WORLD DATA PRIVACY DAY

Understanding Privacy and Online Risks in Digital World Today

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Introduction

Data is Life. Data is King. Data is the new GOLD.

Everything that makes modern life easy and fun has to do with Data: Google, CHATGPT, Uber, etc. Today, from all human interactions in religious worshipping houses, social networks, sports, watching smart TVs, etc, people collect data and manipulate it for commercial, social or political purposes.

Online privacy and security risks refer to potential threats and dangers that individuals and organisations face when using the internet. These risks can range from theft of personnel information, financial data, and identities to virus exposures, malware, ransomware, censorship and other forms of cybercrime. One of the fastest-growing industries today is ransomware-as-a-service. It is estimated to cost around $265 billion by 2030.

But there is a difference between DATA SECURITY & DATA PRIVACY. While the latter can be likened to a window blind to prevent passersby from spying on the house, the former is like the strong iron steel installed on the window to prevent thieves from gaining access. Both are critical and needed.

Introduction

The 2023 Data Privacy Day celebration could not have come at a better time. This will be the first time in the history of elections in Nigeria that the country will rely on wholesale technology to choose HIS (?) next President. Will BVAS (Bimodal Voter Accreditation System) BVAS lead to a breakthrough or a breakdown of Nigeria?

I deliberately used the word “HE” for Nigeria because I have since realised that Nigeria is not a “SHE’; or an “IT” country it is a “HE”. For instance, I got to my bank yesterday and was unable to withdraw N10k cash. Using ATMs isn’t any easier; it takes a minimum of 24 hours to be served, and you need another 24 hours at the filling station to get gasoline and yet another 24 hours for you to access your mobile banking. Besides, it is only in Nigeria where you now have a NAIRA ON NAIRA Exchange rate: the exchange rate of naira to naira on POS is different from that of roadside “Jerry can filling stations” or supermarkets etc.
Yoruba people will say: ”OKUNRIN NI NIJA”- NIGERIA IS A “HE” (I joke!!!).

Despite Nigeria’s self-inflicted hardship, the fact that you are all here, listening to me, is a miracle. For that, you deserve a big applause for yourselves. What hardships are Lebanon, Sri Lanka, Iran, France & UK citizens going through, yet they are on the streets? Whatever they are going through is “O” Level compared to what Nigerians are going through. Tell them to come to Nigeria for PhD in Hardship and Smiling (Apologies to Fela).

Introduction

The only other “HE” country in the world where you must smile as you experience “sifia pains” (apologies to the Osoko 1, ex-Governor Ayodele Fayose of “Sifa pains” fame) is North Korea! Not even in Iran or Lebanon or Venezuela or Sri Lanka do we have an amalgamation of pains, to the level Nigerians are currently experiencing today.

Those who find the kitchen too hot are taking to JAPA and the rest of us who seem trapped by either age or business or family or financial considerations can be described as SURVIVORS!

Even though BVAS end -to-end encryption security offers more than a kilogram of comfort and confidence, It is good and helpful.

Regardless, it is in the best interest of INEC in particular, and Nigeria in general, to pay more than a casual attention to what we call ‘Man -in-the –Middle’ attack or a ‘REPLAY ATTACK’ which dark hackers can exploit to intercept, modify and retransmit the election Data while in motion or transit.

More importantly, transmitting sensitive data using the GSM technology which BVAS depends on is not as water tight as using the Satellite technology.

Introduction

All said, regardless of the performance of BVAS in the next three weeks, there's need for an urgent upgrade against the background of the over voting incident in Osun State governorship election.

A reconfigured BVAS 2.0 will definitely be capable of identifying and automatically eliminating cases of over voting from the source (polling units) using certain Artificial intelligence technology, thereby saving INEC from avoidable embarrassment of having to harmonize their data, as It happened in Osun State with 3 results on one election.

Of course, time is no more for the implementation of this reconfiguration before the February 23 election but suffice to say that the technology to arrest over voting by BVAS exists today, if INEC cares to step up!

If the F-35 American fighter jet, the most sophisticated fighter jet in the world can be hacked, BVAS is not ABSOLUTE!
With determination, patience, and doggedness, everything that is connected can be hacked. Security was not built into the internet foundation by its inventor in the beginning, it is an afterthought.

Understanding Online Risks

Phishing: Phishing is a type of scam that aims to steal personal information such as passwords and credit card details. Attackers send fake emails or messages posing as a trusted source and trick the recipient into clicking a malicious link or downloading an infected file.

Malware: Malware refers to any software designed to cause harm to a computer, network, or user. This can include viruses, worms, Trojans, and spyware, which can steal personal information and cause harm to the system.

Ransomware: Ransomware is a type of malware that encrypts the user's files and demands payment in exchange for the decryption key. This can result in the loss of important data and personal information.

Man-in-the-middle attack: A man-in-the-middle (MITM) attack is when a malicious actor intercepts and alters the communication between two parties without their knowledge. This can result in the theft of sensitive information such as login credentials and credit card details.

Social engineering: Social engineering refers to the manipulation of individuals into performing actions or revealing confidential information. Attackers use tactics such as impersonation, manipulation, and deception to trick victims into divulging sensitive information.

Data Breakfast

1 Out of 8 billion people in the world, 5 billion are connected on the internet. And anything that is connected can be hacked. This accounts for 63% of the world population of which 92.4% use their phones to get online.

2 Averagely, an internet users spend 6 hours, and 53 minutes online per day.

3 Nigeria is the number one country where internet users use their phones to surf the internet: 98.4% (Ages 16-64 years)

4 75.1% of users on social networks are over 13 years and above

5 Philippines spends the most hours on the internet (10 hours and 23 minutes while Japan spends the least – 50 minutes.

6 on average, internet users spend 2 hours and 29 minutes on social networks globally

7 Generation Z spends an average of 4.5hours a day on social networks

Data Breakfast

8 Nigeria tops the ranking of social network users with 4 hours and 49 minutes each day. South Korea spends 1 hour, and 13 minutes, the UK: is 1 hour, and 56 minutes, USA: is 2 hours, and 17 minutes.

9 Generation Z (16-24 years old) are the most addicted to social networks especially ladies who spend an average of 3 hours and 11 minutes online compared with men who spend 2 hours and 40 minutes.

10 Regardless of age, ladies (as in the traditional meaning of ladies) remain the most (now we have 7 types of GENDER- Gender fluid, Gender expansive, Cisgender, etc) addicted to social networks (Facebook, Instagram, etc)

11 The average Data breach costs $4.35 million in 2022, an increase of 2.6% rise over 2021($4.24million)

12 The 11 largest breaches in 2022 affected 21.5 million people. Twitter was accused of covering up data breaches that affected millions of users, while more than 1.2 million credit cards numbers were leaked on hacking forum. Also, personal and medical data for 11 million people accessed on Optus data breach. Yahoo! Suffered the largest data breach in history involving over 3 billion user accounts.

Data Breakfast

13 Over 225 million Phishing attacks were reported in 2022, 27% of organisations reported cyber security challenges using the public cloud infrastructure.

14 Cyber bullying represents one of the major online risks:

The following countries have the highest rate of cyber bullying: India- 38%, Brazil, 29%, America, 26%. Women experience more cyber bullying than men. In Australia, 44% of women as against 34% men have experienced one form of online harassment. Australia experiences one of the highest suicide rate per week arising from cyber bullying.

The Untold Truth

“Privacy and security – like eating and breathing – are now of life’s basic requirements”

Katherine N.

Lack of consideration for privacy can kill any business, especially fines that privacy laws attract

Fines Paid By Organizations For Breaching Data Security Regulations In 2022

- Instagram - €405,000,000
- Facebook - €265,000,000
- Clearview AI - €69,000,000 (4 combined fines)
- Microsoft Ireland — €60,000,000
- Meta Platforms - €17,000,000
- Google - €10,000,000
- REWE International AG - €8,000,000
- Cosmote Mobile Telecommunications - €6,000,000
- Interserve Group Limited - €5,000,000
- Portuguese National Statistical Institute - €4,300,000
- Vodafone España - €3,940,000

Academic Institutions Fines

Polish university fined over breach after employee used personal device to process student data

Jessica Haworth 17 September 2020 at 13:51 UTC
Updated: 17 September 2020 at 13:59 UTC

Data Breach | GDPR | Poland

Data regulator issues penalty under GDPR

Source: https://portswigger.net/daily-swig/polish-university-fined-over-breach-after-employee-used-personal-device-to-process-student-data

Jessica Haworth 16 December 2020 at 14:01 UTC
Updated: 02 July 2021 at 13:16 UTC

GDPR | Cloud Security | Education

Umeå University research group held sensitive information on insecure cloud storage

A Swedish university has been fined SEK550,000 ($66,000) for storing sensitive personal information in the cloud without sufficiently protecting the data.

Umeå University, in mid-northern Sweden, violated the General Data Protection Regulation (GDPR) by failing to

Source: https://portswigger.net/daily-swig/swedish-university-fined-66-000-for-gdpr-violations

Academic Institutions Fines

ARTICLE Share Follow Question Print Translate

Nigeria: NITDA Fines Company For Data Breach; Extends Filing Deadline To 30th June 2021

13 April 2021

by Andersen Tax LP

Andersen Tax LP

Summary

On 16th March 2021, the National Information Technology Development Agency (NITDA or "the Agency") announced that it has imposed a fine of ₦5 million on Electronic Settlement Limited for personal data breach following a 16-month investigative process.

This announcement came after the Agency had earlier notified all Data Protection Compliance Organisations (DPCOs) that it had extended the deadline for filing the 2021 mandatory Data Protection Audit Report by Data Controllers from 15th March 2021 to 30th June 2021.

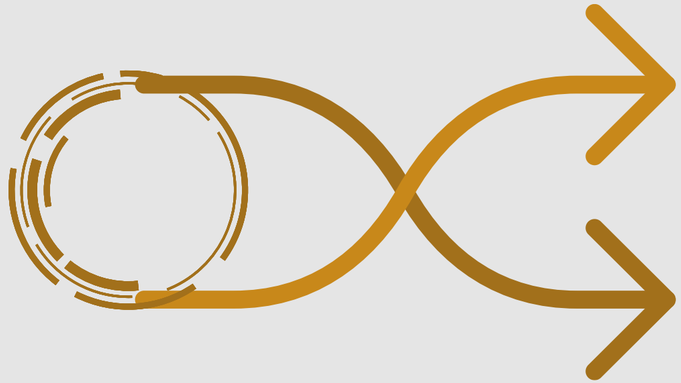
Details

NITDA is the agency of the Federal Government of Nigeria responsible for fostering the development and growth of the information technology (IT) in Nigeria. NITDA regulates, monitors, evaluates and verifies developments on information technology under the supervision and coordination of the Federal Ministry of Communication and Digital Economy.

Source: https://portswigger.net/daily-swig/polish-uniersity-fined-over-breach-after-employee-used-personal-device-to-process-student-data

Technology Advancement

- Discussion on privacy issues is as old as mankind
- The history of privacy makes evident that there is a strong relationship between privacy and the development of technology



Technology Advancement

Higher Demand for Privacy

With more and more organizations using computers to store and process personal information, there was a danger the information could be at privacy risk. Hence the need for industry collaboration to ensure the global standardization of privacy programs and laws.

Five (5) Digital Economy and Society Index drivers for African Data protection law adoption.

1. Connectedness

Over the past 5 years, there has been increasing technological connectivity across Africa

- Fixed broadband take-up
- fixed broadband coverage
- Mobile broadband etc

2. Use of internet

- Citizens' use of internet services and online transactions
- 601,643,061 Internet users in Africa in Dec. 2021, with 43.1% penetration rate

3. Integration of digital technology

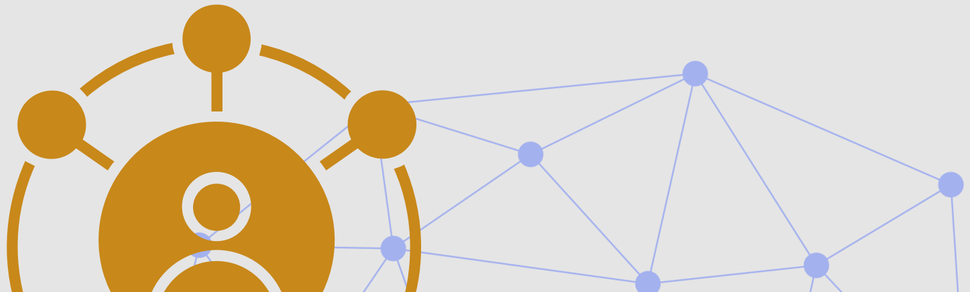
- Business digitization and e-commerce

4. Digital public services

- e-Government

5. Human capital

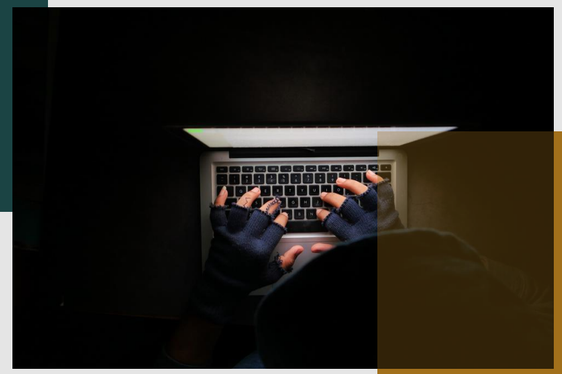
- Internet user skills and advanced skills



Connected??? Hackable Hackable??? Security and Privacy

The Threats, the need.....

- The advent of the digital age has brought about increasingly powerful technologies that pose unprecedented threats to the right to privacy in Africa.
- The rise of so many digitally enabled markets in Africa means that more consumers are being asked to give access to their personal data, including financial, demographic, and geolocation facts.



Hence the urgent need for Privacy laws

EU GDPR Regulation, a Motivation for rising interest in Africa

- The General Data Protection Regulation (GDPR) of the European Union (EU) has likely spurred an increased interest in the regulation and governance of personal data throughout Africa
- Most data protection laws in Africa try to Mirror the EU GDPR

Overview of the journey so far in Africa……

Some countries in Africa have enacted Data Protection laws

South Africa

POPIA,
July 1, 2020

Ghana

DPA, 2012

Kenya

DPB, 2019

Nigeria

NDPR, 2019

Uganda

POPIA,
July 1Data Protection and Privacy Act
February 2019, 2020

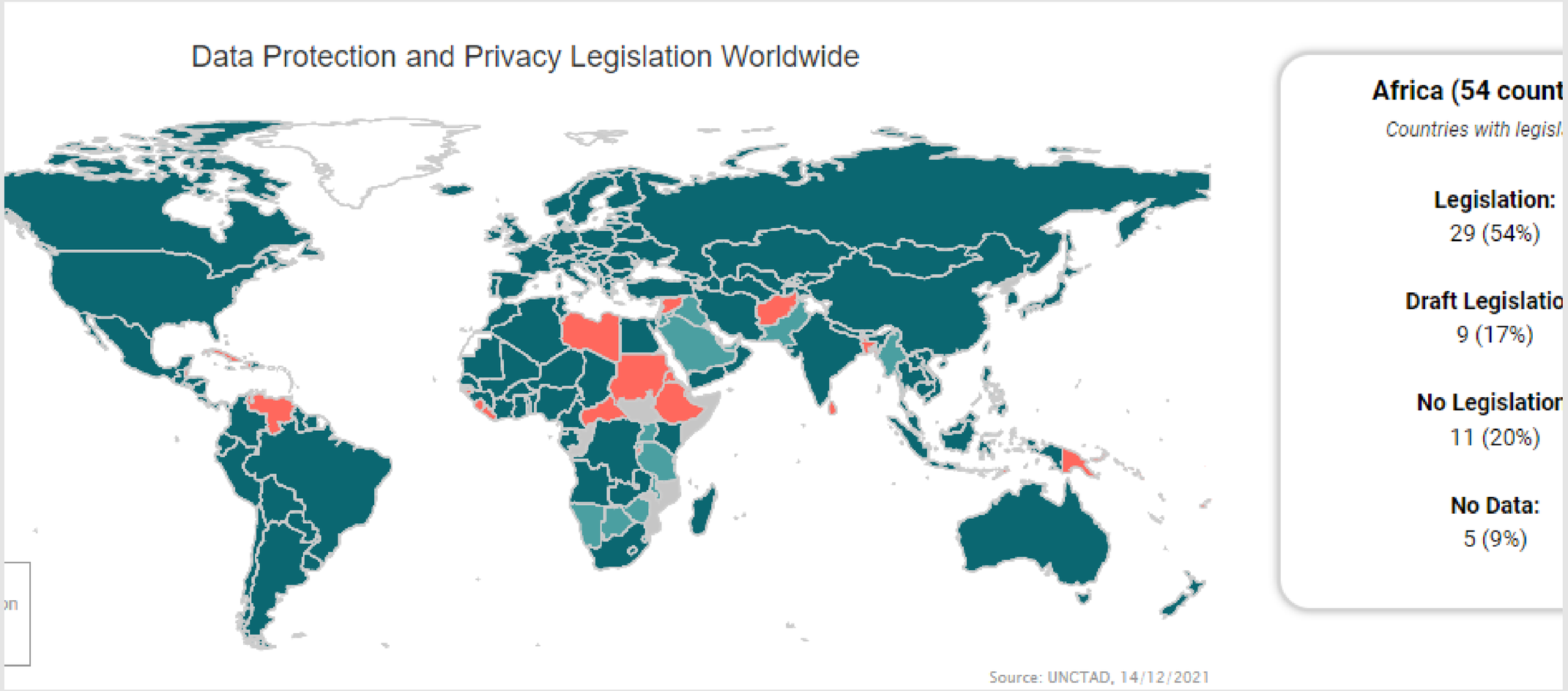
Morocco

Data Protection
and Privacy Act
2009

Togo

Protection of
Personal Data Act
October 2020

Africa Data Protection landscape



7 BIGGEST CYBER THREATS TO WATCH OUT FOR IN 2023

1 Spear Phishing

2 Cloud vulnerabilities

3 Ransom ware-as-a-service

4 Open Ports

5 Endpoint vulnerabilities

6 Malware

7 Distributed Denial of service (DDOS)

Next Steps?

- Data Protection, security, and Privacy is no longer a regional concept but a global one and we must all join hands to make it work.
- In business, we can all compete, but the only option we have as Africans on issues of security and privacy is a collaboration.

My Final Thoughts on Digital privacy and security

1 Education! Education!! Education!!!

2 Modernisation of a security infrastructure using secured collaboration and information-sharing platforms leveraging Ai (Artificial Intelligence) for pro-active cyber defence.

3 Perform regular security and risk assessments checks

4 Individuals must take control of their digital footprints and privacy.

5 Cyber situational awareness and hygiene is critical.

6 Be wary of “Free stuff”/ Trial versions. Nothing is free in Freetown.

7 Nigerian federal and state governments need to appoint a PDO (Privacy Data Officer) who will monitor, regulate and coordinate Privacy policy to keep private things private.

8 INEC needs to double-check BVAS security: How secured is the DATA –IN-MOTION/TRANSIT?

For, what is at stake in the Hope ’23 presidential election is an “elephant” and not a cricket!

My Final Thoughts on Digital privacy and security

To that extent, INEC Chairman needs urgently to talk to some Nigerian Cyber security practitioners–no be only white men get correct sense, the sense wey dey Nigeria pass the one wey dey China, Israel, and America!–and appoint some DEVIL'S ADVOCATES who will conduct a stress test on BVAS DIM (Data- in- Motion) before the wholesale adoption on February 25th.

Between 2007-2008, Kenya witnessed an untold bloodbath arising from conflicting election results. Between 2010 and 2011, Mr. Devil himself took over the affairs of Ivory Coast when conflicting election results were announced. In 2016, Russia was alleged to have influenced the American presidential elections through technology. In the recent Osun governorship Tribunal judgment, 3 types of BVAS results on the same election were alleged to have been tendered. This shouldn't be: Math is exact, absolute! According to the 2022 Securonix Threat. The report, insiders were involved in 57% of data breaches. But there are new technological solutions to this if INEC cares.

A stitch in time saves nine: What Lord Lugard joined together in 1914, however imperfect and deformed "HE" (don't forget Nigeria is a "HE" now) is, let no BVAS put asunder in 2023!

Conclusion

HERE IS WISHING NIGERIANS HAPPY WORLD DATA PRIVACY AND SECURITY DAY CELEBRATION AND BREAKTHROUGH ON FEBRUARY 25TH, 2023 USING 100% TECHNOLOGY IN ELECTION RESULTS TRANSMISSION FOR THE FIRST TIME IN HISTORY, COUNTRY WIDE.

If I provoked you to think, even for 5 seconds, then our gathering today despite all the mountain of odds in Nigeria, has not been a waste.

FOR CASH (both old and new notes) AND FUEL I HAVE NONE, BUT WHAT I HAVE IS THIS THOUGHT-PROVOKING PIECE, and it is FREE!!!

Thank You

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