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THE IMPLICATIONS OF CYBER-CRIME ON SOCIO-ECONOMIC DEVELOPMENT OF MAIDUGURI METROPOLIS, BORNO STATE, NIGERIA

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Abstract

This study examined the implications of cyber-crime on socio-economic development of Maiduguri Metropolis, Borno state. The objectives of the study were to examine the causes of cyber-crime in Maiduguri, Borno state; ascertain the types of cyber-crime perpetrated in Maiduguri, Borno State; and examine the effect of cybercrime on education, employment, and business activities in Maiduguri, Borno state. The study were guided by the risk societies and space transitions theories. According to the risk society theory, advancements in contemporary technology have drastically affected socioeconomic growth by generating a risk society that affects governments, businesses, and people. The idea of space transition contends that the cybercriminal's decision to conduct cybercrime is fueled by factors such as dissociative anonymity, identity flexibility, and a lack of deterrents. The study adopted survey method of data collection using questionnaire as the instrument. Sample sizes of one hundred (200) respondents were selected from for the study but only one hundred and ninety-four (194) were found useable for analysis. The data were analysed using descriptive statistics of frequency and percentage tables. The findings revealed that unemployment, poverty, lack of e-policing, and quest for wealth are the causes of cyber-crime in Maiduguri, while ATM pin fraud, bank account hacking, fake bank alert, and child pornography are the forms of cyber-crimes committed. Other findings indicated that cyber-crimes has affected education, employment, and business activities in Maiduguri Metropolis. The study recommends that individuals need to observe simple personal safety rules such as not disclosing to strangers their banking details such as credit card pins, bank account numbers, e-mail codes and use of antivirus on their systems against malware etcetera as this would go a long way in minimising or completely eradicate the menace of cyber-crimes in Maiduguri Metropolis.

Keywords: Cyber-crime, Implications, Socio-economic development, Maiduguri.

1. Introduction

The proliferation of the internet and easy access to computer-aided technologies have presented many prospects for employment and entrepreneurial endeavours, while also enabling individuals to use the internet revolution for illicit purposes. The advent of information communication technology and online communication has also led to a significant increase in the occurrence and development of new trends and patterns of internet-enabled criminal acts. Cyber-crime refers to criminal activities that are carried out on the internet, where the computer is used either as a means to conduct the crime or as the intended victim. Categorising crimes into specific groupings is challenging due to the constant evolution of criminal activities. Even in reality, crimes such as rape, murder, or theft might be interconnected. Nevertheless, every cybercrime include both the computer and the person using it as victims, with the distinction being in which of the two is the primary focus. Halder and Jaishankar (2011) define cybercrime as an intentional criminal offence against an individual or group of individuals with the goal of damaging the victims' reputations and causing irreversible harm to the hardware of sensitive infrastructure, such as mobile phones and the internet.

According to Hassan, Lass, and Makinde (2012), as early as 2003, the United States was dominating the globe in terms of the proportion of cyber-attacks, with 35.4%, followed by South Korea with 12.8%. A comparable Norton survey, according to Frank and Asirifi (2015), showed that 73% of internet users in the United States and 65% of users worldwide were victims of cybercrime. The United States is ranked third among countries most affected by cybercrime, after China (83%) and Brazil and India (76%). Therefore, it should come as no surprise that

Nigeria, with its scant cybercrime laws (Ibikunle 2013) and inadequate cyber-defense capabilities, has a high incidence of cybercrimes.

According to Ribadu (2017), Nigeria is the primary destination and source of harmful cyber activity in Africa, and this trend is expanding across the West African sub region. According to Maitanmi, Ogunlere, Ayinde, and Adekunle (2013), the nation has therefore established herself as the origin of what is now known as 419. Cybercrime also affects the nation's socioeconomic development as information coming from the nation is seen as dubious due to the criminal element, which renders it erroneous, untrustworthy, and unreliable (Iwarimie-Jaja 2010). It is true that the economic damage caused by cybercrime in Nigeria cannot be overstated. As such, this is an issue that merits empirical study.

The internet's impact on national development has been hindered by the emergence of new forms of criminal activity. The internet has evolved into a realm where very profitable and secure criminal activities flourish. Cybercrime has emerged as a worldwide menace, extending its reach from Europe to America, Africa to Asia, and beyond. Cybercrime has emerged as an unexpected and peculiar occurrence that now exists in Nigeria. Every day, we see an increasing number of distressing instances of cybercrime in Nigeria, with each new example surpassing the previous one in terms of shock value (Maitanmi *et al.*, 2013).

Cybercrime undermines the scientific and socioeconomic advancement of any nation and has serious repercussions for society, including the potential to support terrorism, money laundering, military espionage, and corruption. Kamini (2011) makes the case that a country with a high crime rate cannot prosper or flourish, and as a result, cybercrime has detrimental social and economic effects.

The ramifications of this can be seen throughout Nigeria's socioeconomic development. As a result of the country's reputation for corruption, foreign investors are blocking emails coming from Nigeria and are extremely cautious when accepting financial instruments. Because of the criminal aspects that render Nigerian information erroneous, untrustworthy, and unreliable, it has been described as having problematic flow (Iwarimie-Jaja, 2010). As noted by Folashade and Abimbola (2013), the development of new waves of cybercrimes has tarnished the internet's contribution to Nigeria's technological and socioeconomic advancement, with more dire consequences for the nation's socioeconomic and technological advancements than traditional crimes. Numerous research on the implications of cybercrime on Nigeria's socioeconomic growth have been carried out in light of the aforementioned claims. For instance, the effect of cybercrime on Nigeria's socioeconomic growth was studied by Maitanmi, Ogunlere, Ayinde, and Adekunle (2013).

Using the aforementioned studies as an example, Laura (2011) discovers that various cybercrimes are emerging annually and that their effects on Nigeria's socioeconomic development vary. Additionally, many of the studies on the impact of cybercrime on Nigeria's socioeconomic development were carried out prior to 2023. Thus, there is still time for academics to investigate how Nigeria's socioeconomic growth in 2023 may be impacted by the recently discovered categories of cybercrimes. Given the aforementioned, the purpose of this research was to determine the implications of cybercrime on socioeconomic development of Maiduguri Metropolis, Borno state, Nigeria.

The study examine the causes of cyber-crime in Maiduguri, Borno state; ascertain the types of cyber-crime perpetrated in Maiduguri, Borno State and to examine the effect of cybercrime on education, employment, and business activities in Maiduguri, Borno state.

2. Literature Review

Causes of Cyber-crime

The underlying reasons of cybercrimes are not implausible. All it takes is a cursory look around society to see the accumulation and display of unlawful riches. In addition, the offenders have attained a very high status. According to Hassan et al. (2012), the issue is exacerbated by the high rate of teenage unemployment, the lack of regulations that restrict certain behaviours, and the overall

lax attitude that people and organisations have towards cyber security.

According to Hassan et al. (2012), some of the factors contributing to the rise in cybercrimes in Nigeria include urbanisation, high unemployment, the pursuit of riches, the ineffective application of cybercrime laws, underequipped law enforcement organisations, and bad role models. In their research, Akwara et al. (2013) looked at the connections between insecurity, poverty, and unemployment in Nigeria. They discovered that there is a positive causal association between poverty and insecurity, and that unemployment is a source of poverty. They list the following as other reasons for cybercrime: corruption, greed and credulity, the growth of cybercafés, and the susceptibility of the internet. Cybercrime may include: Cyber terrorism, Fraud (Identity Theft), Cyber Stalking, Spam, Password sniffing, phishing and fake websites

Effects of Cyber-Crime on Socio-economic Development

It is often known that the internet plays a crucial part in the growth of a country's economy. Hence, Ehimen and Bola (2010) contended that the internet has generated a geometric expansion, expedited windows of opportunity for enterprises, and eliminated economic restrictions that formerly confronted countries worldwide. With the internet's seemingly endless benefits, it is easy to accept that, in a growing nation like Nigeria, it is a vital instrument for national advancement. Cybercrime over the internet, however, has grown to be a major danger to socioeconomic endeavours including business, employment, and education.

2.1 Theoretical Framework

The research was guided by two different theory among which are the Risk Society Theory and the Space Transition Theory.

Space Transition Theory was adopted as the theoretical frame work for analysis. The theory which was developed by Jaishankar in 2008, has several recognition in the area of cyber criminology, making it one of the most important theoretical formulations in the field. According to Jaishankar (2008), the theory explained the cause of crimes in the cyberspace and sees the rise of cyberspace as a new hub for criminal activity. An important factor in the development of ideas about cybercrime was the emergence of the space transition theory. Jaishankar's explanation of the phenomena of cybercrimes was the most effective at the time it was developed, which is why no other social scientist could match it. This study applies the space transition theory to demonstrate that individuals who engage in cybercrime and have suppressed their criminal conduct online are more likely to commit cybercrimes in cyberspace. The theory also demonstrates how the identity flexibility, dissociative anonymity, and absence of a deterrent in cyberspace provide the cybercriminal the option to conduct cybercrime which in the end, may affect the socioeconomic development of any nation which Maiduguri, Borno state is not exempted from this menace.

3. Material and Methods

Primary and secondary data were employed in this study. Respondents with first-hand knowledge and expertise with the study's topic provided the main data. Members of the public living in the chosen Maiduguri Metropolis dwellings make up the major data source. These individuals not only possess knowledge and expertise, but they may have actively contributed to the solution of the cybercrime issue.

On the other hand, government documents, relevant organisations, textbooks, published, and unpublished materials were the sources of the secondary data. A large portion of these data were employed in the literature review process, which helped identify knowledge gaps and prevent duplication of previously examined material. It also helps to identify approaches that have previously been used and those that this research may apply.

The population of Maiduguri as of 2021 was put at 803,000 (Mecrotends, 2021). This study did not cover all the population of Maiduguri for the reason that the study area is one of the larger cities in Borno State. Therefore, the population of this study were members of five (5) residences/wards of Maiduguri Metropolis from which the sample was taken.

The study utilised a multi-stage sampling approach which includes cluster, purposive and simple random sampling. Maiduguri was once divided into the fourteen (14) legally recognised wards: Bolori I, Bolori II, Bulabulin I, Bulabulin II, Gamboru Liberty, Gwange I, Gwange II, Gwange III, Shehuri North, Shehuri South, Mafoni, Limanti, Lamisula, and Jabba Mari.

Using the purposive sampling approach, five (5) wards were chosen at the second step of the sampling process based on the researcher's judgment when selecting the locations to participate in the study. The wards that was chosen were Lamisula/Jabba Mari, Bolori I, Gwange III, Shehuri North, and Mafoni.

In the last step of the sampling process, community members from the five (5) chosen wards who were knowledgeable and experienced about the impact of cybercrime on socioeconomic development of Maiduguri Metropolis were chosen using a simple random sample approach. A total of one hundred (200) community members were chosen as respondents for this research, with forty (40) a randomly selected respondents from each of the five (5) designated wards.

The research used a questionnaire as the instrument for data collection, because it allows the researcher to determine the range and distribution of certain social characteristics and how these characteristics were related to a particular responses from respondents regarding their behaviour patterns and approach to the questions raised.

The questionnaire were divided according sections which comprises A, B, C, and D questions to meet the study's aims. Respondents were asked to respond to questions raised on the impact of cybercrime on socioeconomic growth of Maiduguri Metropolis. The supervisor verified the validity and reliability of the instrument before the survey to ensure that it was suitable for gathering data. The collected data were scored, coded and inserted into Statistical Package with the use of tables, frequency distributions and percentages.

4. Results and Discussion

A total of two hundred (200) respondents were used to provide the needed data for the study. Out of the two hundred (200) questionnaires administered, 4 were invalid and 2 were missing. Therefore, the analysis was done based on one hundred and ninety-four (194) questionnaires.

4.1 Data Analysis

Table 1: ***Distribution of Respondents by Sex***

Sex	Frequency	Percentage
Male	153	79%
Female	41	21%
Total	**194**	**100%**

Source: Field work, 2024.

Table 1 above reveals that 153 (79%) were male and 41 (44%) were female. This indicates that majority of the respondents were males which constitutes the highest number of responses.

Table 2: ***Age Categories of the Respondents***

Age	Frequency	Percentage
18 – 25	48	25%
26 – 33	60	31%
34 – 41	36	19%
42 – 49	10	5%
50 and above	40	21%
Total	**194**	**100%**

Source: Field work, 2024.

Table 2 above presents that 48 (25%) of the respondents were between the ages of 18 – 25, while 60 (31%) were around 26 – 33, 36 (19%) were at the range of 34 – 41, 10 (5%) were between 42 – 49, and 40 (21%) were from 50 and above years old. The result shows that majority of the respondents were between the ages of 26 – 33. This was done to get some kind of expected answers from matured minds relevant to the study.

Table 3: ***Respondents Marital Status***

Marital Status	Frequency	Percentage
Single	70	36%
Married	84	43%
Divorced/Separated	22	12%
Widowed	18	09%
Total	**194**	**100%**

Source: Field work, 2024.

Out of the 194 (100%) respondents, the table 3 above shows that 70 (36%) were single, 84 (43%) were married, 22 (12%) were divorced or separated and 18 (09%) were widowed. This implies that most of the respondents were married.

Table 4: ***Educational Level of the Respondents***

Educational Level	Frequency	Percentage
Informal/Primary	22	11%
Secondary	28	15%
Tertiary	144	74%
Total	**194**	**100%**

Source: Field work, 2024.

With regard to the educational level of the respondents, table 4 above shows that 22 (11%) of the respondents were in informal/primary level of education, 28 (15%) were in secondary level of education and 144 (74%) were in tertiary level of education. This indicates that majority of the respondents were in tertiary level of education. The educational level was requested to find out the knowledge of the respondents in providing the needed data for this study.

Table 5: ***Occupation of Respondents***

Occupation	Frequency	Percentage
Civil servant	66	35%
Farming	26	13%
Business	32	16%
Student	70	36%
Total	**194**	**100%**

Source: Field work, 2024.

Table 5 presents the occupation of the respondents which shows that 66 (35%) were civil servants, 26 (13%) were farmers, 32 (16%) were business owners and 70 (36%) were students. The data indicates that majority of the

respondents were students followed by civil servants. It is believed that the data provided by this set of people would be genuine and concrete since students and civil servants are the people who have more knowledge on cybercrime and its implication on socio-economic development of Borno state and Maiduguri in particular.

Table 6: ***Causes of Cyber-Crime***

What do you think is/are the cause(s) of cyber-crime?	Frequency	Percentage
Unemployment	56	29%
Poverty	20	10%
Corruption	06	03%
Lack of e-policing	18	09%
Quest for wealth	36	19%
All of the above	58	30%
Total	**194**	**100%**
How often do cybercrimes occur in Maiduguri?	Frequency	Percentage
Always	95	49%
Once in a week	15	08%
Twice in a week	10	05%
Not aware	74	38%
Total	**194**	**100%**
Do you think significant proportion of cyber-crime is perpetrated by youths?	Frequency	Percentage
Yes	194	100%
No	0	0%
Not sure	0	0%
Total	**194**	**100%**

Source: Field work, 2024.

Out of the total number of the respondents in table 6 above, 56 (29%) believed that unemployment is one of the cause of cyber-crime, while 20 (10%) believed that poverty is the cause, 6 (03%) opined that corruption is the cause, 18 (09%) believed that lack of e-policing is the cause; 36 (19%) believed that quest for wealth is the cause; and 58 (30%) believed that all of the aforementioned factors are the causes of cyber-crime. This implies that unemployment, poverty, corruption, lack of e-policing, and quest for wealth are the causes of cyber-crime in Maiduguri Metropolis.

Secondly, the table above reveals that 95 (49%) of the respondents confirmed that cybercrimes occur always in Maiduguri; while 15 (08&) opined that it occur once in a week, 10 (05%) believed that it occurs only twice in a week, while 74 ((38%) are not aware. The results indicates that cyber-criminals are always active in perpetrating cyber-crimes in Maiduguri.

Finally, data from the table above also shows that the entire respondents (100) agreed that significant proportion of cyber-crime is perpetrated by youths. So, it can be concluded that almost all the different forms of cyber-crimes are committed by youths in Maiduguri.

Table 7: ***Types of Cyber-Crime***

What type(s) of cyber-crime(s) is/are committed in Maiduguri?	Frequency	Percentage
ATM pin fraud	40	21%
Bank account hacking	20	11%
Fake bank alert	32	16%
Email scam	06	03%
Child Pornography	30	15%
All of the above	66	34%
Total	**194**	**100%**
Are the cybercrimes committed in Maiduguri highly advanced?	Frequency	Percentage
Yes	72	37%
No	42	22%
No idea	80	41%
Total	**194**	**100%**
Do you think people are at a risk of being victims of cyber-crime in Maiduguri?	Frequency	Percentage
Yes	154	79%
No	10	05%
No idea	30	16%
Total	**194**	**100%**

Source: Field work, 2024

Table 7 above presents that 40 (21%) of the respondents confirmed that ATM pin fraud is the common types of cyber-crime committed in Maiduguri, while 20 (11%) believed in bank account hacking, 32 (16%) reveals the use of fake bank alert as a factor of cyber-crime committed in Maiduguri, while 06 (03%) opined that it occur as a result of email scam, 30 (15%) confirmed that child pornography is the type of cyber-crime committed in Maiduguri. However, majority of the respondents 66 (34%) confirmed that all of the afore-stated items are the types of cyber-crimes committed in Maiduguri.

Additionally, the table above also indicates that 72 (37%) of the respondents believed that the cyber-crime committed in Maiduguri is highly advanced; while 42 (22%) disagreed; and 80 (41%) have no idea. This shows that the cyber-crimes committed in Maiduguri may or may not be highly advanced.

Finally, all of the respondents (100%) agreed that people are at a risk of being victims of cyber-crime in Maiduguri. This is because cyber-crime is earlier confirmed to be committed always in Maiduguri.

Table 8: ***Effect of Cyber-crime on Education, Employment, and Business Activities***

Does cyber-crime affect the educational activities of people in Maiduguri?	Frequency	Percentage
Yes	146	75%
No	48	25%
Total	**194**	**100%**
If yes to the above, how?	Frequency	Percentage
Cybercriminals avoid schooling	66	34%
Affect student's academic performance	14	07%
Damage school records	42	22%

All of the above	72	37%
Total	**194**	**100%**
How does cybercrime affect employment?	Frequency	Percentage
Dismiss of staff after security breach	40	21%
Fear of employing youths	24	12%
Fear to employ more staff after financial losses	22	11%
All of the above	108	56%
Total	**194**	**100%**
In what way cybercrime affects business activities in Maiduguri?	Frequency	Percentage
Loss of capital	38	20%
Loss of profit	06	03%
Loss of customers	60	31%
Al of the above	90	46%
Total	**194**	**100%**
Do you think many people fear to partner with others on business activities because of cyber-crime?	Frequency	Percentage
Yes	194	100%
No	0	0%
Total	**194**	**100%**
Do you think the threat of cyber-crime is having significant impact on online businesses?	Frequency	Percentage
Yes	160	82%
No	06	03%
Not sure	28	15%
Total	**194**	**100%**
Do you think the widespread of cybercrime reduces the level of foreign investments in Maiduguri?	Frequency	Percentage
Yes	90	46%
No	104	54%
Total	**194**	**100%**

Source: Field work, 2024.

Table 8 presents the effect of cyber-crime on education, employment, and business activities. At the beginning Items one shows that 146 (75%) of the respondents believed that cyber-crime affects the educational activities of people in Maiduguri, and 48 (25%) disagreed. Similarly, 66 (34%) of the respondents confirmed that cybercriminals avoid schooling, while 14 (07%) of the respondents believed that cyber-crime affects student's academic performance, 42 (22%) confirmed that it damages school records, while 72 (37%) believed that all the stated items in category one of table 8 affects educational activities of Maiduguri people.

In another vein, the data shows that cybercrime affect employment. It is reveals that 40 (21%) of the respondents believed that cyber-crime results to dismiss of staff after security breach, while 24 (12%) said that cyber-crime results to fear of employing youths, 22 (11%) confirmed that cyber-crime results to fear to employ more staff after financial losses, and 108 (56%) believed that all of the aforementioned items are the effects of cyber-crime on employment.

Furthermore, 38 (20%) of the respondents confirmed that cybercrime affects business activities in Maiduguri

through loss of capital, 06 (03%) were with the opinion that cyber-crime causes loss of profit, while 60 (31%) said through loss of customers and 90 (46%) of the respondents go with all the aforementioned point which stated that cyber-crime affects the business activities of Maiduguri Metropolis. This implies that the result shows that majority of the respondents believed that cybercrime affects business activities in Maiduguri through loss of capital, loss of profit, and loss of customers.

Moreover, the table above indicates that all of the respondents (100%) believed that many people fear to partner with others on business activities because of cyber-crime. Similarly, 160 (82%) of the respondents agreed that the threat of cyber-crime is having significant impact on online businesses, 06 (03%) disagree, while 28 (15%) are not sure with the statement. This result shows that cyber-crime has significant effect on business activities in Maiduguri.

Finally, table 9 above presents that 90 (46%) of the respondents agreed that the widespread of cybercrime reduces the level of foreign investments in Maiduguri; while the remaining 104 (55%) of the respondents disagreed. This indicates that majority of the respondents were not in the view that cyber-crime discourages foreign investments in Maiduguri.

4.2 Discussion of Findings

The study examined the implication of cyber-crime on socio-economic development of Maiduguri Metropolis, Borno state. The result on the socio-economic characteristics of the respondents indicates that majority of the respondents were female between the ages of 26 to 33. Likewise, majority were married and possess tertiary level of education. Another result revealed that majority of the respondents were students followed by civil servants.

The findings on the causes of cyber-crime revealed that unemployment, poverty, lack of e-policing, and quest for wealth are the causes of cyber-crime in Maiduguri. Other findings indicates that cyber-criminals are always active in perpetrating cyber-crimes in Maiduguri, and majority of the cyber-criminals are youths. These findings are in accordance with the results of Meke (2012); Maitanmi *et al.,* (2013); and Hassan *et al.,* (2012) which shows that the causes of cyber-crime include unemployment, poverty, urbanisation, negative role models, and porous nature of internet. Most especially, unemployment and poverty are high in Nigeria; that is why a significant proportion of cyber-crimes are perpetuated by young people.

On the types of cyber-crimes, the findings showed that ATM pin fraud, bank account hacking, fake bank alert, and child pornography, are the forms of cyber-crimes committed in Maiduguri. Other findings indicates that the cybercrimes committed in Maiduguri are highly advanced, and people are at a risk of being victims of cyber-crime. These findings were in contradiction with the findings from the work of Maitanmi *et al.,* (2013) which reveals that some of the highly committed cyber-crimes in Nigeria are cyber-terrorism, cyber-stalking, spam, password sniffing, phishing, and fake websites.

This research concluded by showing that crime has an impact on education, particularly since it tarnishes academic records and discourages cybercriminals from going to school. Employment is also impacted by cybercrime, since it may lead to staff terminations after security breaches, apprehension about hiring young people, and reluctance to hire more personnel following financial losses. Additionally, the research revealed that cybercrime significantly impacts company operations in Maiduguri, resulting in losses related to money, profit, and clientele. Cybercrime deters foreign investment in Maiduguri. The impact of cybercrime on socioeconomic advancement is also shown by other research. This is in connection of the results of Shehu (2014), Saulawa and Abubakar (2014), and Folashade and Abimbola (2013), for example, it is clear that cybercrime has the potential to have a significant detrimental influence on Nigeria's socioeconomic growth. First of all, Nigeria's reputation has been damaged by pervasive cybercrime, which makes it untrustworthy for foreign investment. Second, Nigerians' faith in the digital economy has been severely damaged by cybercrime, which has hampered economic expansion. Thirdly, companies and organisations are vulnerable to cyber-attacks that may harm their brand and cause them to lose clients and money.

5. Conclusion and Recommendations

Cybercrime is a serious danger to the socioeconomic growth of Maiduguri, Borno state, Nigeria, and has ingrained itself deeply into our culture. It is important to emphasise that although cybercrime is a worldwide problem, each nation's level of success in thwarting the threat through the implementation of cyber laws and cyber defence technology, for example determines the vulnerabilities and effect patterns. Regretfully, Nigeria is among the nations most affected by cybercrime, as the explanations above demonstrate, yet the nation's reaction to combating cybercrime is still extremely low because of insufficient laws, outdated technology, and a shortage of cyber security specialists. In order to meet Nigeria's security demands to fight cybercrime and cyber threats originating from cybercriminals, a key vulnerability element in cyber-security is the lack of human resources.

In light of the aforementioned, this study concludes that in order to maintain the continuity of essential social services, preserve public confidence in information systems, and promote socioeconomic development in Maiduguri, Borno state, Nigeria, efforts by the government and the populace aimed at reducing cybercrimes must be redoubled.

It is recommended that:

i. Using the mass media, the government should aggressively work to raise public awareness of cybercrime. Additionally, the promotion of personal cyberspace security should be included in the curricula of elementary, secondary, and university education as this will help in addressing the problems of cybercrimes in Maiduguri.

ii. People should follow basic personal safety guidelines, such as using antivirus software on their computers to protect them from viruses and not giving out credit card pins, bank account numbers, email codes, or other financial information to strangers as these will go a long way in reducing or completely eradicates the accordance of cybercrime in Maiduguri Metropolis

iii. In order to decrease the amount of young people engaging in cybercrime, programmes for entrepreneurial development and vocational skills should be implemented in areas where employment are not easily accessible, as well as positions from the public and private sectors for recent graduates to have something doing rather than engaging in cybercrimes.

iv. In order to help the current law enforcement, intelligence, and security organisations better comprehend technology and the people who commit cybercrime, the government must educate specialised cyber security professionals.

v. Access control systems, such as firewalls, should be used to prevent unauthorised users from accessing computer networks to eradicate the menace of cybercrimes.

References

Akwara A.F., Akwara, N.F., Enwuchola, J., Adekunle, M., and Udaw J.E., (2013): Unemployment and Poverty: Implications for National Security and Good Governance in Nigeria. *International Journal of Public Administration and Management Research* (IJPAMR), Vol. 2, no. 1.

Ehimen, O.R., and Bola, A., (2010): Cybercrime in Nigeria. *Business Intelligence Journal,* January 2010, Vol. 3.No.1.

Folashade B.O., and Abimbola K.A., (2013): The Nature, Causes and Consequences of Cyber Crime in Tertiary Institutions in Zaria-Kaduna State, Nigeria. *American International Journal of Contemporary Research.* Vol. 3 No. 9; September 2013.

Frank, A.D., and Asirifi, M.K., (2015): The Impact of Cybercrime on the Development of Electronic Business in Ghana. *European Journal of Business and Social Sciences*, Vol. 4, No. 01, P.P. 22 – 34.

Hassan, A.B., Lass, F.D., and Makinde, J., (2012): Cybercrime in Nigeria: Causes, Effects and the Way Out. *ARPN Journal of Science and Technology.* VOL. 2, NO. 7, August '12.

Halder, D., & Jaishankar, K., (2011): *Cybercrime and the Victimization of Women: Laws, Rights, and Regulation*. Hershey, PA, USA: IGI Global. ISBN 978-1-60960830-9.

Ibikunle, F., and Eweniyi, O., (2013): Approach to cyber security issues in Nigeria: Challenges and Solutions. *International Journal of Cognitive Research in Science Engineering and Education* (IJCRSEE), Vol. 1, No. 1.

Iwarimie-Jaja (2010): *Criminology: The Study of Crime.* Owerri: Springfield Publishers.

Jaishankar, K., (2008). Space Transition Theory. Frank Schmalleger, Michael Pittaro.

Kamini, D., (2011): Cyber Crime in the Society: Problems and Preventions. *Journal of Alternative Perspectives in the Social Sciences (2011)* Vol. 3, No 1, 240-259.

Laura A. (2011): Cyber Crime and National Security: The Role of the Penal and Procedural Law.

Maitanmi, O., Ogunlere, S., Ayinde, S., and Adekunle, Y., (2013): Impact of Cybercrimes on Nigerian Economy. The *International Journal Of Engineering And Science* (IJES) Volume 2, Issue 4, Pages 45-51.

Meke, E.S.N., (2012): *Urbanization and Cyber Crime in Nigeria: Causes and consequences.*

Office of the Surveyor General of the Federation [OSGOF] (2021). Map of Maiduguri, Borno State.

Ribadu, E., (2017): Cyber Crime and Commercial Fraud; A Nigerian Perspective. A paper presented at the Modern Law for Global Commerce, Vienna 9th – 12th July.

Saulawa, M.A., and Abubakar, M.K., (2014): Cybercrime in Nigeria: An Overview of Cybercrime Act 2013. *Journal of Law, Policy and Globalization. Vol.34*.

Shehu, A.Y., (2014): Emerging Issues in Cyber-Crime: Causes, Implications and Effects for the Legal Profession. *Online Journal of Social Sciences Research.* Volume 3, Issue 7, pp. 169-180.