



**NDPB**  
NIGERIA DATA PROTECTION BUREAU

# LEVERAGING IT FOR NATIONAL SECURITY AND ECONOMIC STABILITY

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PRESENTED BY:

**DR VINCENT O. OLATUNJI, CPPPS, CDPO, FIIM**

NATIONAL COMMISSIONER/CEO,

NIGERIA DATA PROTECTION BUREAU (NDPB)

# Outline

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- Introduction
- National Security
- Economic Stability
- Non-Traditional Military/Cyberwarfare
- Impact of Cybercrime
- Types of Cybercrime
- Cybercrime in Nigeria
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- The Role of IT in Strengthening National Security and Economic Stability
- Use of Technology in Addressing National Security
- Government Initiatives Towards Enhancing Sustainable National Security and Economic Stability in Nigeria

# Outline

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- Cybersecurity support pillars
- Budgetary allocation to the Defense/ICT Sectors
- Journey of ICT development in Nigeria
- Strategic milestones in ICT sector
- ICT Annual Contribution to GDP
- Nigeria Data Protection Bureau (NDPB)
- Challenges facing IT in developing countries
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- His Excellency's comment on Digital Economy
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# Introduction

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- ❑ It is my great pleasure and honour to be invited as a keynote speaker at the 2022 IT Professionals' Assembly organized by the Computer Professions Registration Council of Nigeria (CPN). The theme which is “**Leveraging IT for National Security and Economic Stability**” is very interesting and apt particularly at this time that the whole world is facing enormous challenges in the areas of security and socio-economic development
- ❑ It has, however, become evident based on global trends that maintaining a high level of national security and economic stability at this age requires a new strategy with digital at the core of the game.



# Economic Stability

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- Meanwhile, economic stability is the “description of the financial system of a nation that displays only minor fluctuations in output growth and exhibits a consistently low inflation rate”. An economy with frequent recessions, a pronounced business cycle, very high or variable inflation, poverty, unemployment, or frequent financial crises is considered economically unstable.



# Non-Traditional Military/Cyberwarfare

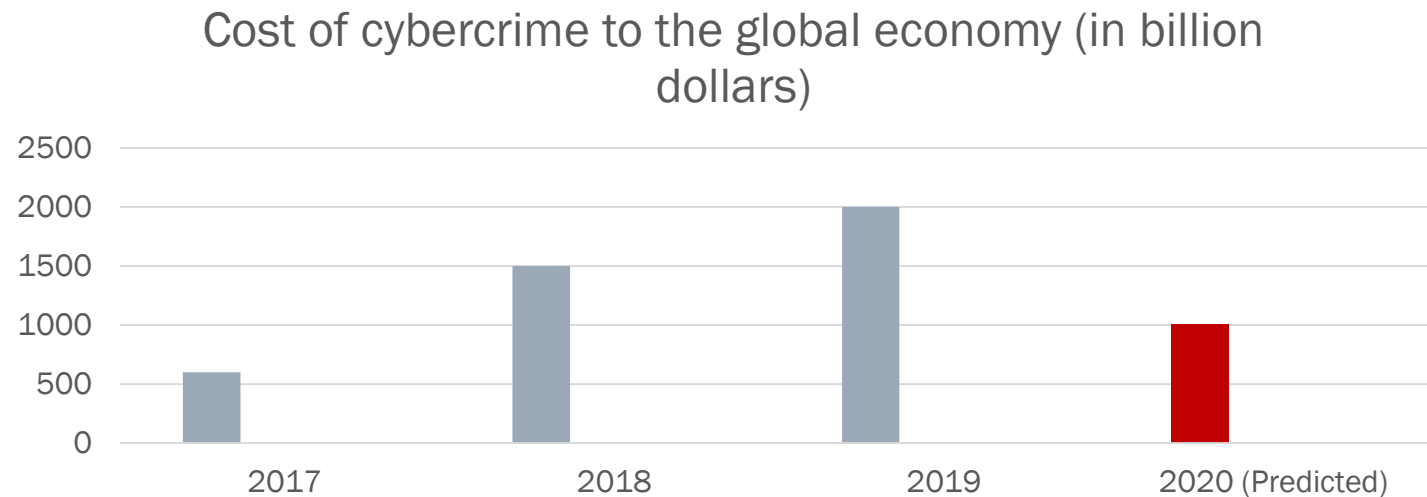
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- ❑ Globally, attention is now shifting to non-traditional military or physical security to cybersecurity which has tremendous negative impact on global economies and by extension sustainable socio-economic development.
- ❑ Cyberwarfare including hacking, information jamming, attack on command and control systems, surveillance equipment and cybercrimes are major IT related issues around global insecurity.



# Impact of Cybercrime

- There are reports showing the monetary value of Cybercrimes across the globe. For instance, the Center for Strategic Studies revealed that “cybercrime cost the global economy as much **as \$600 billion** or **0.8%** of global GDP in **2017** and will hit **\$1 trillion** for **2020**”. It is currently believed that it was worth **\$1.5 trillion** in **2018** and **\$2 trillion** in **2019**.



# Impact of Cybercrime

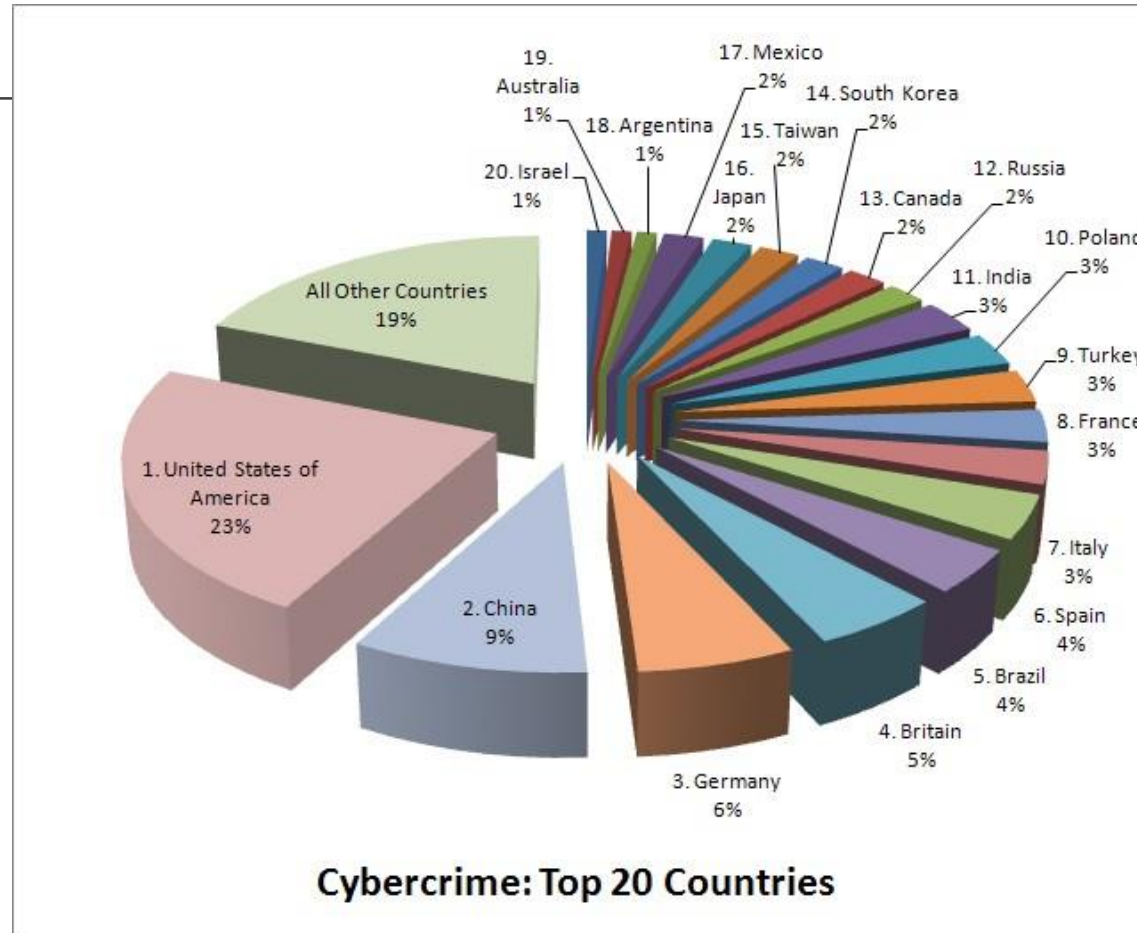


Figure 1 - List of Top 20 Countries with the highest rate of Cybercrime (source: BusinessWeek/Symantec) 2022

# Types of Cybercrime

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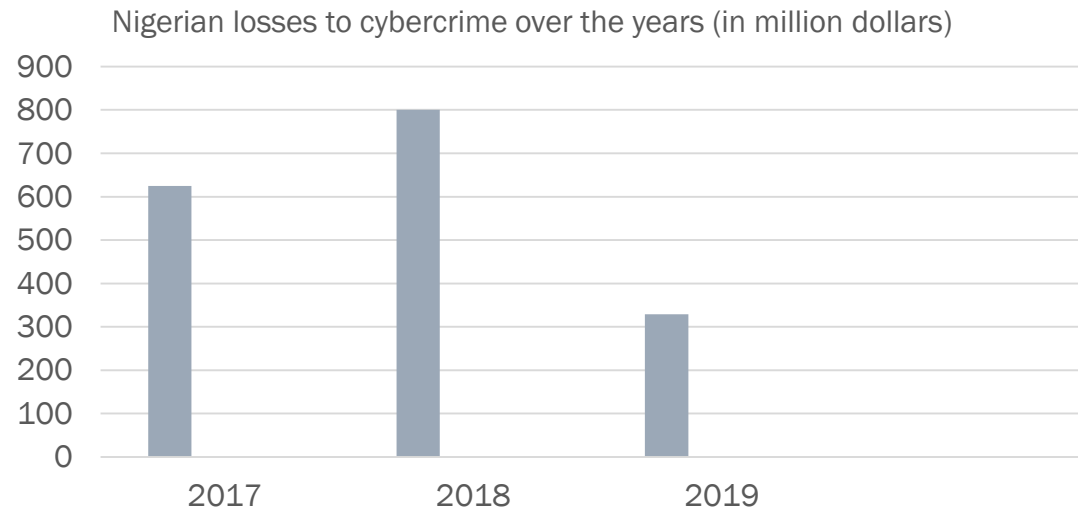
Major types of cybercrime as listed by these countries include :

- Malicious computer activities
- Malicious code rank
- Spam zombies rank
- Phishing web site hosts rank
- Bot rank
- Attack origin

# Impact of Cybercrime on Africa

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It has been reported that Africa “as a whole lost \$3.5 billion in 2017 to cybercrimes, the Nigerian portion of this sum was \$645 million, by far the largest (Kshetri 2019). A year later, it was reported that Nigeria lost \$800 million (N288 billion) collectively to cyberattacks in 2018 (Azeez 2019). More broadly, a 2019 report disclosed that Nigeria has lost on average N127 billion (\$328,842,878 million) annually to cybercrimes in recent years” (Ohwovoriole 2019).



# Cybercrime in Nigeria

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- ❑ The Economic and Financial Crimes Commission (EFCC) reported that **80%** of the **978** convictions it secured as at September 2021 were based on cyber fraud.
- ❑ Another report by Nigeria Inter Bank Settlement System (NIBSS) indicates that within 9 months of **2020**, fraudsters made **46,126** attempts to breach data based systems. Sadly, **41,979** of these were successful - representing **91%** of the time!
- ❑ A Survey titled 'The State of Ransomware 2022', reveals that **71%** of Nigerian businesses were hit by ransomware attacks in **2021** and that the cost of remediation of these attacks for **44%** of the businesses was **\$3.43 million**. The implications are definitely huge on our economy and image as a country.

# Economic Impact of COVID-19

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- ❑ Globally, the Covid-19 pandemic further worsened the economic situation as the lockdown period significantly constrained economic activities and the circular flow of income. Most of the primary effects of the COVID-19 crisis have been economic, rather than health-related.
- ❑ For instance the early part of the COVID-19 crisis ushered in Nigeria's deepest recession since the 1980s, hitting hard on many services and industries except the ICT industry which bounced back the economy due to migration of socio economic activities to digital platforms.

# The Role of IT in Strengthening National Security and Economic Stability

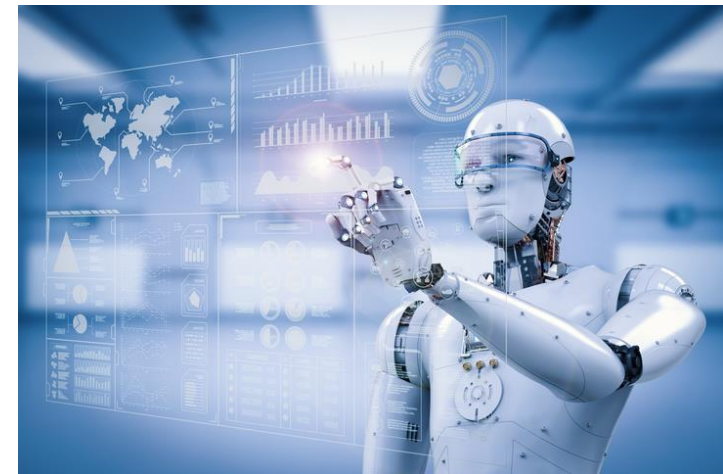
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- ❑ ***“We live in an information dominated era. Technological discoveries... are changing the nature of war and the way we prepare for it”*** William Perry, former US Secretary of Defence
- ❑ Fourth Industrial Revolution (4IR) are already serving as veritable tools for combating security threats. Emerging technologies such as Artificial Intelligence and Robotics (AIR), Internet of Things (IoT), Big Data Analytics and Autonomous Drone Technology among others have led to the evolution and advancement of many technological innovations which can be employed in stemming the rising tides of security challenges.
- ❑ Also, Technology is playing a significant role in the operations of various security/defense organisations in advanced economies such as the United States of America, the United Kingdom, Russia, Japan, Germany, and other emerging technology-driven countries

# Use of Technology in Addressing National Security

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- ❑ The advent of internet started with the US military in 1960 through ARPANET as a research initiative
- ❑ Military services have started incorporating AI and Robotics into addressing national security challenges. AI technologies are being used to identify the environment, recognize obstacles, combine sensor data, plan navigation, and also communicate with other vehicles. With the advent of artificial intelligence, automated vehicles, and drones amongst many other hi-tech innovations, fighting a war and combating insecurity is becoming easier.



## Use of Technology (contd.)

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- Geospatial science and Technology such as satellite Remote Sensing (RS), Geographic Information Systems (GIS), and Global Navigational Satellite Systems (GNSS) are being embraced for accurate mapping of contiguous areas.
- Security experts have long been able to tap into satellite images to help their prevention and response efforts. Now, the availability and quality of these images are increasing.

# Government Initiatives Towards Enhancing Sustainable National Security and Economic Stability in Nigeria

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- ❑ In the country's recent development plans targeted at economic stability, issues of national security and developing a robust knowledge economy have been afforded great priorities. Plans such as:
  - ❑ Vision 20:20,
  - ❑ Seven Point Agenda (2010-2017);
  - ❑ Transformation Agenda (2011-2015);
  - ❑ Economic Recovery and Growth Plan (2017);
  - ❑ National Development Plan (2021-2025)

The initiatives are divided into two parts here i.e. Military and Information Technology

## Some Initiatives with specific focus on Security and Information Technology are highlighted below:

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- ❑ The 2001 Nigerian “Grand Strategy for National Security” defines national security as **“the aggregation of the security interests of individuals, political entities, human associations & ethnic groups, which make up the nation”** It also clarifies that “the security interests includes safety of life & property, economic, physiological & mental wellbeing & the freedom to pursue the attainment of legitimate objectives without hindrance” and that **“National Security will be Information Technology (IT) driven.”** as IT promotes seamless sharing of information among security agencies for effective security & law enforcement.
- ❑ In addition, the recognition of this latter threat led to the adoption of a policy document on cybersecurity by the Nigerian government in 2015, a comprehensive policy statement detailing the provisions and efforts of the government aimed at achieving a safer digital environment.
- ❑ The latest of the initiatives is the formal launch of a national cybersecurity policy and strategy in 2021. The central pillar of policy includes Safe guarding the sovereign, independence and territorial integrity of the Nation.
- ❑ It promises a safe and secure digital economy community that provides opportunities for its citizenry and promotes peaceful and proactive engagements in cyberspace for enhanced national prosperity.

# Cybersecurity support pillars

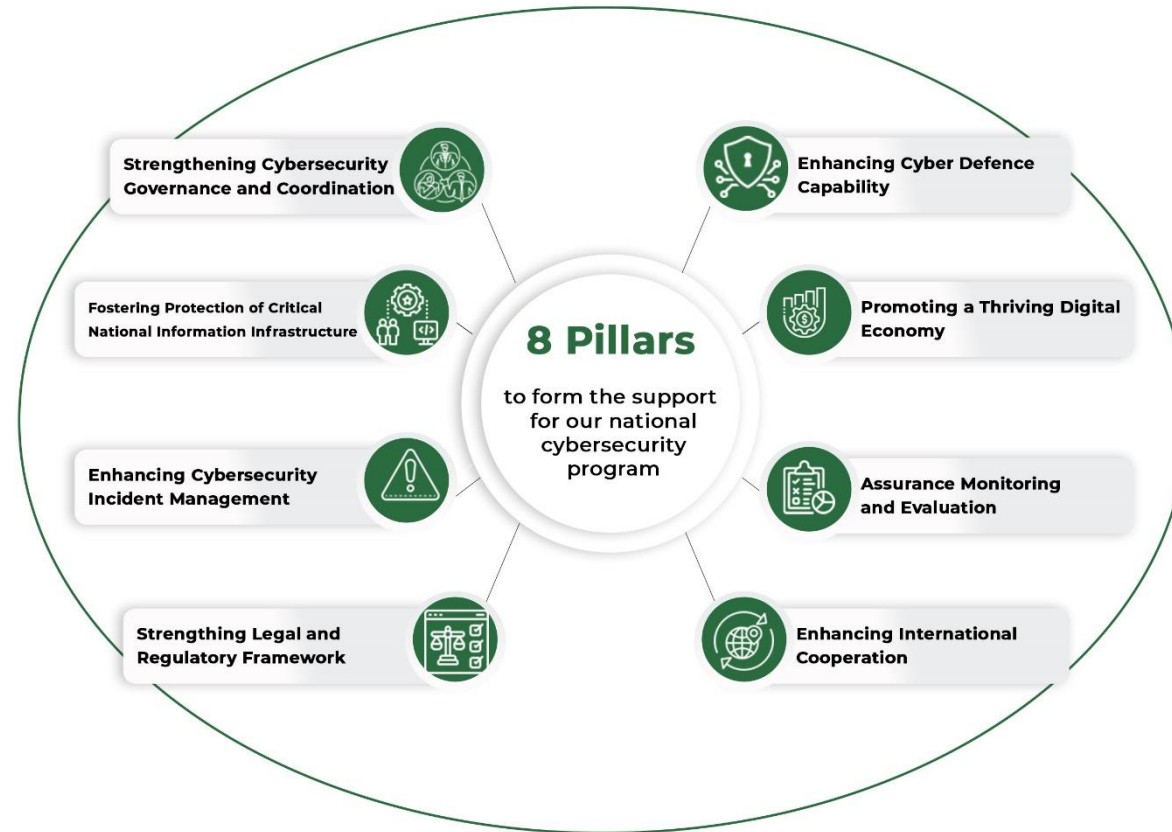


Figure 2 – 8 Pillars to form the support for our national cybersecurity program

# Budgetary allocation to the Defense/ICT Sectors

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Budgetary allocation to Defence and ICT sectors

YEAR	TOTAL BUDGET	DEFENCE	%	ICT	%
2015	4.5Trillion	388.46	8.6	18.70n	0.42
2016	6.06Trillion	430.13	7.08	21.99n	0.26
2017	7.44Trillion	481.87	6.26	20.33n	0.26
2018	8.61Trillion	560.15	6.36	20.77n	0.22
2019	8.83Trillion			17.62n	0.19
2020	10.33Trillion			17.43n	0.17
2021	12.9Trillion	838.5	6.45	20.17n	0.31
2022	16.93Trillion	1.14 Trillion	6.73	20.00n	0.95

*Table 1 – Budgetary allocation to Defence and ICT sectors*

# Journey of ICT development in Nigeria

## Leading the Way: The Journey of ICT Development in Nigeria

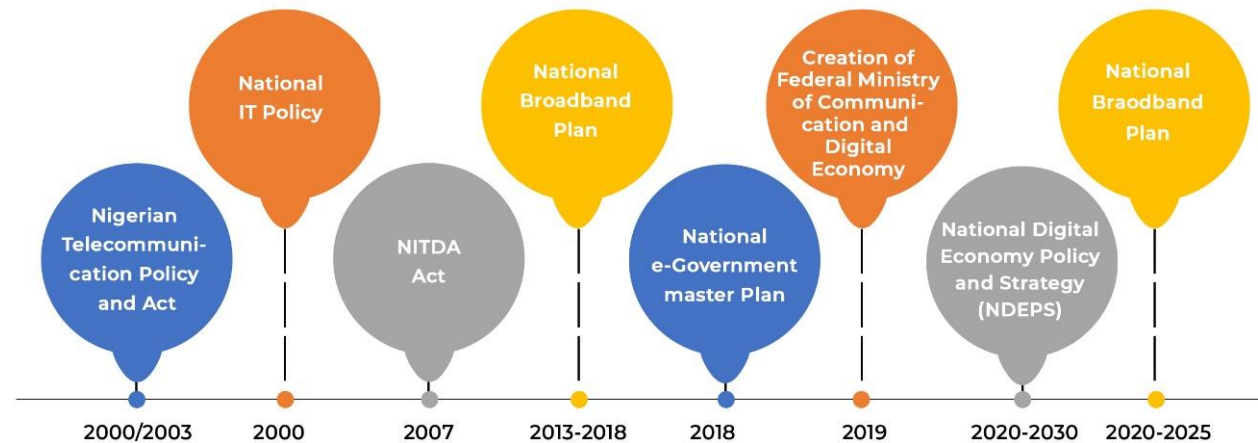


Figure 3 – The journey of ICT development in Nigeria

# Strategic milestones in ICT sector

## Strategic Milestones in ICT Sector



Figure 4 – Strategic Milestones in ICT sector

# ICT Annual Contribution to GDP

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Year	CONTRIBUTION TO NOMINAL GDP (%)
2017	9.22%
2018	6.60%
2019	13.12%
2020	15.21%
2021	9.88%

*Table 2 – ICT annual contribution to GDP*

# Nigeria Data Protection Bureau (NDPB)

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- ❑ Since humans are the drivers of economy and security, PERSONAL DATA occupy a special place in data processing and by extension, national security. It is vulnerable to all manners of abuses hence, the need to ensure the security, protection and safeguard of data processing inline within available regulatory instruments issued by NDPB.
- ❑ As the world is moving digital, the reality is that the boundaries between digital and traditional economies are getting blurred with technological change as the main driver. For us at the NDPB, we are more focused on ensuring cyberspace is safe to promote the digital economy and ultimately create environment for economic stability. We view national security from the perspective of guaranteeing individual privacy in the digital space and harnessing data for the promotion of data intelligence for national security and eventually, the economic stability of the country.

# Objectives of NDPR

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- Safeguard the rights of natural persons to data privacy;
- Foster safe conduct of transactions involving the exchange of Personal Data;
- Prevent manipulation of Personal Data; and
- Ensure that Nigerian businesses remain competitive in international trade through the safeguards afforded by a just and equitable legal regulatory framework on data protection and which is in tune with best practice.

# NDPB's Perspective on IT and National Security

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- Data Protection is everybody's business**
- Data Subjects** to be aware of their Rights and Duties (Dos and Don'ts) on Data Processing (Protect Personal Information, Keep Username/Passwords, Vigilance with emails/Attachments, Awareness, etc)
- Data Controllers/Processors to Know their Obligations**
- Technological Measures
- Organizational Measures
- Annual Audit filing with NDPB

# Challenges facing IT in developing countries

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The reasons why IT has not really been able to impact in National security in most developing countries are shown below:



*Figure 5 – Challenges Facing IT in developing countries*

# The Way Forward

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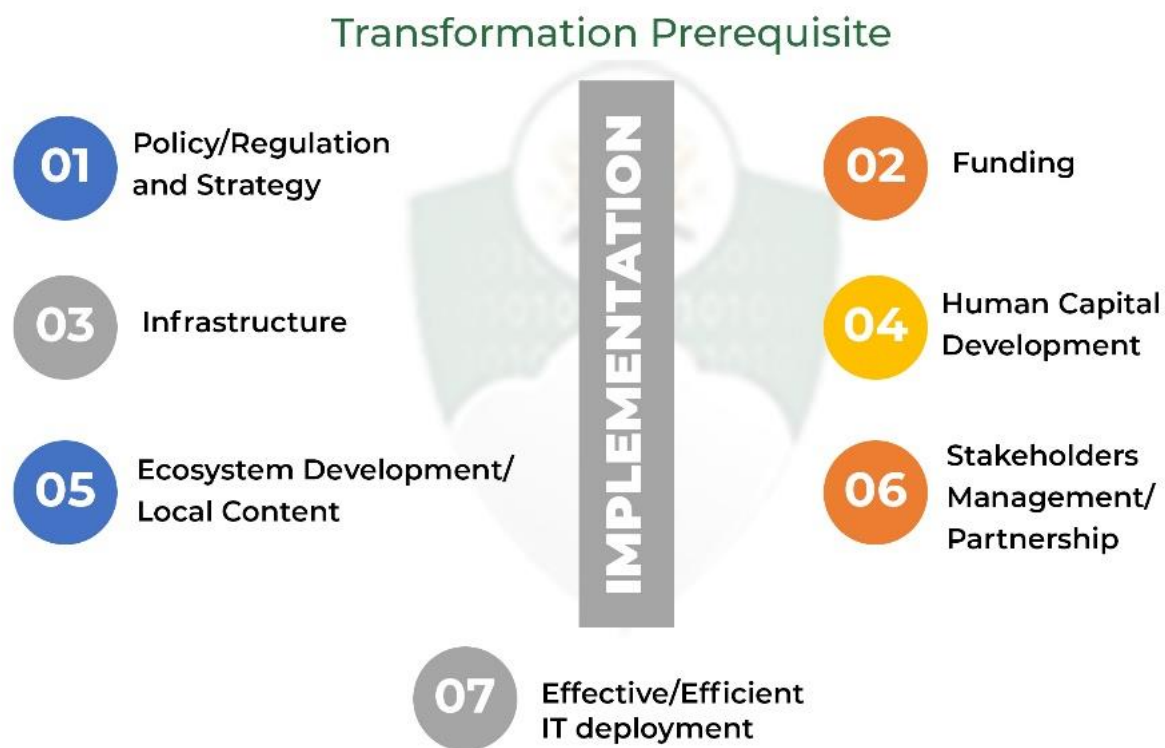


Figure 6 – Transformation Prerequisite

# His Excellency's comment on Digital Economy

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## Digital Economy

June 12, 2020

*“Digital Economy continues to play an important role in our development agenda as we move into the age of Artificial intelligence”*

# Leadership Roles in State's Development through Technology

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## Leadership Roles in States' Development through Technology



Lee Kuan Yew, former Prime Minister of Singapore



Paul Kagame, President of Rwanda



Barack Obama  
Campaign: My.BarackObama.com (200 electoral votes & 8.5 votes)  
Appointment of first CTO, Aneesh Chopra  
Social media for interaction  
NBP (\$Billions) → access for 60% households by 2015  
Policy to free Spectrum, Consumer Protection, etc (2010-2012)  
Revitalized National Aeronautics and Space Administration (NASA)  
United States Digital Service (2014) to offer Guidance on IT to Federal agencies  
Chief Data Scientist, Cybersecurity Plan



Kim Dae-Jung,  
former President of South Korea

*"Let us be the generation that reshapes our economy to compete in the Digital Age. ....set standard for our schools and give them the tools to resources they need to succeed...let's invest in scientific research and Let's lay down broadband lines through the heart of inner cities and rural Towns all across America"*

# Conclusion

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- ❑ On this note, I will call on the IT professionals, the government institutions, the private sector players, and the development partners to continue to collaborate and harness IT and its possibilities for national security and economic development.
- ❑ We need to be innovative in leveraging IT and emerging technologies to create solutions and services that solve our security challenges, and build digital capacity and literacy to allow our military personnel and ordinary Nigerians to take advantage of these solutions for an improved national and economic stability.
- ❑ Let us secure our country and take her economy to the next level for the prosperity of all and the next generation.

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*Thank  
you*



**Thank you for listening and God bless.**

Any Questions?