

Deployment of Information and Communication Technology Tools as a Means of Combating National Insecurity in Nigeria

Duke Urhe-Otokoh Oghorodi
Department of Computer Science
College of Education, Warri.
Delta State, Nigeria

ABSTRACT

This article addressed the issue of Nigeria national security using Information Communication Technology tools. It considered the rate of unemployment as the main reason for the Nigeria national insecurity. The paper then proffers functional ICT education security personnel, use of closed circuits television camera for surveillance of public places, creation and use of national identity database management system, use of facial recognition technology, use of lawful interception of information of suspected person, and protection of communication networks with firewall as for solutions to the insecurity situation precipitated by unemployment in the country. Low ICT skill of security personnel and lack of government commitment were identified as the challenges of using ICT for the security problem in the country. The paper then recommended amongst other things that security personnel should be adequately trained on the use of ICT; National Identity Management Commission should create and maintain a national identity database management system, and there should be Nation-wide installation of CCTV camera to track criminal activities in the country.

Keywords:- Security, National Security, Information Communication Technology

I. INTRODUCTION

The need “to promote international peace and security” is of primary concern in the comity of nations. This need led to the establishment of the League of Nations in 1919 under the Treaty of Versailles. The same quest led to the establishment of the United Nations (UN) in 1945 after the World War II. [10]. Subsumes in the concept of global peace and security is peace and security within nations, a phenomenon referred to as national security.

National security is the requirement to maintain the survival of a nation hence United Nations (UN) made it a condition for countries in 1986 to develop and progress safely. It is for this reason, United State (US) included security as one of the country’s four enduring national interest, [14] and it was taken more seriously after the September 11 attack in 2001 on the World Trade Centre.

First, security is defined as the degree of resistance to, or protection from harm to any vulnerable and valuable asset such as a persons, dwelling places, organizations, communities, or nations. Hence, we often talk about personal security, community security, organizational security and national security. The focus of this paper is on national security.

National Security has attracted different usages and definitions as it means different things to different people. It could connote (1) freedom from foreign control; (2) ability to preserve the nation’s physical and territory integrity with her military might; (3) capacity to control domestic and foreign conditions, and (4) absence of threats to people’s lives and

properties . The later connotation is assumed in this paper. In this respect, national security can be viewed as the resistance to, or protection from harm to any vulnerable and valuable asset of a nation such as persons, personal properties, dwelling places, organizations, and communities. It is the protection or the safety of a country’s secrets and its citizens [11]. It is also the “measurable state of the capability of a nation to overcome the multi-dimensional threats to the apparent well-being of its people and its survival as a nation-state at any given time” [16]. This entails economic security, environmental security and energy security [18]. The elements of national security include resources, avoidance of natural disaster, and availability of food; protection of the cyberspace, healthcare, and protection of ethnic groupings [16].

Several measures could be taken to ensure national security; these measures include the use of diplomacy, armed forces, and civil defense, intelligence and counterintelligence services.

In this paper, national security is taken to be the safety of nation’s resources, cyberspace and information.

The need to deploy Information Communication Technology to tackle national insecurity has become inevitable as crime waves have gone more digital in the Digital Age that is Information Technology driven. Information Technology (IT) is the technology which supports activities involving the creation, storage, manipulation and communication of information, together with the related methods, management and application [8]. IT is also the use of computers and

telecommunications equipment to store, retrieve, transmit and manipulate data [6]. In [13] IT is defined as any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data or information. In other words, Information Technology is technologically mediated information. However, [13] extended the definition of IT to include computers, ancillary equipment, software and firmware (Hardware) and similar procedures, services (including support services) and related resources.

However, a more encompassing terminology is Information and Communication Technology (ICT) which has become an extended synonym for Information Technology.

ICTs cover Internet service provisions, telecommunications and information technology equipment and services, media and broadcasting, libraries and documentation centers, commercial information providers, network-based information services, and other related information and communication activities [17]. Therefore, ICT is a convergence of interest between electronics, computing and communication.

There is high unemployment rate Nigeria; and the rate of unemployment between 2006 and 2012 in Nigeria is in the range of 5.3% and 23.9%. [12] From this statistics, there is a visible upward movement trend in the unemployment rate in the country with youths' unemployment between the ages of 15 and 24 having the highest average unemployment rate of 35.9 percent [1]. This high rate of youth unemployment therefore creates a serious security challenges as the unemployed get themselves involve in all sorts of crimes like robbery, kidnapping, oil pipeline vandalization, insurgency, political tuggery, ritual Killings that threaten national security. These crimes are not only counter-productive to the economy but also posses threat to our national integrity as potential foreign investors are scared away and the country's image is usually painted in bad light in the international fora. Therefore, serious efforts must be made to minimize or completely eliminate the incidence of these crimes in Nigeria.

II. THE OBJECTIVES OF THE STUDY

The objectives of this study are:

1. To ascertain the level of insecurity in Nigeria
2. To proffer possible ways ICT could be used to guarantee National security in Nigeria
3. To identify the likely challenges to the deployment of ICT for national security in Nigeria.

III. THE STATE OF INSECURITY IN NIGERIA.

There has been a general state of insecurity in Nigeria starting from the Niger Delta crisis to insurgency in Northern part of

the country. This crisis with its attendant effect of insecurity started in Nigeria in the area known as the Niger Delta area, consisting of Delta, Bayelsa, River, Abia, Akwa-Ibom, Crossover, Edo, Imo and Ondo states for years where militia groups rose against the Nigeria nation by blowing up some oil flow stations, kidnap foreign oil workers, vandalize oil pipelines, and disrupt oil business generally. This crisis is attributed to greed, selfishness, deprivation, poverty, and social injustice [15]. To stem the crisis situation, the Nigeria Government granted amnesty to Niger Delta militants; but as the government of Nigeria was yet to recover from the adverse economic effects of the militancy in the Niger Delta, a terrorist organization, *Jama'atu Ahlis Sunna Lidda'awati Wal-Jihad*, known by its Hausa name, **Boko Harām**; figuratively meaning "Western education is a sin" emerged in the Northern part of the country, thereby opening a new wave of insurgency in Nigeria. The group exerts influence in the northeastern Nigerian states of Borno, Adamawa, Kaduna, Bauchi, Yobe and Kano. This terrorist group bombed schools, churches and mosques, public places; kidnapped women and children; raids vulnerable villages and assassinated politicians and religious leaders. The 2014, abduction of 219 female students from the Government Secondary School in the Chibok town in Borno State, Nigeria [7]; and the 2011 bombing of the United Nation House headquarters in Nigeria nation's capital, Abuja [4] are cases in point. Bokom Haramm therefore is Nigeria synonym for fear and bloodshed [9]. Unlike the Niger Delta militant, Boko Haram sect rejected the idea of amnesty [3]. This rejection implied that the Boko Haram sect were more ready than ever to take up arms against the state; and indeed insurgency increased in the northern part of the country thereafter. With the Niger Delta militancy and insurgency in the North, crime wave increased in unimaginable proportion across the length and breadth of the country. The global report stated that the war against terrorism in Nigeria raised military expenditure to a staggering sum of \$2.327 billion (N372.3 billion) in 2012 alone; thereby placing Nigeria among countries at war in Africa [24]. To this extent, Nigeria is tottering towards becoming a failed state [2].

IV. HOW ICT CAN BE USE TO COMBAT CRIMES IN NIGERIA

There are no problems without solutions. In this regard, the following solutions are proffered:

A. ICT Education.

Every efficient use a technology begins with its knowledge and skill acquisition. Therefore, to use ICT to tackle insecurity in Nigeria, security agents must be well trained in the use of ICT tools. Information and Communications Technologies (ICT) education is the teaching and learning of valuable ICT knowledge and skills around computing and communications devices, software that operates them, applications that run on them and systems that are built with them. There are many

important dimensions to ICT education. These include: (1) ICT/Digital Literacy for basic user competency, (2) ICT Infrastructure and Support for more knowledgeable and capable technical people to deploy, manage and maintain ICT equipment, software and systems, so that they can work well for users.(3) Specialized and Industry Uses of ICT, and (4) ICT Research and Development for people who deeply understand the science and technologies underlying ICT so that they can work to advance the field of ICT.

B. Nation-wide installation of Closed Circuit Television (CCTV) cameras.

CCTV systems have the ability to take high resolution images with date-and-time-specific playback capability for live-monitoring purposes. Following the September 11 attacks, the use of video surveillance has become a common occurrence in the United States to deter future terrorist attacks [22]. There are positive results of the use of the CCTV systems in various parts of the world. Forty-four (44) different studies that collectively surveyed areas in the United Kingdom (UK) and cities in United States (U.S) revealed that [21]: (1) Surveillance systems were most effective in parking lots, where their use resulted in a 51% decrease in crime; (2) Public transportation areas saw a 23% decrease in crimes; (3) Systems in public settings decreased by 7% in crimes.

When the analysis was sorted by country, United Kingdom accounted for less incidence of crime than other country; and the reason advanced for this is that United Kingdom has more cameras per person than in any other country in the world.

In Nigeria, Bayelsa State government paid the sum of N1.7 billion to Wawin Technology, a Chinese firm, for the installation of CCTV cameras across the state, with a 'Safe City, Safe State' security agreement[5]. The Nigeria Federal Government installed about 700 CCTV in Lagos State and a few were installed in some other states. This selective installation may not stem this high national crime wave; but the focus should be on a nation-wide installation of these CCTV to ensure adequate surveillance in the country.

C. Creation and Use of National Identity Database Management System.

Another way is through the creation and use of National Identity Database System which is the pool of data from where several agencies can access data for their own purposes. It is for this purpose that the National Identity Management Commission (MIMC) was set up with three fundamental mandates amongst which is to establish, operate and manage the National Identity Management System (NIMS) with specific objectives to:

1. Create and operate a National Identity Database;
2. Issue Unique National Identification Numbers to qualified citizens and legal residents;

3. Issue a Smart ID Card to every registered person;
4. Provide a secure means to access the National Identity Database so that an individual can irrefutably assert his/her identity (Person Identification Verification Services (PIVS) Infrastructure);
5. Harmonize and integrate Identity Databases in Government Agencies to achieve resource optimization; and
6. Collaborate with private and or public sector institutions to deliver on the National Identity Management System (NIMS).

Surprisingly, with N30bn appropriation for the project in the 2012 budget, the commission has no being able to create and manage such demographic data of persons which include fingerprints, head-to-shoulder facial picture and digital signature to track crimes.

D. Use of facial recognition technology.

Related to the use national data capture and management is the use of facial recognition technology to track identity-related crimes like theft in the banks. A facial recognition system is a computer application for automatically identifying or verifying a person from a digital image or a video frame from a video source. The facial recognition systems use facial recognition algorithms to identify facial features by extracting features from an image of the subject's face using the Principal Component Analysis or Linear Discriminate Analysis . One of the ways to do this is by comparing selected facial features from the image and a facial database. The essence of facial recognition systems is to reduce identity-related fraud or crimes. Properly designed systems installed in airports and other public places can identify individuals among the crowd.

E. Use of Lawful Interception laws.

Some many of the crimes committed today include the receipt of threat messages from an anonymous individual. It is important that these messages are lawfully intercepted. Lawful Interception (LI) is the legally sanctioned official access to private communications such as telephone calls or e-mail messages [19]. Such lawful interception should information transmitted on the Internet traffic or mobile phones. With lawful interception laws it will be easier to monitor a greater number of individuals under suspicion, while the information of non-targeted individuals remains private.

F. Protection of communication networks.

Most crimes are committed in communication networks with could be telecommunication and computer networks. Therefore appropriate measure must be taken to secure the network which is the infrastructure of communication. Communication network could be protected with the use of

firewall. Firewall as a set of related programs, located at a network gateway server that protects the resources of a private network from users from other networks [19]. In other words, it is firewall prevents unauthorized access to or from a private network.

V. THE CHALLENGES OF USING ICT FOR NATIONAL SECURITY IN NIGERIA

The use of Information and Communication Technology tools is not without a challenge. This challenge is:

A. Low level of ICT skills among security personnel.

The major challenge of the use ICT to combat crime in Nigeria is low level of ICT skills among security personnel. On a generally note, the International Telecommunication Union (ITU) Development Index (IDI) for ICT use and skills, ranked Nigeria 122th position out of the 155 selected economies as at 2011 with an abysmal growth rate of 0.18% [23]. In a related study, out of 255 personnel of the Nigeria Army Signal Corps indicates that only 89 personnel could use ICT tool without assistance [20]. This is a general reflection of what happens in other sections of the Armed Forces and other security agencies.

It was asserted in [20] that gone are the days when the purpose of sophisticated personal computers and other electronic gadgets were the exclusive preserve of the very rich and multi-national corporations and large business organizations. In other words, the ICT tools are becoming cheaper and more readily available; therefore the availability must be translated into effective and effectual use of the tool to tackle problems of life.

B. Lack of Government Commitment.

Nigeria Government fights insurgency more from her military effort other than the use of ICT. To this end, Nigeria expenditure on military hardware for the purpose of combating insurgency is on the increase. In [24], Nigeria military expenditure of \$2.327 billion (N372.3 billion) in 2012 alone makes the Nigeria's military spending to be the sixth highest in Africa, and it competes with the expenditures of countries like Libya (\$2.9 billion), Morocco (\$3.4 billion), Angola (\$4.1 billion), South Africa (\$4.4 billion) and Algeria (\$9.3 billion). As government is combating the rising insecurity in the country occasioned by insurgencies erupting from different segments of the society [through the military], there has been embarrassing quietness from the ICT sector [25]. This quietness of the ICT sector in using ICT resource to combat insurgency is coupled with the lack of commitment by the Nigeria government in deploying the ICT resources to this end. This lukewarm attitude of the government can be seen from the government inability to put in place the necessary infrastructure, in terms of legal and technical infrastructure.

VI. CONCLUSION

No nation progresses in a state of insecurity. Progress comes when economic activities take place in an environment of safety. Therefore, every nation including Nigeria must include national security as one of their enduring interest as to create enabling environment for economic, political, and social activities to thrive. Nigeria national security is an issue for every Nigeria. This is because, a state of insecurity can hamper Nigeria vision becoming one of the leading 20 nations of the world by the year 2020 which is few years away.

VII. RECOMMENDATIONS

In the light of the above, the following recommendations are made to be able to use ICT to confront the security challenges in Nigeria:

1. Law enforcement agencies can possess an unprecedented capability to monitor threats
2. Security agencies should be grounded in the use of modern electronic surveillance technologies
3. Recruitment of ICT skilled personnel into the various arms of the security agencies
4. Continuous training and retraining of security staff on the use of modern ICT tools.
5. SIM card registration must be executed much more aggressively,
6. National Identity Management Commission (NIMC) live up to expectation

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