USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGY AMONG NIGERIA CUSTOMS SERVICE PERSONNEL

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ABSTRACT

This paper assessed usage of Information and Communication Technology (ICT) among Nigeria Customs Service (NCS) personnel. The challenges experienced by NCS in using these various NCS applications and software is being undermined by these miscreants, it appears that proper usage of daily application ICT tools that are based on operations seems to be negative and has become a matter of concern. The paper adopted descriptive research survey design. The sample comprised three area commands of the NCS. A total number of three hundred personnel was randomly selected using simple sampling technique. A questionnaire was developed and used to collect data. The title of the instrument was Usage of ICT among NCS Personnel Questionnaire. The reliability of the instrument was found to be 0.85. Descriptive and inferential statistics were used in analyzing the data drawn from the questionnaires. The results were held significant at 0.05 probability level. The paper revealed that there was a significant relationship between usage of ICT among NCS Personnel ($r=0.430; P< .05$). The result also showed that the magnitude at which the NCS personnel were using the available ICT tools was very high. The result equally revealed that the level of ICT usage was on average. The management of the Nigeria Customs Service should encourage personnel to use ICT and give more attention to training and retraining of the personnel on how to use software applications in order to meet up with the high demanding task in the services. The level of usage of ICT should be increased by the personnel of NCS in order to minimize traders who perpetrate into website of NCS.

Key Words: Usage of ICT and NCS Personnel

Introduction

Over the years, technology in business has been changing rapidly as the global environment becomes highly competitive and innovative. Globally, the use of Information and Communication Technology (ICT) has become very vital to all organizations that intend to
remain competitive in the market. In the words of Cravens (2000), the drivers of change in today’s world include deregulation, global excess capacity, global competition, changing customer expectations, demographic shifts and changing work and lifestyles. These changes have led organizations to embark on activities that will provide a source competitive advantage and embrace the usage of ICT (Kevin, 2006). Understanding the role and usage of ICT is an essential requirement for any personnel or organization that is seeking competitive advantage over others. Every organization needs to be effective and efficient in the use of ICT as a real success in today’s and future’s change, rapidly changing and highly competitive world depend on such knowledge and skills (Kpolovie, 2016; Kpolovie and Iderima, 2016).

For several years, international organizations including the Organization for Economic Co-operation and Development (OECD), the World Bank, the World Customs Organization (WCO), the World Trade Organization (WTO) and the European Union (EU) have considered and provided recommendations on usage of ICT to enhance trade facilitation and to improve the processes of customs administrations. Now, governments, the business community and individuals are looking to improve their respective financial situation as a matter of absolute necessity during the current global economic downturn (Kevin, 2006).

With the growing penetration of ICT, attention tends to shift from readiness to usage of ICT for different purposes. Most organizations today use ICT to provide online services. Among those organizations that are heavily reliant on ICT are the Nigerian military (Army, Air force and Navy) public sector agencies, Para-military (Nigeria Police, Federal Road Safety Commission, Nigeria Customs Service, among others) public sector agencies, in particular the law enforcement agency – the Nigeria Customs Service (NCS). The future of ICT-driven customs administration in Nigeria, in the context of modernization has responded to the increasing demands for revenue optimisation, greater involvement in trade facilitation, enhanced security and enforcement of regulatory policies. Therefore, the NCS is mandated to contribute to socio-economic development with its revenue collection activities by facilitating legitimate trade (Mayowa, 2014).
In keeping up with the information age, it is imperative for NCS to jump on the bandwagon and use ICT tools in every area of their daily activities. Mohammed and Okpara (2012) examined behavioural factors as correlates of the use of ICT in the Nigerian Army. The finding indicated that there was a positive correlation between the use of ICT and the behavioural factors (education and social status). Equally, Mayowa (2014) confirmed that the NCS conducted a comprehensive feasibility study of the entire trade supply chain by engaging international consultants. The feasibility study, undertaken for the national single window, covered the core areas of change management, stakeholder engagement, business process and data harmonisation, legal framework and ICT readiness assessment.

Pre-Arrival Assessment Report (PAAR) is aspect of ICT which seems to be an important component of generating revenue into federation accounts. Lack of usage of PAAR by the personnel of the NCS may lead to reduction of revenue into federation account by the NCS personnel. Nigeria Customs Service appears to be proactive in the management of the seeming contradictory role of ensuring improvements in speedy delivery of services, while maintaining systematic and effective intervention controls, necessary to meet the demands of complex and growing international trade. Hence the introduction of PAAR in the Nigeria Custom Services may depend largely on the competence and knowledge of personnel in facilitating trade and for service delivery. Having ICT in Nigeria Customs Service may not guarantee their effective usage if the personnel are not competent enough in handling modern ICT and software (Kyriakidou, Chrisostomou and Bank, 2000). These scholars added that the PAAR is an ICT device designed by the NCS with the support of technical partners. The assessment report consists of the highly classed comprehensive national risk management system encompassing pre-arrival and cargo management, which is deployed in a phased approach. The NCS also developed the innovative web-based application, known as the Nigeria Trade Hub Portal, simplifying access to information and providing guidance for existing traders in the areas of import, export and transit trade.

The Automated System for Customs Data (ASYCUDA++) is another form of ICT device used in NCS, is an electronic system devised under the auspices of the United Nations Conference for Trade and Development (UNCTAD). A major benefit of the ASYCUDA++ system is that it
allow the Customs administration to configure it according to its own specific needs. Therefore, introduction of ASYCUDA++ and increased automation have brought tremendous benefits to the Customs administration. It provides more accurate data and increased revenue collection because of the more uniformly applied code. This has improved integrity through increased transparency in the system and a higher predictability in decision-making (Manassah, 2012). Usage of ICT plays a crucial role in strengthening the activities of the personnel of the NCS in their official core responsibilities (collection of revenue, and accounting for same to the federation account, suppression of smuggling, trade facilitation, border management, database, as well as the management and administration of entire service). The challenges experienced by the NCS personnel from importers/exporters and agents especially in the areas of tariff classification of goods, documentation and declaration being an ICT based operation has tremendously affected their official responsibilities. A major concern in this endeavour has been that of personnel’s willingness not only to use the PAAR and ASYCUDA++ in the general sense but also ability to use ICT application and software for generation revenue into federal account. As a result of this, usage of ICT is necessary for NCS operation.

Manassah (2012) stated that the necessary components of a modern customs information and communications technology (ICT) system include seven core functions: cargo control; declaration processing; payments and accounting; risk management; statistics and reporting; intelligence and enforcement; and a communications gateway. Therefore, for any modern Customs administration, seven core functions must be fulfilled by its ICT system. Cargo control is used to monitor all movements of imported, exported and transit goods and ensures that all goods are properly cleared before their release. Declaration processing is the capture and processing of data for the assessment and collection of relevant duties and taxes. Payments and accounting which is another function that records and accounts for payments made by traders. Risk management is the process by which a consignment, transaction or person is assessed for the level of risk it poses to the country from the standpoints of revenue, social protection and security – and by which the appropriate control action is determined. This scholar further stated that statistics and reporting is the collection and collation of accurate data on border movements/transactions for dissemination throughout government and business, including foreign trade statistics and data on
transportation and immigration while intelligence and enforcement is the recording and dissemination of data for risk management, compliance management, and enforcement. Communications gateway provides efficient and effective electronic access to Customs procedures for all stakeholders.

NCS personnel make use of the various ICT tools such as computer, e-mail, the Internet, World Wide Web, online database, PAAR, ASYCUDA++ and other networking technologies in generating revenue into federation account, detecting fraudulent ones and others stakeholders in the areas of proper documentation of imported goods, exports and excisable goods for onward collection of expected revenue for the nation. Successful incorporation of ICT in the Nigeria Customs Service relies heavily on the personnel towards the role and use of modern technologies in handling importation and exportation goods (Kpolovie, 2014). Usage of ICT seems to depend on the ability of personnel to combine and apply relevant attributes to particular tasks in specific settings. These attributes include high levels of knowledge, skills, values, personal dispositions, sensitivities and capabilities, and the ability to put these blends into practice in a suitable way (Commonwealth Department of Education, Science, and Training, 2002). Serving personnel in the NCS need to be skilled in the use of ICT and also to be able to critically evaluate strategies for the acquisition and appropriate application of ICT in diverse facilitating trade area.

However, despite the huge advantages associated with use of ICT, Most personnel in NCS seem to spend more time at work on social media such as Face book, Whatzap, twitter, 2go and games at the detriment of the NCS’s goals and objectives. However, Nigeria Customs Service personnel undergo series of ICT training and retraining on yearly basis, yet much is still expected from this organisation being the second highest revenue generating body in the nation economy after crude oil. Proper usage of ICT among NCS personnel seems to be negative and this called for concern. This could be as a result of fraudulent activities of some importers/ exporters in terms of proper documentation of goods and services. It requires knowledge, skills and competences to curb these menaces to meet up with the yearning needs of the standard best practice of the 21st century. It was against this context that this paper tried to assess usage of ICT among Nigeria Customs Services personnel.
Statement of the Problem

Most personnel in an organization especially NCS seem to spend more time at work on social media at the expense of the NCS’s desired goals and objectives. Although NCS undergo series of training and retraining on how to use ICT in carrying out their daily operations, it appears that usage of ICT that are based on operations seems to be a matter of concern among NCS personnel.

The challenges experienced by the NCS in using these various applications (PAAR, ASYCUDA++, Computer, Nigeria Trade Hub Portal, e-mail, the Internet, World Wide Web as well as online database) from traders especially the fraudulent ones and other stakeholders in the areas of proper documentation of imported goods, exports and excisable goods for onward collection of expected revenue for the nation, the knowledge, skills and competences of the personnel are being undermined by these miscreants. The main concern of this paper was to assess usage of ICT among Nigeria Customs Service Personnel.

Purpose of the Study

The main purpose of this study was to assess usage of Information and Communication Technology among Nigeria Customs Service personnel. Specifically, the research was designed to:

1. examine the magnitude at which the NCS personnel are using the available ICT tools
2. find out the level of ICT usage among NCS personnel

Research Questions

The following questions were to be answered:

1. What is the magnitude at which the NCS personnel are using the available ICT tools?
2. What is the level of ICT usage among NCS personnel?

Research Hypotheses

The following hypotheses were formulated for the study:

$H_0$: There is no significant relationship between usage of ICT and Nigeria Customs Service personnel
Methodology

This paper adopted the descriptive survey research design of the survey type. The population comprised 300 Nigeria Customs Service personnel in zone A, random sampling technique was used to select one hundred personnel from each of the 3 selected area commands (Oyo/Osun Customs area command, Kirikiri Lighter Terminal Customs area command, and Seme Customs area command). A questionnaire was developed and used to collect data. The questionnaire was validated by the experts in the faculty of education by adding and removing some items from the original list. Through this, face and content validity of the questionnaire was ensured. Reliability co-efficient of 0.85 was found for ‘Usage of Information and Communication Technology (ICT) among Nigeria Customs Service (NCS) personnel Questionnaire (UICTNCSQP)’. Simple percentage, frequency counts, and Pearson Product Moment Correlation were used in analyzing the data drawn from questionnaires. The results were held significant at 0.05 probability level.

Presentation and Analysis of Results

Research questions 1: what is the magnitude at which the NCS personnel are using the available ICT tools?

Table 1: Magnitude at which the NCS personnel are using the available ICT tools

<table>
<thead>
<tr>
<th>S/N</th>
<th>STATEMENT</th>
<th>VLE</th>
<th>LE</th>
<th>LE</th>
<th>VLE</th>
<th>(X̄)</th>
<th>S D</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nigeriatradehub.gov.ng is useful in dissemination of information to traders.</td>
<td>150</td>
<td>107</td>
<td>23</td>
<td>19</td>
<td>3.30</td>
<td>0.86</td>
<td>accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(50.0)</td>
<td>(35.7)</td>
<td>(7.7)</td>
<td>(6.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ASYCUDA++ can’t address the needs of the NCS</td>
<td>97</td>
<td>79</td>
<td>67</td>
<td>56</td>
<td>2.73</td>
<td>1.11</td>
<td>accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(32.3)</td>
<td>(26.3)</td>
<td>(22.3)</td>
<td>(18.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Using Nigeriatradehub.gov.ng is useful between personnel of NCS and traders</td>
<td>159</td>
<td>94</td>
<td>35</td>
<td>10</td>
<td>3.35</td>
<td>0.82</td>
<td>accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(53.0)</td>
<td>(31.3)</td>
<td>(11.7)</td>
<td>(3.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The use of PAAR enhances trade facilitation</td>
<td>165</td>
<td>89</td>
<td>30</td>
<td>15</td>
<td>3.35</td>
<td>0.86</td>
<td>accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(55.0)</td>
<td>(29.7)</td>
<td>(10.0)</td>
<td>(5.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Most workers use Social networking during the working hour</td>
<td>62</td>
<td>124</td>
<td>42</td>
<td>70</td>
<td>2.60</td>
<td>1.06</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(20.7)</td>
<td>(41.3)</td>
<td>(14.0)</td>
<td>(23.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Very Large Extent (VLE), Large Extent (LE), Little Extent (LE), Very Little Extent (VLE)
Table 1 reveals that 85.7% of the respondents agreed that Nigeriatradehub.gov.ng is useful in dissemination of information to traders \( \overline{X} = 3.30 \). 58.6% of the respondents agreed that ASYCUDA++ can’t address the needs of the NCS \( \overline{X} = 2.73 \). 84.3% of the respondents agreed that using Nigeriatradehub.gov.ng is useful between personnel of NCS and traders \( \overline{X} = 3.35 \). 84.7% of the respondents agreed that the use of scanning machine enhances trade facilitation \( \overline{X} = 3.35 \). While 62.0% of the respondents agreed that most workers use social networking during the working hour \( \overline{X} = 2.60 \). Based on the result from the above table, the data indicates that the mean ratings of the respondents for items 1 to 5 are 3.30, 2.73, 3.35, 3.35 and 2.60 with corresponding standard deviation of 0.86, 1.11, 0.82, 0.86 and 1.06. The cluster mean of above items is accepted as rated above 2.50 cut off point which shows that the magnitude at which the NCS personnel are using the available ICT tools is very high to a very larger extent.

**Research Question 2:** What is the level of ICT usage among NCS personnel?

**Table 2: Level of ICT Usage among NCS Personnel**

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Mean (X)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>30</td>
<td>10.0</td>
<td>2.32</td>
<td>0.65</td>
</tr>
<tr>
<td>Average</td>
<td>144</td>
<td>48.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>126</td>
<td>42.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that 30 (10.0%) of Personnel had low level of ICT usage, 144 (48.0%) of the respondents had average level of ICT usage while, 126 (42.0%) of the respondents had high level of ICT usage. This indicates that there was average level of ICT usage with means score value of 2.32 and a standard deviation score of 0.65 respectively in all selected three zone of Nigeria Custom Service.

**Hypotheses Testing**

**Hypothesis 1:** there is no significant relationship between usage of ICT and Nigeria Customs Service personnel
Table 3: Usage of ICT and Nigeria Customs Service Personnel.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Sig(P)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>usage of ICT</td>
<td>295</td>
<td>3.30</td>
<td>0.864</td>
<td>0.430</td>
<td>0.002</td>
<td>Significant (P&lt; .05)</td>
</tr>
<tr>
<td>NCS personnel</td>
<td>1.88</td>
<td>0.320</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result of hypothesis one is presented in the above table 3 indicated Pearson Product Moment Correlation showing relationship between usage of ICT and Nigeria Customs Service Personnel. From the above table there was a significant positive but moderate correlation between usage of ICT and Nigeria Customs Service Personnel, $r = (430), 0.002, P< .05$. Based on this analysis, hypothesis 1 which states that there is no significant relationship between usage of ICT and Nigeria Customs Service Personnel was therefore rejected. This indicates that there is significant relationship between usage of ICT and Nigeria Customs Service Personnel. This implies that the ability to use ICT among NCS personnel will improve income generation into federation account and eradicate the fraudulent ones that are trying to undermine Nigeria Customs Service. This means that if personnel of NCS have positive towards the usage of ICT, it will contribute more to the revenue generating for the country.

Discussion

Based on the hypothesis which states that, “there is no significant relationship between usage of ICT and Nigeria Customs Service personnel” the result obtained from the analysis indicates there was a significant positive but moderate correlation between usage of ICT and Nigeria Customs Service Personnel. This finding is in agreement with the findings of Abdul Rahman, Mustapha, Omar and Hashim,(2007) who carried out empirical study on attitudes toward ICT and working with computers of the Royal Malaysia police workforce. The overall objective of the study measures the attitudes of the Royal Malaysia Police workforce towards the use of information and communication technologies in policing. With a response rate of 77.67% from the 600
questionnaires sent to 14 identified police headquarters throughout Malaysia, the results showed mediocre attitudes toward ICT and working with computers relative to usefulness, confidence, liking and anxiety.

However, the finding of this study is also consistent with Tai (2011) who investigated influence of worker’s competencies on job performance of Royal Malaysian Customs Department. The required data were gathered from 90 Customs officers attached at Royal Malaysian Customs Department Kelana Jaya, Wilayah Persekutuan. The tests conducted were Pearson's Correlation, multiple regression, t-test and one-way ANOVA were adopted in answering the objectives of the research. The Pearson's Correlation showed that only competency of decision making skills was correlated to overall job performance. However, multiple regression tests showed that Job Performance was significantly influenced by the dimensions of interpersonal skills, decision making skills and communication skills.

The finding was equally corroborated with findings of Mohammed and Okpara (2012) who examined behavioural factors as correlates of the use of Information Communication Technology (ICT) in the Nigerian Army and found that there was a positive correlation between the use of ICT and the behavioural factors of education and social status.

**Conclusion**

From the findings of this study, it can be concluded that, level of ICT usage is on average and the extent at which the NCS personnel are using the available ICT tools is very high.

**Recommendations**

Based on the findings, discussions and conclusion drawn from this research, the following recommendations were made:

1. The management of the Nigeria Customs Service should encourage personnel to use ICT and give more attention to training and retraining of the personnel on how to use software applications in order to meet up with the high demanding task in the services.
2. The level of usage of ICT should be increased by the personnel of NCS in order to minimize traders who perpetrate into website of NCS especially the fraudulent ones in the areas of proper documentation of imported goods, exports and excisable goods for onward collection of expected revenue for the nation.

3. The NCS should encourage its personnel to use their computer and internet facility on the job specifically assigned to them.

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