

# Location Information: Another Perspective of Intelligence Gathering for Minimizing Terrorism in Nigeria

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**Abstract---** Security challenges are the order of the day in some countries around the globe, Nigeria inclusive. Series of measures were proposed and even implemented, but due to population size, lack of social amenities (i.e. Power) and time factor rendered some of them insufficient enough to tackle the issue. Nigeria, as at February 2014, has recorded total number of cell phone users to be (167,371,945). Therefore, via wiretapping and imagery intelligence, this number or even more will be on surveillance over a period of time so as to pinpoint suspects through location information. To achieve this, there must be a tradeoff between citizen privacy and optimum security.

**Keywords:** Intelligence gathering, Location Information, Surveillance, Security, Remote Intelligence, Wiretapping

## 1 INTRODUCTION

Security has been topmost priority in Maslow's hierarchy of need apart from psychology and therefore, every government is expected to provide it. The rate of security challenges (terrorism) is growing in some countries pervasively and Nigeria will not be ostracized. It is evident to all Nigerians that a lot and diverse security mechanisms ranging from human to computerized had been proposed and deployed to curb the menace in the country. But due to its pervasive nature and threat pose to lives and properties, these measures are not sufficient enough, hence the need for devising other techniques to minimizing it.

Globally, the concept of terrorism is being seen as subjective to a particular person defining it at a particular time and environment but, two properties could lead to understanding it: 1. *Violence* 2. *Threat to violence* [1]. According to [2] it

is violent activities harmful to lives and properties via violation of criminal laws of any nation that may lead to human abduction, murder and the likes. These terrorist activities are being carried out using technological tools such as cell phones, internet, and software and so on [3]. Many strategies were suggested by varieties of authors to minimizing the act, most of which are physical policing, CCTV, Data mining and biometric-based. These are insufficient taking into consideration the population size of the nation and electricity availability. And since the security challenges facing our dear country, Nigeria, include: "political and electioneering conflicts, socio-economic agitations, ethno-religious crises, ethnic militias, boundary disputes, cultism, criminality and organized crimes" [4]. There is need for state-of-the-art technology/strategy or both that will match the challenges. Consequently, we propose strategy using *Location Information* to detect location and time during which the person suspected to be terrorist is communicating over the telecommunication or social media network.

## 2 RELATED WORKS

The strategy proposed by [5] highlighted the profit to gain when geospatial intelligence is applied in

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checkmating insurgency. In this, images taken from the satellite will give an insight where the terrorist camp is, as the objects in the image will differentiate each and every object (person for person, sea for sea and tree for tree). Regrettably, among the five Nigeria's satellites, none is dedicated to intelligence gathering [5]. GPS tracking system is among the emerging technology used in recent time in combating lingering security challenges [6]. Using triangulation, it will determine location, time and velocity of an object attached to it. Trailing terrorist and their allies could be easier by recording his/her location and time at real-time via GPS [6], [7]. Unlike developed countries, the application of Data mining technology is relatively new in Nigeria. It's a means of locating notorious personality, discovering his/her financial movement, unusual pattern and behavior through intelligence with a view to fighting crime-related activities [8]. Some authors pointed out that different data mining algorithms and/or techniques such as *Classification* and *Link Analysis* could be used to discover genuine pattern and, ultimately achieve an objective. Events such as phone calls, email contacts, places and so on could be linked to one another for further intelligence analysis. According to [9], [10] Biometrics is the automated means of identifying a personality using physical, physiological or behavioral characteristics through identification and verification. The features to consider are facial characteristics, retina, fingerprint and iris [10]. The proposed system in [9] is capable of detecting a suspected terrorist under surveillance, at the time of screening, at entry or exit point in the airport whose facial images were pre-processed and stored in the database. Due to some of the pre-processing algorithms capable of minimizing false acceptance rate and false rejection rate the system ensure that innocents are not labelled as culprits or vice-versa. In their contribution, [10], the system is fingerprinted. To gain access into premises, the person has to be enrolled and authenticated. IP-

Video surveillance cameras connected to the system serve as intelligence vehicle which report to the terminal, suspicious movements and gatherings.

### 3 BRIEF CONCEPT OF INTELLIGENCE

Intelligence has been defined as the "collection, gathering, assessment and distribution of essential and strategic information". It's a final product of the above mentioned characteristics which help in diplomacy and warfare astronomically. Conclusively, it's a result of specialized information which gives any nation or opponent needed fact to further its action. Countless wars were fought and recorded success due to IT-based intelligence facilities [11]. However, no counter terrorism will prevail without intelligence.

### 4 LOCATION INFORMATION CONCEPT

According to [12], Location information is sensitive piece of personal data that people might not realize and typically associated with a particular place i.e. home, school, hospital and so on. It specifies person's location over a time and could be collected through: *locating system* which reveal the location of devices in a particular place and; *location system* that identify and determine location information of such devices [13]. Having intelligence of all sort is part of warfare and our intelligence community must locate and hit a target [14].

### 5 RESEARCH METHODOLOGY

Our methodology is based on the secondary data at our disposal, ranging from journals, book section, periodicals, websites, electronic source and others. Nigeria, as at February 2014, has recorded total number of cell phone users to be One hundred and sixty seven million, three hundred and seventy one thousand, nine hundred and forty five (167,371,945) [15]. To this end, the country has abundant location data to be used as source of intelligence information gathering. This could be achieved by adopting the proposed strategies coined *Remote Strategy* (1. Wiretapping 2. Imagery Intelligence).

#### 5.1 WIRETAPPING

September 11, 2001 gave birth to patriot Act (*Providing Appropriate Tools Required to Intercept and Obstruct Terrorism*) in United State [16], [17]. With this, we can conclude that it is constitutional and acceptable means of forestalling act of terrorism and preserving security of any country. Wiretapping, is a "form of electronic eavesdropping accomplished by seizing or overhearing communications by means of concealed recording or listening device connected to the transmission line" [18]. It is an act of interruption and seizure of oral and electronic communication media [19]. The bill stated above, could be used or implemented in Nigeria towards achieving its aim. The security enforcement could deploy the necessary wiretap-friendly hardware and software to intercept all cell phone network conversations out of user's consent. According to [20], interrupting cell phone communication is probable, simple than wire line conversation. The best and suitable is *soft wiretap*, where digital information in transit on phone equipment is being analyzed [21]. It is common to intelligence agencies, larger organization and black box [16]. A research conducted by [20] indicates that 96% of wiretapped communications reveal location data to intelligence communities. Through wiretap in 2010, US army was able to track down Abu Ahmad al-Kuwaiti a courier attached to Osama bin Laden which led to Bin Laden death in Abbottabad, Pakistan [22]. When the conversation proved to be suspicious, then, wiretap database could be accessed for location information and further actions. Therefore, Nigeria can mandate all its mobile network providers to provide wiretap capability-network (if not in existence) as US did under 1994 Communications Assistance for Law Enforcement Act (CALEA) [23].

### 5.2 IMAGERY INTELLIGENCE (IMINT)

It is also called "photo intelligence" [24], it provides in-depth examination of image (still or full-motion video) data in order to detect, classify and identify object or organization [25]. It assist in providing accurate geolocation of the target and covers large area. In this paper, we will not explain what devices and how these devices gather image intelligence but, rather how it assist in locating a criminal through an image posted on social media

or other websites such as Facebook, Twitter and YouTube. Videos and pictures posted by terrorist group play a vital role in determining their location. A good example is, locating Iraqi Militant training camp. Time of the coverage and even position of the camera was determined. Secondly, through the sect video posted on social media, imagery analysis was able to spot a location where American journalist was executed [26]. This could be achieved by optimum use of *Geospatial Toolkits* by our DSS, DIA and other related communities [27].

### 6 CONCLUSION

As security is the first priority of every nation to give to its citizenry, these adoptable and promising strategy to curb the terrorism are timely. Our Remote strategy could only need the Nigeria's espionage community to collaborate with cell phone service providers to access their location information database during wiretap which proved to be cheaper. Or, acquire the intelligence technology as Egypt, Libya, Bahrain, Saudi Arabia, United Arab Emirate and India did. To our knowledge, to succeed in this, there must exist a tradeoff between privacy and security.

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