DEPICTING THE SIGNIFICANCE OF ICT IN THE SUSTENANCE OF NATIONAL SECURITY (NIGERIAN PERSPECTIVE): A REVIEW OF THE IMPORTANCE OF TECHNOLOGY IN GLOBAL SOCIETY

Moses Adeolu AGOI[1], Zohaib Hassan Sain[2*]
[1]Lagos State University of Education, Lagos Nigeria
[2]Superior University, Pakistan
E-mail: Zohaib3746@gmail.com

Abstract: The significance of Information and Communication Technology (ICT) in the sustainability of global societies cannot be undermined. The term ICT is an umbrella suit that encompasses the functions of unified communications and harmonized telecommunications including software applications, storage, and audio-visual systems that enable users to process information. ICT can therefore play an important role in national safety and defence against instability and risks of violence brought about by rapid technological growth, and social and political transformation. This paper is a descriptive review of the role of ICT in the overall security of a nation. The paper discusses the concept of ICT and security. It further identifies the problems faced by ICT implementation and possible solutions for the sustenance of national security. To collect important data for the paper discussion, questionnaire instruments were administered to respondents using an online Google form. The gathered responses were subjected to reliability analysis. In conclusion, recommendations were made.

Keywords: ICT, National Security, Technology, Global Society.

INTRODUCTION

Information and Communication Technology (ICT) is an umbrella term that defines the use of communication gadgets such as radio and cell phones, satellite channels and dishes, computers, and many more utilities to manage information (acquisition, processing, dissemination, storage, and retrieval)(The Way Forward, 2022)[1]. The developments introduced by the inception of Information and Communication Technology (ICT) in human societies have substantially helped reshape people's interaction, education, entertainment, and business processes. ICT has made the exchange of information easier than ever and resultantly encouraged globalization. These evoking technologies have aided the continuing reduction of the complexity of government-related issues. However, the use or misuse of the internet as a medium of information and communication has in several cases led to direct damage to the human physical society (Aljazeera, 2002)[2]. The non-compliance to the payment of taxes on online transactions is having adverse effects on physical businesses and overall government revenues. The unrestricted sharing of beliefs, ideologies, opinions, and

convictions among indigenous cultures is encouraging emotional stress and confusion while terrorists are using the opportunity of the web to create violence and conspiracies. In other words, the major issue with Information and Communication Technologies (ICT) is security. The term 'Security' can be defined as the status of defense of the interest of an individual, society, and the nation against internal and external dangers. The past century has witnessed a couple of anti-societal activities such as cyber-attacks, vulnerabilities, and intrusions in the domain of information and communication technologies (Oforji et.al, 2017)[3]. It is therefore very important to discuss security problems putting 'national security' in mind. Numerous researchers have dived into the issue of national security. The study of Oforji, Udensi, and Ibegbu (2017)[2] stipulated that several countries are going through many Internet-related challenges including intellectual property breaches, security risks, and security of personal data. Cybercrimes are not limited to people who lack the technical capability to supervise and tackle digital communications required for national security.

RELATED LITERATURE

A research study was done by Ibrahim Saleh to emphasize the need to address vital issues of conflict and violence to improve the monitoring of cyber networks in Nigeria, creating a better understanding of how ICT could help address new media discourse conflict issues, peace, and security (Ugbegili, 2018)[4]. This shows that the incorporation of ICT can be used to bridge wide communication gaps through mobile communications and its connectivity. ICT can help to ensure the transmission of information across geographical locations that are far apart. About security, many studies have postulated views on the concept. The term 'Security' is used to describe liberation from uneasiness or a peaceful situation without any risks or threats (Oghuvbu, 2021)[5]. Security is therefore a broad view of "freedom from threats or danger to an individual or a nation. An individual or nation can protect and defend oneself (Ojobah et.al, 2021)[6]. Security challenges have become a major challenge confronting almost all human institutions, agencies, governments, and nations around the world that have pivoted from civilian to military-centered perspectives. There are numerous criminal activities perpetrated through the Internet including e-mail scams, theft of data, identity theft, hacking, extortion, and many more (Nasiru, 2020)[7]. In recent years, the state of insecurity in many nations has been highly worrisome and the

effort to combat it has prompted a lot of questions (Nsudu & Onwe, 2017)[8]. By implication, there is a need for national security; hence sophisticated communication facilities, effective communication processes, and an adaptive participatory communication approach are needed to achieve maximum national security (Jimoh & Awodi, 2021)[9].

Problems of ICT in National Security

Alongside the opportunities and benefits extracted from ICT use, a broad range of drawbacks have limited its full implementation. These include:-

1. Poor funding and utilization of ICT equipment:

   This problem is peculiar to governments and NGO's not adequately providing funds for the purchase of necessary equipment and gadgets to ensure effective security.

2. Unpatriotic conduct of security personnel:

   A huge number of security personnel are not devoted to their duty assignment basically because of poor motivation or incentives.

3. Disloyalty among security personnel:

   Most of the security personnel are not dedicated nor loyal to the nation because of distrust among themselves and even towards their superiors.

4. Poor intracultural development:

   Most intracultural structures are nothing to write about hence the developments of ICT as a tool for security are not being enhanced.

5. Erratic and poor power supply:

   The Epileptic nature of power supplies in most developing nations has constituted a major problem in the use of ICT as a tool for national security.

6. Lack of competent manpower:

   There is insufficient competent manpower to handle ICT in most countries, this has limited the implementation of ICT in the area of security of some nations.

Possible measures on how to sustain national security

Some of the major ways information and communication technology can help to sustain national security include:-
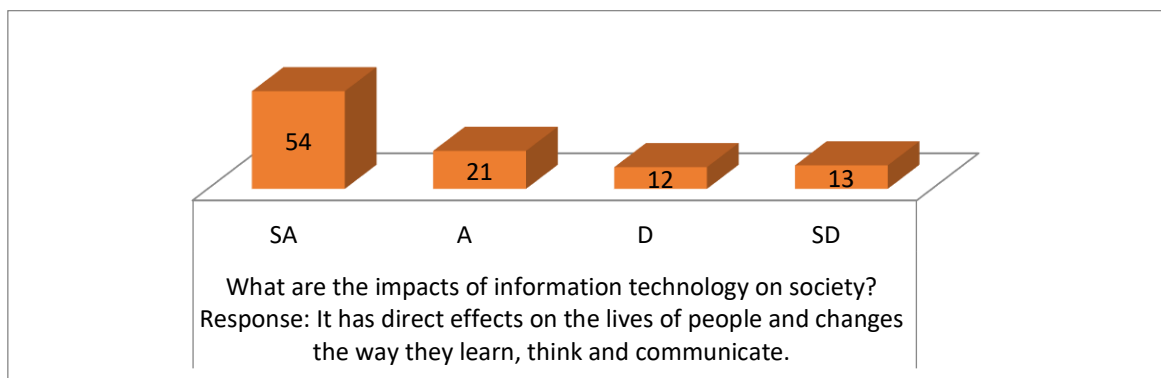
1. Using Global Positioning System Technology

2. Using social networks
3. Use a smart surveillance camera
4. Emergency Operations Centers
5. Use of smart weapons
6. Intelligent monitoring and collection

METHODS

This study conducted quantitative research. The study utilized a descriptive survey approach method which involves the use of a questionnaire where carefully constructed questions were administered to respondents using an online Google form questionnaire instrument to make the collection of useful information easy. Items found in the questionnaire include the test questions and four (4) point scale options consisting of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The responses gathered from the respondents were subjected to Cronbach's alpha reliability analysis. Closed-ended questions were asked to enable the respondents, which were security personnel and other people from different countries around the world. The responses gathered from the interviewed respondents were subjected to Cronbach's alpha reliability analysis. The result of 0.91 gave a good reliability index of the instrument. The entire exercise took place within thirty-four days before completion.
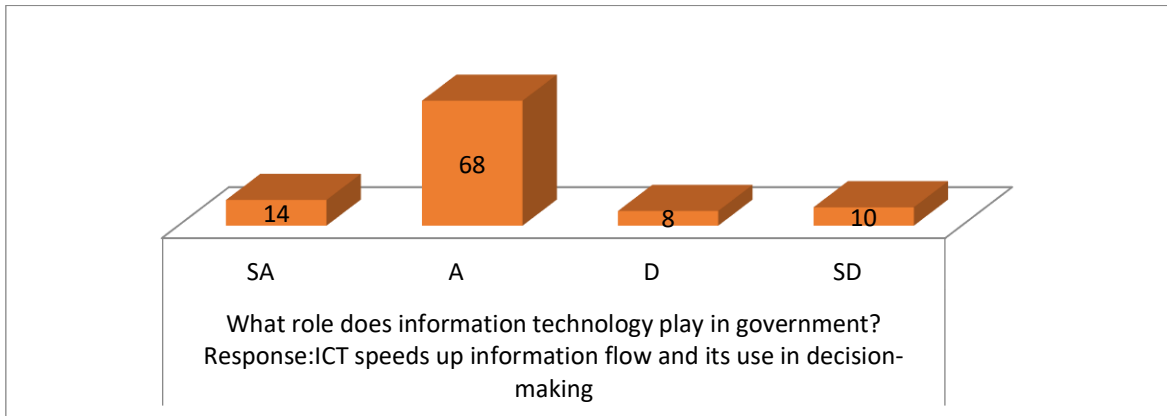
RESULTS AND DISCUSSION

SA 54 A 21 D 12 SD 13

What are the impacts of information technology on society?
Response: It has direct effects on the lives of people and changes the way they learn, think and communicate.
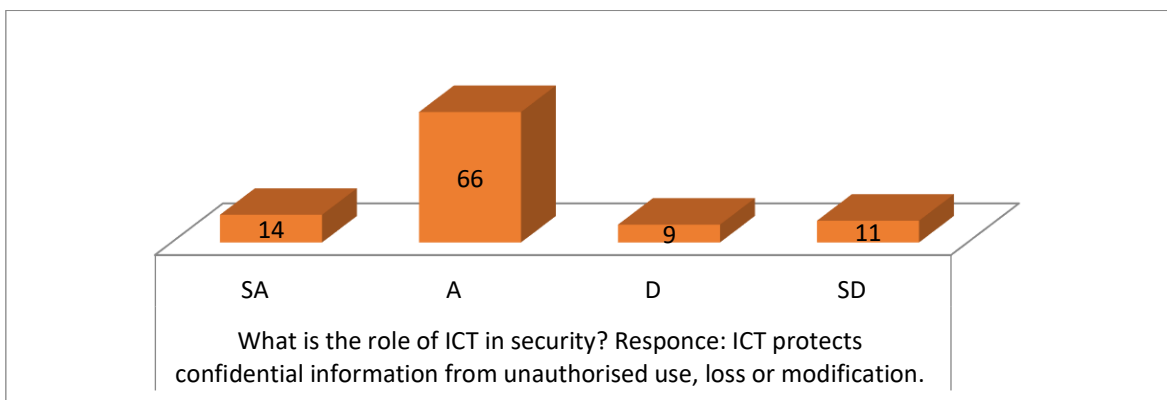
Analysis chart 1

The graph plotted in analysis chart 1 shows that 75% of the respondents consisting of both security personnel and civilians were in support that information technology has direct effects on the lives of people and has the potential to change the way people learn, think, and communicate while the remaining 25% of the respondents were not in agreement about the positive impacts of information

technology on the society. In general, a very high percentage concur that information technology and society are co-dependent, co-related, and mutually influenced by one another.
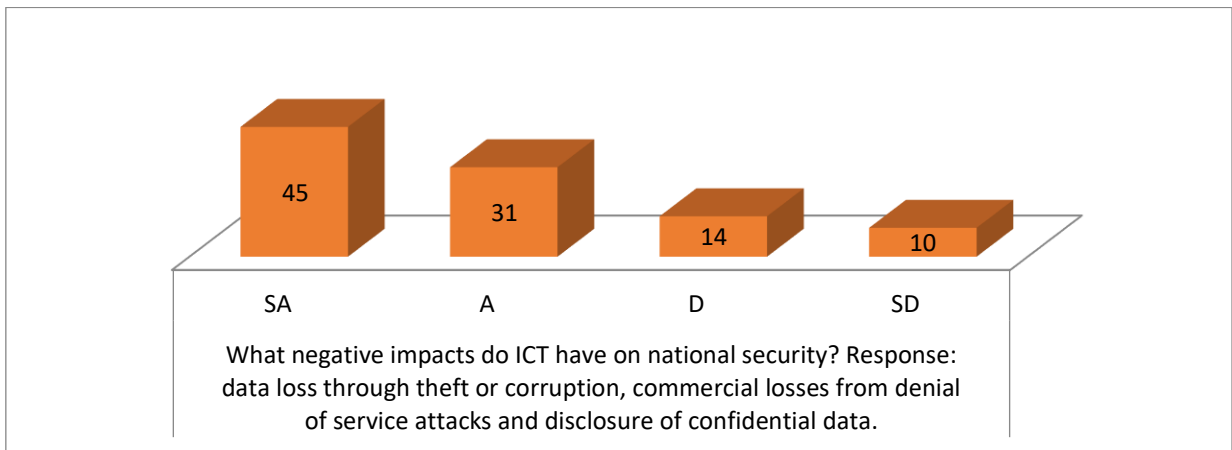

Analysis chart 2

The responses of the respondents shown in analysis chart 2 depict that 82% of the respondents were made up of security personnel and civilians agree with the statement that Information technology can essentially be used to speed up the flow of information in society and also greatly useful in decisive decision-making while the remaining 18% of the respondents consisting of a few number of security personnel and the rest civilians were indifference about the role played by information technology in general governance. A huge number of respondents noted that several procedures are taken to enhance governmental organizations in conducting manual operations. According to the respondents, this usually slows down the delivery of jobs thus information technology can be used as an aid for the the automation of these processes.
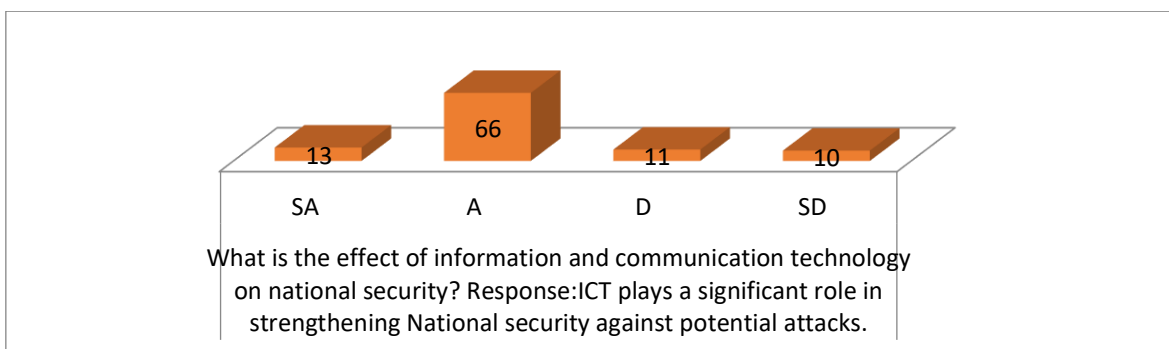

Analysis chart 3

The graph plotted in analysis chart 3 shows that 80% of the respondents

consisting of security personnel and civilians affirmed that information technology can be used as a tool for protecting confidential information from unauthorized use, loss, or modification. Other resorts which sum up to 20% consisting mainly of civilians and a few number of security personnel were not in favor of the role of information technology. According to the respondents that were positive about the role of ICT in the society, the responses reveals the elements of an effective ICT security system include monitoring and restriction of access to confidential information.

SA   A   D   SD

What negative impacts do ICT have on national security? Response: data loss through theft or corruption, commercial losses from denial of service attacks and disclosure of confidential data.

Analysis chart 4

The graph plotted in analysis chart 4, indicates that 76% of the respondents majorly where security personnel and civilians concerned that there are several negative impacts of information technology besides the numerous benefits derived from its usage on national security while the rest 24% disagree and strongly disagree with the statement. According to the respondents, the adverse impacts of using information technology include data loss through theft or corruption, commercial losses from denial of service attacks, and disclosure of confidential data.

SA   A   D   SD

What is the effect of information and communication technology on national security? Response:ICT plays a significant role in strengthening National security against potential attacks.

Analysis chart 5

The graph shown in analysis chart 5 depicts that 79% of the respondents consisting of a greater number of civilians and security personnel as a minority considered that information technology has significantly contributed positively towards the development of strengthened national security and helped in combating potential attacks while the other 21% of the respondents were indifferent of the effect of information and communication technology on national security. The majority of the respondents noted that information and communication technology has the capability that enable the general society to identify potential threats, provide mechanisms to aid the protection of any society, develop response capabilities, and effectively be used for information sharing.

CONCLUSION

Information and Communication Technology (ICT) has the potential that can help to sustain the security of global societies. Modern information-gathering gadgets or devices must be deployed by security services or agencies as surveillance systems should be installed in sensitive areas across the nation that will enable information sharing. The findings in this paper discussion correspond with the theoretical postulations in other literature reviews that postulates that ICT has roles in the security of any nation; the impacts of which can be direct through its industrial growth and indirectly through multiplier effects of the society.

RECOMMENDATION

The following recommendations were made in line with the findings and conclusions of this paper discussion:

1. The government should undertake computer development programs for all its personnel on current issues on ICT.
2. The government should constantly fund ICT to aid its functionality as a tool for combating crimes and monitoring security systems.
3. Personnel in the various information management departments/units should be sent to conferences, workshops, and seminars which would help them update their knowledge on current ICT issues.
4. The power section should be adequately funded so that the operation and use of ICT equipment would be effective.
5. The government should help promote security culture, frameworks, and public

awareness on how ICT can be used as aids for holistic societal security.

REFERENCES

Aljazeera, (2022). Suspected Bandits Attack Passenger Train in Northern Nigeria. Retrieved from https://www.aljazeera.com/news/2022/3/29/suspected-bandits-attack-passenger-train-in-northern-nigeria.

Jimoh, I. & Awodi S. (2021). Barrels to Buttons: The Nexus between Communication and National Security in the 21st Century. A Paper Presented at the Faculty of Social Sciences, Ahmadu Bello University Symposium on Insecurity and National Development in Nigeria.

Nasiru Z. (2020). Rising Insecurity in Nigeria: Causes and Solution. Journal of Studies in Social Sciences. Vol. 19(4). Pp. 1-11.

Nsudu, I. & Onwe, E.C. (2017), Social Media and Security Challenges in Nigeria: The way forward. World Applied Sciences Journal. Vol. 35(6). Pp.993-999.

Oforji, J. C., Udensi, E. J. & Ibegbu, K. C. (2017) Cybersecurity Challenges in Nigeria: The Way Forward, Sos Poly Journal of Science & Agriculture. Vol. 2. Pp. 25-36.

Oghuvbu, E. A. (2021). Security and the Challenges of Securing Nigerian State, Turkish e-Journal of Computer and Mathematics Education. Vol. 12(3). Pp. 3924-3930.

Ojobah, C. F., Amiriheobu, I., Chinwe, A. C. & Owunari, G. (2021). Social Media and Insecurity Issues in Nigeria: A Post COVID-19 Discourse, International Journal of Advanced Research in Social Sciences, Environmental Studies & Technology. Vol. 6(1). Pp. 137-149.

The Way Forward, Sos Poly Journal of Science & Agriculture. Vol. 2. Pp. 25-36. http://searchcio-midmarket.techtarget.com/definition/ICT

Ugbegili, S. (2018). Historical Perceptions on Nigeria's National Security. A Paper Presented at the 53rd Annual Congress of Historical Society of Nigeria (HSN), Gombe State University, Gombe.