COMBATING CORRUPTION AND INSECURITY; THE ROLE OF INFORMATION AND COMMUNICATION MANAGEMENT TECHNOLOGY (ICTM)

The use of Information and Communication Technology (ICT) in the provision of solution to human, social and industrial challenges has proven to have been successful in many nations and Nigeria should not be an exception. According to the World Bank, ICT —consists of the hardware, software, networks, and media for the collection, storage, processing, transmission and presentation of information (voice, data, text, images), as well as related services. This shows that Information and Communication Management Technology (ICTM) definitely plays a pivot role in combating corruption and insecurity, especially in Nigeria considering the above listed components.

DEFINITION OF TERMS

CORRUPTION:

- Ngouo (2000) defines corruption as the exploitation of public positions for private benefits. She further observed that the lack of any civil spirit among all categories of civil servants leads to corruption and misappropriation of public funds.
- Akindele (2005) sees corruption as a behavior, which deviates from the formal rules of governing the actions of someone in a position of authority while, Osunyinkanmi (2007), opines that the term corruption is synonymous to the terms Fraud, Bribery, Settlement etc.
- Adewale (2011) view corruption as an act of diverting the resources that should have been used for developmental purposes of the society to private or personal use.

INSECURITY: the term can be simply defined as

- **insecure condition:** the state of being unsafe or insecure or
- **unsafe feeling:** a state of mind characterized by self-doubt and vulnerability or
- **insecure phenomenon:** an instance or cause of being insecure

THE ROLE OF ICT IN COMBATING CORRUPTION IN NIGERIA

Information and Communication Technologies (ICTs) have changed the process of governance in Nigeria. To manage government affairs for the benefits of citizens, governments have adopted e-governance technologies in service delivery. Thus, what is **e-governance**?

e-governance has been described as the use of information technologies (such as the Internet, the World Wide Web, and mobile computing) by government agencies that can transform their relationship with citizens, businesses, different areas of government, and other governments.

Examples of such applied in Nigeria includes;

- Introduction of **Banking Verification Number (BVN)**
- Introduction of a single Federal government account known as **TSA (Treasury Single Account)**
- **New Unified Banking Account Number (NUBAN)**

ROLES OF ICT IN COMBATTING INSECURITY IN NIGERIA

Reports over the years show alarming increase in levels of crime and Boko Haram terrorist attack especially in the North Eastern Nigeria. Unfortunately, this situation is spreading across the other African countries, with countries such as Cameroun, Chad and Niger has now recording disquieting increases in crime levels and attack of Boko-Haram, as Boko Haram Attacks Killed Over 1,000 Civilians as at 2015.

Before 2009, insurgency and its concomitant effects (both emotional and physical) were alien to Nigeria, most especially the North Eastern regions of the country; and of recent in Kano, Kaduna in the North Western States, Plateau State and Abuja in the North Central where there have been ceaseless terrorist attacks. The problem led to the Federal Government declaration of state of emergency in the three affected states in the North Eastern Nigeria in 2012. The Government have recently further seeked the assistance of foreign nations that are technologically developed such as USA, France, Britain, Israel and others to tackle the menace of Boko-Haram insurgency.

Pipeline vandalism poses another major threat to the economic and human security in Nigeria.

Furthermore, the rate of Kidnapping has risen to an alarming rate recently in Nigeria. Formerly, kidnapping was only peculiar to the Niger Delta regions where expatriates were being kidnapped in exchange for ransom by the Militants in the region, but recently, almost all the regions in the nation is affected and various kidnapping cases have been reported.

The persistence of insecurity has been claiming precious lives of citizenry and government efforts to tackle the problem through various menial methods and approaches such as the use of police, military, paramilitary agencies, vigilante and local hunters seem not to be yielding success. But deploying technology, through the use of ICT devices such as computer, internet, mobile phone, close circuit television (CCTV), surveillance cameras, social network analysis, biometry surveillance, data mining, satellite imagery, and IP devices, the satellite would definitely produce the

desired results." Another strong argument is that besides its speed, technology-driven surveillance and intelligence gathering cost less in terms of men and logistics.

Below are some key areas where ICT can be used to combat Insecurity in Nigeria

Close Circuit Television (CCTV)

CCTV plays a significant role in protecting the public and assisting the security agencies in the investigation of crime. Social perceptions and attitudes towards security have changed, and over time society has become increasingly security conscious. This change has also been a result of the mass media coverage on crime. People have changed their views as a result of terrorism, gun crime, child abductions, etc. And have adopted a more proactive role in ensuring their own safety. One way this has been achieved is through investment in CCTV systems. Security is now considered essential for the protection of both people (e.g., within businesses and for the general public) and their property. With the rise in crime in Nigeria especially in the North East and South-South where terrorism and kidnapping are issues disturbing the peace of the region. There is need for CCTV to be deployed.

Online Vehicle Registration

Vehicle Registration in Nigeria began over 100 years ago and the records have been essentially manual which in turn has not helped to raise the efficiency of general automotive services in recent years. Today, computer has been discovered as a very efficient instrument, which has played a very significant role in adequate management of information. However, computerization has helped in many areas of life and due to vehicle owners, the thought of computerization of this operation becomes of great importance in order to wipe out the manual data processing system from which many problems have originated.

Therefore, we should work on a more reliable and better medium where road network can be controlled, this cannot be achieved without a scheme; some of the road network schemes are found in Singapore and Malaysia. Electronic road control

is one of the main schemes established by Singapore government to control road traffic where only licensed and registered vehicles are allowed on the road (Authority, 2016).

Vehicular movement is controlled due to the installation of gantries which determine and sensor the movement of each vehicle that passes by for the day. With the help of this system the government also introduces the electronic road pricing scheme. ERP is an Electronic Road Pricing System used in managing road. Based on a pay-as-you-use principle, motorists are charged when they use priced roads.

Some benefits of ERP system are:

- Minimizes traffic volume.
- Record of each vehicle passed for the day.
- Optimizes usage of the road network.
- No human error.
- ERP is reliable and fully automated system operates 24 hours.
- Its central computer system ensures gantries are always working properly.

Sim Registration

A SIM, *Subscriber Identity Module*, is the removable circuit board found in a modern cellular phone. It carries the network identity information and is a type of *smart card* which can also be found on Credit/Debit Cards, ID cards and so on. A smart card is basically a small computer, providing a safe and controlled execution environment (Edsbäcker, 2010).

The Nigerian Communications Commission (NCC) embarked on a nationwide SIM Card Registration Project which commenced on March 28th 2011. This was necessitated by the fact that in 2008, security agencies approached the Commission to assist them in resolving crimes perpetrated through the use of telephones in which criminal elements could not be identified with the number of the phones that they use. The objectives of SIM Registration exercise were:

• To assist security agencies in resolving crime and by extension to enhance the security of the state.

• To facilitate the collation of data by the Commission about phone usage in Nigeria

• To enable operators to have a predictable profile about the users on their networks

• To enable the Commission to effectively implement other value added services like Number Portability among others.

GPS Driver's License and Tracker

A GPS tracking unit is a device that uses the Global Positioning System to determine the precise location of a vehicle, person, or other asset to which it is attached and to record the position of the asset at regular intervals. The recorded location data can be stored within the tracking unit, or it may be transmitted to a central location database, or internet-connected computer, using a cellular (GPRS), radio, or satellite modem embedded in the unit. This allows the asset's location to be displayed against a map backdrop either in real-time or when analyzing the track later, using customized software. This can be used to trace stolen vehicles and such Driver's license owner, if they commit any crime.

Explosive Device Detectors

Nowadays a lot of attention is being paid to the development of methods and instrumentation for the detection of explosive devices. Initiated explosives have already killed thousands of people and injured several tens of thousands worldwide not only Nigeria, Infrastructural facilities, like railway stations, airports, undergrounded railways, security offices, electricity, water supply, etc. are preferred targets involving up to thousands of people. Assuming, the methods will be found to early detect explosives by means of sensors. New forms of bomb attacks are more sophisticated, more dangerous, using remote control of Improvised Explosive Devices (IED); initiation by mobile phones permits terrorists to initiate a bomb

immediately. Therefore, detection systems with a reliable detection efficiency used in broadrange of IEDs are an important problem. An IED is an improvised explosive charge, equipped with a non-standard (home-made) or a professional detonator. But, an Improvised Explosive (IE) may be any chemical or mixture capable of an explosive reaction.

Unmanned Aerial Vehicle (UAV)

Unmanned Aerial Vehicle (more like a small aeroplane controlled remotely by a human) provides the ideal solution to the problems and limitation faced by other surveillance methods. The UAV was used during the ***OPERATION AWATSE*** conducted by the Military and NSCDC at Arepo where vandals were arrested and illegal structures on the right of way were destroyed.

Pipeline break Detection system

NNPC recently installed a modern ICT equipment at its System 2B Artery in Arepo, Ogun State. It was done by an indigenous engineering firm, ENIKKOM to prevent pipeline hacking and vandalism. This system even allows early detection of breakage in any part of the pipeline from the control room, remotely located far from the pipeline.

In conclusion, it is evident that the role of ICT in curbing corruption and insecurity in Nigeria cannot be over-emphasized. Thank you.