THE IMPLEMENTATION OF ICT TOOL FOR THE FACILITATION OF ELECTORAL PROCESSES IN NIGERIA: A CASE STUDY OF THE INDEPENDENT NATIONAL ELECTORAL COMMISSION

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ABSTRACT

In the last decade, the electoral processes were purely manual where the verification process is limited to physical checking from voters list to confirm the genuineness of the voters' card. The process of verification was lengthy and cumbersome during the election, in most cases; there were problems of multiple registrations. The remarkable growth in Information and Communication Technology (ICT) to electoral processes created new voters verification opportunities for the electorates. This opportunity was known as Smart Card Reader (SCR). This research aims to investigate the implementation of Smart Card Reader (SCR) and its challenges during the verification process of election. Through Actor-network Theory the theoretical lens, the study will present the processes of the implementation looking at the challenges. This will include the Problems in Problematisation that started the implementation challenges, imperfect intersement that led way to more challenges and incompetence in the enrollment. This study proposes a case study methodology to understand the phenomenon under investigation. Multiple data collection methods; observation, interview, focus groups will be used to collect data. The research is expected to contribute to the IS research adding to the literature on ICT to electoral processes.

KEYWORDS

Actor-network Theory, Smart Card Reader, Independent National Electoral Commission, Implementation Challenges, Nigeria

1. INTRODUCTION

Information and Communication Technology (ICT) is believed to play a vital role in improving electoral processes (Debrah, Effah, & Owusu-Mensah, 2019; Avgerou, Masiero, & Poulymenakou, 2019). This is due to its role in ensuring transparency by providing free and fair elections (Effah & Debrah, 2018). The electronic electoral process (e-electoral) refers to the use of ICT for improving the electoral process, increasing trust and efficiency in its management (Wolf et al., 2011). It is a techno-organizational disposition which is embedded in the processes of an election with different socio-economic context around the globe (Avgerou et al., 2019). Thus, it aims at improving the processes of election to overcome historical forms of electoral fraud (McGrath and Maiye, 2010).

The implementation of e-electoral processes has become popular around the world in representing present democracy (e.g., Avgerou, 2013). It provides an opportunity to improve both the governmental agency and the public in general by enhancing efficiency, transparency, and effectiveness for politicians, citizens, and civil servants (Twum-Darko, Noruwana, & Sewchurran, 2015). However, when real implementation materializes, the intended end result does not occur (Gunawong & Gao, 2017). The unpleasant part is that the implementation is bedeviled with challenges (Ashaye & Irani, 2019). Some of these challenges include; lack of proper internet connectivity and properly skilled training (eg., Sambo & Alexander, 2018; Ramli, 2017).

In the developing countries, discourse around the implementation of e-electoral processes are dominated with failure, such studies have been carried out; In Nepal (Sharma, 2014), Uganda (Asiimwe, 2013), Sri Lanka (Heeks and Stanforth, 2014) and Ghana (Effah and Debrah, 2018). In some cases, about 80% of the projects in developing nations have failed and abandoned (Gunawong and Gao, 2017). Despite studies on the

implementation of Smart cards, there is little understanding of the implementation of ICT to electoral processes (Adeshina and Ojo, 2017). Heeks & Stanforth, (2014) argued that implementation practice is under-researched. Thus, Walsham (2017) emphasized on the need for more research reflecting on technology intervention to political discourse. In terms of studies associated with Smart card for verification during an election, most of the studies tend to investigate the causes of failure of Smart Card for multiple purposes or other purposes in e-government research, and suggestions were given based on the multifunction of the smart card instead of strictly for verification during an election (Gunawong & Gao, 2017; McGrath, 2016). Although, the study by Effah & Debrah (2018) investigated biometric technology for voter verification and identification, the study adopted activity theory as a lens to guide the research. It is argued that the verification process by the use of Smart Card guarantee (SCR) a credible, free and fair and transparent election (Alebiosu, 2016), which is the main process of election. The verification by the use of SCR increased public trust and confidence in the electoral process (Alebiosu, 2016). This reality encouraged this research to focus on the implementation of smart card for verification and its challenges during elections in Nigeria.

Globally, democracy has been widely accepted as the best means of electing leaders for good governance (Abdulhamid et al., 2013). However, the election process has always been questioned and in some instances results in creating social, political and economic instability (Abdulhamid et al., 2013). Similarly, the electronic voting system (e-Voting) has also been widely accepted as an alternative to the manual paper voting method (Nkohkwo and Islam, 2013). In addition, the use of card readers in the 2015 and 2019 elections restored confidence in the electorates. Consolidating the gains and improving the electoral process is therefore imperative to sustainable democracy and good governance in Nigeria. Theoretically, the implementation process that is categorized with human and non-human actors have not been ignored; rather, the majority of the research on the implementation of ICT to electoral processes reported cases of failure at the initial stage of problematisation (Gonawong & Gao, 2017) This could be achieved by integrating all the actors in the electoral process through in-depth analysis.

Thus, the purpose of this study is to investigate the implementation of Smart Card Reader (SCR) in the Nigerian electoral processes, and to understand its challenges using ANT as a lens to view the processes and explore the relationship between human and non-human actors. This research will build on the concept of generalized symmetry by maintaining the interaction between human and ICT in terms of implementation.

1.1 Aim and Objectives

The aim of the research is to understand the implementation of Smart Card Reader, the relationship among heterogeneous actors on Nigeria's electoral process and challenges to implementation.

Thus, the specific objectives of the research are:

- To investigate the process of implementation of SCR to the Nigerian electoral process as the phenomenon of this research under investigation
- To use ANT, human and non-human actors as the theoretical lens for building new findings into the electoral processes in Nigeria
- To further understand the causes of the challenges of SCR used in the Nigerian electoral processes

1.1.1 Research Questions

Based on the underlying problems and the stated objectives, the study intends to pose the research question thus:

- How does the implementation of SCR impact on the electoral processes in Nigeria emerged?
- What are the causes of challenges to SCR in the Nigerian electoral processes?
- How do the relationships between heterogeneous actors in the translation model influence the implementation of ICT for the Nigerian electoral processes?

2. RESEARCH DESIGN

To address the research aim, an inductive research approach will be adopted. The research will be empirical in nature and investigation will be conducted to understand the actors involved both non-human and human for

the implementation SCR during the verification process in the Nigerian election. Interpretive approach will be adopted for the research (Walsham, 2006). This is because meanings will be derived from the motivation of individual interpretation. Interpretivist believes that meanings are understood through social context that is social constructivist (Adom et al., 2016). The interpretivist approach aimed at understanding the cultural and social life of people's characters and rules out the natural science method (Walsham, 1995; Chowdhury, 2014). This will enable the researcher to understand the reality of the phenomenon under investigation.

The research will be carried out at the Independent National Electoral Commission (INEC), and the general public (electorate). The research will be exploratory in nature (Rahi, 2017) with the aim of understanding how the implementation of ICT on the verification process of election in Nigeria emerged. The qualitative data will be identified and analyzed through thematic analysis (Maguire and Delahunt, 2017).

2.1 Research Procedures

The research will adopt an interpretivist case study approach (Klein and Myers, 1999) due to its ability to explain the complex socio-technical interaction process using interviews, case descriptions, and empirical observations (Thapa, 2011). Qualitative data will be collected from Independent National Electoral Commission (INEC) staff and the electorates.

2.2 Data and Collection Procedure

Interviews, participants Observations and organizational documents will be applied as techniques for data collection (Walsham, 2006). The interviews will be conducted with participants. The design of the interview questions will be guided by the translation models of ANT (Nuridin et al., 2014). The participants will be INEC officials both lower and upper bureaucrats and the electorates. The interview questions will be semi-structured that will involve both open and closed-ended questions. This will allow interviewees to be flexible while answering the questions. The use of interviews will allow the researcher to absorb into the project's social, cultural, contextual, and organizational reality of the various actors (Klein and Myers, 1999).

Participant observation and document analysis will be carryout. Participant observation will assist in carrying out a database on day-to-day activities happening at the INEC. Feelings, ideas, and reactions of the participants will be observed and noted for the study. Additionally, how systems works and support given to the systems will be observed.

Besides, documents will be analyzed as other sources of data collection. Document analysis will give more details of things that were not clear during observations and interviews. INEC project documents and Nigeria ICT tools for election policy documents will be collected and analyzed. The aim was to understand the relationship and influence of other non-human actors within the project network (Fenwick and Edwards, 2011). The use of various qualitative methods to collect data will help in ensuring triangulation and a rich data set to illustrate the various networks of actors involved in the implementation and use of ICT-enabled interventions aimed at improving the electoral process.

2.3 Data Analysis

Qualitative data analyses will be carried out to analyze all the data that will be collected. Interviewed data will be transcribed through examining, pinpointing and recording patterns into themes following the teachings of thematic analysis (Braun and Clarke, 2013). An iterative process will be used for reading the transcript samples that will lead to the creation of a codebook. All related obscurity will be clarified after the coding of the transcripts samples and codebook will be filtered. The themes will be categorized reflecting respondents' feedback relating to the implementation of ICT and challenges. The transcripts will be coded and merged into larger themes. Different themes relating to the relationship of actors on issues of the implementation and challenges will be contained in the codebook. The coding will follow the movement of heterogeneous actors as it relates to the case study (Wright, 2015). The main themes will be obtained through playing and re-playing of recorded interviews. Also, reading and re-reading the interviewed transcript as discussed by the participants will be analyzed. Secondly, the themes will be grouped in relation to the translation models of Actor-Network Theory (Bengtsson & Lundstr, 2013). These will be done with careful consideration for the implementation of ICT tools to electoral processes as a phenomenon for the research. Field note taken during observations will be analyzed using codes that will be used for the interviews.

2.4 Theoretical Approach

The research is theoretically based on the sociology of translation upon human and non-human actors of Callon, Latour and Law translation model of Actor-Network Theory (ANT) (Callon, 1986; Latour, 1996; Law, 1992a). ANT will explain interacting actors towards achieving goals or objectives of the verification process of Nigerian election. ANT serves as a theoretical lens through which the underpinning reality of the implementation phenomenon under investigation will be viewed. It is of the view that knowledge is the end product of a heterogeneous network of aligned interests. The ANT considered the process of a heterogeneous network as pieces from technical, textual, social and conceptual which are put together and translated to produce an end product (Law, 1992). It is concerned with the link between human and non-human (institutions, organization, society, machines and, agents). It is regarded as the “*sociology of translation*” and it is worried about the “*Mechanics of Power*” (Law, 1992). The “*Mechanics of Power*” and its relationship to organization believes that there is a Macrosocial or Macroactor and Microsocial or Microactor in translation (Law, 1992). The Macro and Micro actors are referring to human and non-human actors involved in ANT translation. Both non-human and human actors are not separated from each other in the translation process (Callon, 1986).

3. CONCLUSION

In conclusion, the study will make three broad contribution; First, the study will contribute to; the literature of IS research on the analysis of ICT on electoral processes using ANT, it will increase the deliberation on the implementation of ICT and theorization for developing countries, and depicting the intervention of ICT for electoral processes and exposing more of the loopholes for deploying ICT to the electoral process. Secondly, it will contribute to the theory where the study is first of its kind to look into the ANT and the verification process of an election using SCR in developing countries. Thirdly, the study will contribute to practice where findings from the study will help in curbing e-electoral processes fraud. The research will be limited only to the phases of implementation of the Smart Card Reader focusing on its challenges during the verification process of an election. The expected recommendation is that findings from this research will proffer solution to overcoming the challenges associated with SCR.

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