Trends, Patterns and Processes of Information Management by the Nigerian Army in the United Nations Peace Support Operations in Liberia

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Abstract:- **Nigeria has been involved in the United Nations Peace Support Operations (UNPSOs) since independence. Nigeria's Peacekeeping Operations with the direction of the trends, patterns and processes of information acquisition and the Nigerian Army's (NA) Information Management in the UNPSO in Liberia were studied. The study adopted the Cohen's Agenda Setting and employed a triangulation research design. Twenty-eight officers and 172 soldiers were purposively sampled from Nigerian Battalions (NIBATTs) 36 and 37 that served in Liberia while 18 in-depth interviews were conducted with heads of military units in Liberia. Two key informant interviews were conducted with one Commanding Officer and the Military Assistant to the Force Commander. Secondary data were collected from Nigerian Army Signal Messages, Part One and Part Two Orders and the United Nations documents. Quantitative data were analysed using descriptive statistics, while qualitative data was content analysed.The critical role of information management in decision making was reflected by 192 (96.0%) of respondents who affirmed that adequate information management was crucial to the success of Peace Support Operations (PSOs) in Liberia. Also, 182 (91.0%) of the respondents averred that Information Management processes in NA PSOs in Liberia included communication links, satellites, cables and procedures, formats and filters for information transport and retrieval. Furthermore, 184 (92.0%) of the respondents held that trends and patterns of information on the NA in PSOs in Liberia was well managed and protected by both officers and soldiers. Information acquisition processes, trends and patterns of information management by Nigerian Army in PSOs in Liberia were in form of open sources like visual observations by patrol and authorised flights, open communication with belligerent forces and local populations while the act of cryptography or sending coded messages was employed as patterns for information sharing. Though beset with information sharing and coordination challenges, strategic information management by the Nigerian Army contingent enhanced operational efficiency and contributed to the overall success of the United Nations Peace Support Operations in Liberia. However, to achieve a more efficient and reliable management of information resource in PSOs, synergy on information management trends, patterns and processes among the different military battalions in the PSO should be encouraged.**

Keywords: **Information management, Trends, Patterns, Processes, Nigerian Army, United Nations Peace Support Operations in Liberia**

I. INTRODUCTION

Information management is central to military engagement in peace support operations. Of course, information management is very crucial in the security architecture of nations as it is in every decision-making process (Landree et al, 2009). This rests on the contention that in societies and decision-making mechanisms have always required and relied on adequate information as an essential element in facilitating appropriate policies geared towards security and development.

To this end, information is an indispensable resource that when effectively managed, can serve as the driving force for the economic, political, sociocultural, scientific and technological advancement of a nation; greater socio-political equity; efficient governance, power and followership (Muhammed 1994:91). As such, information acquisition and dissemination are the propelling forces of military science across the globe. Therefore, information seeking is a fundamental human process closely related to learning and problem solving- security provision (Goldfrab, 2006).

Upon receipt of information what users do with it translates to information management. Mullins (2003) views information management as a process that involes the gathering and utilization of information from single or multiple sources and the circulation of such information to a single or multiple recipients. Sometimes, information management is exclusive and limited to critical stakeholders. Management implies organization, coordination and control of the different aspects, including planning, form, organization, evaluation and presentation of information processes aimed at meeting certain objectives and to enable corporate functions in the generation and dissemination of information.

The central role of information management in assuring the security of the military and the security architecture of the territories they guide is at no time more important than this era of modern technological warfare (Landree et al, 2009). With the increasing sophistication in modern warfare, military commanders in various fields of assignments are today faced with the global challenges of capable, effective and efficient information management to enhance military operations.

Across the world, nations in defence of their territorial integrity and deterrence of external aggressions have realized that in addition to the accumulation and launching of arms and other weapons of mass destruction, efficient information management plays a pivotal role in security operations (International Peace Academy, 1984:39).

Today, the changing conditions of warfare challenges the currency of the security of societies and that of military personnel. Thus, in emerging trend of sophistications and advancement of technologies, security operations can no longer be pursued successfully by depending primarily on available operational logistics such as men, money, materials and machinery. There has also been an increasing reliance on the effective use of available information in security operations (Nasu and McLaughlin, 2014). It is therefore a significant and sacred responsibility of the information managers whether in peacetime or war situation to make sure that the choice of information gathering, dissemination and application of mass media are vigorously, accurately and efficiently pursued. To this end, in war situations, the significance of accurate information gathering and dissemination by the information managers to secure support, persuasion, morale boosting of military personnel in warfront or to counter negative propaganda cannot be under estimated.

Accordingly, information management is critical in military operations especially Peace Support Operations (PSOs) and there is the widely accepted view that the Nigerian Armed Forces have, over the years, played critical roles in the security architecture of Africa. Thus, the institution has emerged as an important stakeholder and influencer in terms of PSOs and internal security operations. In response to article 43 of the UN Charter and in keeping with the Nigeria Defence and Foreign policy objectives, it has continued to offer assistance to many organizations, including the Economic Community of West African States (ECOWAS), African Union (AU) and the United Nations (UN), in the contribution of troops for PSOs. In this sense, the objective is the security of Nigerians and Africans in the West African sub-region. This objective is not feasible without adequate information acquisition and dissemination.

In Liberia, the Nigerian Army was instrumental to the success of the ECOWAS Cease fire Monitoring Group- ECOMOG. The ECOMOG rose to the challenge to address the deplorable carnage in Liberia, which shamed the world during those traumatic days. Nigeria former Foreign Minister, Major General Ike Omar Sanda Nwachukwu (Rtd) in a statement at the floor of the United Nations General Assembly during the Provisional Verbatim Record of the Three Thousand One Hundred and Thirty-Eight Meeting on November 19, 1992 claimed that ECOMOG - the ECOWAS peace-keeping force - is a refreshing example of collective self-help in a sub-region that has seen many conflicts and that, more often than not, has depended on others to rescue it from its travails. In that sense,

ECOMOG was viewed as an important building-block in the new world order of shared responsibility for the maintenance of international peace and security (UNGA, 1992). According to General Nwachukwu, the Member States participating in ECOMOG do so at great cost (UNGA, 1992).

Peace Support Operations at such perilous time require great diligence and resourcefulness and adequate utilization of information to reduce cost of conflicts and prevent break-out of violent hostilities in the entire sub-region. There is therefore a necessity for a solid and virile information outfit to provide information and maintain awareness for personnel while in operations.

There is a renewed scholarly emphasis on the role of information management in military operations for ensuring national security in nations. The revolution in the field of information technology have emeeged as a positive trigger in driving changes in the ways humanity conduct their affairs especially in the realm of conflict and military affairs (Papp and Alberts, 1997). The defining features of the information age are complexity and change to the point that the security of any nation, people, government and troops in operation hinge largely, on its capacity to adapt to and utilise these complexities and dynamic change for its security.

Studies on military operations in PSOs, have focused on logistics of PSOs (Adonkie, 2014), contribution of Nigerian military contingent in PSOs (Ali, 2013), the role of intelligence in PSO (Umoru, 2013), pre-mission planning and cost benefits of PSOs (Utsu, 2012; Nicholas, 2003). While these studies are important and provide a background understanding of the Nigerian Military and PSOs and a number of the challenges encountered, they have not adequately explored the role of effective utilisation of information management by the Nigerian Military involvement in Peace Support Operation in Liberia to reduce cost of conflicts- human and material while ensuring the security of its territory.

Thus, existing studies have not interrogated the roles and nature, trends, methods and challenges of information management in military peace support operations. This study intends to fill this gap. However, there is a major research question that would guide the conduct of this research: What are the trends, patterns and processes of information management by the Nigerian Army in United Nations PSOs in Liberia?

This study focuses on examining the use of information by the Nigerian Army in the UN Peace Support Operation in Liberia. It sheds light on how information management reduces the costs of conflicts- both in human and material terms. The study interrogates the nature and role of information management in Peace Support Operations.

Information management in decision making and particularly PSOs is a means to an end, and that end in this sense is decreasing the cost of conflict during military operations-PSOs. Peace Support Operations in Liberia has been viewed as a resolve of stakeholders to rise to its responsibilities in ensuring security, stability and peace in the area (UNGA, 1992). However, this resolution cannot be achieved without proper decision making that rests on effective information management. Nonetheless, information management is not only a means to facilitate appropriate decision making during conflicts but also a requirement for achieving peace, security and reducing conflict costs. Therefore, this study provides a guide to the Nigerian Army leadership tasked with the responsibilities of planning and making decisions for PSOs and a framework for officers and men of the military in PSOs for the proper utilisation of information management during operations and helping to reduce costs- human and material during the operations. Also, the study shall help Nigeria to consolidate her participation in PSOs and achieving her foreign policy objectives, it hopes to contribute to the literature and debate on PSOs and security of military personnel and security and peace promotion in the operation area.

II. REVIEW OF RELATED STUDIES

This section will be devoted reviewing existing relevant studies and adopt theoretical model of importance to this study:

Trends of Military Information Management

The notion of data mining or extracting specific data from huge fields of information is usually used along with information management (Wilshusen, 2010). This allegory highlights the launch of the industrial revolution in the Europe. Industrial economic growth expanded and companies increased in complexity. Some of the emergent issues that needed to be addressed included the necessity of recording and transmitting a rapidly growing amounts of data. Given the low level of technological sophistication at that time, solutions tended to be manual. In view of this fact, at the turn of the nineteenth century, information management went through some conceptual and practical changes.

Before the 1980s, the management of information passed through seven different stages. In the first period, the dilemma was the physical control of information containers that, in the early period of the twentieth century, more or less had to do with the need to computerise and simplify data containers which could also be easily replicated. This heralded attempt to restrict the production of manual, analogue sources of data storage such as paper. Between 1920 and 1930, further attempts were made to improve on record management with particular focus on better organisation of data and broader and easier availability.

The breakthrough in computer development between 1930 and 1940 gave this drive a boost especially the introduction of the Electronic Numerical Integrator and Calculator (ENIAC) developed by Pennsylvania University scientists, Mauchy and Eckert . The success would result in the creation of the first commercial computer, Univac in 1951. This began the fourth stage, represented by the management of automated information technologies. The distinguishable features of the fifth phase were the explosion of information technology and devices including computers, microfilms, punch cards and optical devices. Evolution and improvements in data management systems characterised the sixth stage which occurred in the late 1960s.

Information resource was the popular term used in place of information management in the 1970s. This seventh stage featured an advanced approach for handling important and required information in an organization. Most of the modern organisations are experiencing this improved method of information management, although a new concept has already appeared recently, which is knowledge management, widely considered as the latest phase of information management.

The widespread acceptance and approval of the internet and the technologies that drive it since the 1990s, has increased the rate of globalization and inter-connectedness of local and national networks into one big, complex and global system. Internet was initially an experimental network funded by the US government whereby researchers in the field of computer science were tasked with the development. From the Mid 1980 and till date, it proved very successful as a worldwide information infrastructure for military and then private organisations.

In the area of technology, three related changes are observable: first is the emergent mobile digital programme. Second is the progress in online software as a service; and lastly is the advancements in cloud computing where more and more software runs over the Internet.

With an estimated 206.9 million ardent users, Facebook for example, was described as the most prominent social networking site in the world in 2009 (Wilshusen, 2010). Like Facebook, Twitter is also very prominent. With Donald Trump, the US President, often using Twitter to communicate policy issues and decisions, Twitter messaging took on a whole new level of a veritable means of communication that arguably rivals the value of the traditional news media. It has been argued that Twitter has outpaced other social networking sites in terms of unique visitors having witnessed over 500 percent increase, from 2.7 million visitors in December 2008 to 18.1 million in December 2009 (Wilshusen, 2010).

Army commanders routinely use so-called Web 2.0 technologies like wikis and collaboration tools to influence quick and effective decisions. As management behaviour changes, how work gets organized, coordinated, and evaluated

changes also. By connecting military personnel working on teams such as peace missions, the Web 2.0 network enables the works get done quickly. The use of the technological tools was endorsed in President Obama's January 2009 memorandum in a bid to encourage transparency in government (Wilshusen, 2010). Heads of agencies and departmnts were encouraged in the memorandum to leverage on these technologies and put information about their activities online for easy access to the public; and also welcome feedbacks on their activities and operations as this would aid better service delivery and collaboraton and cooperation in government.

Nevertheless, other emerging form of computing such as IPhones, iPads, Black Berrys, and Web-surfing notebooks are not just gadgets or entertainment outlets. They epitomise new evolving technological advancements as reflect in the wide-ranging numbers of new software and hardware technologies. Army personnel are increasingly using these devices to coordinate military operations, communicate with each other, and provide intelligence that impact decision making.

According to Jones (1998), there are currently three clear trends in information management. The first relates to development of multi-faceted information systems, the second trend is the use of sophisticated terminal interfaces with different forms of display facility, multiple windows, etc, and while the third trend is the application of artificial intelligence. These trends will be explained briefly.

The first, development of multi-faceted information systems involves very different types of information object, and of object use. The user operates different types of documents such as papeprs, reports, letters, messages or records, performing complex manipulations on the decuments, example could be scanning, seeking, routing, producing or modifying them. The ser could be supported in these activities by secondary object types like directories, dictionaries and indexes.the entire activity though complex, is also simplied wth computer programmings. This makes it easier for the user to multitask at the same time. He/she could be writing and then turn to something else like search a dictionary or view a thesaurus. These programmes are done in such a way that they can accommodate other users with similar information resources, whether in reading form, as in consulting a common database, or in writing mode, as in modifying a shared schedule. They are further characterised by providing information resources for the individual user which depend on a larger information system, as with mail files (Jones, 1998).

The second trend is the manipulation of sophisticated terminal interfaces with different forms of display facility, multiple windows, etc, which allow linked and parallel operations in a non-comples and convenient way. Thus, for instance, a user can simultaneously create a chart, modify a worksheet and do other things while working on a paper. This trend is clearly linked with the first since sophisticated interactive facilities are needed to support the efficient use of a mixture of objects in a mixture of ways for a mixture of purposes.

The third trend is the application of artificial intelligence. This is not just the acceptance of simulated intelligence techniques, e.g. in the introduction of artificial intelligence processes, as in interpreting natural language sentences for indexing. Substantively applying artificial intelligence implies handling the computerised information management as an action that requires a knowledge base constituting a universal model and inference procedures for exploiting this knowledge. For example a military peace support operation information system would have in part, characterisations of conflicting parties, fighting and killings (Wilshusen, 2010).

III. METHODOLOGY

The true nature of this study required the use of a triangulation design which incorporates the use of combinations of research methods for data collection such as adopted in Asika (2008). Therefore, qualitative and case study methods of data collection were adopted to fully achieve the objectives of the research. This study employed survey and case study research designs. It utilised quantitative and qualitative method to examine the trends, patterns and processes of information management by the Nigerian Army in the Nuited Nations Peace Support Operations. This is important as it helped the study to capture statistics and details of Nigerian Army operations in Liberia as it concerns the use of information during the PSO.

This study was carried out in Liberia. Liberia is located in West Africa. It is bordered in the west by Sierra Leone, in the north by Guinea, while on its eastern borders by Cote d'Ivoire. It borders the North Atlantic Ocean to the southwest and lies between latitude 4° and 9°N and longitudes 7° and 12°W. The 2013 World Bank estimates put the country's population at 4,503,000 while it has a land area of 111,369 square kilometres. The country is captured in Figure 1:
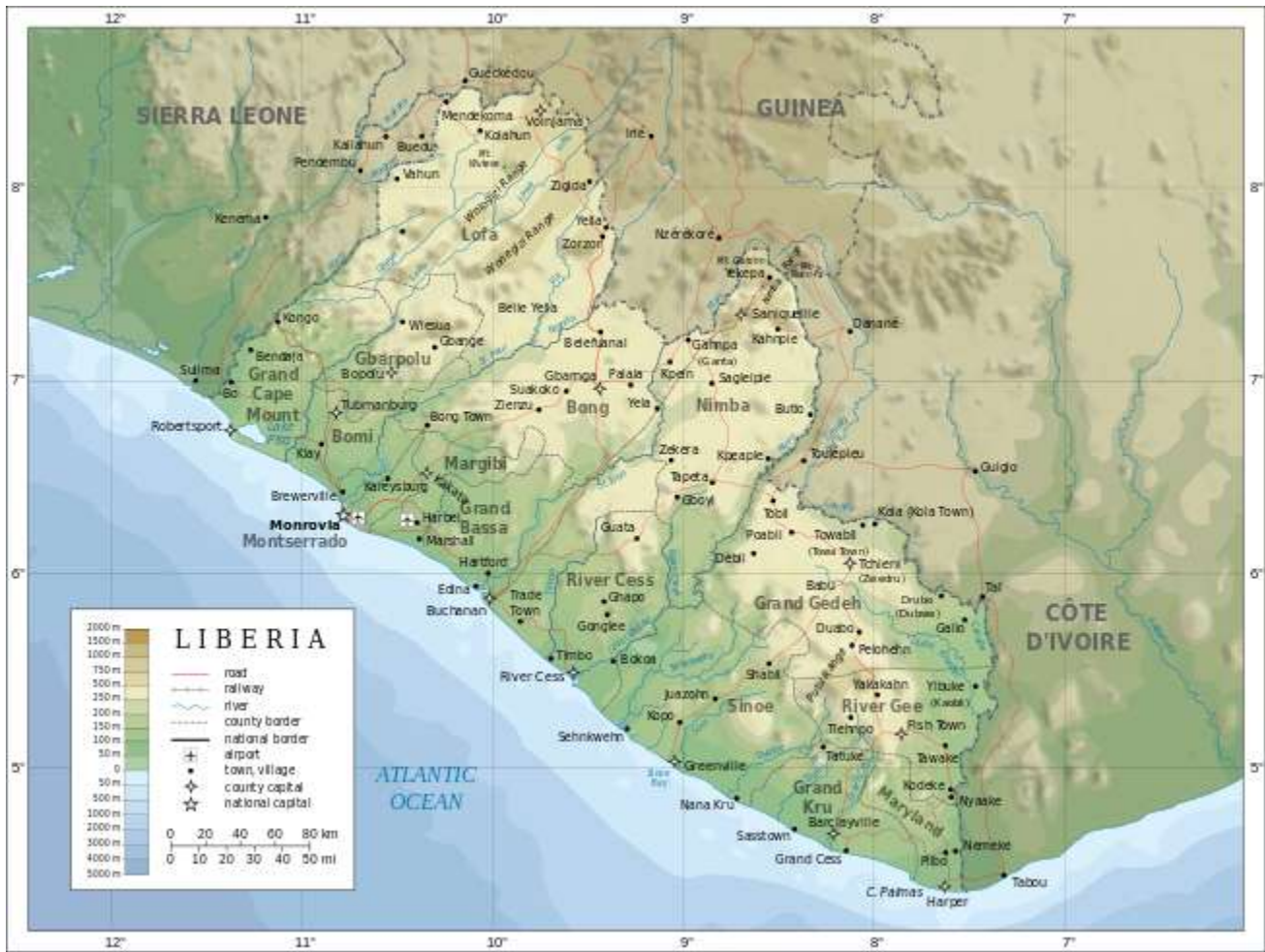
Figure 1 Administrative Map of Liberia

Source: Internet

The country is the oldest republic in Africa believed to have been founded in the 19th century but became notorious for its amost intractable and ruinous civil war in the 1990s. The war which registered high cost in terms of human and physical destruction led to series of peace support operations- peacekeeping, peacebuilding and peace enforcement. To this end, officers and men of the Nigerian Army have piloted military operations. These operations- the failures and successes- have depended largely on the management of information. It provided the impetus to examine information management.

The population for this study is the Nigerian Army- troops who have participated and are still participating in the PSO in Liberia. However, the target population for the study comprised of officers and men of NA who have participated in PSO in Liberia since 2003 and NIBATT 36 and 37 of the Nigerian Army deployed in United Nation PSO in Liberia from July 2015-July 2016. The two Nigerian battalions deployed were about 1,500 officers and men.

In most cases, the population of study is usually too large to be managed with a given time in a study. Thus, a representative sample is necessary. Sample is the subset of a population selected to represent the general characteristics of the entire population. It is the segment of the population that is selected for investigation. In this study, 14.6% of 1500 (the study population) was sampled. Therefore, a total of 220 respondents were sampled in the study with one hundred and ten respondents in NIBATT 36 and 37 respectively. The sample is to provide opportunity and engage Nigerian Army participants in the PSO in Liberia since 2003 to address the research questions set out in the study.

The purposive sampling technique was adopted for this study. Purposive technique involves a process where the researcher deliberately chooses respondents whom he/she considers knowledgeable on the phenomenon under study (Babbie, 2007). The technique helped in locating officers and men of the Nigerian Army with detailed information on the role of information management in its operation in Liberia. A total of two hundred and twenty (220) copies of a questionnaire was administered to officers and men of the Nigerian Army who

participated in PSO in Liberia between 2003 and 2016. Two hundred copies of the questionnaire were returned and analysed. The administration of questionnaire was to understand how information management by the Nigerian Army during the PSO in Liberia is challenged. It also centred on roles, nature, trends, patterns and processes of PSOs. This validated the information sourced from Key Informant Interviews (KIIs) and In-depth Interviews (IDIs).

Two (2) KIIs were conducted with the Commanding Officer of NIBATT 37, Colonel S. O. Aliyu and the Military Assistant to the Force Commander Major Abdul Aziz Saidu. These discussions focused on roles and nature of information management in PSOs, trends, patterns and processes of information management in PSOs and the methods of information acquisition and dissemination during PSOs. Information gathered from the KIIs validated the survey and IDIs. Eighteen (18) in-depth interviews (IDIs) were conducted with heads of military units during PSOs in Liberia between July 2015 and July 2016. The discussions centred on the research objectives and explored the roles and nature of information management in PSOs, trends, patterns and processes of information management in PSOs, the methods of information acquisition and dissemination during PSOs and how information management by the Nigerian Army during the PSO in Liberia is challenged. This was used to validate information gathered from KIIs and questionnaire.

A copy of questionnaire and an interview guide were utilised to collect information from respondents. The questionnaire comprised twenty (20) items which were drawn based on the study objectives. The interview guide contained eight (8) structured questions based on the research objectives.Data gathered from the questionnaire were quantitatively analysed using descriptive statistics in percentages and tables. The qualitative data generated through KIIs, IDIs, and documents were coded and subjected to content analysis.

IV. RESULTS / FINDINGS

The results of the data analysis were presented based on the objectives of the study. The data collected were analysed using both descriptive and qualitative approach

Nigerian Army's Involvement in Liberia Peace Support Operations

Over the years, the Nigerian military has been considered competent and able in tackling flash points of violent political conflicts in Africa and beyond. Throughout Africa, therefore, the Nigerian Military hase played compelling roles in promoting peace and security. In this regard, the NA has since the 1960s been involved in PSOs around the world. The country has therefore participated in over 25 United Nations missions, 2 African Union missions and well over 3 ECOWAS missions (Agwai, 2004). Her involvement forms part of the cardinal objectives of her foreign policy, the deepening of integration, unity and peace in Africa and its defence policy objectives which are determined by her

domestic and foreign policies. In this context, Nigeria defence objective is guided by the need to defend its core values and interests and rooted in the 1999 Constitution (Gbor, 2004:188).

Relying on the foreign policy objective of advancing international peace and security as well as reducing tensions, Nigeria, supported by the USA, led the peace initiative in ECOWAS PSO which became the first regional military intervention in the world. In view of this, the Nigerian Army, was deployed as the largest contingent of ECOMOG to save the West African sub-region from anarchy as well as restore peace and order in Liberia. Initially, NA contributed 756 officers and men out of the first 2,500 ECOMOG forces required to restore peace to Liberia leaving the remaining 1744 for other troop contributing states (Iweze, 1993; Vogt, 1993). Subsequently, Mali and Togo withdrew from the arrangement of contributing forces. This action has often been interpreted as lack of financial power on the side of Mali and Togo to fully contribute troops the PSO in Liberia (Vogt, 1993)

Nonetheless, this appears to be a mere camouflage as the real reason behind their withdrawal may be attributed to the age long rivalry between Anglophone and Francophone Africa (Atkinson, 1997:4). Their withdrawal laid the responsibility on the Nigerian Army as there were constant requests for troop reinforcement in the mission field. To this end, as at October 1990, NA produced about 5000 out of the 6000 soldiers and men in Liberia. Between 1991 and 1993, the number of troops rose to 12,000 and NA contributed 10,000 soldiers and men. In this regard, the Nigeria contingents did not only dominate ECOMOG, they also played critical roles in the ECOWAS peacebuilding project albeit with enormous cost – both human and material. Thus, NA has achieved significant success in the PSO in Liberia.

The success of the Nigerian Army in PSOs, specifically in Liberia, may have been informed by its experience in such operations since the 1960s. Although power and scope of each PSO mission varied from the other, the mandate of the NA has remained largely the same. To achieve the tasks, strategic pre-deployment training is required to gain skills for prosecuting the assignment. Often conducted in Nigerian Army Peace Keeping Centre, Jaji, Kaduna State, Nigeria, the training seeks to equip officers and men with the best conflict management tool possible. Drawing attention to this, one of the commandants of Nigerian Battalion observed that:

> Tasks such as observation techniques, surveillance and supervision, negotiation and mediation, presence patrolling, investigation of complaints and information gathering require additional training for troop efficiency and this is done in Kaduna before troops set out for PSO.

In this connection, what is particularly important for this study is the training on information gathering for troop efficiency.

This indicates that information gathering and management is crucial in Nigeria Army decision making in PSOs. This provides the ground to interrogate information management in the planning and implementation of PSO in Liberia.

Timeliness and objectivity of information are therefore taking seriously in information management for military operations. In this context, a Nigerian battalion field commander in NIBAT 36 pointed out that

> If information does not get to you timely, it will hamper decision making and it will as well hamper situations for the defence headquarters. For instance, if there will be trouble in town tomorrow and you waited till an hour to the incident before you informed the commander, what again can he do. In fact, to even take decision whether to deploy men or not will be hampered because that timeliness was wrong (Interview, 2016).

In this regard, a Nigerian officer stated that;

> Among the Nigerian battalion and in the level of the UN, when information is gathered, it will be passed to ASA, that is, Appropriate Superior Authority and when he gets it, he must process it because there are some steps taken on such information before he acts on it. After processing it and ascertaining its validity, he makes his decision through the structures of command (Interview, 2016).

The above labels information management as the science part of control since it narrows the gap between present and missing information to inform adequate decisions. In this connection, important information is all information of relevance to the commanders and personnel in the exercise of command and control. Survey result show that the role and nature of information management in decision making is critical in PSOs. This is clearly reflected in the Table 1:

Table 1. How Critical Information Management is to PSO

Items	SA	A	SD	D
Information management in PSOs includes document management, record management, digital access management, learning management system.	80 (40%)	108 (54%)	4 (2%)	8 (4%)
Information management in PSOs includes intelligence, logistics, personal, legal issues and weather	78 (39%)	120 (60%)	0 (0%)	2 (1%)
Information management process in PSOs includes communication like satellites, cables and procedures.	76 (38 %)	106 (53%)	18 (4%)	10 (5%)
Information management is crucial to either the success or failure of PSOs.	74 (37%)	118 (59%)	6 (3%)	2 (1%)

While the above table revealed that majority 188 (94%) of the respondents emphasized information management in PSOs to include document management, record management, digital access management, learning management system, the core interest is on how majority 192 (96%) of responses noted that adequate information management in PSOs delivers the mandate and has visible benefits. Adequate and timely information accessibility and dissemination is therefore critical in decision for military commanders.

Consequently, Army commanders often begin their analysis with their mandate and the maps or charts available to him before his men develop the intelligence preparation of the battlefield (IPB) mechanisms required to provide the commander detailed information (ICRC, 2013). At that early stage, accurate information provided by maps and charts inform the personnel generally about locations of legally protected persons, objects, installations and areas and helps the commander and his personnel thought process and appreciation on the mission. Non-availability of this basic information could negatively impact on the military operations.

In Liberia, when the first troops arrived, they had no maps that should have provided basic information and this had severe consequences on both the troops and the mission itself. One respondent maintained that non-availability of maps at the commencement of the mission in Liberia significantly affected the mission and that it was a situation Charles Taylor cashed on to demand the withdrawal of ECOMOG from the country. This is corroborated by Iweze (1993:221) who claimed that there were no military maps on Liberia which would have helped in no small measure in the gathering of intelligence reports. According to Iweze, this development was not only a setback; it also affected the morale and disposition of the troops towards the operation.

Trends, Patterns and Processes of Information Management in PSO in Liberia

Over the years, the Nigerian military has moved from one stage of gathering and managing information to the other. Therefore, there are sweeping trends in the discourse of information management which have appeared as frontburners in the debate including those related to information society and knowledge society, information management and knowledge management, professional skills, capabilities and attitudes to ICT and the global expansion of information services. These developments have triggered increased drive for advancements in the management of information.

Accordingly, a number of changes are occurring in the information environment: change from information to knowledge, commercialisation of access to information, digitalisation of library and globalization to high-tech inventions (Newman et al, 2001) projected over a decade ago that the information profession would undergo the most radical transformation compare to others between 2000 and 2010. However, it is commonplace for individuals and institutions to be resistant to change irrespective of whether it is positive or not. Rutkowski (2000) observed that:

> Change is the constant that is constantly being challenged. People resist change and changes even though it may lead to new knowledge. Organizations also resist change even though it may lead to a better and more effective system. Most people desire to stay with the known rather than venture into the unknown. For information professionals tapping into these issues and having a fresh look is equally essential in information management (cited in Omekwu et al, 2006;21).

According to Jones (1998), there are currently three clear trends in information management. The first is the development of multi-faceted information systems, the second trend is the application of sophisticated terminal interfaces with different forms of display facility, multiple windows, and so on, while the third trend is the application of artificial intelligence. The first is more or less characterised by providing information resources for the individual user which depend on a larger information system, as with mail files (Jones, 1998). The second trend allows linked and parallel operations in a flexible and convenient way and allows a user to manipulate between various tasks at the same time such as amending a checklist, constructing a diagramme while at the same time working on a paper. This trend is clearly linked with the first since sophisticated interactive facilities are needed to support the efficient use of a mixture of objects in a mixture of ways for a mixture of purposes.

The third trend is the application of artificial intelligence. This is not just the incorporation of artificial intelligence techniques, e.g. in the utilisation of frames for representation, or the employment of artificial intelligence processes, as in interpreting natural language sentences for indexing. Substantively applying artificial intelligence implies handling the system data management as an action that requires a knowledge base constituting a model of the world and inference procedures for exploiting this knowledge. For example, a military peace support operation information system would have, partly, characterisations conflicting parties, fighting and killings, and also, characterisations of the people involved, the stakeholders available for non-violent management of the conflict.

This development is connected to the two other trends highlighted as it is also driven by the conviction that terminal technology, in itself, is insufficient for complex information management, but that relying on the user as in outlining, or searching a common bibliographic database, places too great a burden on him.

Trends of Information Management: Information Containers in PSOs and their Control

The steadily increasing technical and environmental complexity of current globally networked warfare presents many obstacles to commanders in various fields of assignments as they attempt to protect their information assets. A container could be described as a repository of information asset. A container is usually described as some type of technology asset, such as software, hardware, or an information system. In addition, it can also describe people, paper, USB sticks or CD-ROMs. A container is therefore any type of asset where an information material is transported, stored or processed. It can be a single technology asset (such as a server), a collection of technology assets (such as an information system or a network), or a person who has knowledge of an information (such as the case where an army commander in a military operation knows the confidential designs for the widgets), or simply a piece of paper with information printed on it.

According to Stevens (2005), when discussing the subject of information containers and their control, there are three important points to consider in the discussion. First, the way in which an information asset is protected or secured is through controls implemented at the asset container level. For example, to protect the customer database on a server, a layered collection of controls (administrative, physical, and technical) are applied to the server, such as only permitting authorized individuals to access the server room (a physical control) and limiting access to administrative permissions on the server to system administrators (a technical control). Second, the degree to which an information asset is protected or secured is based on how well the implemented controls and the container, align with and consider the security requirements (or objectives) of the asset. It is different from merely executing the standing or available set of controls provided by the container, which might randomly safeguard the information assets it supports (Stevens, 2005). In the third point, Stevens argued that any risks to the containers on which the information asset is stored are inadvertently transferred to the information asset. Hence, threats associated with the container should be carefully ascertained when considering dangers to the information asset. For example, if an information asset is warehoused on a server that is in a room that does not limit access, it is susceptible to discovery, alteration, loss, or destruction by an actor using physical access. The value of the server in this case is probably negligible as it can be replaced quickly or its function can be moved to another server. Nevertheless, the data kept on the container is much more difficult to reproduce if compromised,

and might have serious impact on the organisation (Stevens, 2005).

In Liberia, the UN contingents employed the use of LOTUS, Microsoft Outlook, Publisher and several others. The UN Signal Manual indicates that PSOs are provided with such containers for effective management of information. Captain Eric Maza, Nigerian Battalion Intelligence Officer in Liberia claimed the Microsoft Outlook was a more effective information container in Liberia. Accordingly he noted that:

> We use Microsoft Outlook. I think Lotus was more effective in Sudan but in Liberia here, Microsoft Outlook is more effective. Although LOTUS has this compatibility with Microsoft Office but here, Microsoft Outlook has proved to be effective in retaining and controlling information. Accordingly that:

> Using these applications once you send a mail, it is received by the appropriate party. Though sometimes when you are operating a language maybe a barrier, so maybe information meant for operations officer might end up getting to me so I will just have to copy it and send it back to him. Usually, intelligence and operations work hand in hand.

The point to underscore is that information container may have effect on the overall information management and the security situation of the military space. In line with this, Stevens (2005) argued that the type of container in which an information asset resides can often have significant effects on the security requirements and protection strategies of an asset. There are many laws and regulations that require information assets to be protected in specific ways depending on the format in which they are stored. There are often different regulations for paper and electronic records; in some cases, regulations exist for information assets stored in one type of container, while no regulations exist for other container types. However, in respect to the protection of the containers, it is the duty of the owners of information asset, while army commanders would be responsible in the case of peace support operations. They are responsible to safeguard the information asset as it is stored, transported or processed. In this case, commanders set the security requirements for information assets and are responsible for communicating those requirements to all of the assets custodians, which may be other military personnel. The commanders are also responsible for periodically determining that the security requirements for their assets have been implemented through a layered control approach and that the controls in fact meet the security requirements (Stevens, 2005).

Information has always been the centre of military operations throughout history and will continue to be so. Sun-Tzu (2002) observed the significance of information in warfare when he stated that: "know your enemy and know yourself; in a hundred battles you will never know peril. When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal. If you are ignorant of both your enemy and yourself, you are certain in every battle to be in peril (Sun Tzu 2002:51). This well-known quote from Sun-Tzu underlines the relevance of information in warfare. This saying describes the basic fundamentals of information containers and control. In a similar view to that of the intelligence officer cited above, the MPIO noted that:

> In UN operations, they make use of Lotus for team information gathering, processing and discussions. It is a UN installed application; a system. We have it here. The CO has it, the operation officer has it, also the logistic office has it. So, whatever problem he has he forwards it to them and they reply him immediately.

The above response suggests that modern advances in technology, in a general sense compared to older technologies, now provide military personnel with great deal of information to understand, analyse and act upon information according to what is happening on the battlefield.

This brings to light the trend of information management in the Nigerian Army. To understand these trends, we consider the communication systems of the NA and how they have changed over time. The three Services of the Nigerian Armed Forces (Army, Navy and Airforce) currently operate individual communication systems in the high frequency (HF), very high frequency (VHF), ultra- high frequency (UHF) and private automatic branch exchange systems (PABX). Due to the operation of respective service communication systems, attempts at joint exercises have revealed non-interoperability of equipment. This was observed at two successfully conducted joint exercises, namely, Operation SEADOG in 1985 and OP TAKUTE EKPE held in May 2004.

To correct the deficiency in communications, efforts were made by Defence Headquarters (DHQ) to establish common-user systems. This led to the proposition for the establishment of a Defence Integrated Strategic Communication Network (DISCON) by DHQ in 1998. The use of VSAT for the Armed Forces communications was subsequently recommended. Meanwhile DISCON project has been slowed down by paucity of fund. To further improve Defence communications, the Federal Government had authorized DHQ the use and incorporation of the communication equipment used during the 1999 FIFA World Cup Competition in Nigeria (**Nigeria 99**) and the All Africa Games 2003 (**COJA, 2003**). This involves the pooling of all communication equipment used in both competitions from the various venues and distributing them to the three Services and DHQ for effective communication. This greatly boosted the information acquisition, distribution and sharing capability of the Defence

Headquarters and the Services. Some of these equipment were used in PSO as Contingent Owned Equipment.

The VSAT network, recommended by the DISCON Committee solved some of the communication requirements of the Armed Forces in the area of effective command and control as well as administration of the forces. It also eased the dissemination of real-time data required for operational planning and intelligence gathering. The VSAT system is suitable for incorporating the existing Armed Forces Communication equipment and also meets the requirement of the Integrated Services Digital Network (ISDN) necessary for information operations for the dominance of the electromagnetic spectrum. Nevertheless, there was no formal information management system in the Nigerian Army even as at 2013, despite its romance with computerization that stretches back to the late 1970s (NA, 2013).

What existed at the time was the analogue way of managing information especially the storage of information or documents in file cabinets, while dissemination was carried out through telex, Signal Dispatch Service or runners. Also, organised information management was thought to be restricted to the security and intelligence departments of the NA such as the Nigerian Army Corps of Military Police and the Directorate of Military Intelligence. This was because these units are professionally involved in the acquisition, storage and general management of information for efficient duty performance in support of national security. Although other units do acquire, store, retrieve and disseminate information, these functions were not regarded formally as information management as the topic is relatively new and postdates the introduction of computers. Even so, the importance and value of the information held within the Service is surprisingly under-valued (DMI, 2014).

It was not until the late 1970s that computer and Information Technology (IT) were introduced to the Nigerian Army beginning with the initiatives of the computer vendors who were only interested in making money by unloading computing equipment on the Nigerian Army not minding whether or not they were needed at that time. And later on, the efforts of the Nigerian Army Finance Corps (NAFC) to automate, computerise and modernise the mode of payment in the organization. This would later lead to the adoption of a computer policy and the creation of a Directorate of Automated Data Processing (DADP), in 1981. Since the mid-1990s, therefore, information technology has shaped a new way of information management activities in the Nigerian Army.

According to the Director of the Automated Data Processing Department (DADP), few computers were acquired, but these were initially used largely for word processing purposes. It was also revealed that test trial usages for personnel database were made for the Military Secretary Department of the NA. Computers are also being used in the preparation of officers and soldiers salaries. This minimal introduction of computers improved the speed of processing of information. Nevertheless, alongside the computers, the manual approach to information management has remained a usual practice. In the late 1990s, an attempt was mooted to advance the computerization of the NA, using funds provided by the Petroleum Trust Fund (PTF). However, the quantity of the computers purchased which were about 60 personal computers (PCs) were far below the initial requirements of 340 PCs for the Services. Hence, these efforts had no significant impact on information management in the Armed Forces.In this connection, the changing information climate has continued to shape military operations in PSOs as observed in Liberia. Information from the survey revealed that the changing information environment and Nigerian Army adaptation has the potential to entrench information management in PSOs. This is captured in Table 2 below:

Table 2: The Changing Information Environment and the Nigerian Army Adaptation

Items	SA	A	SD	D
The problem of information management in PSOs is the large number of disparate information management system.	20 (10%)	100 (50%)	32 (16%)	48 (24%)
There is poor quality of information, including lack of consistency, duplication and out of date information during PSOs as a result of the changing information environment.	24 (12%)	60 (30%)	32 (16%)	84 (42%)
The movement from manual to technology in information management provides little coordination system during peace operations.	20 (10%)	60 (30%)	36 (18%)	84 (42%)
There is little recognition and support of information by senior management in PSOs	24 (12%)	58 (29%)	30 (15%)	88 (44%)
There is limited resources for deploying, managing or improving information systems during PSOs	22 (11%)	72 (36%)	42 (21%)	66 (33%)
Internal politics impacts on information management in PSOs.	26 (13%)	76 (38%)	36 (18%)	62 (31%)

Table 2 shows that half (100) constituting (50.0%) of the respondents stated that the problem of information management in PSOs is the huge volume of disparate information management system as against the minority 48 (24%) noted that majority (84) (42%) of the respondents disagreed that there is poor quality of information, including lack of consistency duplication and out of date information during PSOs while 24 (12%) strongly agreed. Findings

demonstrated that majority 84 (42%) of the respondents strongly disagreed that there is little coordinating system during peace while minority 20 (10%) of the respondents strongly agreed that there is little coordination system during peace support operations. Furthermore, result showed that majority 88 (44%) of the respondents disagreed that there is little recognition and support of information by senior management in PSOs while 24 (12%) of the respondents strongly agreed with the question. The result further revealed that majority 72 (36%) of the respondents agreed that there are limited resources for deploying, managing or improving information systems during PSOs while 22 (11%) of the respondents strongly agreed with the question. Result also indicated that majority 76 (38%) of the respondents agreed that internal politics impacts on information management in PSOs, while 26 (13%) of the respondents strongly agreed.

From the foregoing, it could be argued that information management in the Nigerian Army has evolved over the years and the containers and control of information have equally followed the changing trend even in PSOs, yet the role of information management in military operation remains the same. Thus, the military, including the NA, has developed information systems to embrace the ever-changing trends of the information management environment.

Patterns of Information Management: Developments of Information Systems

Information systems have a strong presence in approaches to development. Information systems are involved in how individuals carry out their work and leisure activities, in the way people organize themselves in groups, and in the way organizations and societies are formed. The term development is used in different ways. For many, development is primarily associated with economic development (Walsham, 2005). In the context of developing countries, the term is often used in a wider sense, describing development loosely as the ideal of improving people's situations (Sutinen and Tedre, 2010). Not least is the term development also essential in the technical sense, like in software development.

Avgerou (2008) characterizes IS research in developing countries as being distinct from mainstream IS research by its attention to the context of IS innovation and by discussing the evolving role of IS innovation. Therefore, IS research in developing countries should be able to provide substantial contributions to understanding the impact that historically constructed social conditions have on IS innovation, and to understand how IS interventions are able to improve life or working conditions. Walsham and Sahay (2006) provide a summary of the contemporary research on IS in developing countries. Based on a grounded theory methodology by analysing a set of journal and conference papers, they developed a classification approach for literature in this area. This classification broadly distinguishes research contributions into the following categories: (i) key challenges

for ICT use (ii) the role of technology, (iii) theory and methodology.

> They are transforming education, health care, commerce, politics and more. They can help in the delivery of humanitarian assistance and even contribute to peace and security (Castells 1996).

In Africa, the development of IS has been very fast in recent decades. We can see applications of information everywhere in our society such as in military operations, such as the case of Liberia, industry, health care, education, agriculture, travel, and economic activities, amongst others. Thus, a technological revolution, meaning mainly information systems, is reshaping the society (Castells 1996). In PSOs, military contingents have imbibed cultural modes of information systems where locals have developed such systems to communicate security situations. This could be deduced from the response of the Military Intelligence Officer of the Nigerian Battalion in Liberia. He noted that:

> One good thing I like about Sudan, I think Sudan has one of the best intelligence systems in the world. As we are passing here now, a cattle rearer will bring out his Turaya and he is calling, so so so people have just passed here. They are very security conscious unlike Liberians.

Nevertheless, advancements of IS has brought dramatic changes in modern warfare. The nucleus of modern warfare is information. David (1999) proposed an innovative idea of network-centric warfare (NCW) based on the IT revolution. This was influenced by his prediction that future warfare would likely be network-centric. According to him, NCW is an emergent military response to the age of information. It concentrates on the military might that could be harnessed from effectively networking of linking the combat enterprise. Its major feature is the capacity of forces at different locations to be able to establish a sophisticated level of shared conflict theatre awareness that could be exploited through self-synchronization and other system-centric activities to realise commanders' intent (David, 1999).

Hence, military processes are complex and continuously changing due to the developing technology and the spread of information. Thomas and Cohen (1995) stated that the revolution in military affairs requires new technology (internal combustion engines or vehicle armor), its integration to new military equipment, the utilisation of highly effective operational models (breaking the defensive line using vehicle armors), adoption of organizational structures, and lastly, the idea of brigade transitional force grouping. Hence, it would be illogical to argue against Thomas and Cohen is point of view, because it is a very important process in the way warfare is executed in the present era. Even as witnessed in Liberia, we cannot ignore the factors which shaped the mission. These

factors are among others, the development of hi-tech and data transmission tools, or the role of computer science.

Processes of Information Management

The use of sophisticated terminal interfaces with different forms of display facility, multiple windows and allows linked and parallel operations in a higly flexible and convenient way. Generally, there are three forms of sophisticated terminal interface, user interface, administrative interface, and programming interface. According to Shneiderman (1992), a user interface is that portion of an interactive computer system that communicates with the user. The user interface design basically relates to any visible aspect of the system that the user can see. At a time, computer use was limited to experts in the field of computing and the interfaces comprised offline punch cards, batch printouts and jumper cables in patch boards. Today, a substantial number of non-specialists use computers keyboards, mice, and graphical displays are the most common interface hardware.

Presently, most Army personnel are constrained to work with the computer and quite a number of them do not have computer background or experience of working with a computer and thus, have little knowledge of how to use the device. The low level of computer literacy could be as a result of the users' life-style (Shneiderman, 1992). Another downside of this limitation for users is that it creates a number of challenges in terms of learnability and understanding of computer softwares and how they could be applied in the performance of their daily activities. Nevertheless, suitable design of a user interface could substantially improve user learnability and training duration. For the system itself, a good design could reduce error rates, improved speed performance and user satisfaction. It also has positive influence on the retention capacity of users in terms of understanding the system's operational procedure. Meanwhile, sophisticated systems are already replacing the antiquated designs of the past.

The information setting is shrouded with all kinds of security codes to prevent sabotage, leakage and security situation. What is uppermost in military agenda is how do we secure this environment? Given that the military system administrator must be critical, tactical and proactive to know what information goes where and who receives what information, compacts are made to exist to distinguish the information hierarchy. Let us return to the I need to framework of information sharing in the military. Responding to this study, the MPIO of the battalion in Liberia stated that:

> There is I Need to Know Bases**.** There are some information that is purely for the commanding officer and the staff officers. It depends on the information. There are information meant for only the commanding officer and the staff officer. For instance, information meant for our signal officer who is in charge of communication might not be

revealed to logistics officer because it is of no importance to him.

This information pattern suggests that some officers might not be privy to know what is happening in other departments within the military environment. This shows that information management is a sensitive issue in the military. A system administrator working in a business organisation might have a different role.

Nevertheless, the system administrator is usually an information technology expert for or within an organisation. Their job is to ensure that all related computer systems and services keep working (e.g, website). The responsibilities of the administrator differ from one organisation to another, and they are usually wide-ranging. Part of the task includes installing, supporting and maintaining computer systems or the servers. They are also to prepare for and respond promptly to service outages and other problems. System administrators also do scripting, training and supervision of system operators. They could be called upon when the organisation's technical support staffs are unable to address the emergent problem. While the system administrator's role in the business sector might be tasking, in the military, it is much more about information security. Such administrator in the military would have to decrypt several encrypted codes and even code other information to prevent it from getting into the wrong hands. One of the Nigerian Officers in Liberia stated that:

> looking at technology, there are better ways information can be managed. They can be coded. Whenever information is supposed to be passed, it should not be passed in clear languages. Information should be passed in coded languages. So, that only those of the I Need to Know bases (those that can decrypt such information) can have access to it.

Although the officer spoke in the general sense of coding and decrypting information he was also specific about the utilisation of technology. The point made is that information could be kept secret from those who are not knowledgeable on decrypting the passed information. In this sense, artificial intelligence is not sufficient for unlocking a coded information. Discussing further, the officer claimed that usage of sophisticated facility and application of artificial intelligence has been responsible for military victory in history. He linked it to how victory was gained over German forces during the Second World War by simply utilising sophisticated military facility. The military Captain noted that there is more advanced facility in the present time and that the NA has the right people to use this for peace operations whether in Liberia or Nigeria's North East Region. He noted that:

> When we look at World War 2, sophisticated military facility was used to win the Germans, we have more modernised once now. We can have such modernised

facility and we can use them. We can equally have some aircrafts, drones and other things that can have photo imageries and some sensors that can give updated information. Basically, I think ICT is very important when it comes to information management (May, 2017)

The underlying argument above is that usage of sophisticated military facility and the application of artificial intelligence are critical to information management in military operations including PSOs. This reinforces the argument that the system administrator requires to go the extra mile to deliver on his/her job especially in the military.

In a system composed of several computers, the job of systems administrator includes managing user accounts and network resources, with special attention to the care of user privacy and information security. The system administrator is a professional who knows the specific tools and functions that the system offers for it and that can only be used by him, as they require special privileges. Furthermore, for any other user, the administratr can guide. The user must not necessarily be an expert to manipulate a computer, like the driver of a car is not expected to have mechanical expertise. The reality is that, like a vehicle driver is expected to have an idea how to replace a wheel, a computer user is equally expected to address a number of management challenges emanating from the naivety and limitation of operating systems.

To develop applications on an operating system, the programmer uses, regardless of the programming language used, a set of functions to access operating system services. However, calls to the operating system are specific to that system, accordingly, might be unsuitable for another operating system, since they are guided by tools and concepts specific to that system. Actually, it is common that the programmers do not directly use operating system calls, but specific record functions of the language for that purpose.

Application Programming Interfaces (APIs) have for a long time been an essential component of the computer industry. They are fundamental to the way that computer software and system design have developed. An API is a set of tools, protocols and routines for developing software applications. According to Shneiderman (1992), an API expresses a software component in in relation to its operations, inputs, outputs, and underlying types. For example, an API can aid the incorporation of new updates into existing applications (a so-called plug-in API). An API can also facilitate, unique applications with data sharing, which could assist in integrating and improving the application's functions. APIs are usually developed in the form of a library that contains specifications for data structures, routines, variables, classes and objects. In other cases, notably SOAP and REST services, an API is simply a specification of remote calls exposed to the API consumers (Shneiderman, 1992).

A range of optons are also available to the enemy with which they could attack or influence the opponent's INFOSYS and operations. Attacks could be built to have delayed impact, such as controlling a programme, corrupting a database or other forms of direct strike to degrade or physically destroy. These issues were a source of concern to the Nigerian army contingents in Liberia. According to the study, the military assistant to the Force Commander stated that:

> Sometimes they get cut off [communication infrastructure] and it take days before they can be re-connected for obvious reasons because the infrastructure in the country especially telecommunication infrastructure in the country is very weak and everything is actually centralised in Monrovia. Outside Monrovia, the facilities are actually poor (MAFC).(March, 2017)

This type of situation can lead to frustration and confusion among the army contingents. Such challenges can even impact the use of computer, considering its role in the military operation. Over time, the military have adapted or designed computers to do an expansive array of tasks, to include analysing intelligence, organising prudent data for military commanders controlling smart weapons, or communication. In fact, in recent years, the military have been exploring the artificial intelligence exhibited by computer machines to aid military operation.

Nevertheless, scholars and researchers have, over the years, taken great time to describe and reveal more precisely what is meant by artificial intelligence. For instance, Turing (1963) as cited in Hanson (1987) proposed the following test of machine intelligence: if a person engaged in a typewritten discourse with a machine hidden behind a curtain could not determine whether the conversation was with another person or with a machine could be said to exhibit intelligence. This challenge has been addressed by early artificial intelligence programs, however, the results have shown mixed success. An additional effort to illustrate machine intelligence according to Hanson (1987) involved programming a computer to solve portions of an IQ test. The effort to define what behavioural characteristics a machine must possess to be considered intelligent, however, is best considered as an evolutionary process; advances in machine intelligence often result in more exact definition of intelligent behaviour. Therefore, it is evident from the foregoing that usage of sophisticated military facility and the application of artificial intelligence enhance information management—a facilitator of either the success or failure of military operations. In Liberia, evidence revealed that the UN put in place different facilities to enable the military achieve their mandate in the PSO, nonetheless, impacts of sophisticated military facilities have been low in the over-all success of military engagements in the mission.

V. CONCLUSION

Information management is central to the overall success of peace support operations' mission. So, troops need information management to coordinate and manage that environment. This study explained the trends, patterns and processes of information management by the Nigerian Army in PSO in Liberia and argued that information security has compelled information managers/military commanders to utilise different information ampoules and control mechanisms to prevent sensitive information from getting to the wrong/unauthorised hands. This is a contrast of existing explanation that has only mentioned these dynamics in passing without detailing how the steadily increasing technical and environmental complexity of current globally networked warfare environment presents many obstacles to military commanders and how they were able to surmount such challenge. This study found that open source information gathering in PSO is a cost-effective way of gathering information which is commonly advanced in the literature of information management and peace support operations and it could be applied without initiating further conflicts and encouraging harmonious Civil-Military (CIMIC) relations in PSOs. It also showed that the Nigerian battalions have bottom-up method of gathering and disseminating information and top-down method of coordinating and controlling information in the PSOs in Liberia.

VI. RECOMMENDATIONS

Information management by the Nigerian Army in Peace Support Operations becomes salient to the stakeholders of PSOs, policy makers, the Nigerian Army and information managers to take necessary measures in recognising and improving information management in PSOs.

Given the changing security climate and the changing trends, patterns and processes of information management in PSOs, the Nigerian Army hierarchy need to constantly organise conferences and capacity buildings for their personnel to meet up to the ever-changing information environment and how best to employ it in PSOs. Such training and retraining of officers should focus on adequate knowledge of language and culture of the environment, the sensitivity of information and what it does and how it can be used.

Accurate information provided by maps and charts should inform the personnel generally about locations of legally protected persons, objects, installations and areas and helps the thought process and initial planning of the commander and his personnel on the mission, initial intelligence should form the basis of decision making in Peace Support Operations. This is because non-availability of this basic information could lead to faulty decision making and have a negative effect on the peace missions.

Further, the constant dynamics of information management environment has necessitated the use of ICT for efficient PSOs. Thus, policy makers as well as other stakeholders in the security sector need to encourage more utilisation of sophisticated facility in PSOs such as aircrafts, drones and other equipment that can have photo imageries and some sensors that can give updated information about the mission.

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