

AN ASSESSMENT OF SMART GOVERNMENT APPLICATION OF TECHNOLOGY IN NIGERIA CUSTOMS SERVICE: A STUDY OF ZONE A LAGOS

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ABSTRACT

The Nigeria Customs Service is facing the challenges of meeting up with global best practices thus, the study examined Technology application in Nigerian Customs service: A study of Zone A Lagos Command. The study used qualitative research, the target population of this study includes zone A customs, the total population is 6942, judgmental sampling was used, data was generated from both primary and secondary sources, in-depth- interviews were conducted with 10 stakeholders of Nigerian Customs Service, the data was analyzed thematic using Atlas TI9. The finding shows that the application of technology has increase transparency of Customs thereby minimizing corruption, boost revenue generation, proper examination of imported and exported goods. The finding also shows that Customs suffers from latest technology such as scanning machine, poor network connectivity and porous borders. The study recommends application of latest technology in order to ensure border patrol.

Key words: Customs, Revenue, Technology and Transparency.

1.1 Introduction

Studies such as Andrea and Pascual (2022) have shown the important of technology in improving the services of organizations across the globe, the experiences of countries including Canada, Australia, Germany, Sweden, Switzerland, Singapore, France, the United Kingdom, the United States, the Netherlands, Belgium, Botswana, the United Arab Emirates (UAE), Bahrain, Ireland, and Monaco indicate the role of technology in improving their performance.

For instance, Sweden uses technology to promote participation of its citizen, in UK stakeholder are increasingly informing their decision based on governance, the use of e-government technology and innovation to facilitate support, decision making and planning within government body promote good governance, data are derived from actors to provide innovative solutions. People are engaged in decision making process as well as collaboration between various government institutions. Dubai is another country that uses technology, the country uses social media such as Facebook, twitter, radio as well as television to enhance people participation in government, government agencies publish report on the activities of their ministries to keep people informed (IGI Global,2022).

This new strategy also created more jobs for citizens, which also increased their trust in governments. There are however concerns as to what aspects of technological innovation activities that makes government effective. For example, (Asquer, 2015) found that smart technological application has positive impact on innovative performance. This is achieved through digital government, better-regulated government, and honest and transparent government, which creates more jobs and enormous wealth in societies.

Against this background, the Nigeria Customs Service needs to meet up with the trends of global realities and challenges. The apparent lack of support for better decision-making and collaboration with the citizens in service delivery, intelligent systems, new platforms for communication and collaboration, data collection, sharing and analytics, shared services, sensors and ubiquitous computing are some of the major challenges affecting Customs transformation in Nigeria (Jiménez et al., 2015).

Latest technology has not yet become widely practiced in Nigeria especially in the Nigeria Customs Services, of which this research intends to fill the gaps. The study will therefore assess the applications of technology tools in Nigeria Custom Service Zone “A” of Lagos State Command as a unit of analysis.

1.2 Statement of the Problem

Studies such as Parks (2018) examined smart city and environmental governance in Sweden and Alketbi (2018) wrote a thesis on an evaluation of E – government in Dubai Smart Governance, out of the studies reviewed there were geographical gap and methodological gap in literatures. Most of the studies of technology concentrated in advance industrial countries like Sweden, similar research needs to be carried out in a country like Nigeria.

The Nigerian Customs Service is left behind in the area of innovation, technologically the institution in question is not applying latest technology in monitoring of borders as a result is affecting the institution in becoming world class institution; thereby losing huge amount of revenue due to porosity of the borders (Brabham, 2013).

In another development, Nigeria’s customs are suffering from lack of organizational capacity to adapt the way of doing things; the institution is very weak, which is affecting growth and development of the institution.

In view of the above-mentioned problems, this study sets to examine the technological tools adopted by the Nigeria Customs Service to improve service delivery in its operations.

1.3 Research Question

The research question is set in tandem with the problems stated above:

1. What are the impacts of application of technology in Nigerian Customs Services Zone A Lagos?
2. What are the problems facing Nigerian Customs Services Zone A Lagos?

1.4 Aims and Objectives of the study

The research aims mainly on the following objective as a guide:

1. To explore the impacts of application of technology in Nigerian Customs Services Zone A Lagos.
2. To analyse the problems facing Nigerian Customs Services Zone A Lagos.

1.5 Research Assumption

The research assumption is as follows: -

- Technology has impacted greatly in Nigerian Customs service Zone A Lagos.
- There are problems facing Nigerian Customs service Zone A Lagos.

1.6 Significance of the study

This study is important because it covers a gap on smart governance in Nigerian Custom service, there were geographical and methodological gaps in the literatures. Previous studies such as Parks (2018) study smart city and environmental governance in Sweden, Alketbi (2018) wrote a thesis on an evaluation of E – government in Dubai Smart Governance. Therefore, similar studies need to be carried out in Nigeria.

This dissertation added value to the existing body of theoretical and empirical literatures on technology and public sector transformation, particularly in the Nigeria Customs Service.

The study makes robust policy recommendations on how best to transform the Nigeria Custom Service in particular and the entire public sector organizations in Nigeria. Specifically, the attention of Political Leadership and Policy Makers would be drawn on the utility of Technology Innovation as mechanism for reducing cost of governance and public waste.

The research is also important in the sense that if utilized, would ensure an improved service delivery, and enhancing public revenue generation. In addition, the technological innovation dynamic approach would further elevate citizens’ trust in government due to its transparency and accountability effects.

If the project’s policy recommendations are considered and implemented by the concerned public institutions it is hoped that public welfare will be improved, as well as the security of lives and property guaranteed and stability and prosperity enhanced.

The study is expected to have long-term social, economic, and technological benefits on the target institutions, the research communities, other public institutions, and indeed the broader Nigerian society.

Technologically, the research outcomes may suggest the adoption of new techniques to gather, store, retrieve, and make use of information for the purpose of governance. The study may recommend the increased digitalization of governance as a strategy for reducing cost of governance, improved service delivery, and citizens' engagement in policy process. It thus serves as an avenue for conducting further research for viable solutions.

1.7 Literature review

1.7.1 Definitions of Technology

Technology refers to tools and machines, as well as the knowledge to develop and utilize them (Moser and Hond,2023). It refers to both the artifacts and arrangements that are developed as solutions to problems and to make life easier, and to the knowledge and ingenuity to develop and use them, for better and worse (Moser and Hond,2023). Technology enables human beings “to control their lives and their environments by interfering with the world in an instrumental way, by using things in a purposeful and clever way” (Franssen et al., 2018). Technology is typically seen as something that can be managed as a tool, resource, or capability associated with competitive advantage. It is recognized that the adoption of new technologies is not only associated with increased productivity, greater efficiency, and novel opportunities but also that it is an extension or elaboration of earlier technology. Technology is a relational and agentic. The technological and the social are a duality, each constituting, enabling, and constraining the other.

Agency refers to the capacity of an entity to be causally effective in the production of events and states of affairs, including how “we,” human beings, think and behave. Entities can be generative of change (“performative”), such as when they make humans do or think in particular ways (Leonardi, 2011; Pickering, 1993), sometimes even operating autonomously and independently from human beings (Johnson &Noorman, 2014).¹ Although the idea of material agency— “that artifacts have, or embody, some level of agency; even if it is very limited or derived in some way”—may sound unusual, it has in fact become “generally accepted” (Introna, 2014, p. 31). Human beings shape their technologies as much as these technologies shape human life (Orlikowski,2007), including its practices, routines, convictions, values, norms, power relationships, and cultures.

Technology is understood instrumentally, as tools, machines, and entities “that facilitate the adaptation of human collectivities to their environments” (Vurdubakis, 2012, p. 450), Aswell as the knowledge and skills that are necessary to create, understand, and operate them. Interestingly enough, since the 1990s, there seems to have been an increasing tendency to see technology as input.

1.7.2 Theoretical framework

David (1989) proposed Technology Acceptance Model in his doctoral thesis at MIT Sloan School of management, he proposed that system use can be predicted by motivation, user motivation can be explained by perceive ease of use, perceived usefulness and attitude toward using it. He highlighted that attitude of user toward system is the major determinant of using, attitude of user is further influence by perceive ease of use and perceived usefulness

The Technology Acceptance Model (Davis, 1989), or TAM, posits that there are factors that determine whether a computer system will be accepted by its potential users: (1) perceived usefulness, and (2) perceived ease of use. The key feature of this model is its emphasis on the perceptions of the potential user. That is, while the creator of a given technology product may believe the product is useful and user-friendly, it will not be accepted by its potential users unless the users share those beliefs. User acceptance of technology has been an important field of study for over two decades now. Although many models have been proposed to explain and predict the use of a system, the Technology Acceptance Model has been the only one which has captured the most attention of the Information Systems community. Thus, it is essential for anyone willing to study user acceptance of technology to have an understanding of the Technology Acceptance Model.

1.7.3 Gap in the literature

Most of the studies reviewed discussed problems of Nigerian Customs, with no research on application of Technology in Nigerian Customs, thus the study intends to cover the gap.

1.8 Methods of data collection

This study used qualitative research to examine the effect of technology in Nigerian Customs Service.

1.8.1 Population of the Study

The target population of this study includes zone A customs which comprises of Zone A headquarters, Training college, Apapa, TCIP, PTML, KLTC, TCIP, MMAC, MMAIC, WMC, Lag Ind., Seme, Ogun 1, Ogun2, Oyo/Oshun, Ondo/Ekiti, FOU, Strike force, NCS police, Valuation, ACTU and PCA zone A. The total population is 6942.

1.8.2 Sample and Sampling Techniques

In this study, judgmental sampling was used. The sample size comprises 10 informants drawn from stakeholders of Nigerian Customs Service, zone A Lagos.

1.8.3 Methods of Data Collection

For the purpose of this study, data is generated from both primary and secondary source as explained below:

1.8.4 Primary Sources of Data

In-depth interviews were conducted with stakeholders of Nigerian Customs Service, zone A Lagos.

1.8.5 Secondary Sources of Data

The secondary data were generated from both published and unpublished texts. The instrument of secondary data includes information from government documents, gazette, text books, journals, Newspapers, Magazines, unpublished research materials in relation to women activities to politics among others. The data obtained from the secondary source is critical to this study because most of these documents provides source of evidence to support data from the interviews.

1.8.6 Method of Data Analysis

The data collected for this study were analyzed using thematic analysis, Atlas TI9 software was also used.

1.9 Data presentation and analysis

Table 1.1: Demographic Data of the informants

Informant	Education	Age	Marital Status	Occupation	Code
Informant 1	Bsc	55	Married	Public Servant	R1
Informant 2	Bsc	48	Married	Public Servant	R2
Informant 3	Bsc	52	Married	Public Servant	R3
Informant4	Bsc	38	Married	Import/Export	R4
Informant5	Bsc	36	Married	Import/Export	R5
Informant6	Bsc	26	Married	Clearing agent	R6
Informant7	ND	45	Married	Clearing agent	R7
Informant8	NCE	30	Married	Border Community	R8

Informant9	Primary	26	Single	Border Community	R9
Informant10	Primary	31	Married	Border Community	R10

Source: Field work (2022)

The table above shows the Demographic Data of the Informants, their qualifications range from BSc, NCE, OND and Primary. The ages of the respondents range from 26-55, all the informants were married except one, their occupations range from public servants to traders, the respondents were coded R1 to R10 in line with the suggestion of Creswell (2009).

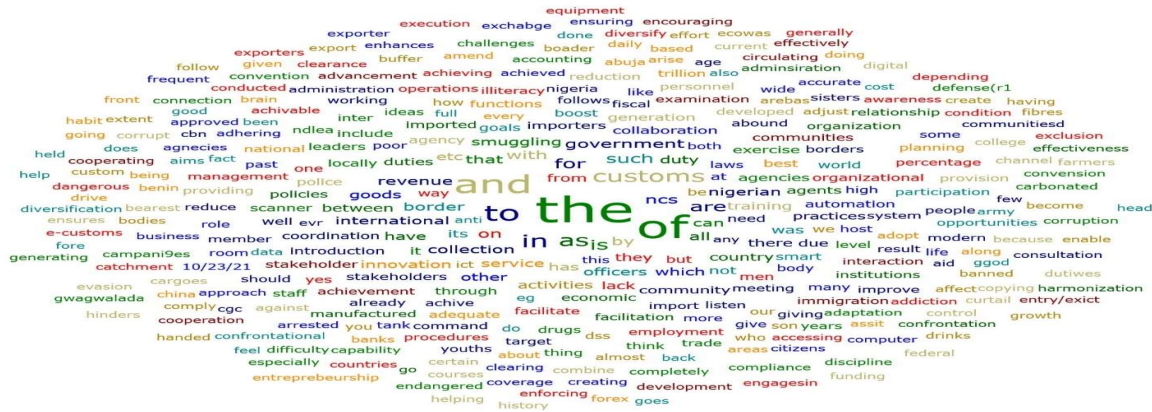


Figure 1.1: Word cloud
Source: Field work (2022)

Word cloud was run to determine the themes and sub-themes. It was from the word cloud that the following themes and sub-themes were formed.

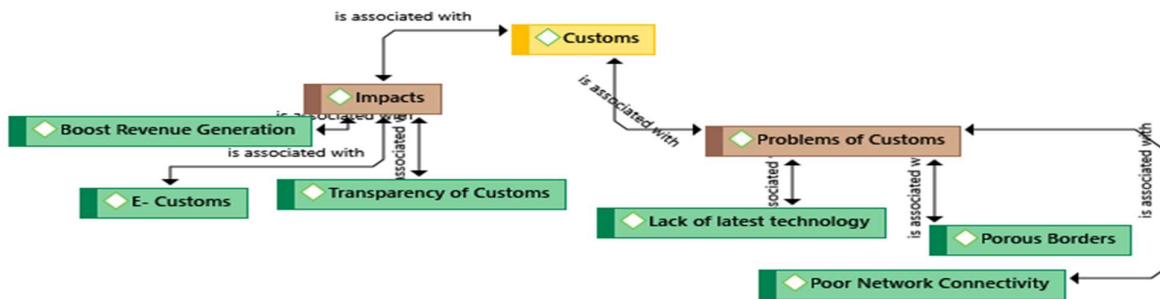


Figure 1.2: Themes and sub-themes

Source: Field work (2022)

The figure above shows the themes and sub-themes, two themes were developed such as problems and impacts of Customs.

The impacts of Technology on Nigerian Customs

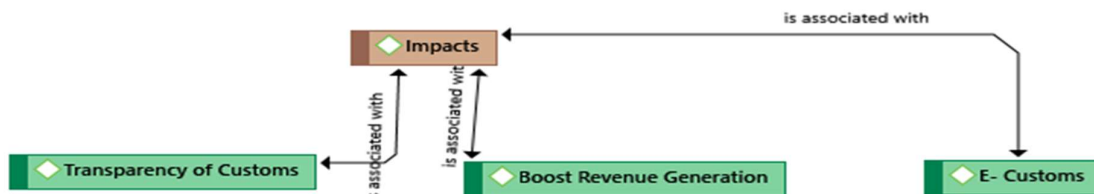


Figure 1.3: Themes one

Source: Field work (2022)

The figure above shows the sub-themes such as transparency of Customs, Boost Revenue Generation and E- Customs.

Transparency of Customs

One of the themes developed is transparency both on the side of customs and the stakeholder as an informant put it “Prior to introduction of technology there was massive corrupt practices by the stakeholder which hinders NCS from achieving its target” (R3). Similarly, an informant added that “Since the introduction and adaptation of technology in Customs things have improved as a result of access to latest information it minimizes corruption” (R5& R9).

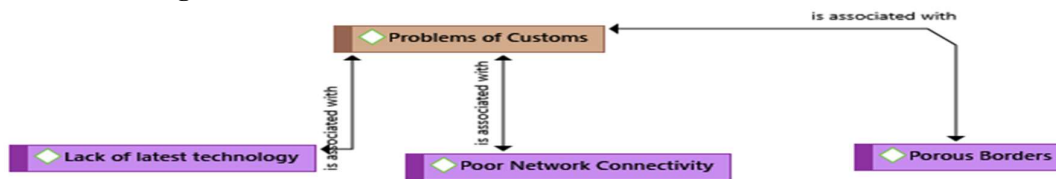
Boost Revenue Generation

Another theme developed is boost in revenue generation as an informant said Technological application in Nigerian Customs has also boost revenue of the institution, the institution revenue has increased over the years because we were able to meet our revenue target, due to the fact that many linkages were block as a result of technological application in the institution (R4&R7).

E-customs

Similarly, an informant further added that: - Introduction of e-customs is one of the trends in moving the institution forward as stated by an informant: -

To reduce transaction cost, the government may wish to adjust the already increased VAT to lower percentage. How ever, to boost revenue generation the organization can intensify effort on proper examination of imported goods. This can assist in increasing revenue (R2& R8).

Problems of Nigerian Customs**Figure 1.4: Themes two**

Source: Field work (2022)

The figure above shows the sub-themes such as lack of latest technology, poor network connectivity and porous borders.

Lack of Latest Technology

Lack of advancement that is adhering to the old method is affecting customs in Nigeria. There is need for customs to improve it technology using modern ICT approach to facilitate the effectiveness of the customs duty. Poor infrastructures such as scanning system, poor economic outlook that is exchange rates. The interview revealed that: - “Customs has introduced technology in its operations, the introduction of tools such as ICT and risk management has led to the development of the Nigerian Integrated Customs Information System NICIS” (R1, R6 &R10). By providing necessary infrastructures need NCS will help to facilitate customs activities and to meet up with international standard.

As we all know that we are in computer age, the custom follows the trends in the town by copying best practices of developed world like USA, UK, China and Japan. Strategies for innovation include technological innovation and digital transformation. Notwithstanding, there is need for provision of more scanner and improving in networking and providing employment opportunities to the citizens (R4& R9).

Poor network connectivity

Another sub-theme developed is poor network connectivity, the interviews conducted revealed that: To go smart, you need to have uninterrupted internet connection which is nearly impossible due to lack of wide coverage of optic fibers in the country to aid internet network. Customs administration gives room for

innovation, automation of customs operations. The management is doing everything to achieve full automation. The customs operation is based on international best practices (R3 &R8).

Porous borders

An informant also said that: - “Porous borders which increases smuggling activities due to inadequate technology is affecting customs in its efforts to generate revenue” (R5 &R7).

Table 1.2: Model summary table

Informants	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
Transparency			1		1				1		3
Boost Revenue				1			1				2
E-Customs		1						1			2
Lack of Latest Technology	1			1		1			1	1	5
Poor network			1					1			2
Porous Border					1		1				2

Source: Field work (2022)

1.10 Research findings

- The finding shows that the application of technology has increase transparency of Customs thereby minimizing corruption.
- The findings further shows that technological application in Nigerian Customs has also boost revenue generation of the institution.
- Similarly, introduction of E-Customs has led to proper examination of imported and exported goods.
- The finding also shows that Customs suffers from poor technology such as scanning system.
- There is also poor network connectivity which negate the activities of Customs.
- There are porous borders which increases smuggling activities due to inadequate technology is affecting customs in its efforts to generate revenue.

1.12 Discussions of the findings

- The finding shows that the application of technology has increase transparency of Customs thereby minimizing corruption.
- The findings further shows that technological application in Nigerian Customs has also boost revenue generation of the institution, Similar study conducted by Parks (2018) also support the idea.
- Similarly, introduction of E-Customs has led to proper examination of imported and exported goods, Majority of the informants interviewed corroborated it.
- Nigerian customs face many problems such as lack of modern equipment like scanner, illiteracy and insufficient manpower and poor training as well as internet connectivity. Similar report by Vanguard (2022) also supported it.
- There is also poor network connectivity which negate the activities of Customs. Majority of the informants interviewed corroborated it.
- There are porous borders which increases smuggling activities due to inadequate technology is affecting customs in its efforts to generate revenue. Most of the youths in the border areas saw smuggling as lucrative business that is means of survival, they prefer following illegal route to evade tax on goods and services, which hinders the performance of customs in Nigeria. There were many cases of killing of customs officers by the border communities as a result of hostility A newspaper report (Vangaurd,2021).

1.13 Conclusion

The study was on the application of technology in Nigeria's Customs service, the finding shows that the application of technology has increase transparency of Customs thereby minimizing corruption, technological application in Nigerian Customs has also boost revenue generation of the institution. The introduction of E-Customs has led to proper examination of imported and exported goods. Despite that Customs suffers from poor technology such as scanning system, poor network connectivity which negate the activities of Customs. There are porous borders which increases smuggling activities due to inadequate technology is affecting customs in its efforts to generate revenue.

The following are some of the suggestions with the hope that if put in place will help in solving problems of Nigeria's Customs and indeed public sector in Nigeria at large: -

- Government should intensify effort in purchasing latest technology that stand the test of time because the analysis of the interviews report shows that there is still need for improvement in area of technology in line with the best global practices.
- Training of the custom staff should also be improved in line with the best global practices because majority of the informant complained of poor training.
- From the analysis, the finding further revealed that customs were facing problem of poor internet connectivity, government should intensify efforts by making sure that internet reach all parts of Nigeria's border by making communication cheaper and easier.
- Government should also encourage synergy among the security agencies as well as informal organizations such as border community in order to ensure intelligent information sharing.
- Custom should also enlighten the community on the importance of tax payment as well as abiding by the rules and regulations governing the country rather than taking law into their hands.
- The hard work should be rewarded in order to encourage innovation in Nigeria's customs service.
- Stake holders should engage in the design or planning of new or improved services.
- Government should also provide employment opportunities to the generality of the unemployed youths in order to minimize smuggling.

1.14 Suggestion for further research

- i. Further research should be conducted on community mobilization in enhancing border patrol in Nigeria.
- ii. In addition to the above, further research should addresses effects of synergy among government agencies in border management in Nigeria.

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