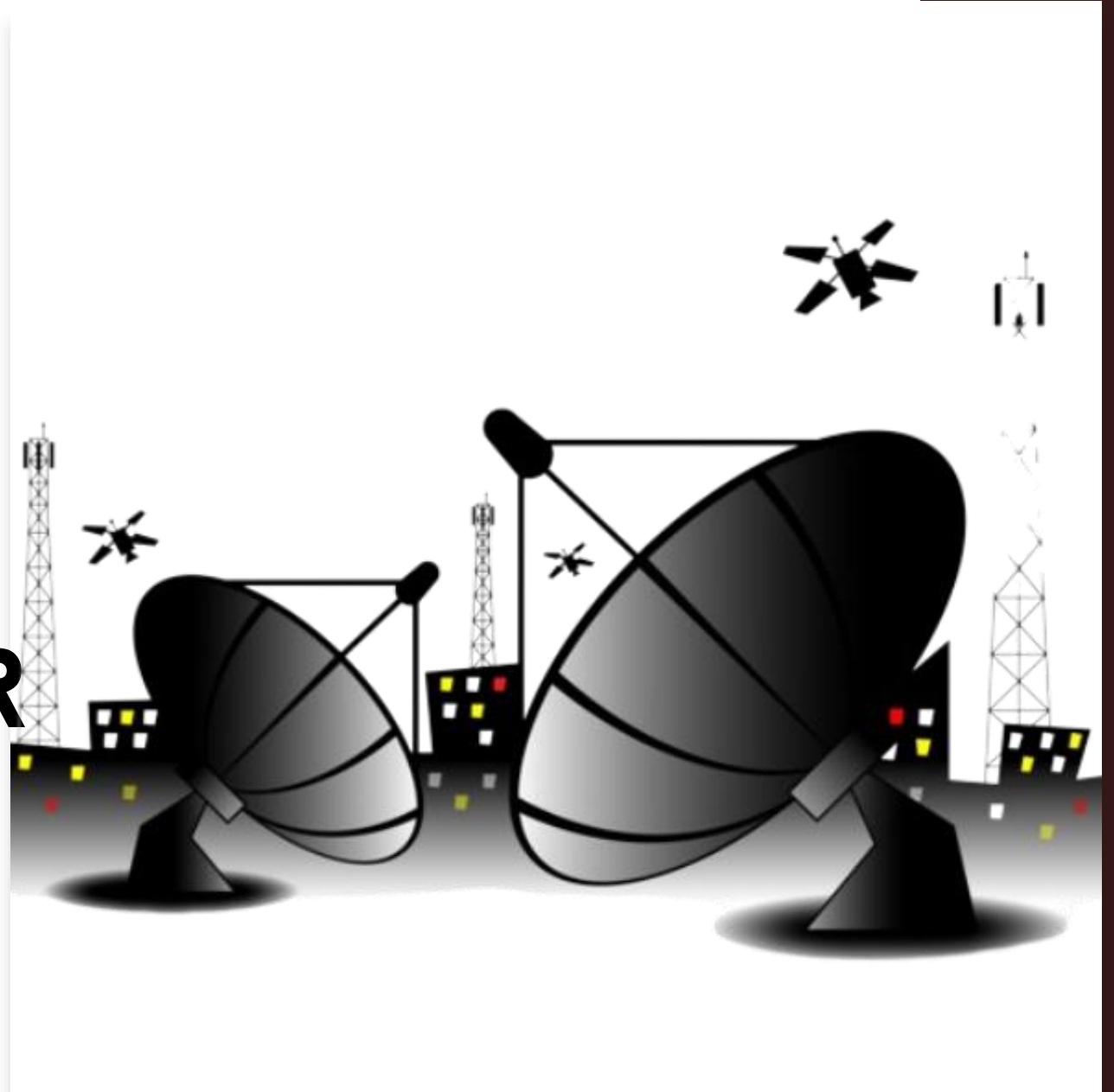


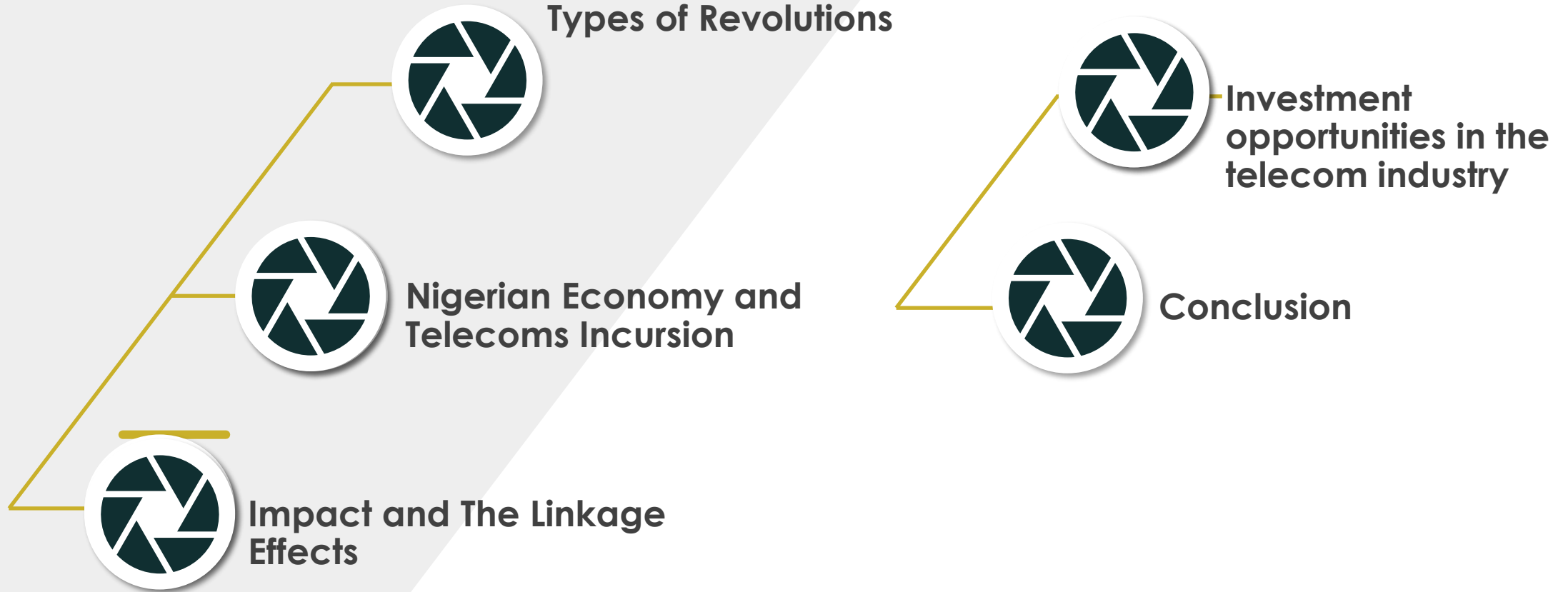
# TELECOMS:

# THE NEXT FRONTIER



Presented by Bismarck Rewane  
August 13, 2024

# OUTLINE



# THE BIG 3 GLOBAL ECONOMIC REVOLUTIONS

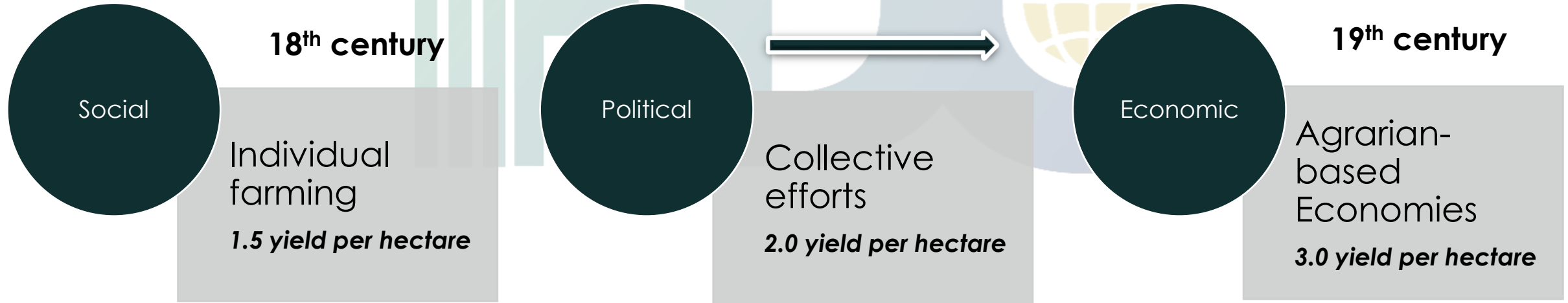
- A revolution is the swift, complete overthrow of a regime by a drastically different one
- Revolutions bring more powerful, efficient means for humans to live & obtain goods and services



- There have been three major revolutions in human history
- and they have influenced social, political, and economic structures

# AGRARIAN REVOLUTION – THE FIRST REVOLUTION

- Small landholdings into larger, more efficient farms. Common lands that were once shared by villagers were fenced off and privatized.
- Introduction of crop rotation and selective breeding – 25% - 50% increase in production
- The development of agricultural machinery, such as Jethro Tull's seed drill threshers



The Agrarian Revolution marked a shift from subsistence farming to more market-oriented agriculture, where farmers produced surplus crops for sale in domestic and international markets

# INDUSTRIAL REVOLUTION – THE SECOND REVOLUTION

- Advances in metallurgy, such as the Bessemer process, enabled the mass production of steel, which was crucial for building infrastructure and machinery
- There was a transition from integrated labor and small workshops to the division of labor in factory work.



It led to unprecedented economic growth, technological advancement, and changes in social structures

# INFORMATION REVOLUTION – THE THIRD REVOLUTION

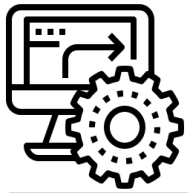
- The Dot Com Boom saw the rapid adoption of the internet by businesses and consumers alike
- A shift to knowledge-based economies, where digital technology and information became key drivers of productivity and growth



It revolutionized the way businesses operated, how people communicated, and how information was shared

# WE ARE IN THE DIGITAL & AI REVOLUTION

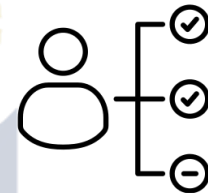
- AI Investment was \$142.3bn in 2023, a 79% growth from \$79.6bn in 2018
- The global AI market is expected to be valued at over \$1.8trn by 2030
- Efficiency, predictive & pattern analysis, & AI-driven automation



Automation of routine tasks helps employees focus on higher value activities



AI assists in analysing vast amounts of data for decision making



AI offers personalization to customer enquiries and tailored recommendations

# FROM ANALOGUE → AUTOMATION → DIGITAL → AI

- **Catch-up timelines:**
- For the agrarian revolution, a country needs 50 to 60 years
- For the industrial revolution, a country needs 30 to 40 years
- Fast further to Dot.com, it took 5 to 10 years
- In the digital and AI era, it takes 1 to 5 years to catch up
- NVIDIA just started recently but its market cap is at \$2.68 trillion
- The Magnificent Seven, the total Market Cap is \$15 trillion
- **How does it affect Nigeria?**
- If Nigeria gets it right the Telecoms, then the catch-up will be faster



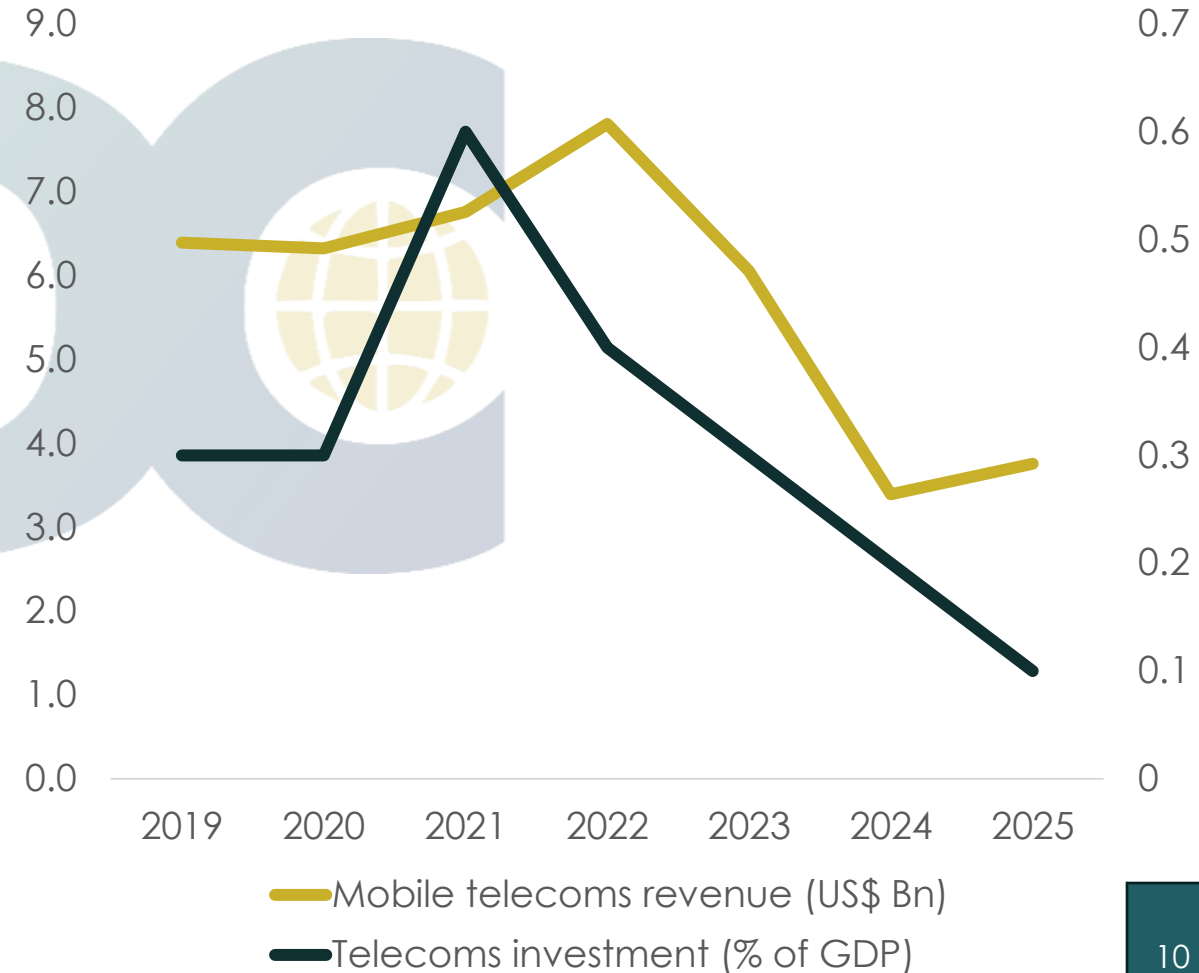
# NIGERIAN ECONOMY AND THE TELECOM INCURSION

- Between 2003 and 2015
- The economy was growing at an average of 7.03%
- CAGR of the Telecoms was 308.84%
- Telecom investment to GDP was 0.376%
- Average inflation was 11.46%
- Telecom returns were higher than GDP growth
- Higher than inflation rate
- Investors were making money like bandits

# WHAT IS THE CURRENT STATE OF THE TELECOMS INDUSTRY

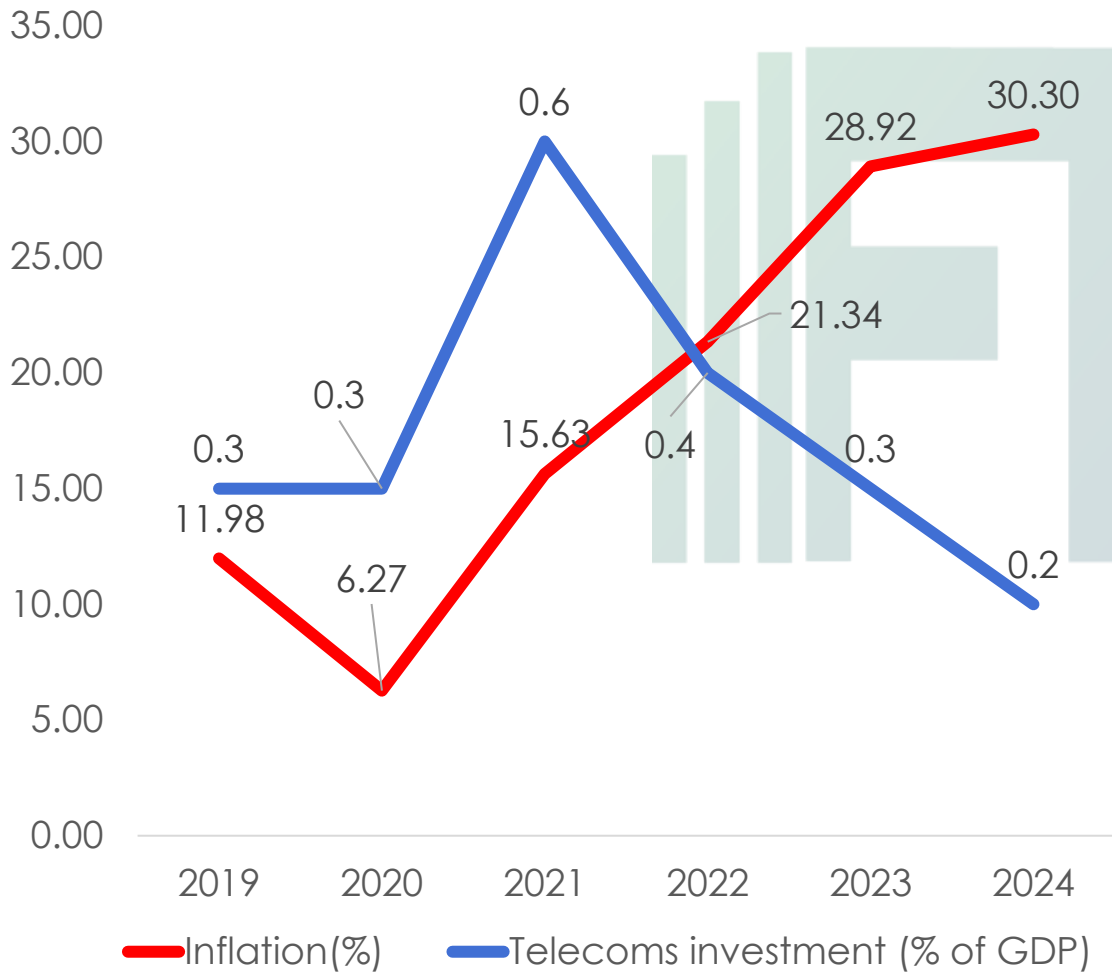
- Telecoms investment plunges
- As revenue declines
- Foreign exchange losses
- Skyrocketing levels of inflation
- Cost of energy intensifies as diesel price increased

Telecoms investments and revenue on a free fall since 2023

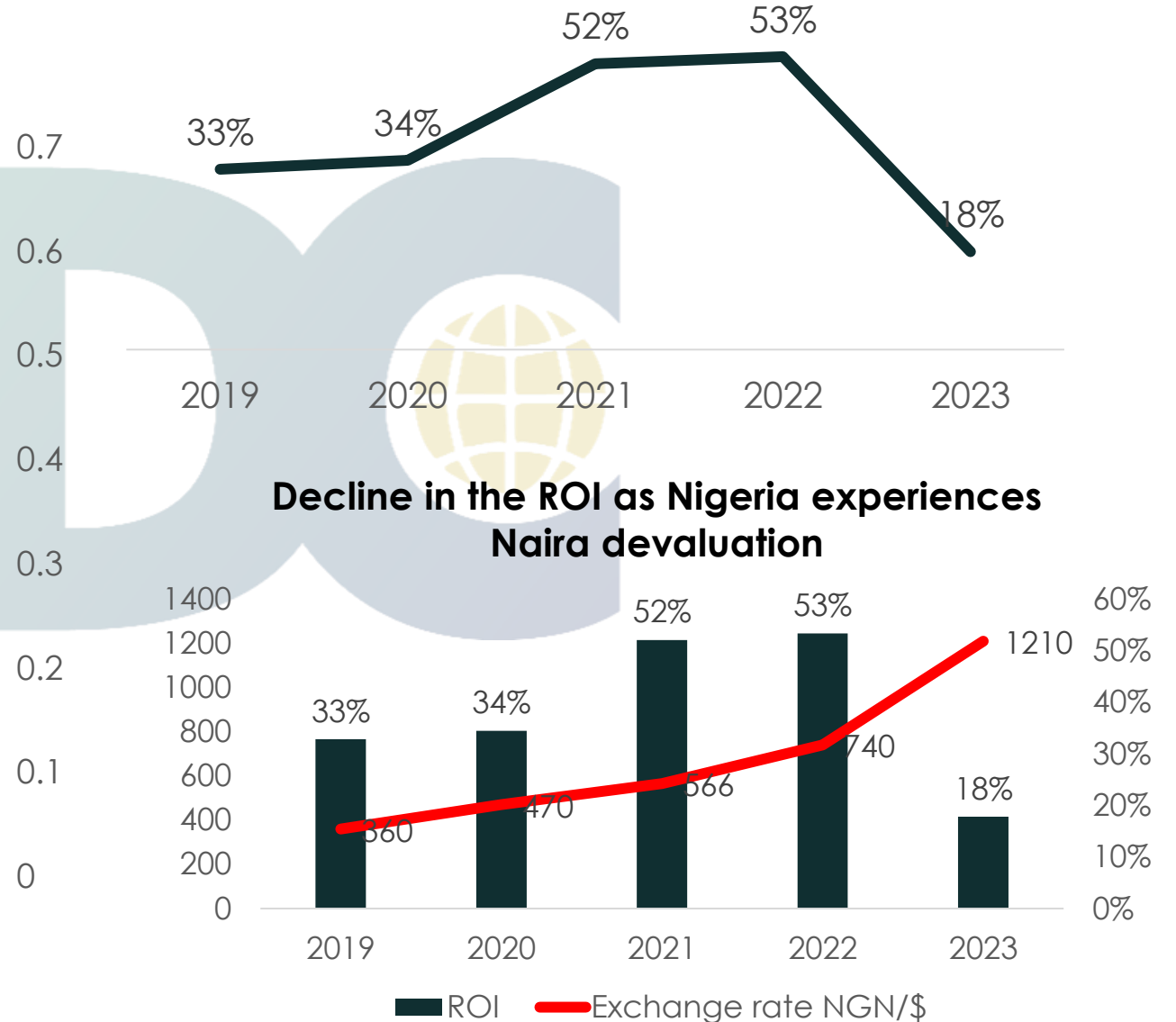


# INVESTMENT CASE: TOTAL INVESTMENT DIPS AS INFLATION AND EXCHANGE RATE DETERIORATE

## Total Telecoms Investment drops as Inflation Soars



## Telco Return on Investment



## Decline in the ROI as Nigeria experiences Naira devaluation

# WHAT IS THE CURRENT STATE OF THE TELECOMS INDUSTRY

- The telecom industry blossomed between 2003 and 2022
  - aligning with the sector's growing importance in the economy
- **Current state of the Telecoms industry**
- Capex has dropped
- Naira depreciated – FOREX losses
- Returns on investment have become negative
- ARPU has dropped to \$3.92 in 2023 from \$4.00 in 2022
- Investment is declining
- Tariffs are stalled

# IS ALL HOPE LOST? NO!

What do we need to do now?



**REGULATORY REFORMS**

Avoid exploitative  
oligarchy



**GUARANTEE QUALITY  
SERVICE**

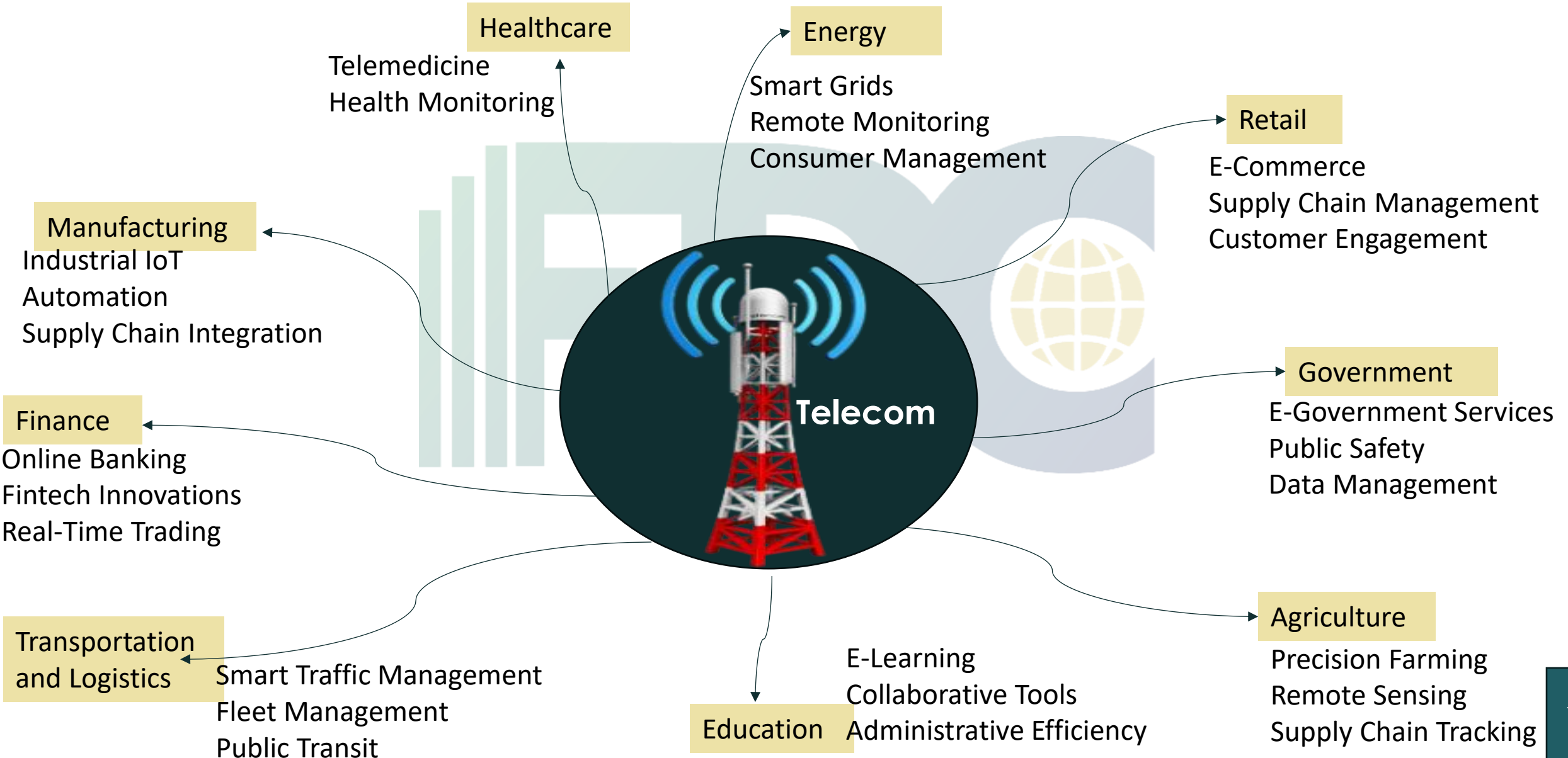


**REVIEW & LIBERALIZATION OF THE  
PRICING FORMULA**

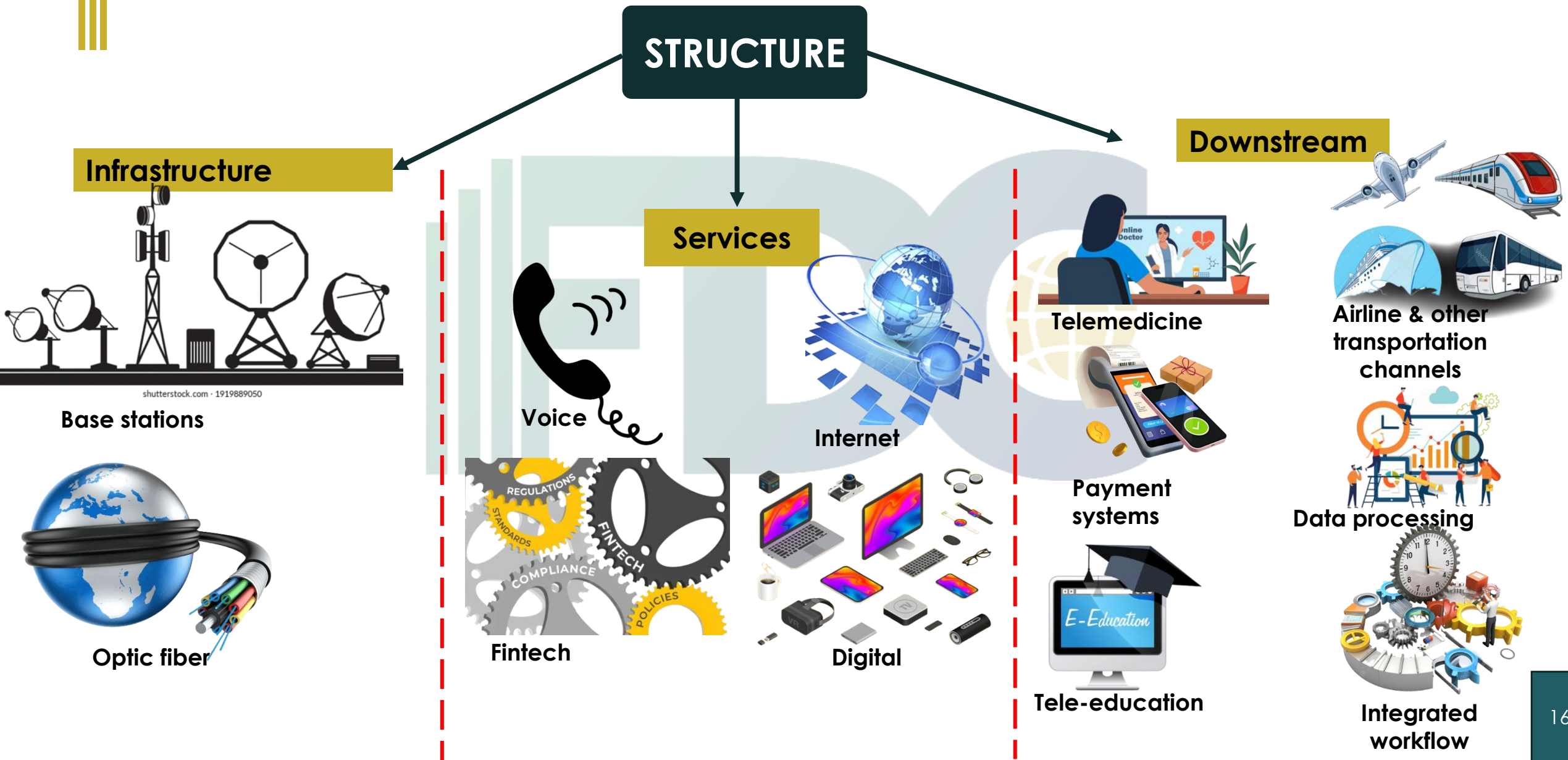


# TELECOM & THE LINKAGE EFFECTS

# TELECOM CONNECTIVITY TO SECTORS & OTHERS



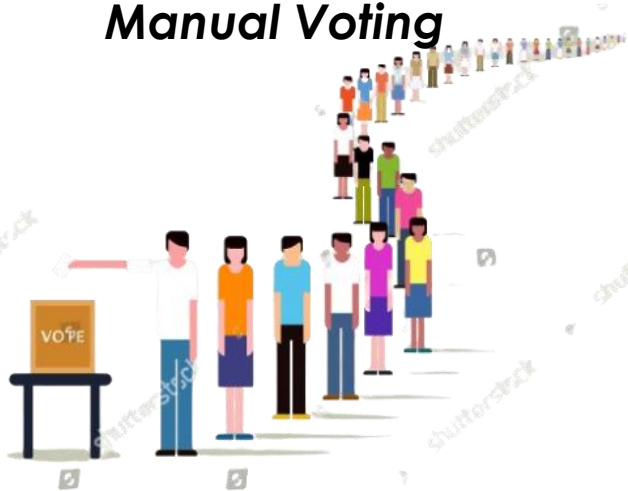
# THE STRUCTURE OF THE TELECOMS INDUSTRY IN NIGERIA





# TELCO SECTOR LINKAGE TO CRITICAL ACTIVITY - ELECTORAL SYSTEM

## 1999 to 2011 Manual Voting



- Long queues
- Delayed results
- Electoral violence
- Ballot box snatching
- More court cases

## 2015 to 2023 E-voting



- Short queues
- Fast & Accurate results
- Secured
- Convenience
- Trust & transparency
- Less violence

## Without an effective Telecom sector



- The electoral system is in chaos

# TELCO SECTOR IMPACT ON PAYMENT SYSTEM

Payment of transactions grew at 345% over 5 years  
CARG = 69%

Faster and more efficient payment processing

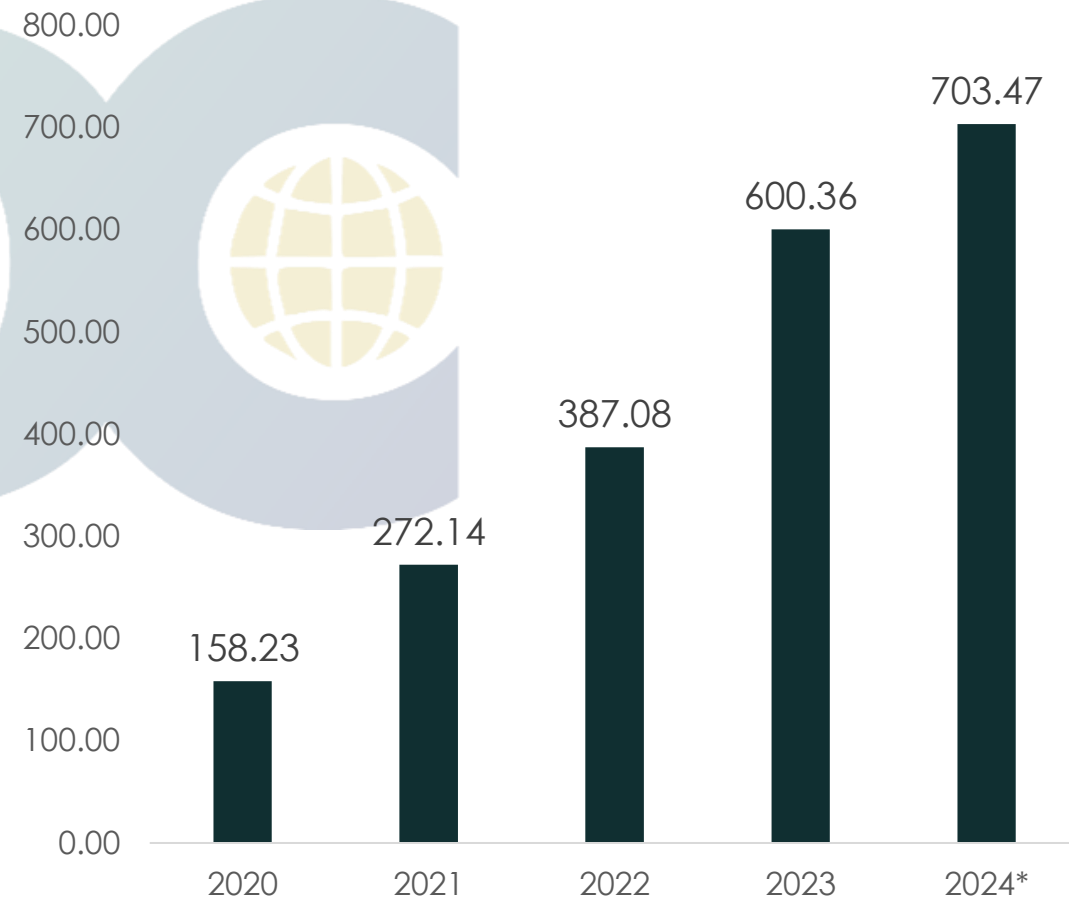
Reduce transaction times and increasing overall system throughput

Reduce the costs associated with traditional payment methods

Enhance the security of payment systems and reduce the risk of fraud and unauthorized access

Mobile payments, contactless transactions, and other digital payment convenience and security

NIBB instant Payment (N'Trn)





# IMPACT OF TELECOMS ON STAKEHOLDERS & THE ECONOMY

Telecoms contributed over 16% of CIT in 2022

Contribution to Real GDP (2023)

14.58%  
Q1'24

Internet adoption

45.5% of population

iGDP

N31.44trn

Telcoms make up

83%

of iGDP

Tax Revenue

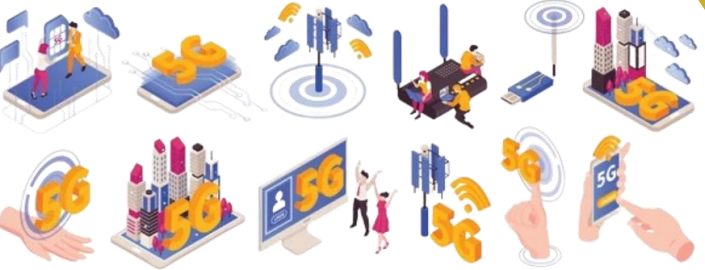
N238bn  
MTN & Airtel  
(2022)

E-commerce

\$13bn

Telco GDP

N26.16trn



# OPPORTUNITIES OF THE 5G NETWORK

Enhanced  
Mobile  
Broadband



Internet of Things (IoT)  
Expansion



Healthcare  
Transformation



Vehicle-to-Everything  
(V2X) Communication



Advanced Augmented  
Reality (AR) and Virtual  
Reality (VR)



Energy Efficiency  
and Environmental  
Impact



Transforming Entertainment  
and Media



Economic Growth  
and Innovation



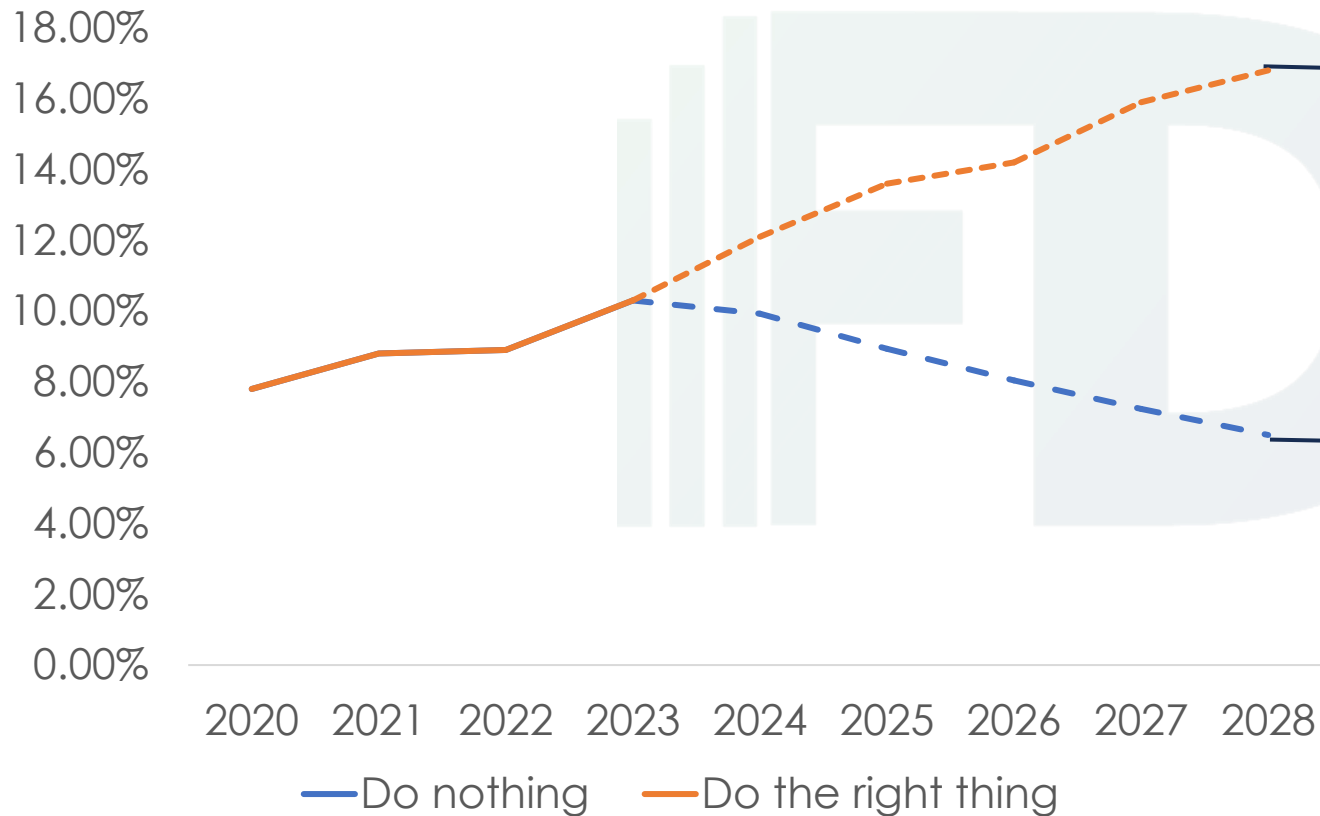
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# CONSEQUENCES OF A COLLAPSING TELECOMS

# IF TELECOM SECTOR COLLAPSES – THE ECONOMY FAILS

Scenarios: Telecoms Contributions to GDP

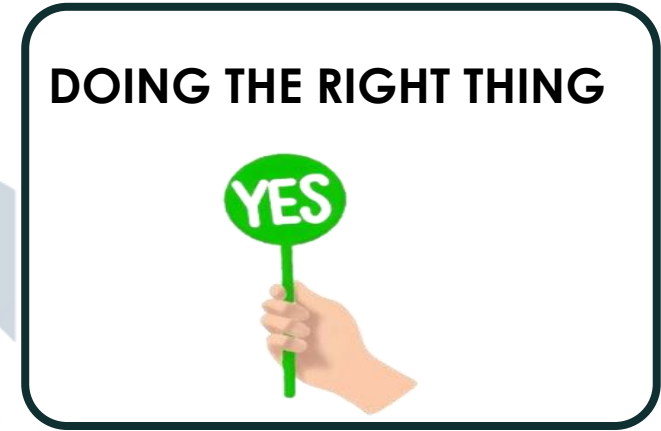


**Do the right thing**  
(Short term - increase tariff  
Long term - price deregulation)

**Do nothing**  
(market delves into oblivion)

- Without immediate intervention, the revenue potential from the telco may start falling.
- The telecoms is linked to many sectors, hence, any disruption in its operations will have a chain effect on other sectors of the economy.

# DOING NOTHING IS NOT AN OPTION



- Telecom sector suffers
- Consumers suffer
- Businesses suffer

- Digital economy goes into hibernation
- The entire economy suffers

- Investment rises
- Quality of service improves
- Consumers benefit
- Businesses benefit

- Telecoms benefit – profits
- The entire economy gains
- Accelerated growth guaranteed

# WHEN SECTORS ARE NOT PROPERLY INTEGRATED



Inefficiency

Reduced productivity

Fragmentation of markets

Missed opportunities for innovation

Social and environmental challenges

Supply chain disruptions

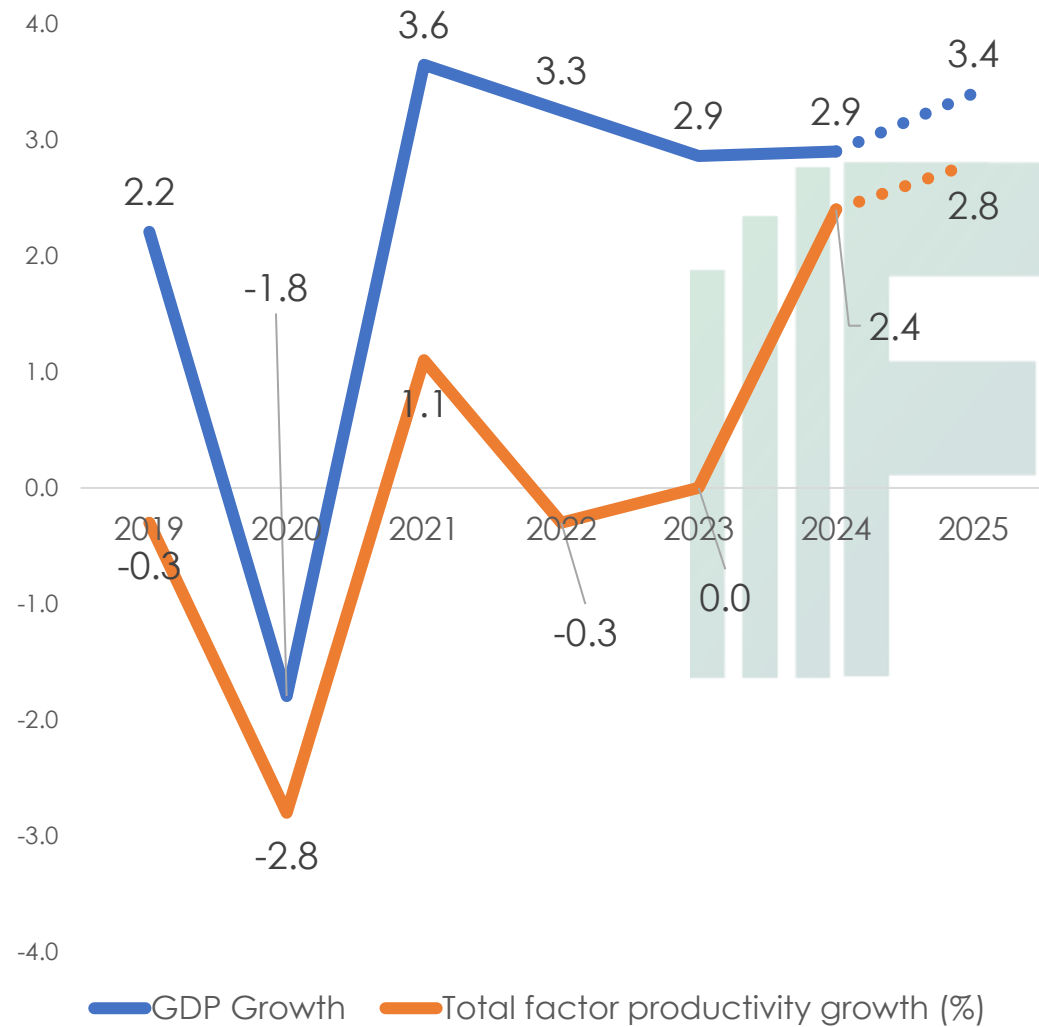
## Communication plays a crucial role in enhancing linkages between sectors

- Telecom provides the essential infrastructure backbone for communication
- Offers various communication channels, including telephone, mobile, internet, email, and messaging services
- Provide global connectivity, linking organizations and individuals across national and international borders
- facilitate the efficient transmission of large volumes of data
- Allow stakeholders to communicate instantly regardless of their location



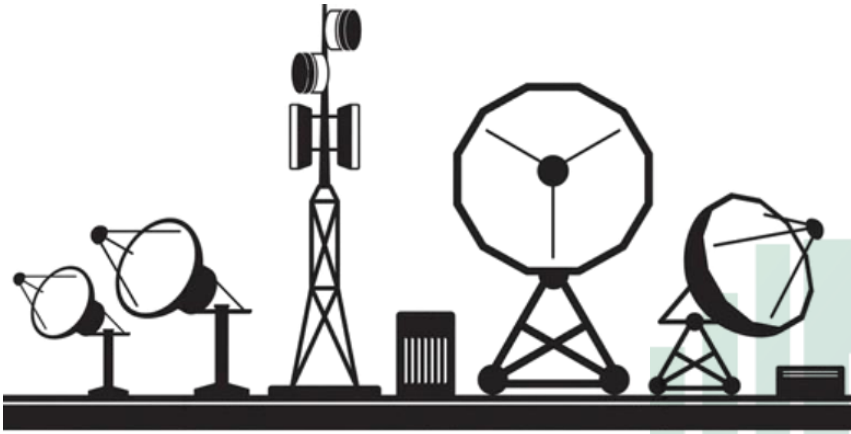


# GDP AND TOTAL FACTOR PRODUCTIVITY GROWTH



- Both GDP and total factor productivity projected to grow in 2025, by 3.4% and 2.8% respectively
- These will have a pull on the linkage sectors
- Investment will increase
- Employment will go up
- Productivity will increase
- Revenue will increase

# COST REDUCTION STRATEGIES FOR THE TELECOMS INDUSTRY



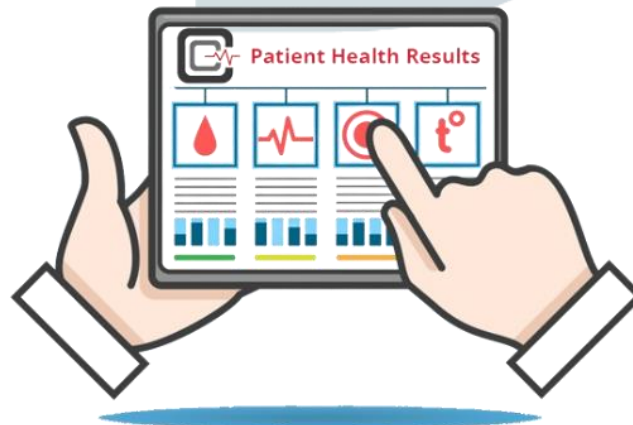
- The biggest cost input of the telecoms industry is the base station
- With more than 60% of total expenditure

**This cost can be minimized by**

**Shifting from diesel to solar power**



**Remote monitoring systems**

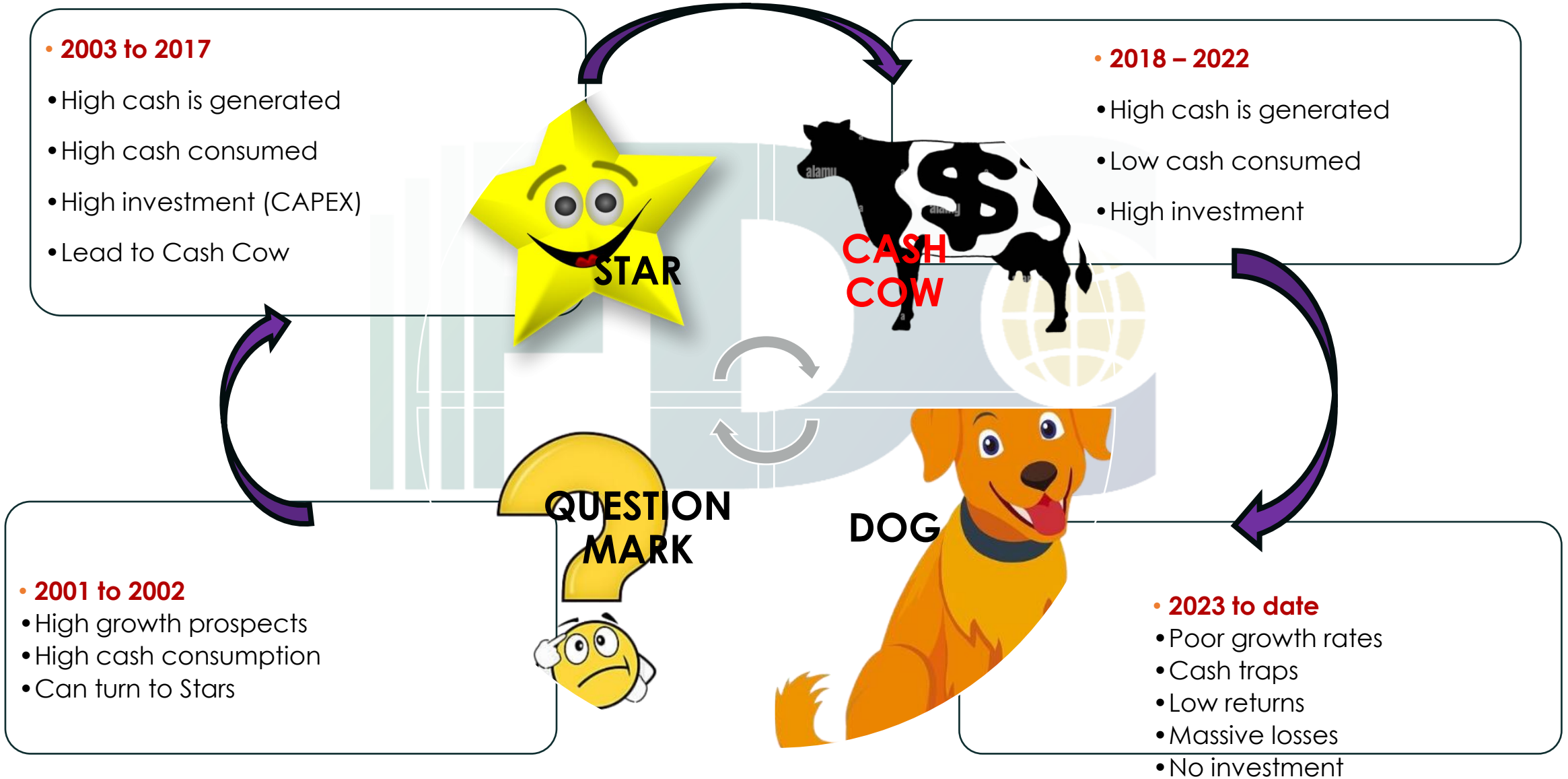


**Liberalizing the tariff structure**

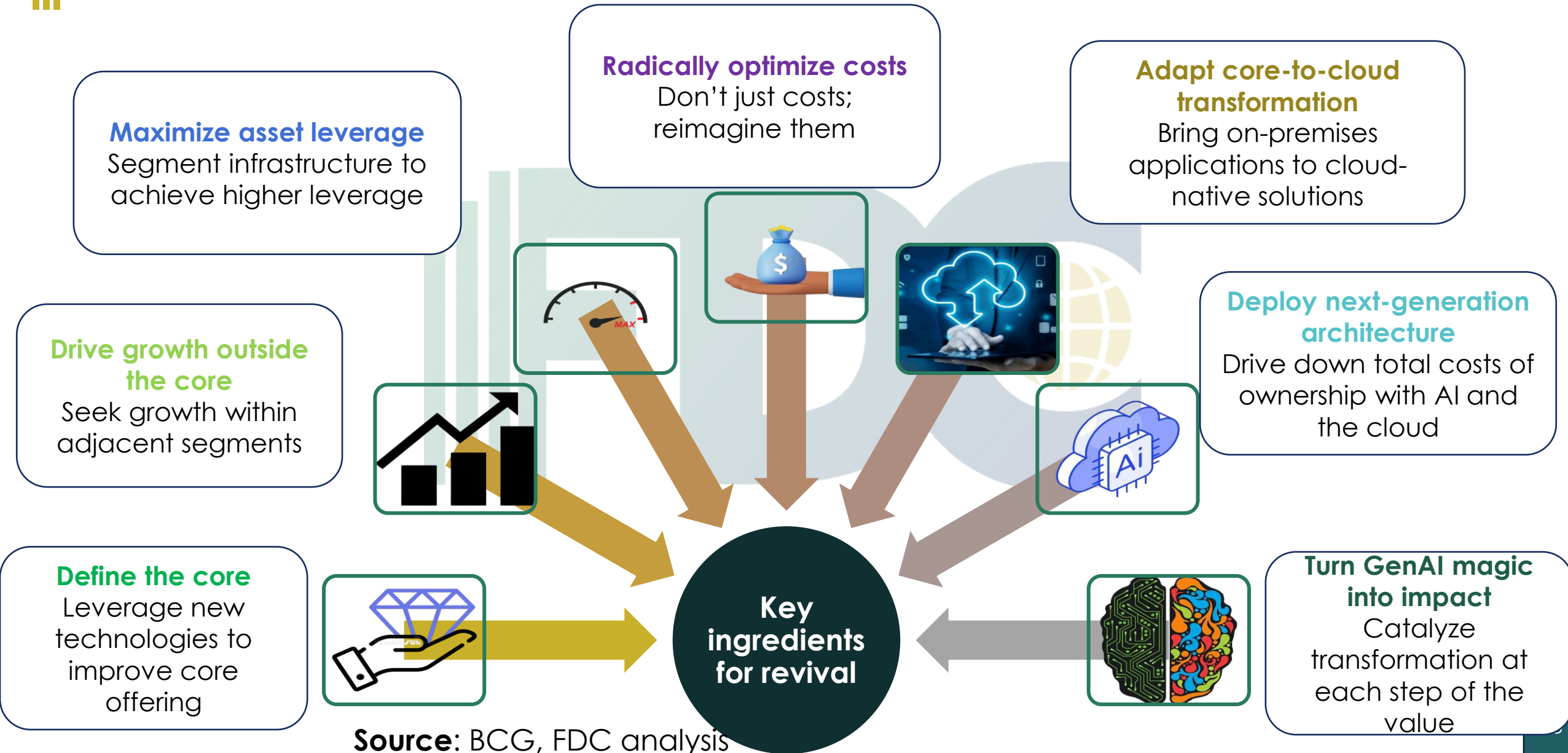
**LIBERALIZATION**



# THE TELECOM INDUSTRY: A NEED FOR REVIVAL



# TELECOMS 2.0: THE NEW INVESTMENT OPPORTUNITY



# INCREASED INVESTMENT: RECIPE FOR ECONOMIC GROWTH

## NATIONAL ACCOUNTING EQUATION

$$\text{GDP} = \text{C} + \text{I} + \text{G} + \text{X-M}$$

\$364bn      \$237.3bn      30%      \$16.4bn      \$1.1bn

Per capita GDP is \$1,597.4

- Gross Investment and Gross Domestic Product
- The changes in Gross Investment gross investment impact the GDP

$$GDP = f(INV)$$

$$GDP = 0.166INV$$

- A 1% increase in gross investment will increase GDP growth by approx. 0.166%

# A 1% RISE IN TELECOMS INVESTMENT GENERATES 0.057% RISE IN GROWTH

Using 2024 as an example

**GDP = \$209.5Bn - Telecoms Investment = \$498Mn**

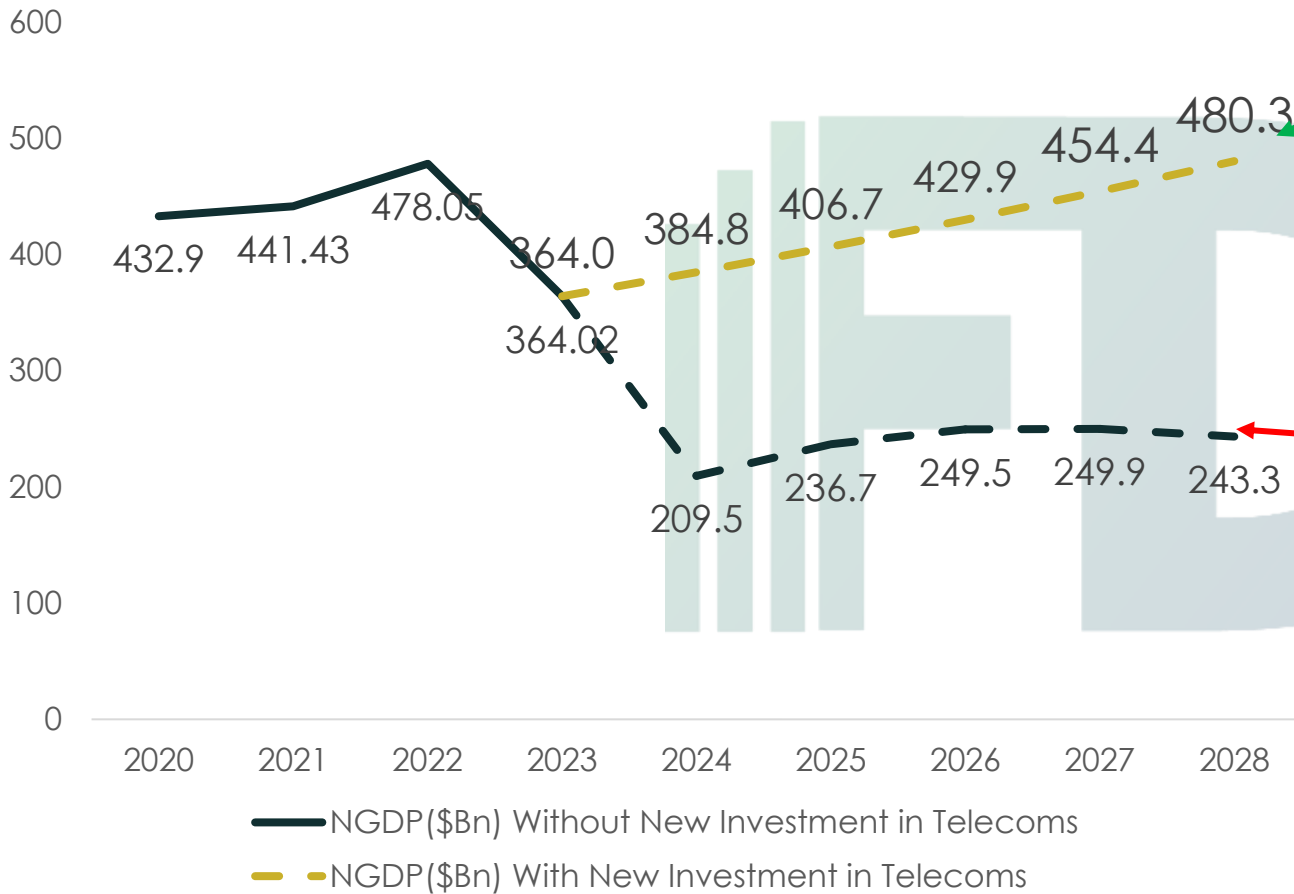
- An increase in telecoms investment by **1%** will lead the GDP to increase to **\$221.44Bn**
- In 2026 base on the analysis above, if we increase telecoms investment by **5.7%** in 2025, GDP in

2026 will go from **\$406.7Bn** to **\$429.9Bn**



# THE MULTIPLIER EFFECT OF NEW INVESTMENT IN THE TELECOM INDUSTRY

Scenarios: Telecoms Investment Impact on GDP



The impact of increasing investment in the Telecom industry by **5.7%**

Without new investment in the Telecoms Industry, the economy suffers

**With increased investment in Telecoms, per capita GDP will increase to \$2,181.8 by 2028 from \$1,597.4**

# THE MULTIPLIER EFFECT OF NEW INVESTMENT

## Immediate Impact on the Telecoms Industry



- **Capital Inflows**
- Increased capital inflows
- Expansion and technological upgrades
  - leading to enhanced service quality and broader network coverage



- **Job Creation**
- New investments would create jobs
- not only within the telecoms sector but also in related fields such as
  - Construction
  - IT
  - customer service



- **Increased Competition**
- More investment would spur competition
- leading to better services and potentially lower prices for consumers





# THE MULTIPLIER EFFECT OF NEW INVESTMENT



## GDP Growth

The telecoms sector could contribute more significantly to GDP growth

## DIGITAL ECONOMY



Increased telecoms capacity can foster the growth of the digital economy, enabling more **e-commerce, fintech, and online services**



Enhance productivity across multiple sectors



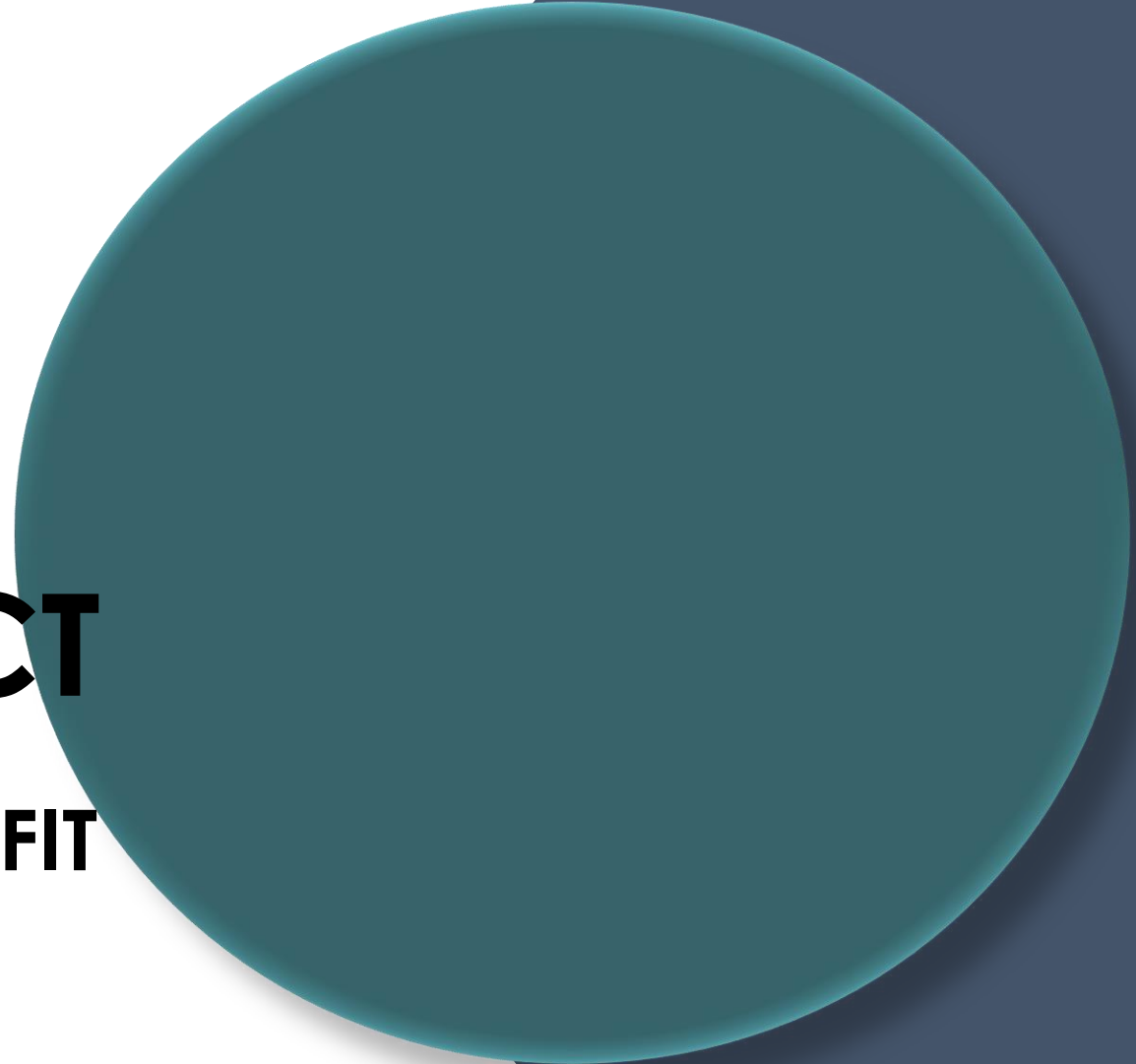
Attract more FDI into Nigeria, not only in telecoms but in other sectors



# **IMPACT AND LINKAGE EFFECT**

**SECTORS THAT WILL BENEFIT**

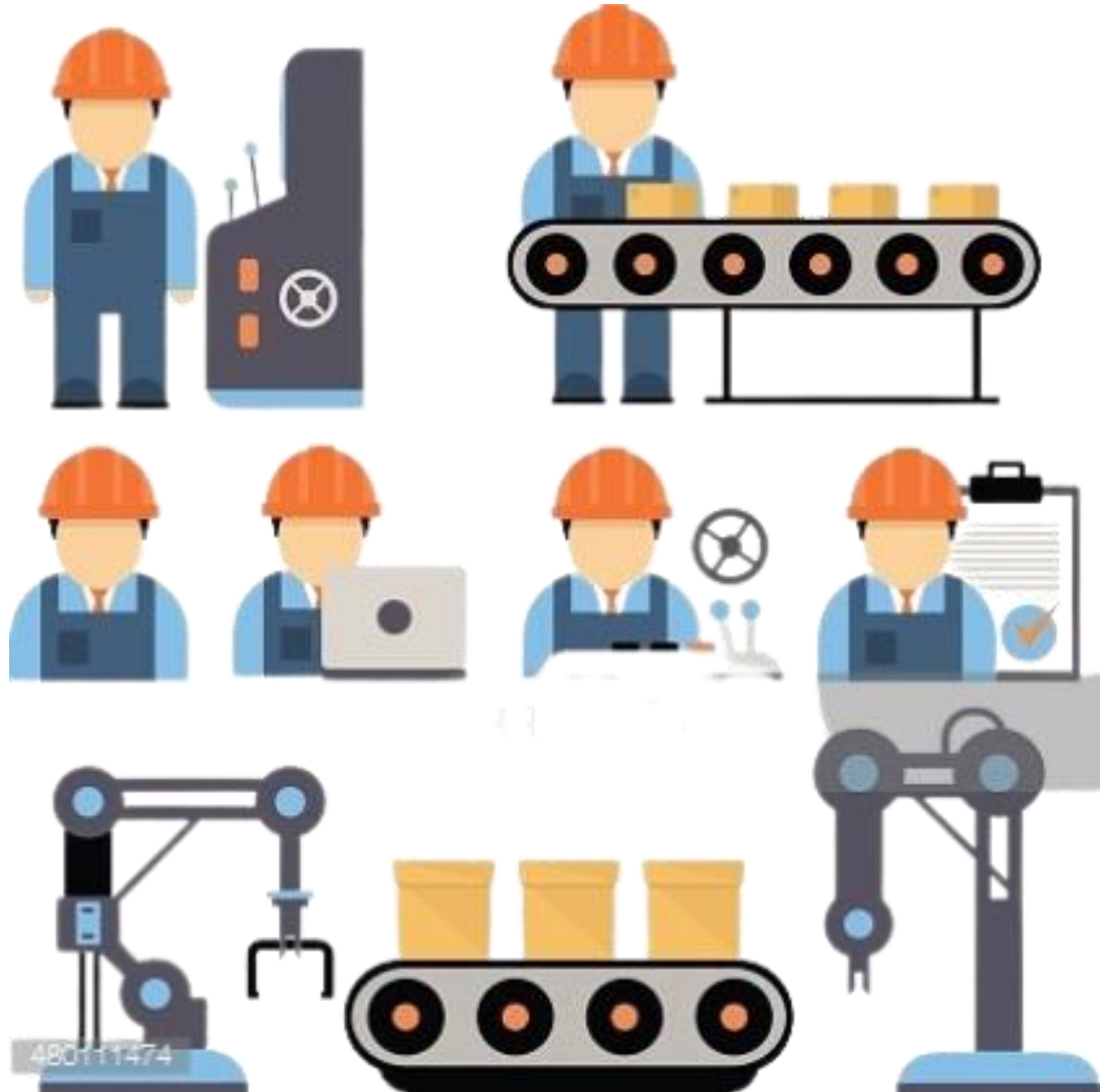
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# MANUFACTURING SECTOR

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- Improved telecoms infrastructure would enable
  - more efficient supply chain management
  - production processes
  - access to markets
  - boosting the manufacturing sector's growth and competitiveness



# FINANCIAL SERVICES

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- Better telecom infrastructure would enhance the reach of financial services
  - especially mobile banking and fintech
  - increasing financial inclusion and supporting the growth of the finance sector



# RETAIL AND E-COMMERCE

---

- The retail sector would benefit from improved connectivity
  - leading to an expansion in e-commerce and digital payment systems
- Further drive consumption and trade



# EDUCATION AND HEALTHCARE

---

- Enhanced telecoms infrastructure would improve access to education and healthcare services
  - particularly in remote areas
  - leading to long-term human capital development



# COSTS AND RISK FACTORS

- Displacement
- Unemployment
- Loss of jobs and others

## Implications of Not Investing in the Telecom Industry

- Missed GDP Growth Opportunities
- Digital Economy Constraints
- Increased Digital Divide
- Loss of Competitive Edge
- Negative Impact on Linked Sectors



# **INVESTMENT OPPORTUNITIES IN THE TELECOM INDUSTRY**

The future sustainability of Telecoms depends on today's investment



# INFRASTRUCTURE DEVELOPMENT

---

- **Fiber Optic Networks:** Expanding the backbone of Nigeria's internet connectivity is crucial
- **Data Centers:** The need for data storage and processing is growing with increased digital services
- **Cell Towers:** with the upcoming 5G networks, there is a growing need for more cell towers, especially in underserved and rural areas



## 5G TECHNOLOGY

---

- **Network Equipment and Rollout:** investing in the rollout of 5G infrastructure, such as network towers and equipment, presents a significant opportunity
- **5G Services:** develop and provide 5G-enabled services for industries like health, education, and finance



# SMART CITIES AND INTERNET OF THINGS (IOT)

---

- **IoT Solutions:** With the rise of smart cities, agriculture, and industry 4.0, investing in IoT solutions tailored for the Nigerian market
- **Smart Devices/infrastructure:** Importing, manufacturing, or developing IoT-enabled devices for sectors like agriculture, logistics, and home automation



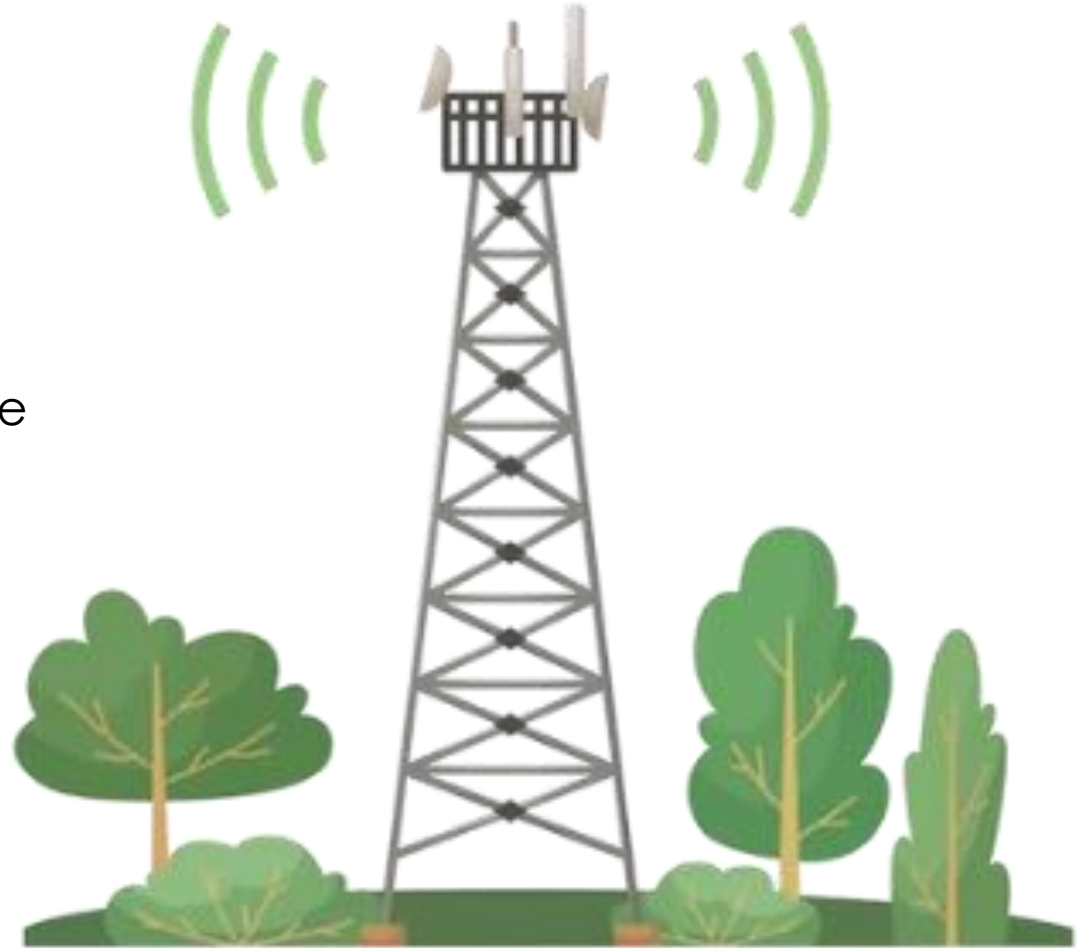
# CONTENT AND DIGITAL SERVICES

- **Streaming Services:** investing in content platforms like video and music streaming services
- **E-Learning Platforms**
- Telemedicine
- Tele-education
- **Remote control management**



# GREEN TELECOM SOLUTIONS

- **Renewable Energy for Towers:** Investing in renewable energy solutions, like solar-powered towers
- **Sustainable Practices:** Investing in companies that offer sustainable practices within the telecom industry, such as recycling e-waste or improving energy efficiency



# LOCAL MANUFACTURING OF TELECOM EQUIPMENT

- **Local Manufacturing:** With the government's push for local content, investing in manufacturing telecom equipment
  - Handsets
  - Routers, and
  - other accessories
- can meet both local demand and export opportunities
- this will reduce the demand for foreign exchange and the pressure on the FOREX market



# DIGITAL SERVICES AND FINTECH

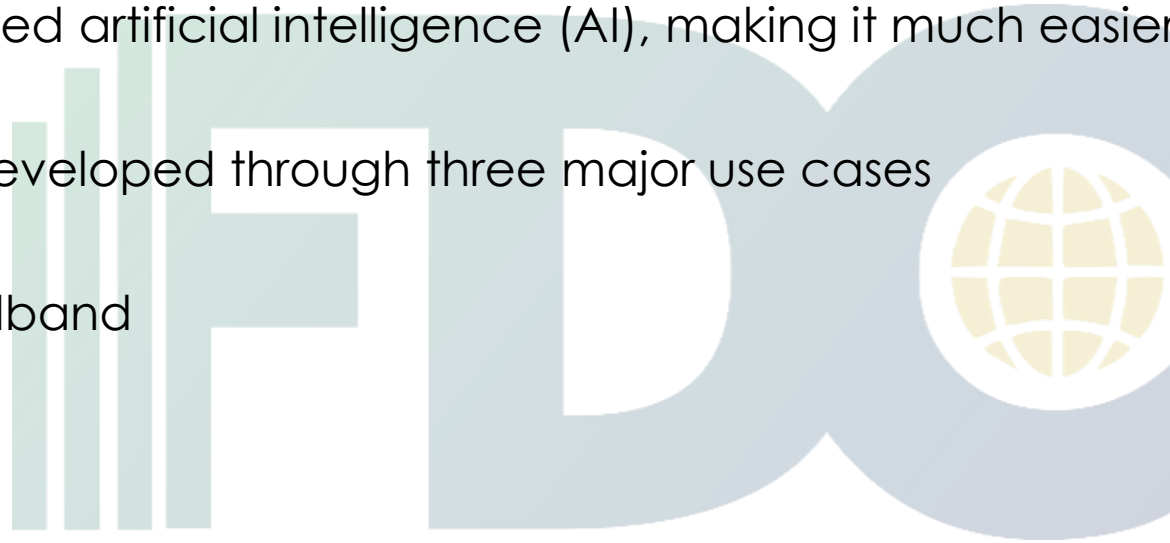
- **Mobile Payments and Fintech:** Investing in partnerships or infrastructure that supports fintech can yield substantial returns
- **Value-Added Services:** mobile streaming, gaming, and e-commerce platforms presents an investment opportunity in creating or supporting these services





# OUTLOOK - EIU

- Globally, operators will continue to focus on the rollout of 5G networks between 2024-28
- Open AI has supercharged artificial intelligence (AI), making it much easier to use
- 5G will continue to be developed through three major use cases
  - Enhanced mobile broadband
  - Fixed wireless access
  - The enterprise segment







# OUTLOOK - EIU

- In Nigeria, after a challenging 2023 marked by the naira's sharp depreciation, we expect economic conditions to improve over 2024-2028, which will help restore profitability in the telecom sector
- The telecoms industry contributed 14.6% of GDP in the first quarter of 2024, up from only 7.7% at the end of 2012
- The NCC's SIM card registration drive constrained mobile subscription growth, with an increase of only 1% in 2023 and a decline of 2.4% in Q1 2024
- Mobile subscription growth is projected to dip by 3.1% overall in 2024, followed by an average expansion of 3.1% annually from 2025-2028
- A joint regional alliance in West Africa may be necessary to boost digital infrastructure

# INVESTMENT PROSPECTS AND OPPORTUNITIES FOR THE TELECOM INDUSTRY IN NIGERIA

- Infrastructure development
- 5G technology rollout
- Smart cities and IoT
- Content and digital services
- Green telecoms solutions
- Local manufacturing of telecoms equipment
- Digital services and fintech





# CONCLUSION

- With a surge in telecoms investment and increased productivity
  - Nigeria could witness stronger and more inclusive economic growth
  - Provide a more diversified economy and positive impacts across various linkage sectors
- potentially transforming its economic landscape over the next three years
- Improving the telecoms industry means better utilization in
  - Telemedicine
  - Aviation
  - Tele-education
  - Payment system
  - Remote monitoring system
  - Integrated work

*Thank*

*you*

