polling stations has also been improved (Ismaila *et al*, 2011).

Technology

Voting process in today's era is behind its time in respect of the usage of modern ICT. The rapid spread of information and communication technology (ICT) is changing the way economic and social development occurs in developed countries of the world. ICT-tools and developmental platforms like ICT4D (ICT for Development) have the potentials to transform and make institutions, businesses, and organizations more productive, enhance skills and learning, improve governance at all levels especially in the area of democracy. In Ghana, Technology dominated these elections, with candidates using popular social media platforms like Twitter and Facebook to spread their messages. But it was the introduction of a biometric voter identification system that captured the most attention (Barnuevo, 2012). (Gentles & Sankaranarayanan, 2012). found that over the years, technology related systems were being developed to resolve some of the issues like electoral fraud, impersonation, double voting etc. The study revealed that these systems seem to be prone to electoral frauds and voters have to make tremendous effort to cast their ballots. It was also clear that there are still a few very important areas which have to be identified and addressed in relation to the Security which involves a person being able to vote in a secure manner, the time spent for voting by voters, the efficiency in counting of votes and the cost involved in employing people towards monitoring the voting process. So taking these areas/issues into consideration, biometrics authenticated mobile voting system was introduced (Gentles & Sankaranarayanan, 2012).

ICT staff competence

Electoral Services International (2011) who manufactures Electonic Voter Registers (EVR) which is a fully supported solution and includes dedicated support before and during the registration exercise report that while the immediate goal during a registration exercise is to keep the project on track, attention is paid to knowledge transfer. The study reported that the result is that the government can take ownership of the EVR solution and manage it according to its needs. This starts with thorough training of trainers who will then train field operators and clerks. ESI Inc. ensure proper sessions and course materials are provided to trainees. Hands-on experience will cultivate the skills needed to use the system and to train others to do the same. More extensive training is provided for staff as system administrators (ESI, 2011)

David's (2004) study on Electronic Voting found that the tendency to recruit election staff on a selective or even partisan basis and collusion between the party in power and the administrative authorities has created confusions obscuring the relationship between the administrations on the one hand, and ordinary citizens and the opposition parties on the other hand. In this context, becoming a card-carrying member of the ruling party opens doors to positions of responsibility, when it does not purely and simply give rise to favouritism. Some civil servants thus feel obliged

to follow orders to please or satisfy the political authorities and thereby maintain their special privileges (David, 2004).

In the Philippines, The National Computer Center (NCC) assumed a pioneering role in the establishment of computerization capacities in the government. Its interventions were direct and total and included systems conceptualization, design and development, implementation, and manpower training. Its role has since expanded to being the government's regulatory arm in the areas of ICT training certification and procurement and service provider to ICT resource management for the public sector. The 2003 NCC survey on the level of computerization in government showed that only 1.5% or 4,120 of the total 282,888 employees in respondent agencies comprise the ICT manpower complement, and about half of these are data encoders and computer operators. The others are programmers, systems analysts, and managers/administrators. But the bulk of government personnel do not use computers (NCC, 2003).

Competitive bidding process

A study by the African Union (2012) Elections Observation Mission reported that the process of procuring the BVR machine was initiated early and conducted in a manner that conformed to Public Procurement and Disposal Act 2005 and its attendant Regulations 2006. The procurement process was subjected to competitive bidding process in which different companies submitted the tender to supply the BVR machines. Companies were scored on the basis of their performance on the various examinable areas according to evaluation criteria set out in the tender document. As a further demonstration of transparency and accountability, the results were submitted to the Tender Committee that affirmed the Electoral Commission's decision. Political parties not only participated in testing the various samples provided by the suppliers, but also monitored the entire registration exercise (AU, 2012).

ICT Policy

The ICT policy addresses strategies for regulating and growing a number of sectors within the ICT industry. These are: Information technology, broadcasting, telecommunications, postal services, radio frequency spectrum, and achieving universal access. Within each of these sectors, the policy focuses on principles for achieving its overall goals. These principles are: "infrastructure development, human resource development, stakeholder participation and appropriate policy and regulatory framework" (Ministry of Information and Communications, 2006).

A study by Warigia (2010) confirms that an ICT policy that produces broad access quickly is better than one that does not. Accordingly, success in ICT policy making can be measured by three empirical measures: speed of passage, scope of implementation, and distribution, as well as one normative measure, process. Process represents an important normative dimension of ICT policymaking. Process measures the extent to which the ICT policymaking involves the citizenry, as represented by individuals, civil society groups, local private sector groups, and ideally, urban and rural residents. Kenya is a case of slow speed of passage, low scope of implementation, low distribution, but high process. The political history of Kenya's ICT

policymaking explains why this county, with such capable people and relatively open ICT policymaking, has struggled to keep up with its poorer neighbors.

The National ICT plan (NICTP) is generally a vision document, aimed at providing the regulators, government and "stakeholders" an idea of the ideal vision for the ICT industry in Kenya. It stipulates what should be in place and how things should happen but is not a legislative document with specific statutory powers.

Procurement performance of IEBC

The study by Warigia (2010) found that as indicated in the name, the BVR system was used to register voters in advance of the elections and to prepare a Certified Voter Registry, which produced a manual list of the voters. Contrary to what has been reported in some media outlets, the BVR equipment was not used on or after Election Day. Procurement of the BVR system begun through tender reference number "IEBC O8/2011-2012 - Supply and Delivery of Biometric Voter Registration (BVR) Solution" (Nyang'or & Gomes 2013). The tender called for the supply of a BVR system and 9000 BVR kits to be used to register voters at registration centres throughout Kenya. The tender asked that the kits contain a laptop loaded with specialized and secure database software for voter registration and periphery equipment. The IEBC cancelled the tender in July 2012 stating irregularities in the tendering process. Given short timelines to prepare this advanced registration system, several countries were instead approached to support the sale of a BVR system through direct procurement using a government-to-government arrangement. Canada was selected to supply the equipment (Nyang'or & Gomes, 2013).

In order to meet tight deadlines for voter registration, the scope of the project was increased and IEBC requested the number of BVR kits be increased to 15,000 which meant an incremental increase in the price. The appropriate number of kits, adequate training and technical support was provided by Morpho Canada and their principal, Safran Morpho based in France. The project was unrolled within all deadlines and approximately 14.3 million Kenyan voters were registered by the December 18th, 2012 deadline. An electronic database containing a Certified Voter Registry, which produced a manual list of the voters free from duplicates, was prepared as was a printable version of the manual list of voters (for example the manual list used on voting day). The list was vetted and approved by the IEBC and registered political parties in Kenya (ELOG, 2013)

The use of BVR has provided Kenya with the largest and cleanest registry in the country's history. It removed the 'dead voters' that plagued earlier registries and prevented people from registering twice. The creation of the registry using BVR now allows the IEBC to link to the national database of deaths and new identity card registrations to keep the voter registry up to date, something few countries in the continent are able to do and a substantial improvement for this and all future elections in Kenya. Through close collaboration and excellent support of the IEBC, the BVR project was delivered on time, on budget and free from technical malfunctions. The technology that was successfully used for voter registration in late 2012 was different and

entirely separate from the technology used to identify voters at polling stations (Nyang'or *&* Gomes, 2013).

Research Methodology

Research Design

This study used a descriptive research design. This design is appropriate because it is considered suitable for gathering qualitative information and generating appropriate conclusions with respect to the research questions (Mugenda & Mugenda , 2003). This is the most suitable design because data was collected only from one organization and hence its adoption for this study

Population

A population is the total collection of elements about which we wish to make inferences (Cooper & Schindler, 2003). The target population was the staff of the Independent Electoral and Boundaries Commission who comprise of top, middle and low level management staff which made it easier to get adequate and accurate information necessary for the research. The population selected was considered to have a higher level of information disclosure.

Sampling and Sample Size

A sample size is a set of entities drawn from a population with the aim of estimating characteristics of the population (Cramer *et al*, 2004). The sample size for this study is 68 which is equivalent to 15% staff working in IEBC. According to Mugenda & Mugenda, (2003), a representative sample is one that is at least 10%-20% of the total population. Stratified sampling method was used to obtain a sample of the respondents. This technique is ideal because it gives the respondents at all levels in the organization an equal opportunity to participate in the study without bias. (Cramer & Howitt, 2004).

Data Collection Method

The study used a questionnaire to collect the required data. A questionnaire is a data collection instrument that sets out in a formal way the questions designed to elicit the desired information. It consisted of a list of structured questions, un-structured questions and Likert rating scales relating to the field of inquiry with space provided for selection of choices and explanatory answers. Close ended questions have the advantage of collecting viable quantitative data while open-ended questions allowed the respondents freedom of answering questions and the chance to provide in-depth responses Mugenda & Mugenda,(2003). Questionnaire is preferred because it is efficient, cheap and easy to be administered. The questionnaires were administered through drop and pick to identify respondents with a brief explanation on their purpose and importance.

Data Analysis

Primary data collected was coded and analyzed with the help of the Statistical Package for Social Sciences (SPSS). The analysis used descriptive statistics such as mean scores and standard deviations. In addition, a multiple regression analysis and correlation coefficient analysis were carried out to determine procurement performance of independent electoral and boundaries commission (IEBC) during the general election period 2013.

The regression equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$):   equation (i)

Whereby   Y = Procurement performance of IEBC
             X_1 = Accountability

             X_2 = Technology

             X_3 = ICT staff competence

             X_4 = Competitive bidding process

The results were presented using tables, graphs and charts for ease of understanding.

To test the moderating effect of ICT policy, moderated multiple regression (MMR) analysis which is an inferential procedure consisting of comparing two different least-squares regression equations (Aguinis, 2004; Aiken & West, 1991) was utilized. Using the MMR analysis, the moderating effect of the variable (product term) was analyzed by interpreting the R^2 change in the models obtained from the model summaries, and the regressions coefficients for the product term obtained from the coefficients tables. Prior to conducting the MMR analysis, preliminary analyses was conducted to ensure that there was no violation of the assumptions of normality, linearity and homogeneity of error variance (Sazali, 2009). The population data was carefully examined to avoid the occurrence of Type 1 error which is the error of rejecting the true null hypotheses at a specified level of significance and Type 2 error (β) which is the error of failing to reject a false null hypotheses at a specified power (Aguinis, 2004). In this study, equation ii below was used to represent the variables in the ordinary least-squares (OLS) model:

(OLS model): $Y = \beta_0 + \beta_1X + \beta_2Z + e$ (1)   equation (ii)

To determine the presence of moderating effect, the OLS model will then be compared with the MMR model which is represented by Equation iii below:

(MMR model): $Y = \beta_0 + \beta_1X + \beta_2Z + \beta_3X*Z + e$ (2)   equation (iii)

where,

Y = Procurement performance of IEBC as the dependent variable,

X = The four variables (accountability, technology, ICT staff competence and competitive bidding process).

Z = a hypothesized binary grouping moderator (presence or absence of ICT policy),

X*Z = the product between the predictors (The five variables * ICT policy),

β_0 = the intercept of the line-of-best-of-fit which represents the value of Y when X = 0,

β_1 = the least-squares estimate of the population regression coefficient for X,

β_2 = the least-squares estimate of the population regression coefficient for Z,

β_3 = the sample-base least-squares estimates of the population regression coefficient for the product term, and

e = the error term.

Conclusions

The study concludes that voting process in today's era is behind its time in respect of the usage of modern ICT to a great; that introduction of a biometric voter identification system captured the most attention; that there are still a few very important areas which have to be identified and addressed this is the time spent for voting by voters, the efficiency in counting of votes and the cost involved in employing people towards monitoring the voting process to a moderate.

From the findings, the study also concludes that the process of procuring the BVR machine was initiated early and conducted in a manner that conformed to Public Procurement and Disposal Act 2005 and its attendant regulations 2006 to a great; that companies were scored on the basis of their performance on the various examinable areas according to evaluation criteria indicated in the tender document to a great extent; that the procurement process was subjected to bidding process in which different companies submitted the tender to supply the BVR machines

The study also concludes that the success in ICT policymaking can be measured by speed of passage, scope of implementation, and distribution, as well process; that the ICT policy addresses strategies for regulating and growing a number of sectors within the ICT industry; and that an ICT policy that produces broad access quickly is better than one that does not and that the ICT policy focuses on principles for achieving its overall goals

Finally the study concludes that the IEBC cancelled the tender stating irregularities in the tendering process and Canada was selected to supply the equipment; that the use of BVR has provided Kenya with the largest and cleanest registry in the country. Also the study concludes procurement of the BVR system was begun through a tender of Supply and Delivery of Biometric Voter Registration (BVR) Solution and that the BVR kits contained a laptop loaded with specialized and secure database software for voter registration and periphery equipment.

Recommendations

The study recommends that IEBC to fully automate its procurement operations besides replacing obsolete IT equipment with modern ones. Further the study recommends that IEBC should consider fully automated systems because in use of ICT there is the increasing complexity of organizational decision making and information needs.

Secondly the study recommends that the government should take ownership of the EVR solution and manage it according to its needs by training of trainers who will then train filed operators and clerks. Also the employees in government agencies that comprise the ICT manpower should be increased in number to enhance efficient output.

The study also recommends that IEBC should be accountable in information technology investments since accountability in information technology clearly plays a leading role in growth of firms who have invested substantial resources in new types of IT enabling them to improve

efficiency in and coordination of operations, thereby reducing complains levels which gives them a competitive advantage.

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