

Sustainable Nation:

Smart Strategies for Promoting Inclusive and Sustainable Economic Growth

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Deputy Governor, Operations
Central Bank of Nigeria

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Central Bank of Nigeria
Sustainable Nation



Central Bank
of Nigeria

Outline

Soul Searching? A
Time to look inward

SMART Strategy
Defined

01

The UN 17
Sustainable
Development Goals

02

SDG Goal 8: Decent
Work and Economic
Growth

03

04

Big Data : Data and
Analytics the
Oxygen of Economic
Growth

05

Digital Revolution
and Banking
Business

06

Fintech Ecosystem
In Nigeria



Central Bank of Nigeria
Sustainable Nation

strat·egy ['stratɪdʒi]

NOUN

a plan of action designed to achieve a long-term or overall aim:

"time to develop a coherent economic strategy" · "shifts in marketing strategy"

What is smart?

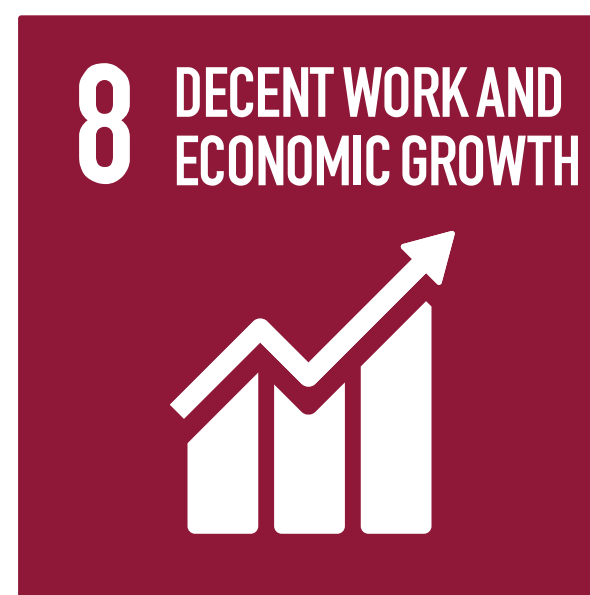
SMART is an acronym that stands for **Specific, Measurable, Achievable, Relevant and Time-based**. Each element of the SMART framework works together to create a goal that is carefully planned, clear and trackable. **Every effective strategy must rely on and be driven by qualitative and adequate data**

You may have set goals in your past that were difficult to achieve because they were too vague, aggressive or poorly framed.





SUSTAINABLE DEVELOPMENT GOALS



SDG Goal 8 - 2016: Decent Work and Economic Growth

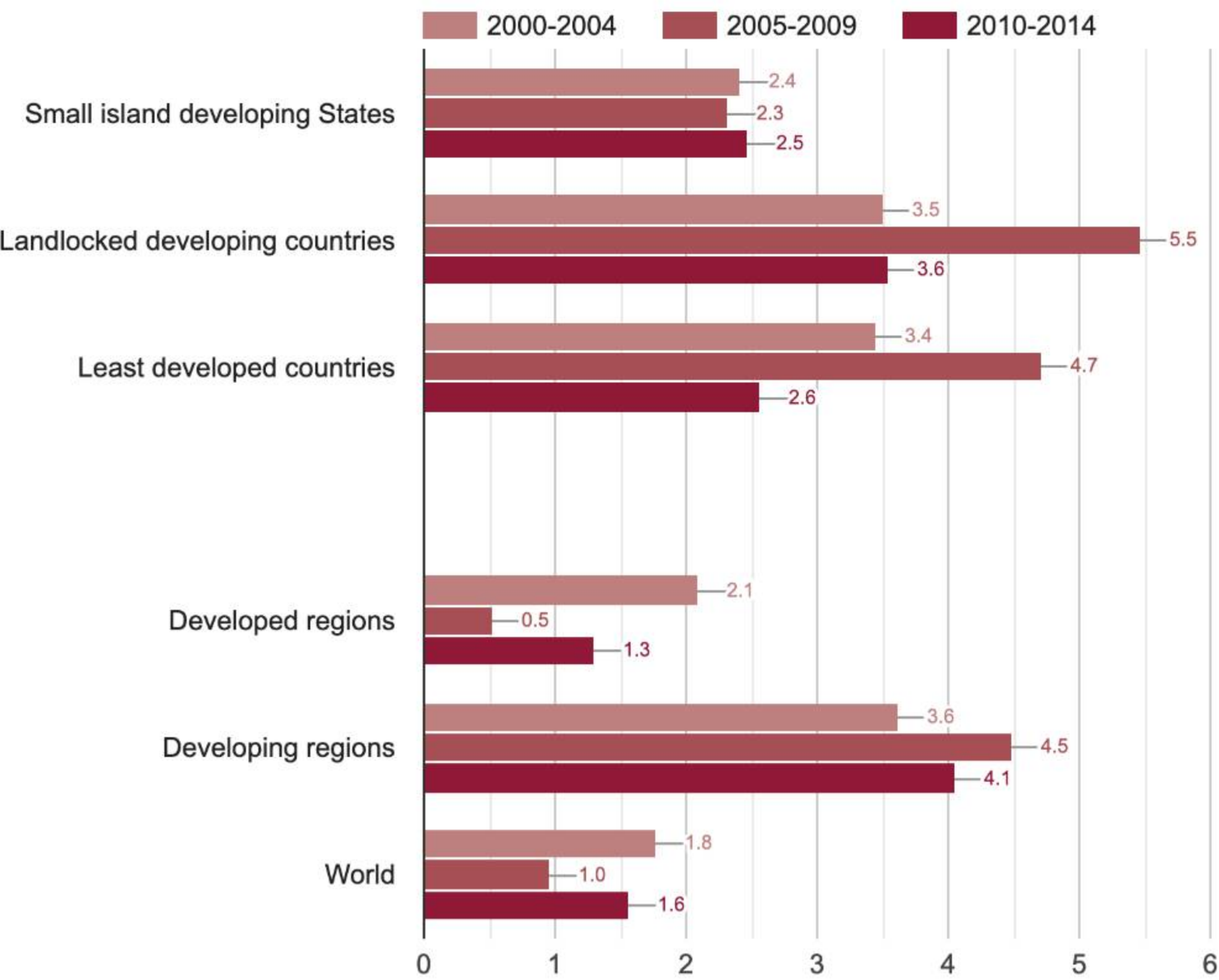
<https://unstats.un.org/sdgs/report/2016/goal-08/>

Increased economic growth is needed to meet the target of 7 percent GDP growth in the least developed countries.

In the period 2010-2014, the global average annual growth rate of real GDP per capita was 1.6 per cent, slightly below the rate achieved over the period of 2000–2004. The growth rate of countries in developing regions was more than triple that of developed regions (4.1 per cent versus 1.3 per cent, respectively).

However, the least developed countries, whose per capita growth accelerated for a time has since slowed to only 2.6 per cent on average during 2010-2014, less than half the target rate of at least 7 per cent a year.

Average annual growth rate of real GDP per capita, 2000–2004, 2005-2009 and 2010-2014 (percentage)



SDG Goal 8 - 2016: Decent Work and Economic Growth

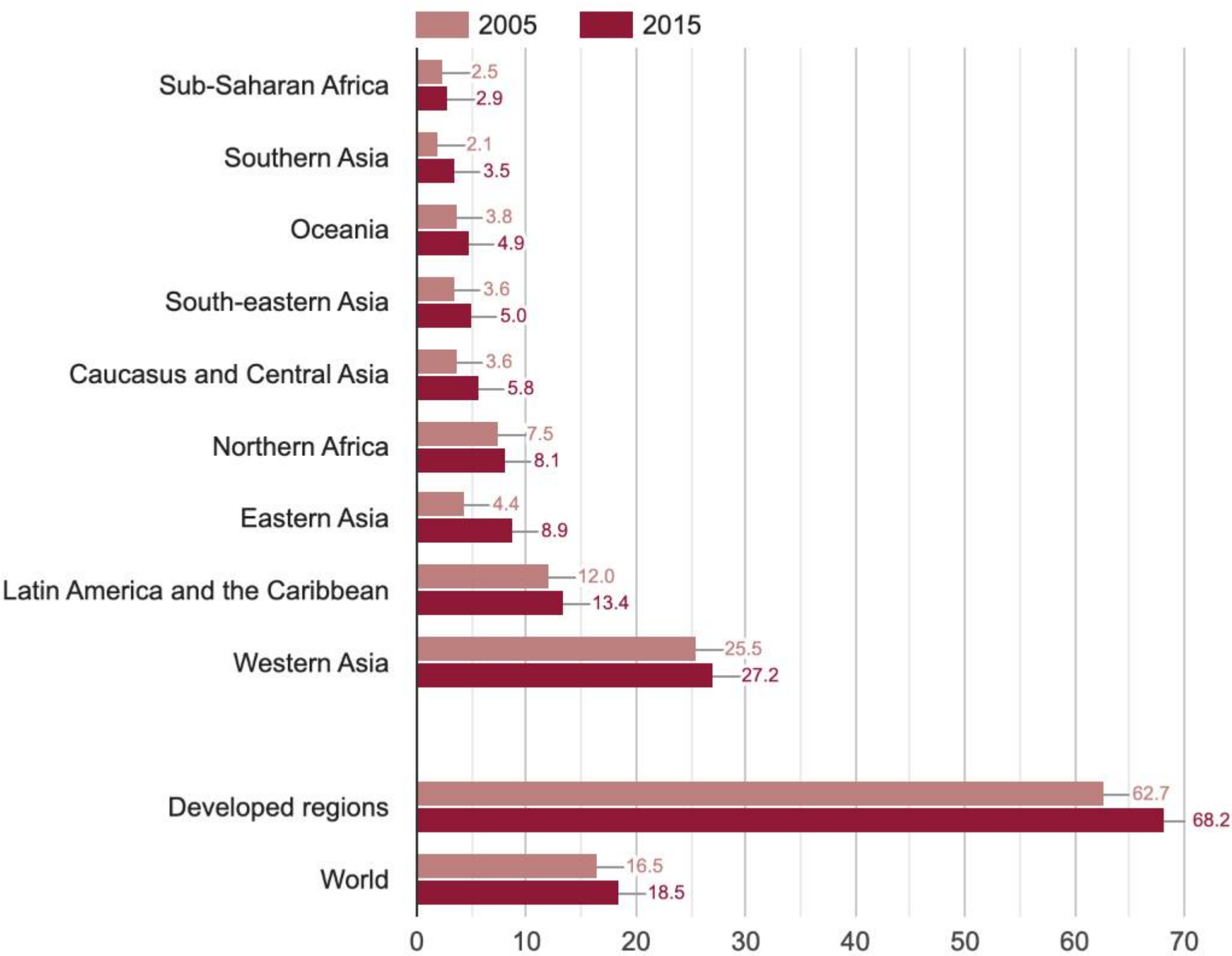
<https://unstats.un.org/sdgs/report/2016/goal-08/>

Labour productivity in developing regions, despite improvements, remains far below that of developed regions.

Growth in labour productivity in developing regions outpaced that of developed regions, especially in Asia.

Workers in Southern Asia and sub-Saharan Africa, for example, are only about 5 per cent as productive as those in developed regions, when measured as a percentage of GDP. Even the developing region with the highest labour productivity, Western Asia, has only about 40 per cent of the labour productivity of developed regions, and this rate has declined slightly since 2000.

Labour productivity (GDP per worker) in constant 2005 US dollars, 2005 and 2015 (Thousands of US\$)



SDG Goal 8 - 2016: Decent Work and Economic Growth

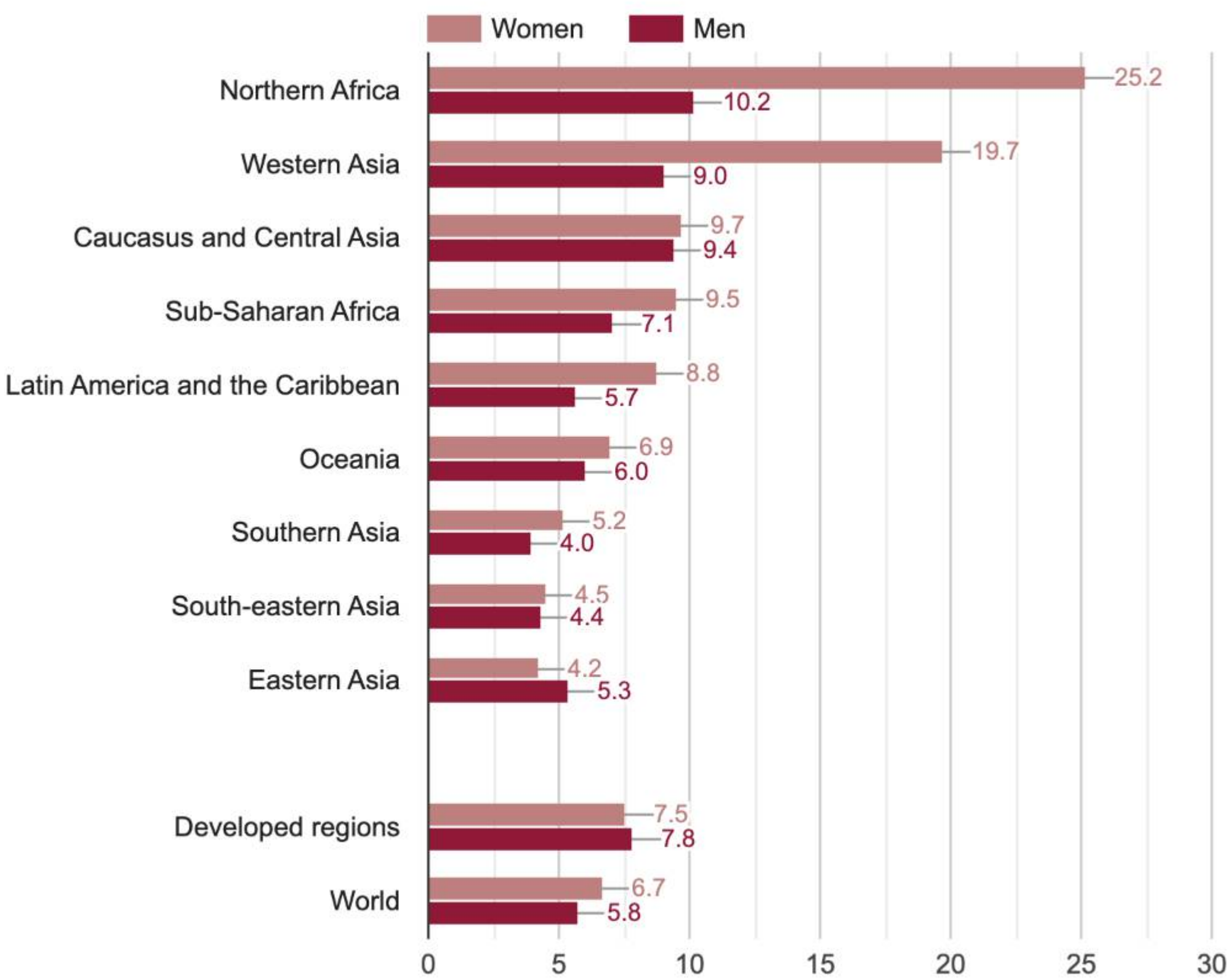
<https://unstats.un.org/sdgs/report/2016/goal-08/>

Women are 15 per cent more likely to be unemployed than men worldwide, but the gender gap is far larger in Northern Africa and Western Asia

Global unemployment rate stood at 6.1 per cent in 2015, down from a peak of 6.6 per cent in 2009. Unemployment was lowest in Southern, Eastern and South-Eastern Asia, below 5 per cent, compared to other regions of the world, where the average was around 7 per cent or higher.

Globally, women are more likely to be unemployed than men. Differences are most striking in Western Asia and Northern Africa, where the unemployment rate of women is more than twice that of men.

Unemployment rates by sex, 2015 (percentage)



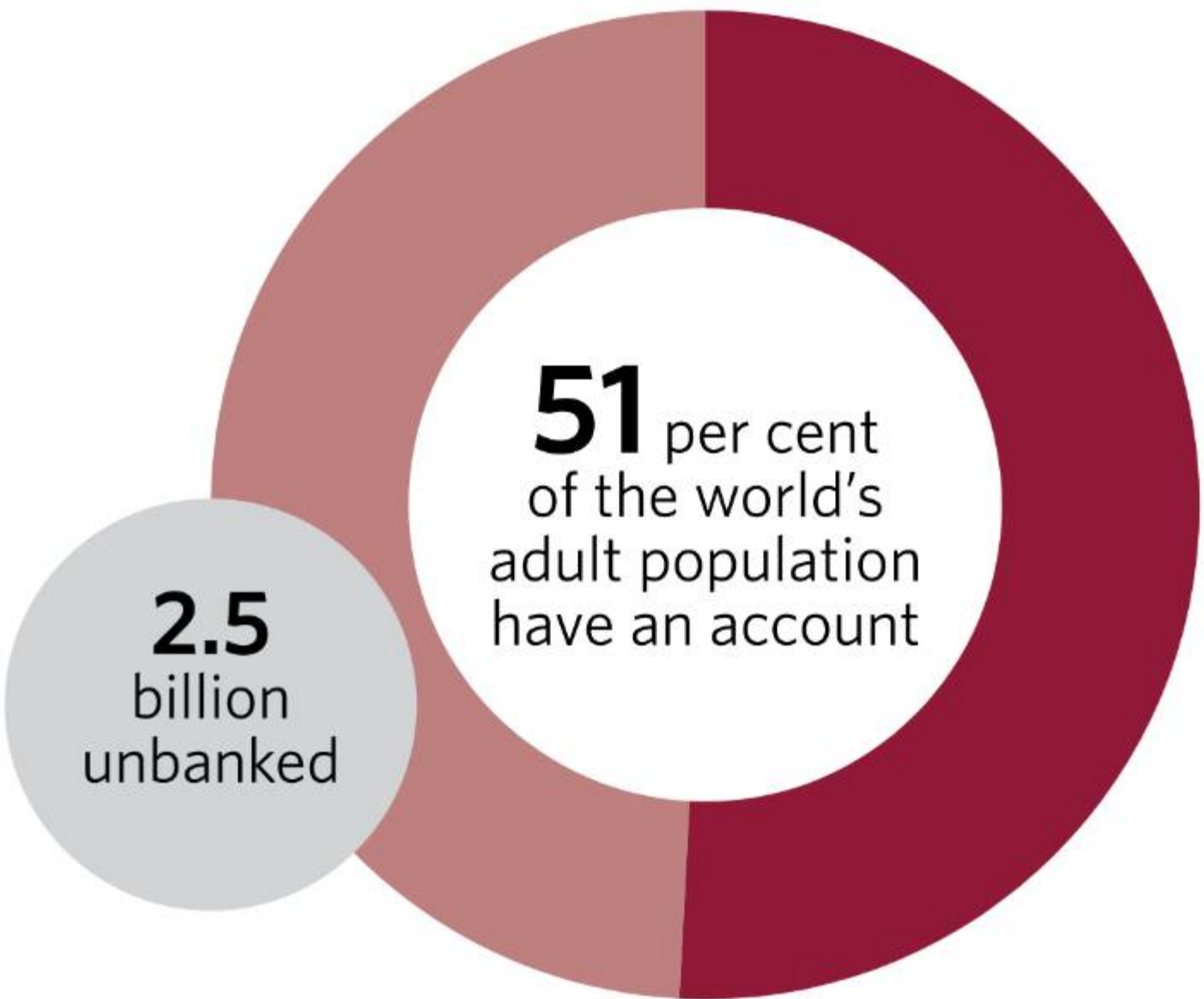
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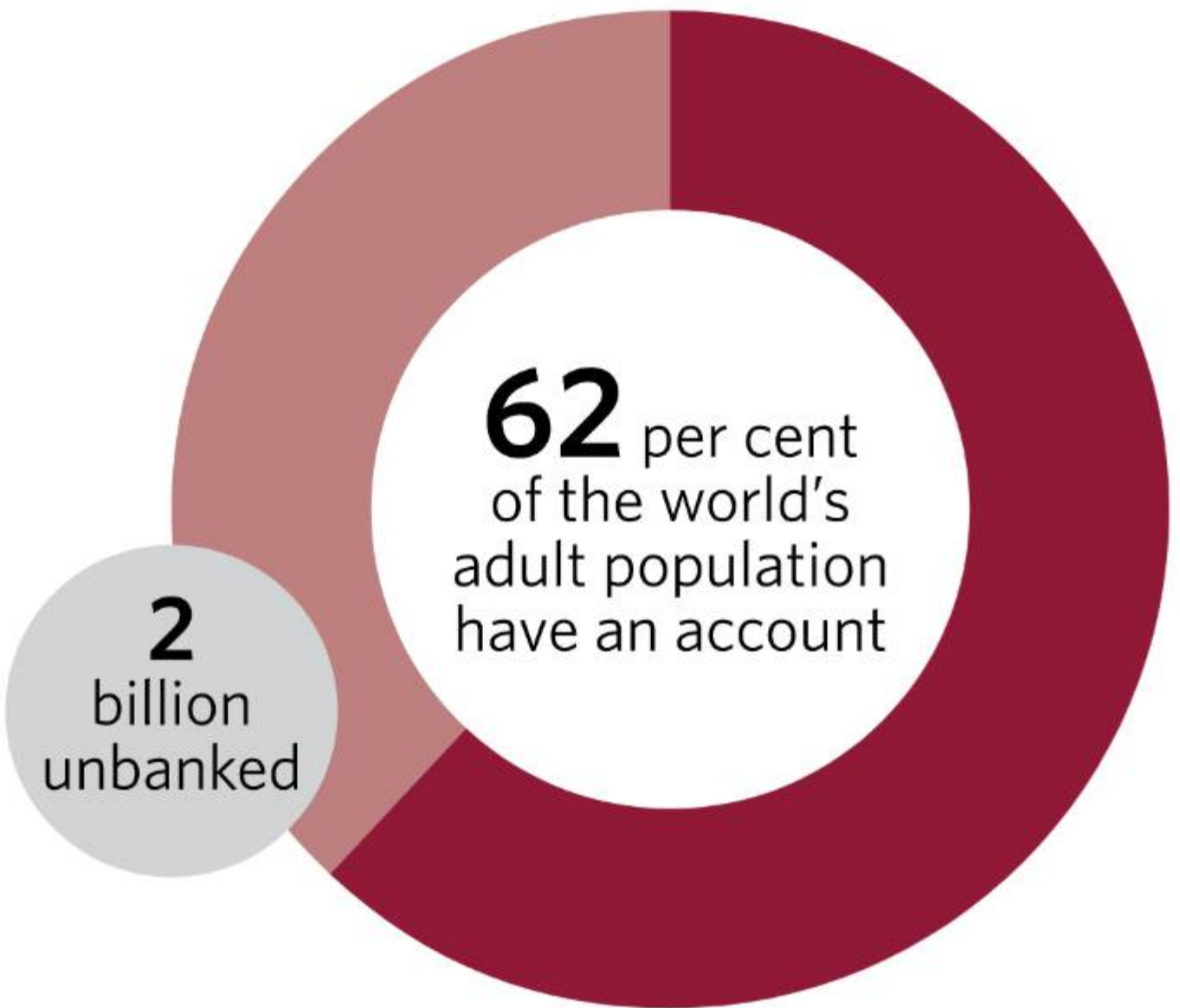
While the share of adults with bank accounts rose by 20 percent in four years, some two billion people still lack this important financial service

<https://unstats.un.org/sdgs/report/2016/goal-08/>

Proportion of the world's adult population that has an account at a financial institution, 2011 and 2014 (percentage)



2011



2014

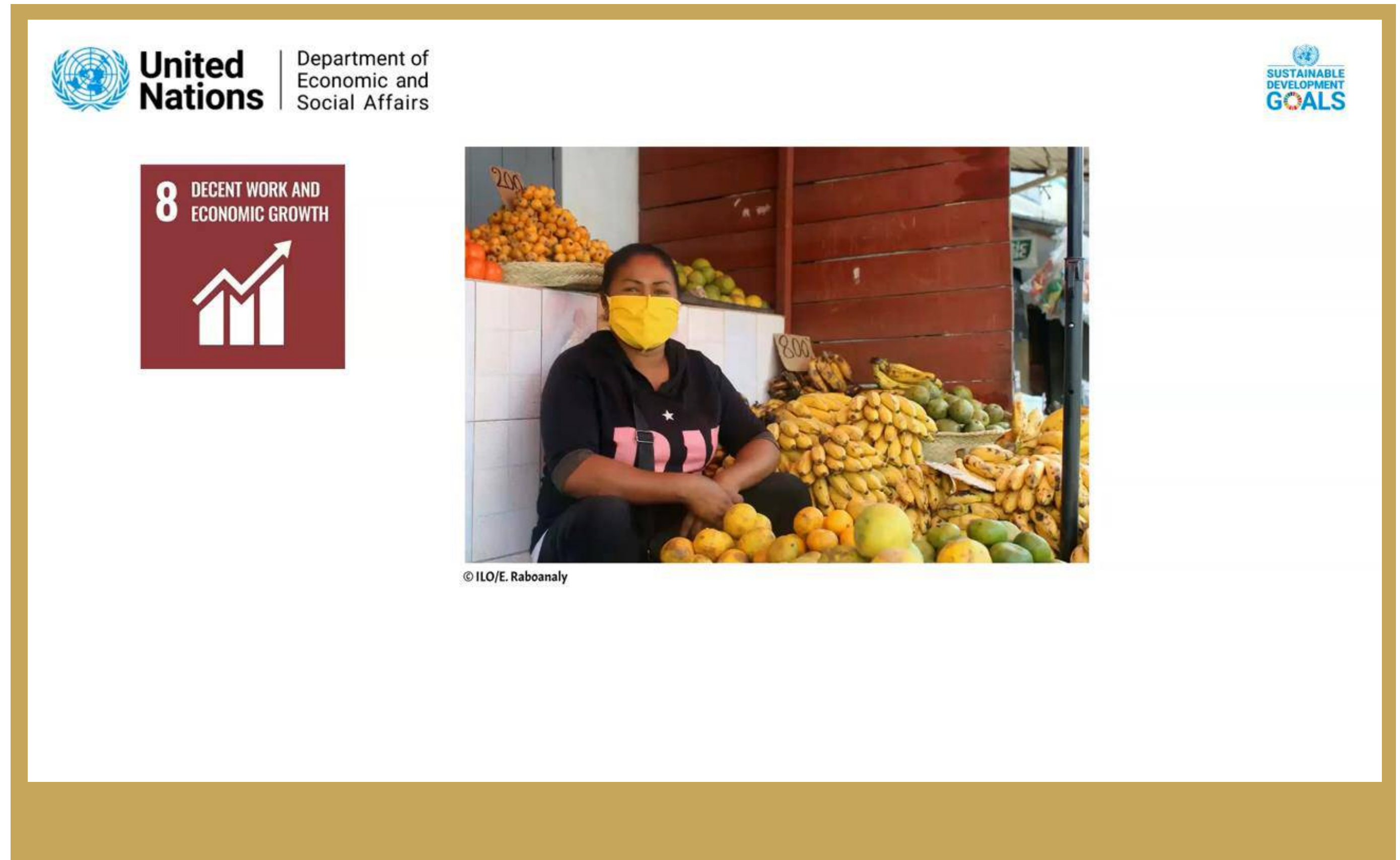


SDG Goal 8 – 2022 : Decent Work and Economic Growth

<https://youtu.be/xCtuDnU1k3k>

- ✓ The pandemic has resulted in volatile shifts in labour productivity, affecting small firms and the poorest countries the most
- ✓ Labour market recovery remains shaky
- ✓ Informal employment was not an option for many workers displaced at the start of the pandemic
- ✓ Rising poverty and pandemic-related disruptions are forcing millions of children into child labour
- ✓ Various shocks, including the war in Ukraine, continue to hinder robust economic recovery
- ✓ Training, education and employment suffered massive disruptions, with women facing the biggest challenges

<https://unstats.un.org/sdgs/report/2022/goal-08/>



Big Data!

Every human created about **1.7MB**
of data per second in 2020

(Source: Tech Jury)



Every second, all over the world, there are 127 new devices connected to the internet. These connected devices produce 5 quintillion bytes of data daily, which could amount to 79.4 Zettabytes of data by 2025

(Source: IDC)



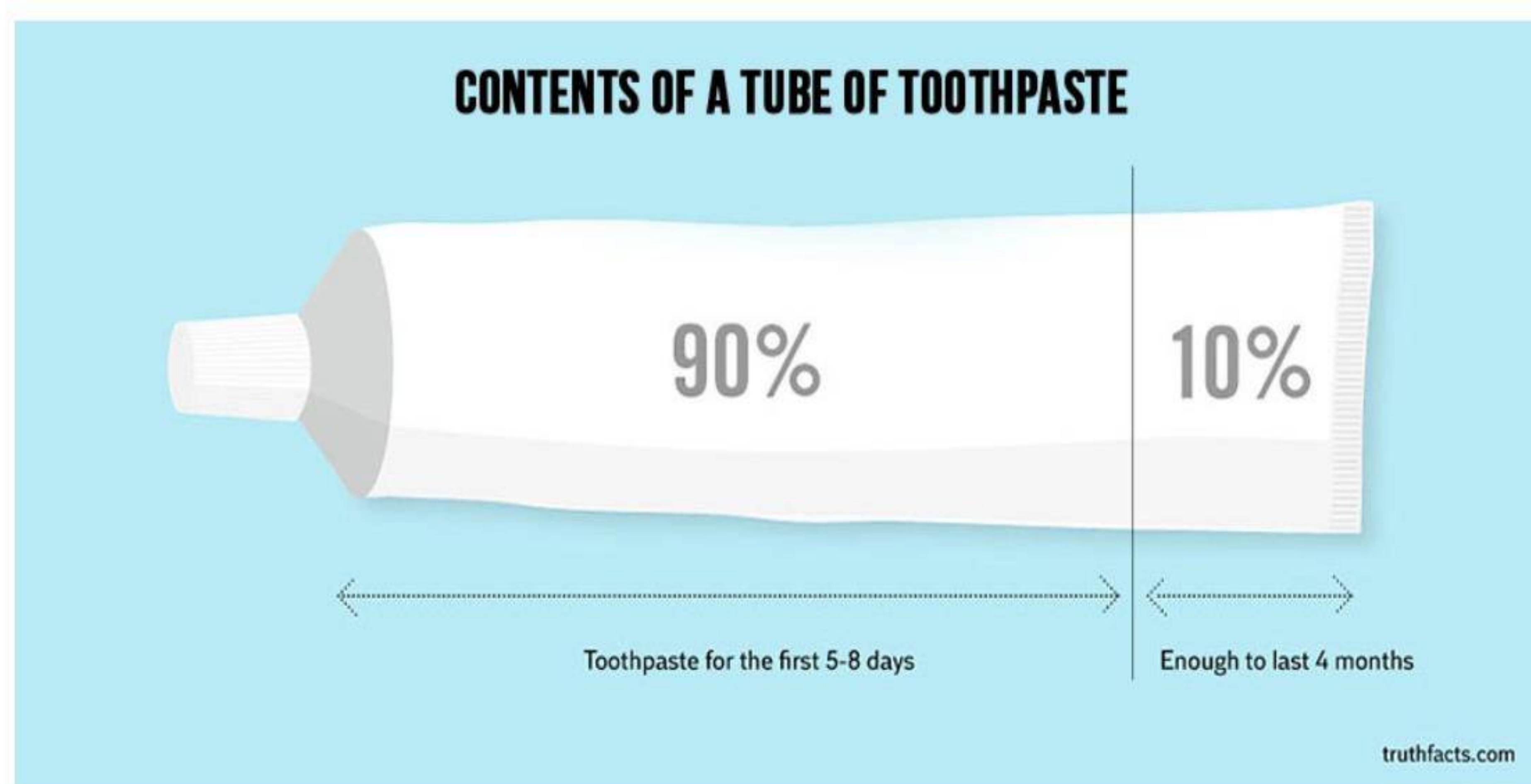
5 quintillion bytes are equal to the number of **all ants on the planet** multiplied by 200

(Source: Data Never Sleeps 5.0)



one **Zettabyte** is equal
to a trillion **Gigabytes**

Who can relate?

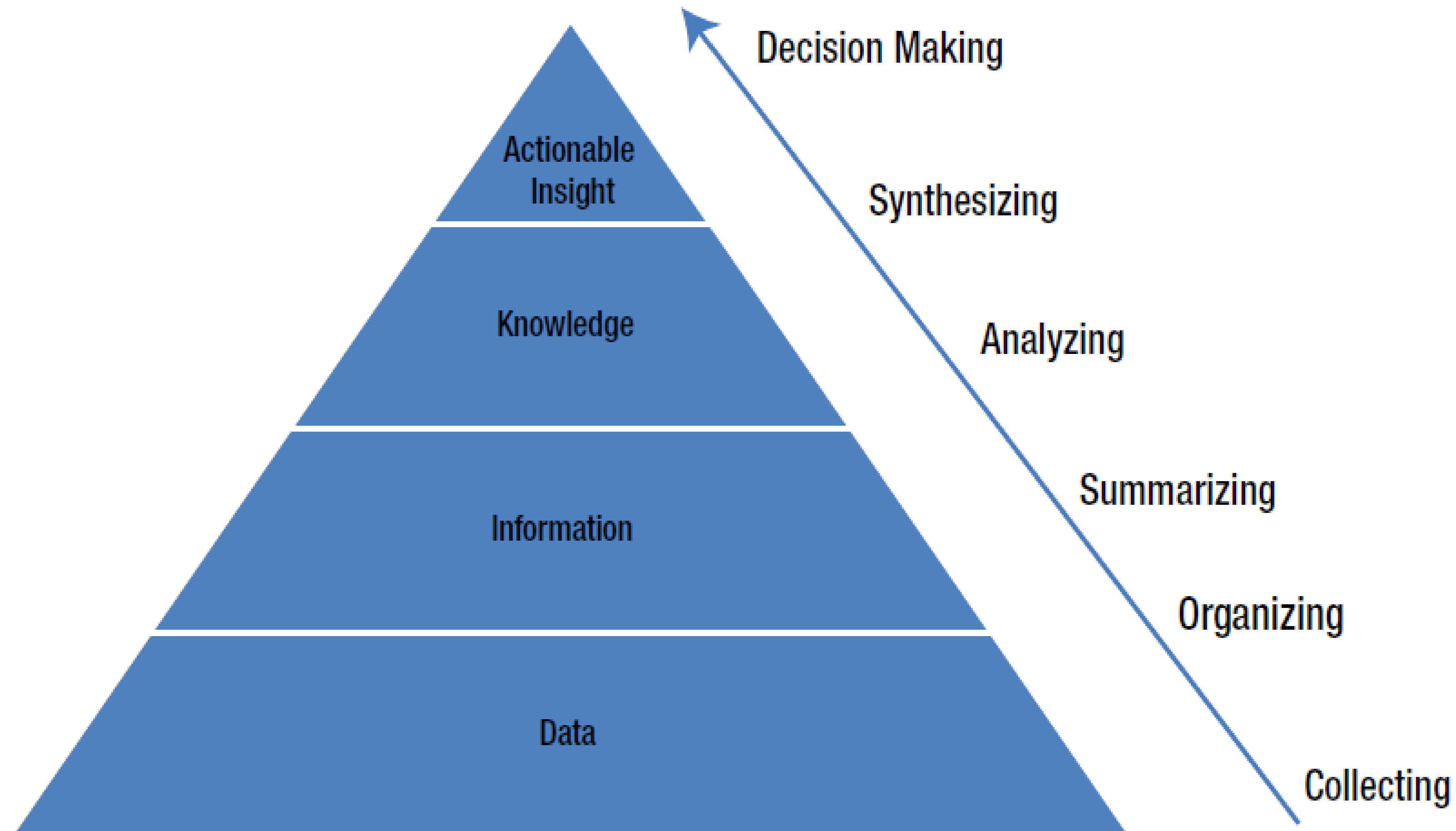


Data, data everywhere yet ...

- ④ We can't find the data we need
data is scattered over the network
- ④ We can't get the data we need
need an expert to get the data
- ④ We can't understand the data we found
available data is poorly documented
- ④ We can't use the data we found
data needs to be transformed from one form to another



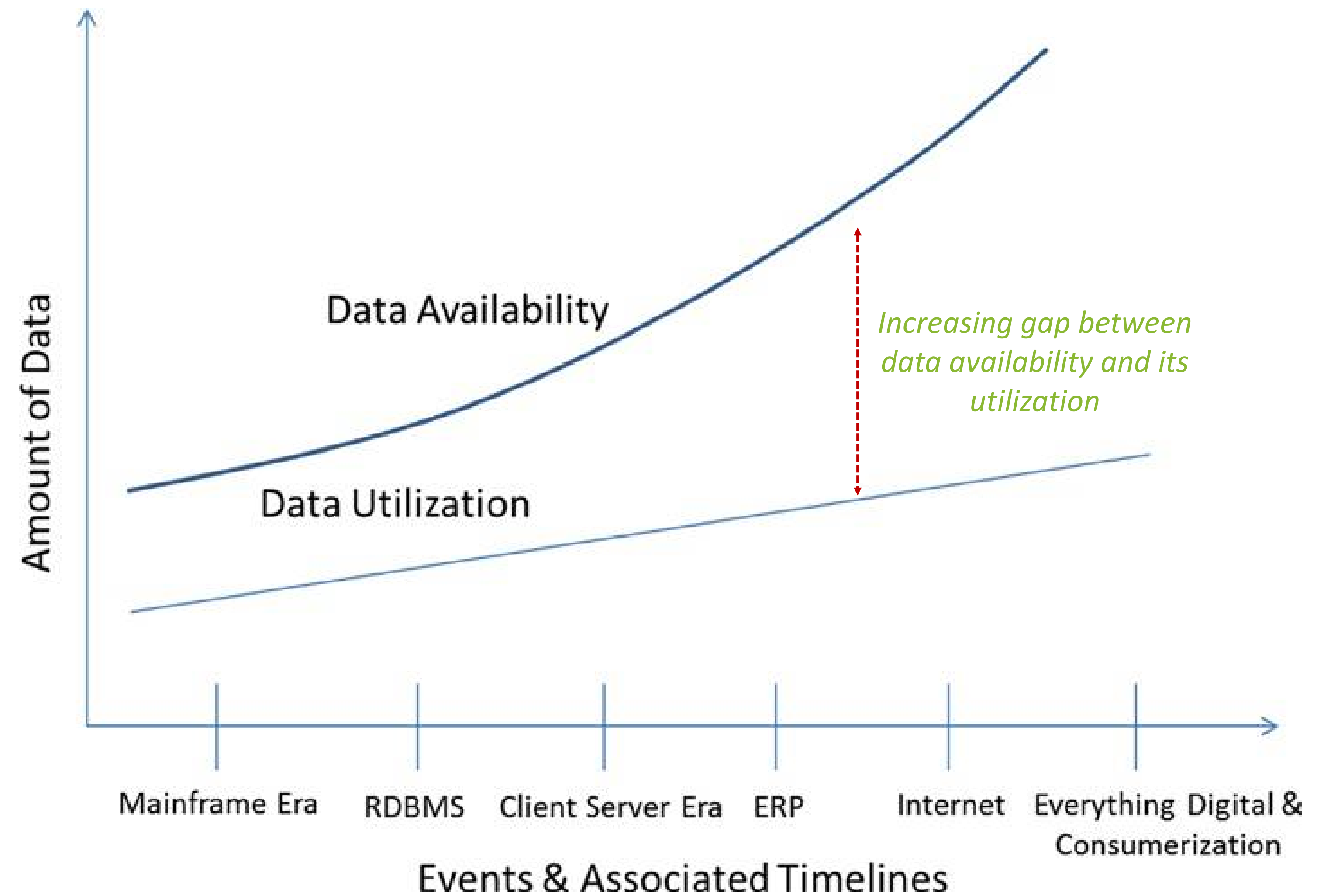
From Data to Decision-making...

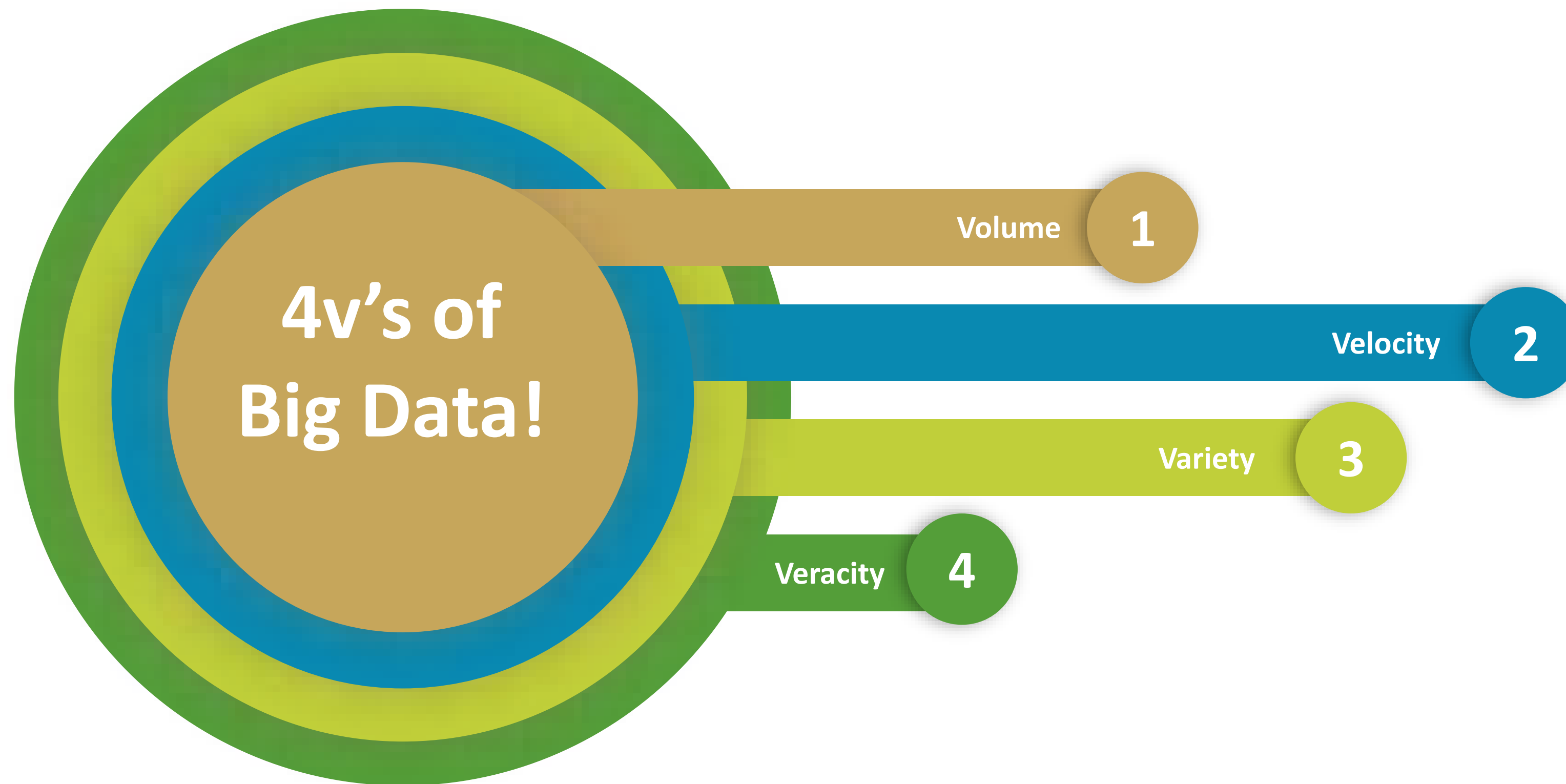


Transforming raw data into action-guiding wisdom



The Opportunity





Volume

Huge Data Size
Terabytes – Petabytes

Velocity

High Speed of Data Flow,
Change and processing

Variety

Various data source(social,
mobile, M2M, structured and
Unstructured data

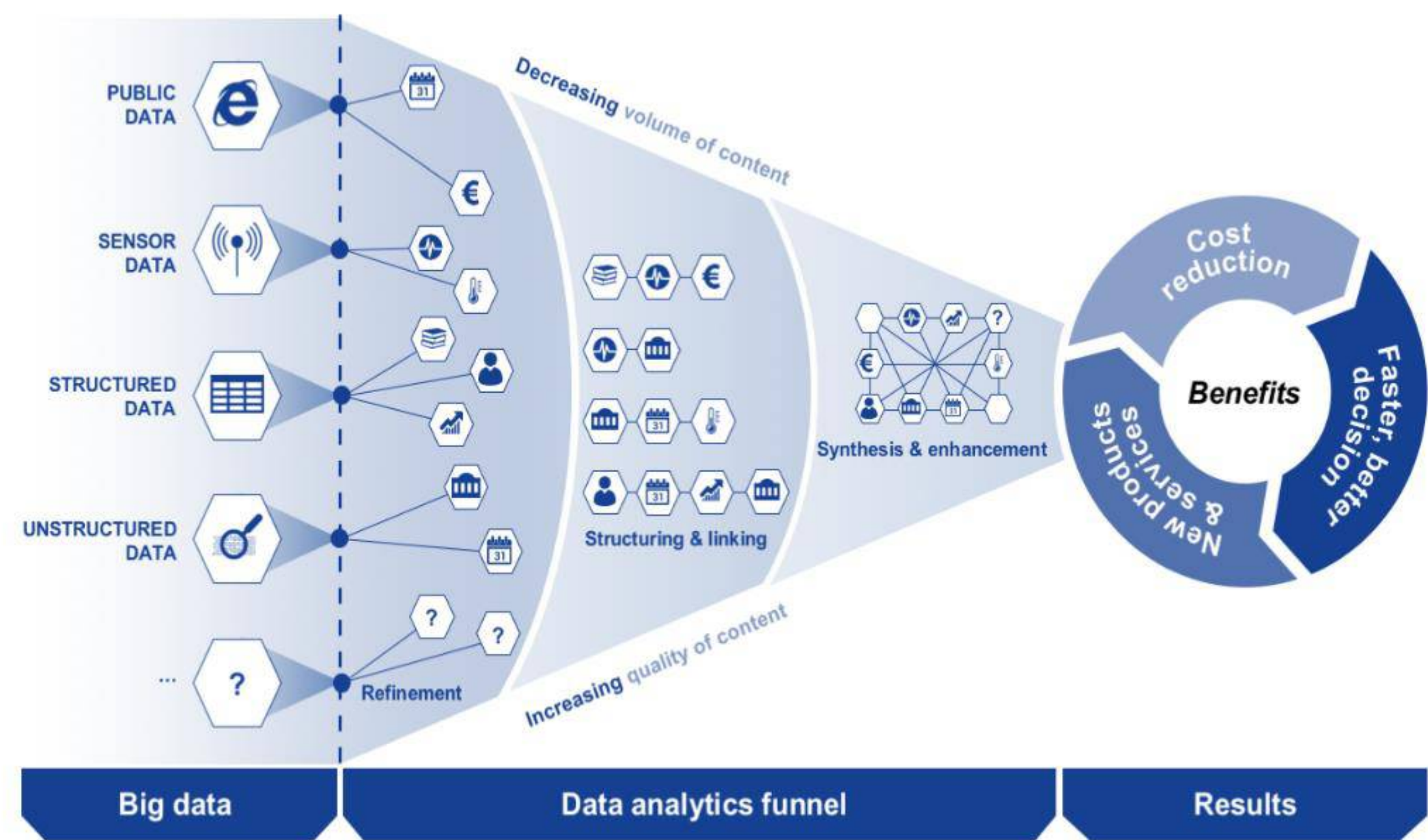
Veracity

Various levels of data
uncertainty
And reliability

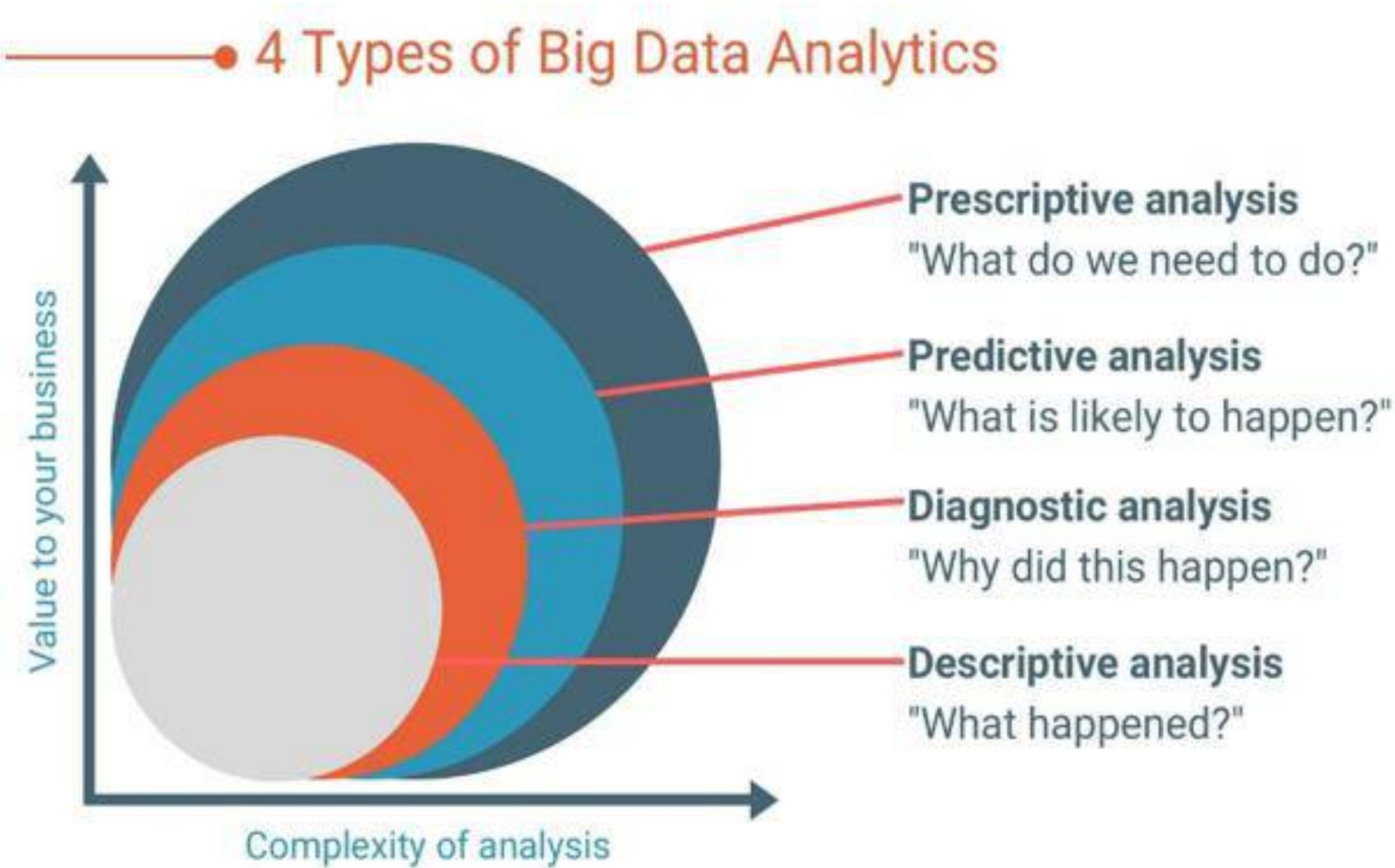


Overview of Big Data and Business Analytics

Big Data Analytics Funnel

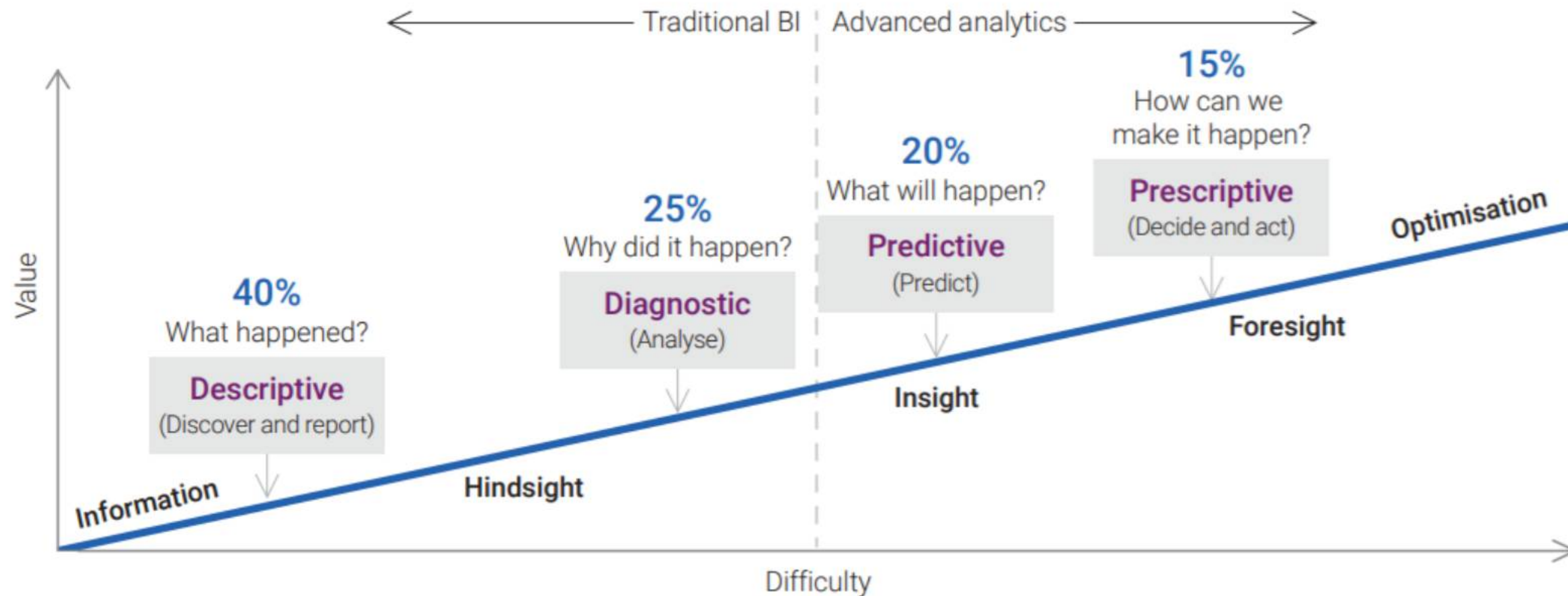


Types of Big Data Analytics



Types of Big Data Analytics cont'd

- ✓ Policy Analyst are realizing that predictive and prescriptive analytics provide greater value than traditional hindsight-orientated business intelligence



The Gartner Analytic Ascendancy Model (2012)



Use Case 1 – Retail Banking

Global Statistics on Transactions for the 1st Quarter of 2022 (IDH)

Total Number of Transactions

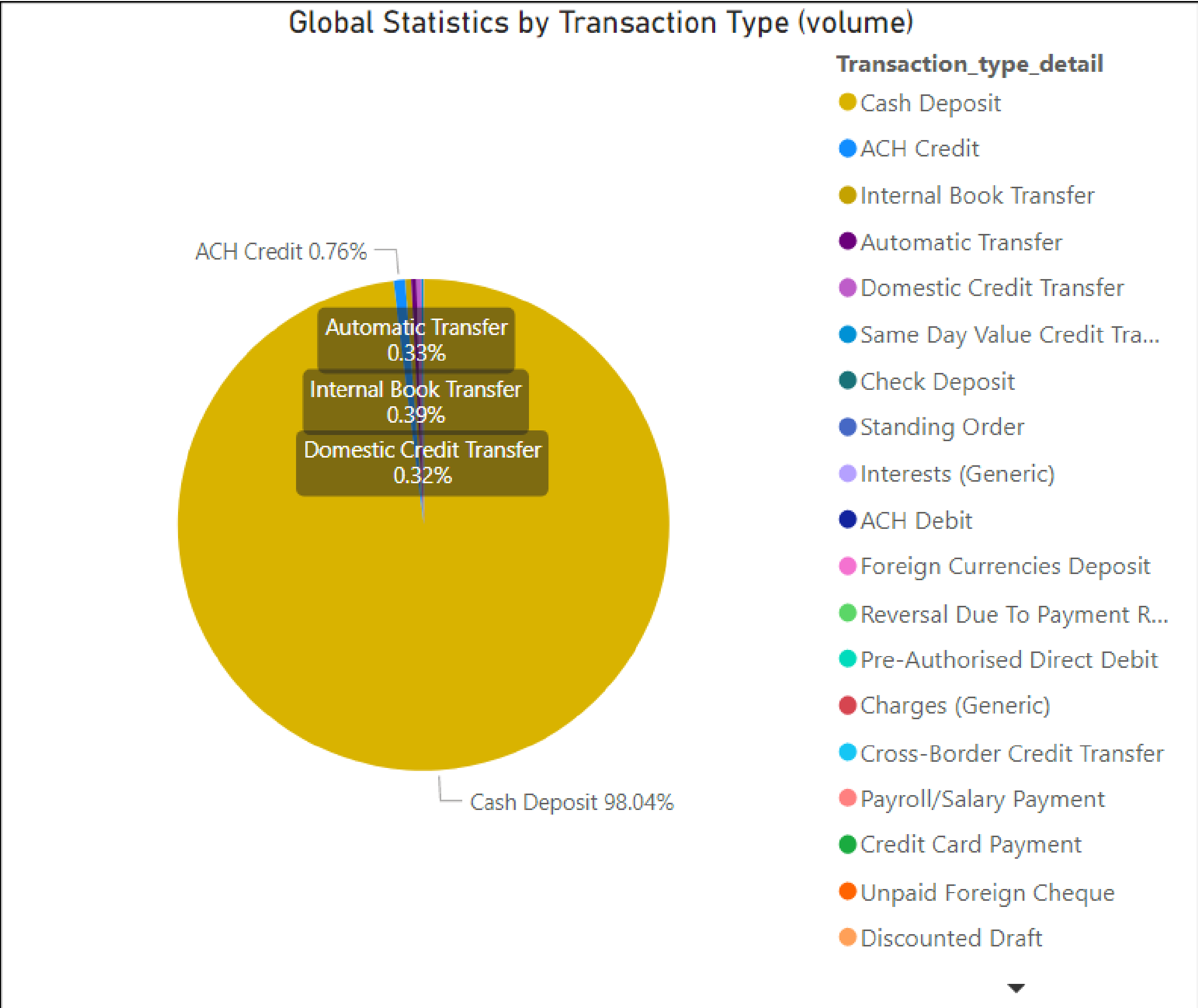
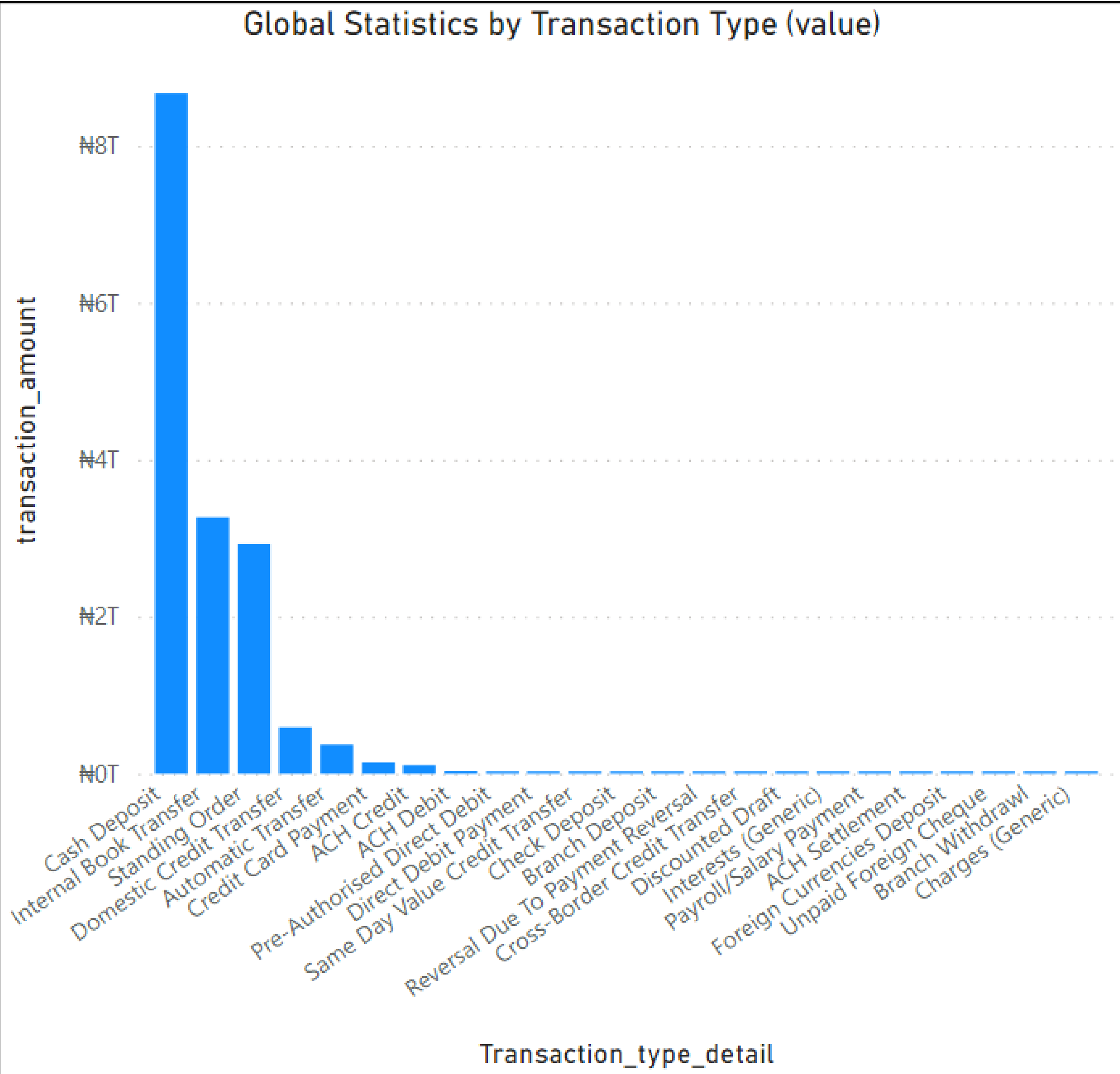
43.98M

Total Transaction Amount

₦16.14T

Number of Banks

9



Use Case 1 – Retail Banking

Global Statistics on Transactions for the 1st Quarter of 2022 (IDH)

Total Number of Transactions

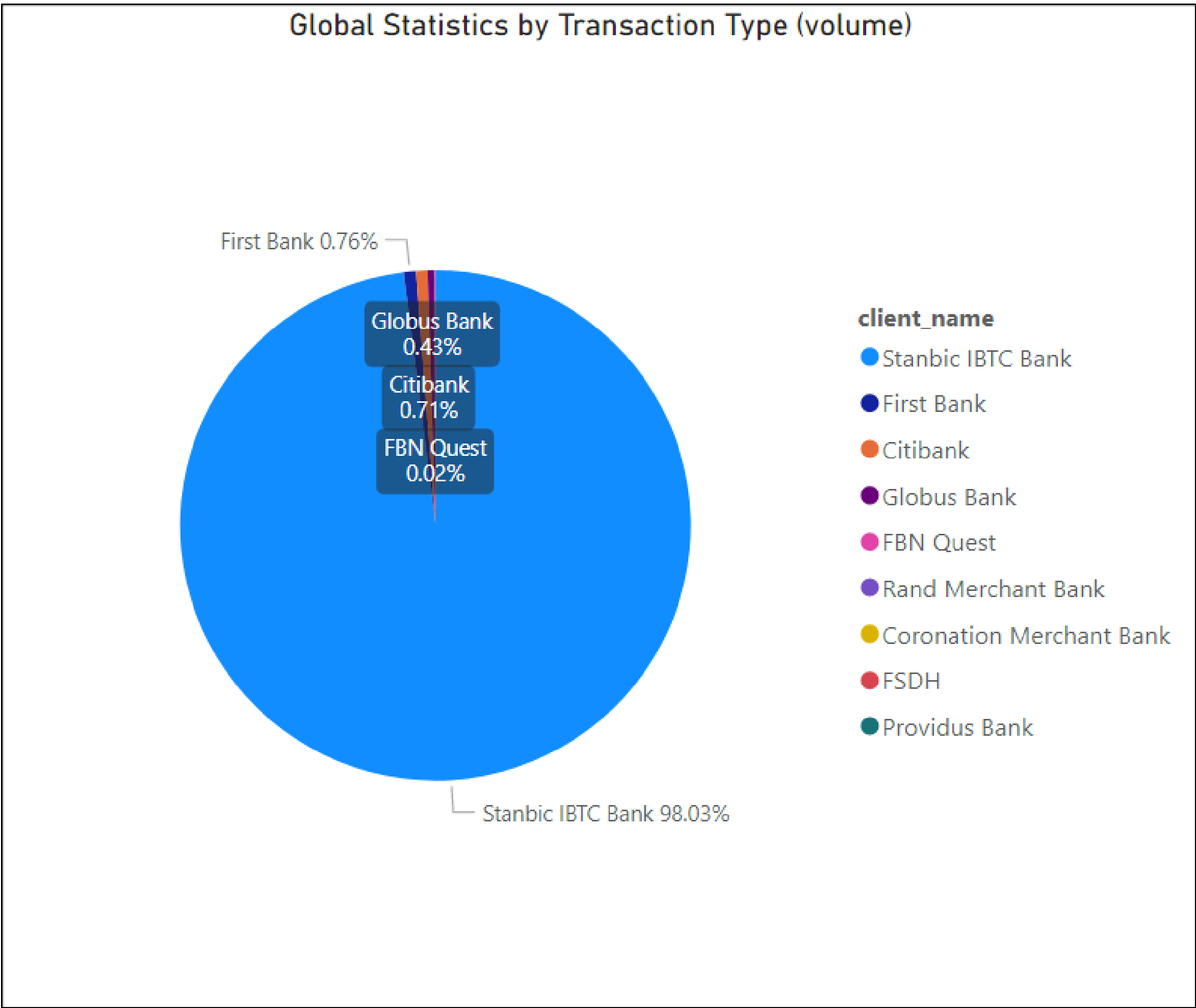
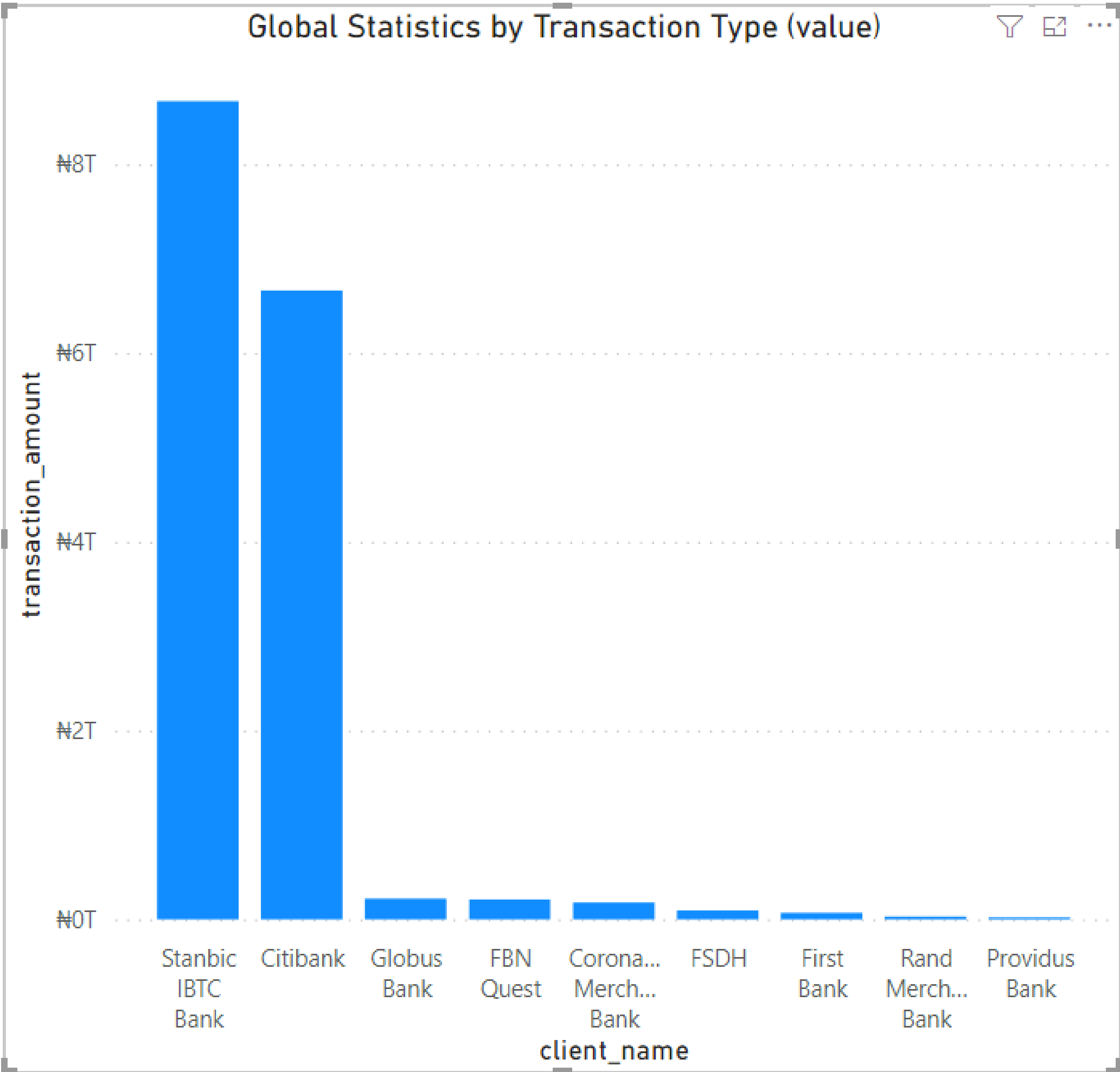
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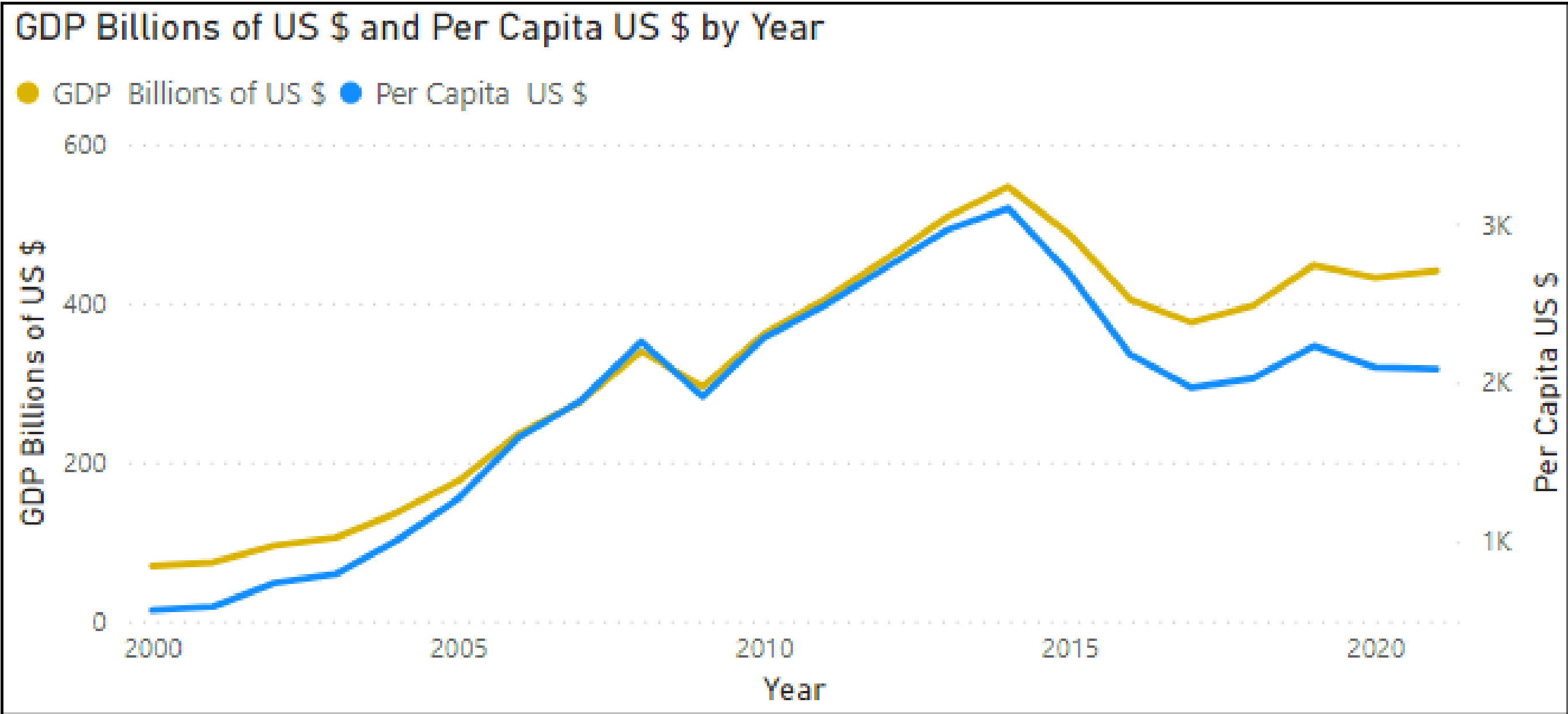
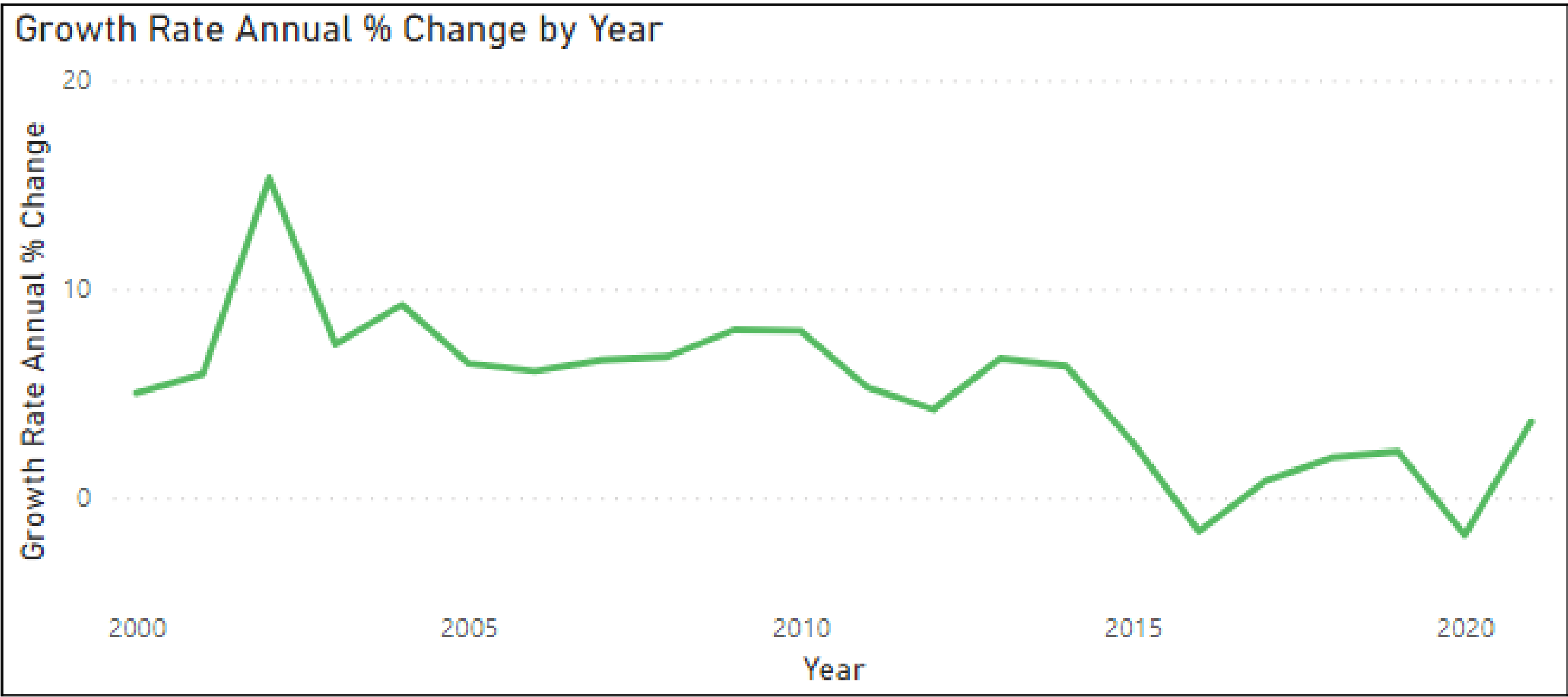


Use Case 1 – Retail Banking

Transaction Type	Citibank	Coronation Merchant Bank	FBN Quest	First Bank	FSDH	Globus Bank	Providus Bank	Rand Merchant Bank	Stanbic IBTC Bank	Total
Cash Deposit	₦463,543,840.38			₦866,946,958.20					₦8,671,318,790,550.28	₦8,672,649,281,348.86
Internal Book Transfer	₦3,198,195,738,884.95		₦22,130,132,878.51		₦38,860,068,719.05			₦3,636,792,941.93		₦3,262,822,733,424.44
Standing Order	₦2,926,231,999,298.64					₦12,567,000.00				₦2,926,244,566,298.64
Domestic Credit Transfer	₦511,165,965,934.93				₦54,543,455,757.42			₦26,122,582,038.99		₦591,832,003,731.34
Automatic Transfer		₦176,199,429,316.75				₦195,547,973,393.74				₦371,747,402,710.49
Credit Card Payment			₦145,109,330,167.25							₦145,109,330,167.25
ACH Credit			₦30,303,188,953.37	₦68,224,352,277.51		₦8,402,095,158.57				₦106,929,636,389.45
ACH Debit			₦16,607,836,212.56			₦12,537,459,644.93				₦29,145,295,857.49
Pre-Authorised Direct Debit	₦14,878,930,301.26									₦14,878,930,301.26
Direct Debit Payment	₦5,300,040,747.98									₦5,300,040,747.98
Same Day Value Credit Transfer						₦5,211,640,320.39				₦5,211,640,320.39
Check Deposit	₦3,584,885,973.20		₦17,006,750.35							₦3,601,892,723.55
Branch Deposit	₦1,433,561,213.86						₦523,170.00			₦1,434,084,383.86
Reversal Due To Payment Reversal						₦1,063,247,774.60				₦1,063,247,774.60
Cross-Border Credit Transfer	₦774,762,848.15									₦774,762,848.15
Discounted Draft	₦478,926,144.35									₦478,926,144.35
Interests (Generic)	₦265,042,682.91									₦265,042,682.91
Payroll/Salary Payment						₦99,487,405.41				₦99,487,405.41
ACH Settlement	₦39,945,458.00									₦39,945,458.00
Foreign Currencies Deposit	₦3,069,153.54									₦3,069,153.54
Unpaid Foreign Cheque	₦1,334,208.96									₦1,334,208.96
Branch Withdrawal							₦1,061,800.00			₦1,061,800.00
Charges (Generic)							₦20,150.00			₦20,150.00
Total	₦6,662,817,746,691.11	₦176,199,429,316.75	₦214,167,494,962.04	₦69,091,299,235.71	₦93,403,524,476.47	₦222,874,470,697.64	₦1,605,120.00	₦29,759,374,980.92	₦8,671,318,790,550.28	₦16,139,633,736,030.92

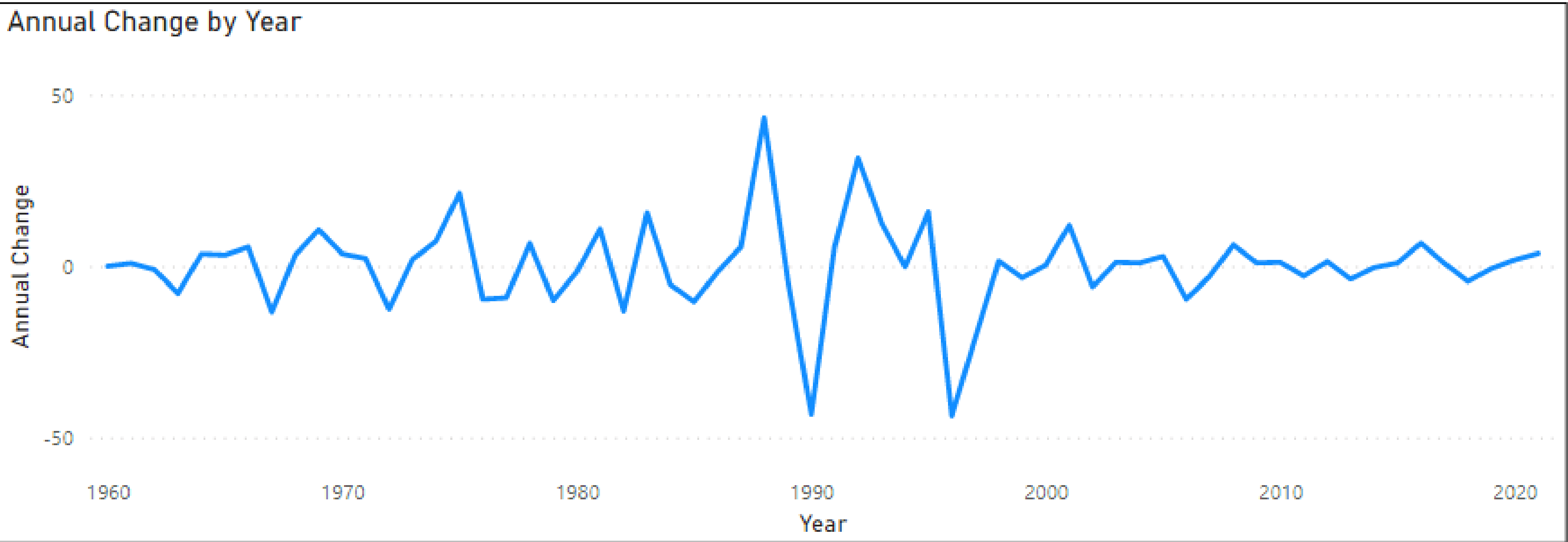
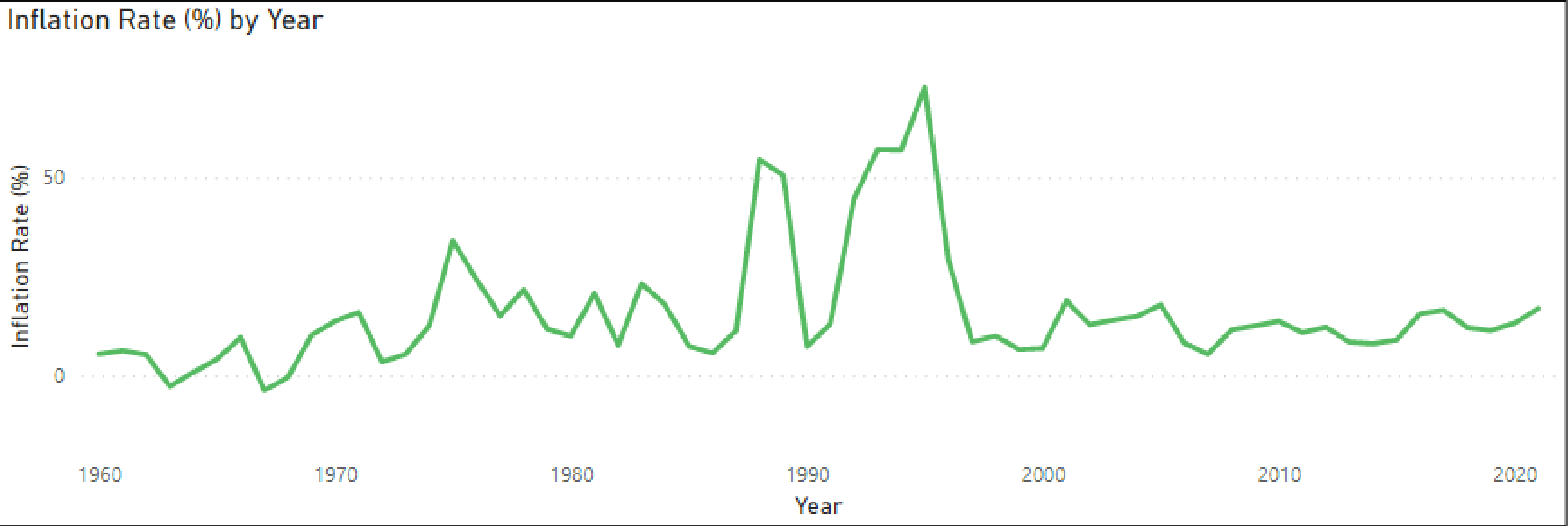


Nigeria Economic Growth Rate



Year	Per Capita US \$	GDP Billions of US \$	Growth Rate Annual % Change
2000	567.93	69.45	5.02
2001	590.38	74.03	5.92
2002	741.75	95.39	15.33
2003	795.39	104.91	7.35
2004	1,007.87	136.39	9.25
2005	1,268.38	176.13	6.44
2006	1,656.42	236.10	6.06
2007	1,883.46	275.63	6.59
2008	2,259.11	339.48	6.76
2009	1,911.61	295.01	8.04
2010	2,280.44	361.46	8.01
2011	2,487.60	404.99	5.31
2012	2,723.82	455.50	4.23
2013	2,961.55	508.69	6.67
2014	3,098.99	546.68	6.31
2015	2,687.48	486.80	2.65
2016	2,176.00	404.65	-1.62
2017	1,968.57	375.75	0.81
2018	2,027.78	397.19	1.92
2019	2,229.86	448.12	2.21
2020	2,097.09	432.29	-1.79
2021	2,085.03	440.78	3.65

Nigeria Inflation Rate CPI



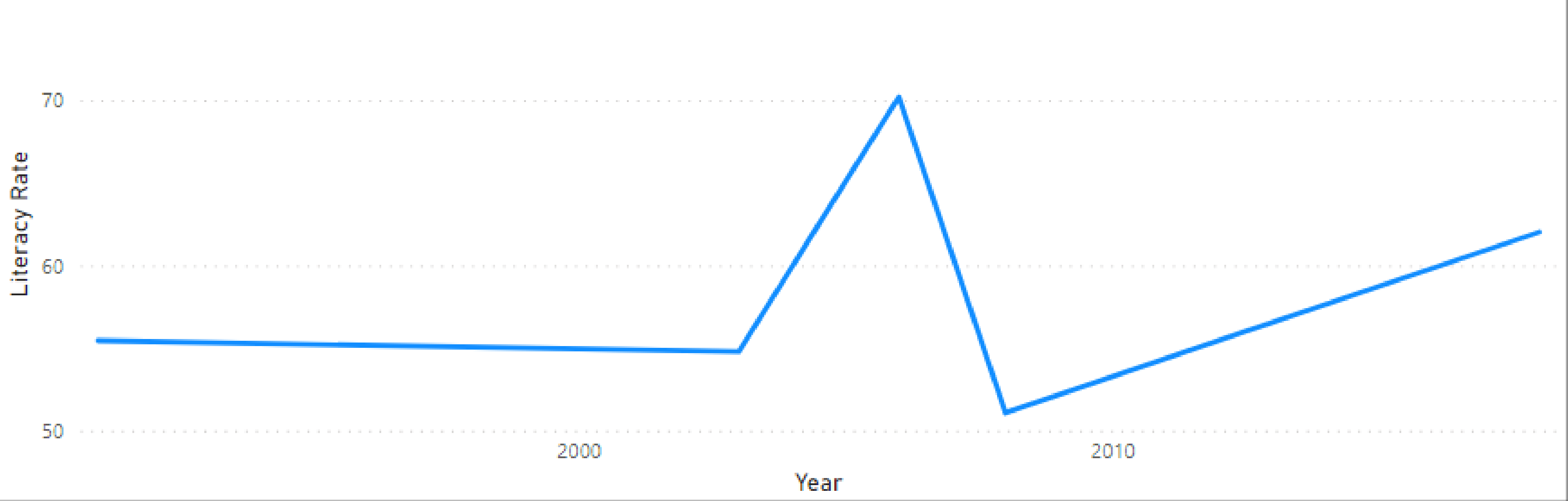
Year	Annual Change	Inflation Rate (%)
2000	0.31	6.93
2001	11.94	18.87
2002	-6.00	12.88
2003	1.16	14.03
2004	0.97	15.00
2005	2.87	17.86
2006	-9.64	8.23
2007	-2.84	5.39
2008	6.19	11.58
2009	0.97	12.56
2010	1.17	13.72
2011	-2.88	10.84
2012	1.38	12.22
2013	-3.74	8.48
2014	-0.41	8.06
2015	0.95	9.01
2016	6.67	15.68
2017	0.85	16.52
2018	-4.43	12.09
2019	-0.70	11.40
2020	1.85	13.25
2021	3.71	16.95

Nigeria Literacy Rate

Annual Change by Year

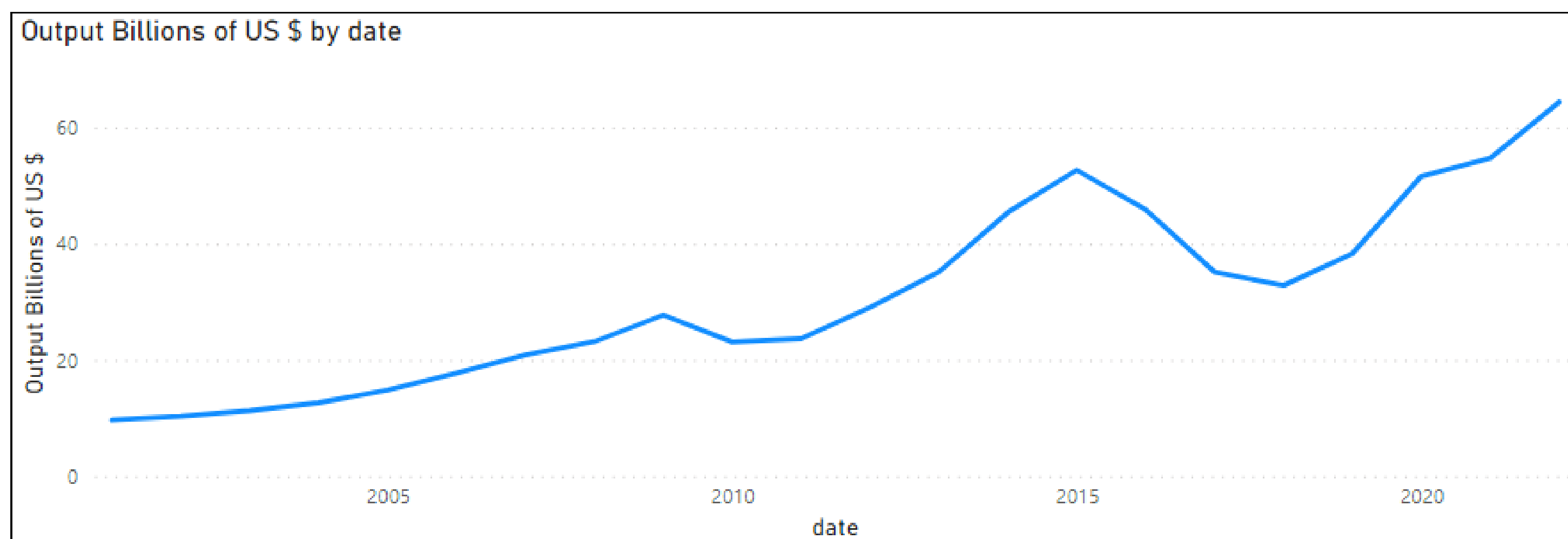
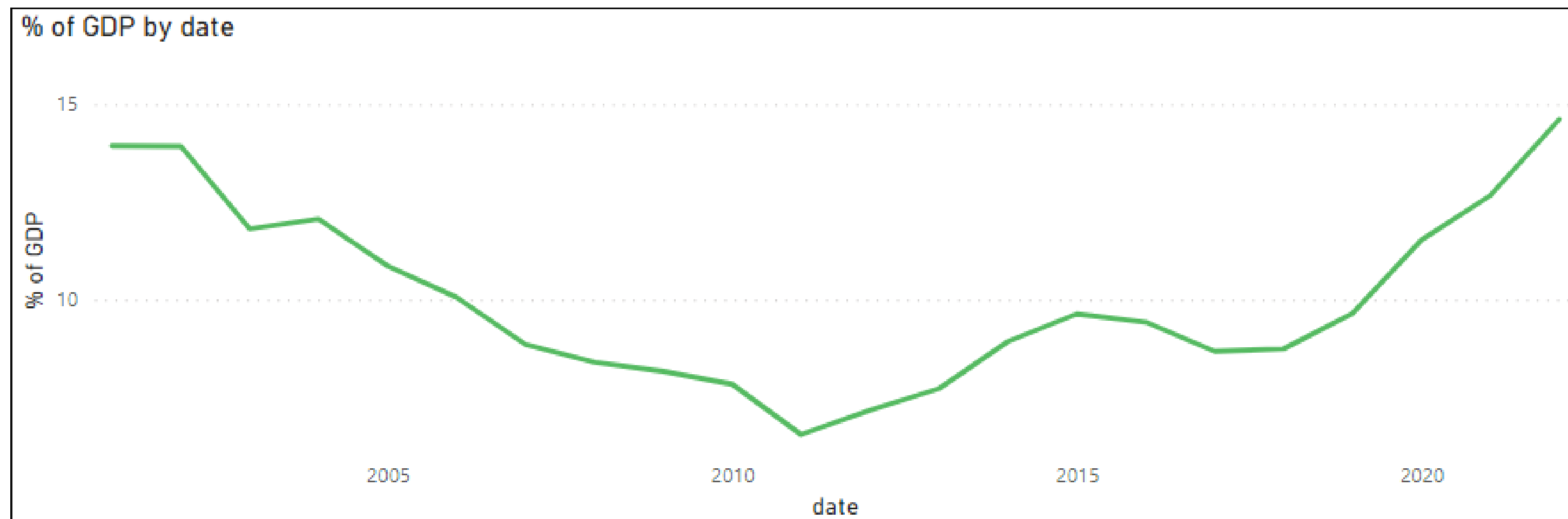


Literacy Rate by Year



Year	Literacy Rate	Annual Change
1991	55.45	0.00
2003	54.77	-0.67
2006	70.20	15.43
2008	51.08	-19.12
2018	62.02	10.94

Nigeria Manufacturing Output

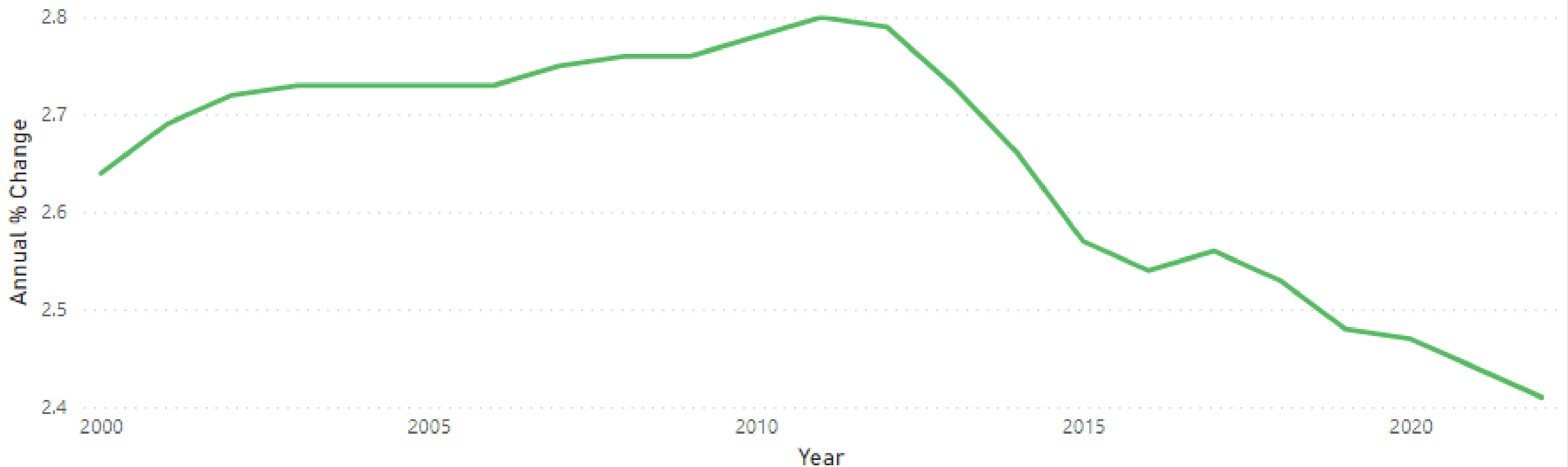


date	Output Billions of US \$	% of GDP
2000	9.68	13.93
2001	10.31	13.93
2002	11.27	11.81
2003	12.65	12.06
2004	14.81	10.86
2005	17.72	10.06
2006	20.90	8.85
2007	23.16	8.40
2008	27.73	8.17
2009	23.12	7.84
2010	23.69	6.55
2011	29.04	7.17
2012	35.19	7.72
2013	45.42	8.93
2014	52.68	9.64
2015	45.90	9.43
2016	35.12	8.68
2017	32.85	8.74
2018	38.32	9.65
2019	51.63	11.52
2020	54.76	12.67
2021	64.40	14.61

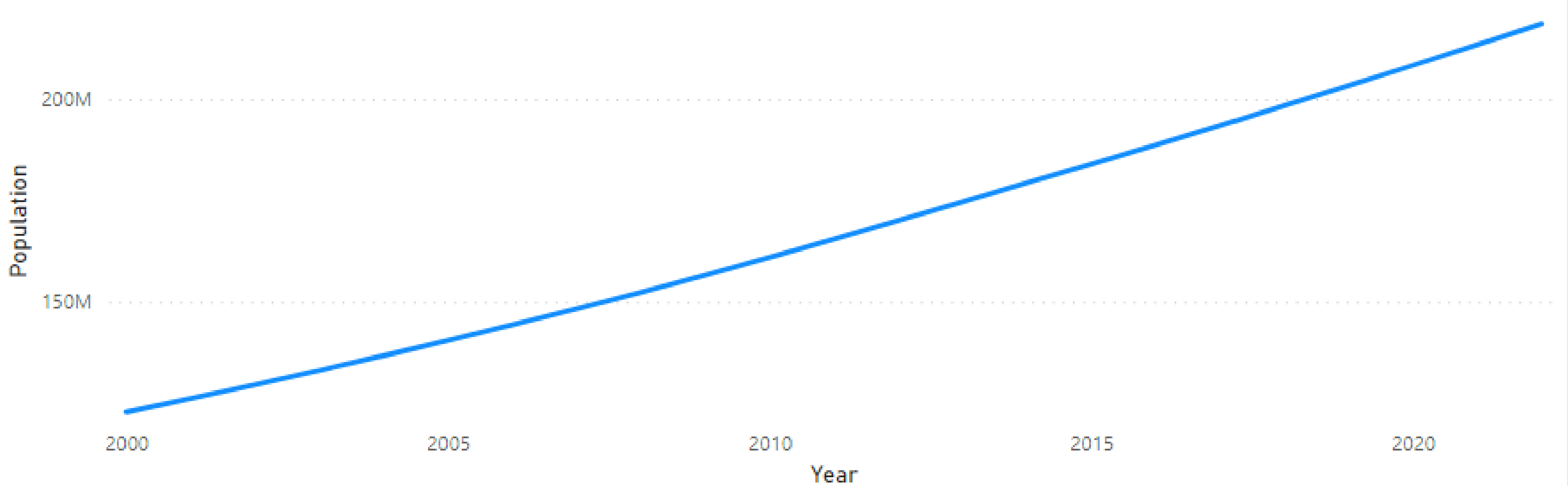


Nigeria Population Growth Rate

Annual % Change by Year

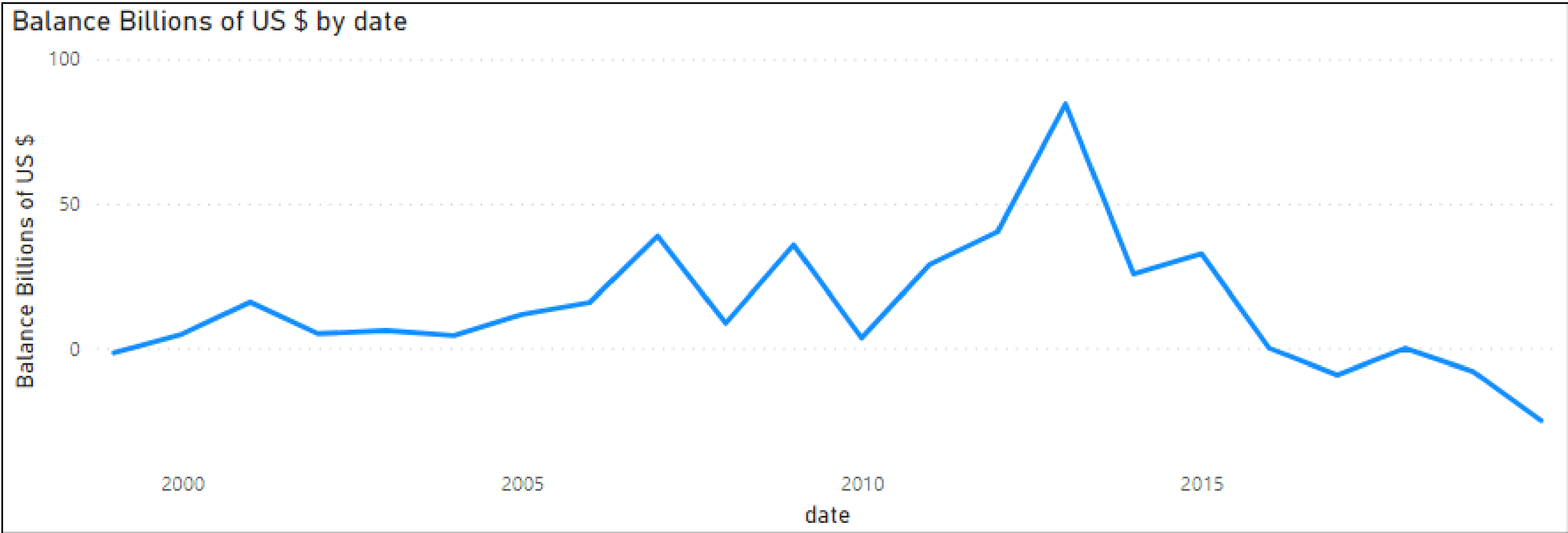
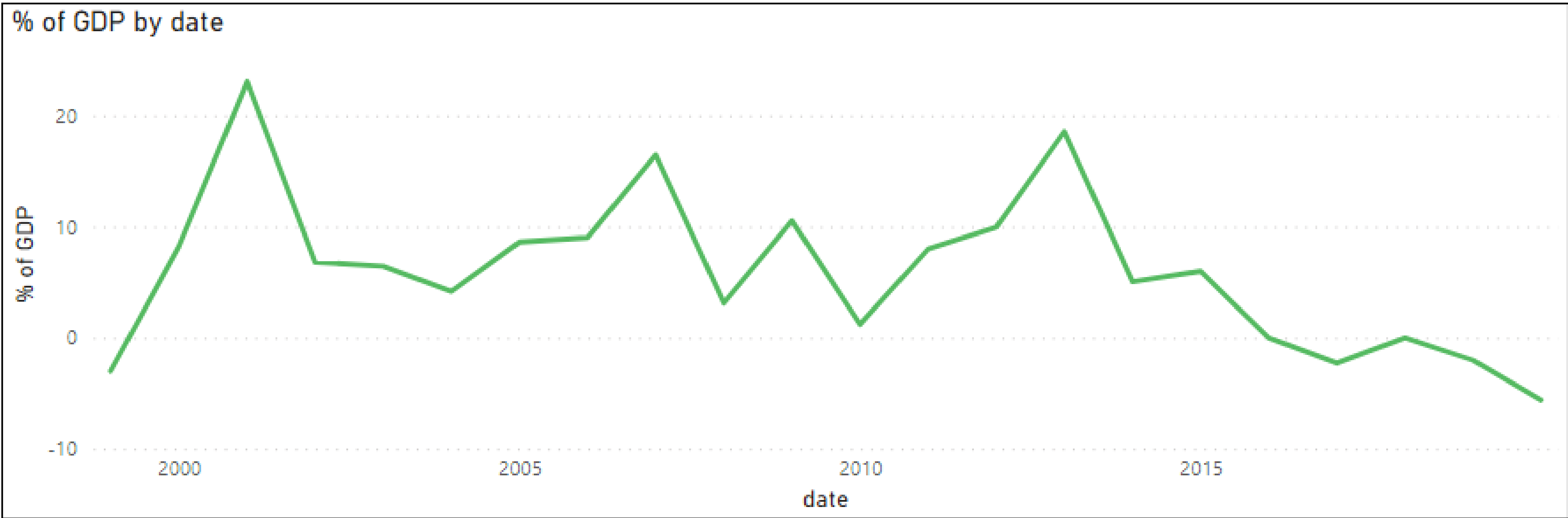


Population by Year



Year	Population	Annual % Change
2000	122851984	2.64
2001	126152678	2.69
2002	129583026	2.72
2003	133119801	2.73
2004	136756848	2.73
2005	140490722	2.73
2006	144329764	2.73
2007	148294028	2.75
2008	152382506	2.76
2009	156595758	2.76
2010	160952853	2.78
2011	165463745	2.80
2012	170075932	2.79
2013	174726123	2.73
2014	179379016	2.66
2015	183995785	2.57
2016	188666931	2.54
2017	193495907	2.56
2018	198387623	2.53
2019	203304492	2.48
2020	208327405	2.47
2021	213401323	2.44
2022	218541212	2.41

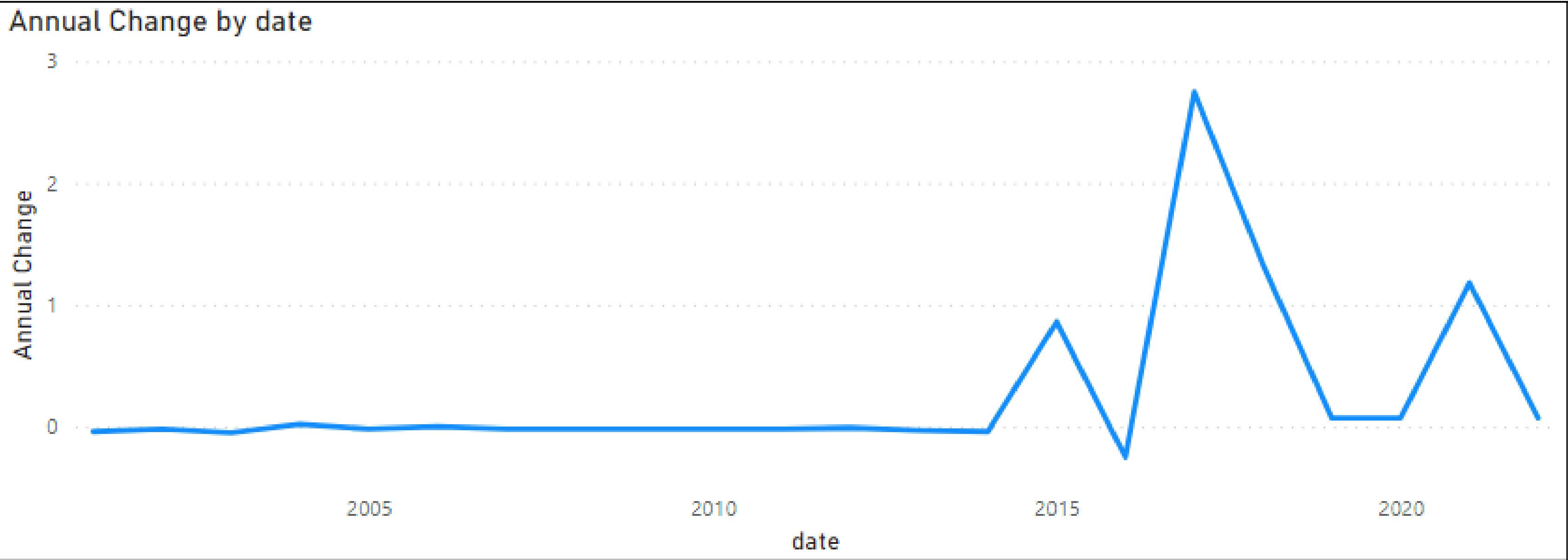
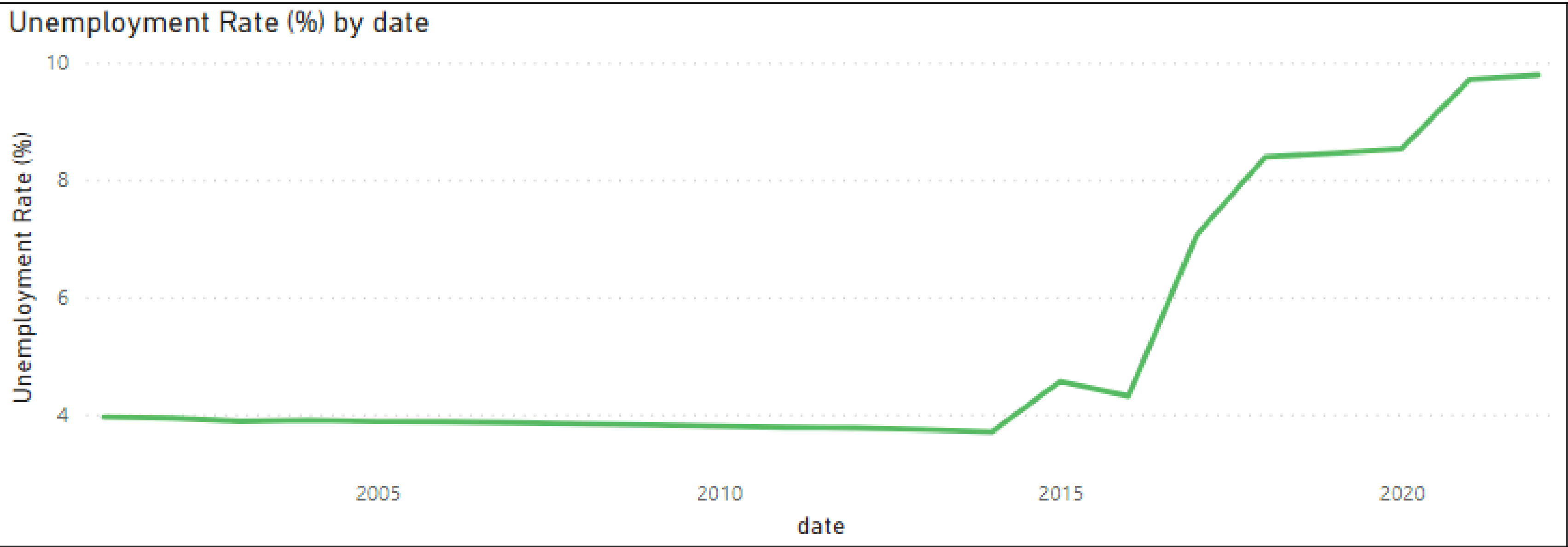
Nigeria Trade Balance Deficit



date	Balance Billions of US \$	% of GDP
1998	-1.63	-2.99
1999	4.87	8.21
2000	16.01	23.05
2001	5.05	6.82
2002	6.15	6.44
2003	4.37	4.17
2004	11.75	8.61
2005	15.87	9.01
2006	38.88	16.47
2007	8.64	3.14
2008	35.79	10.54
2009	3.55	1.20
2010	28.92	8.00
2011	40.32	9.96
2012	84.54	18.56
2013	25.69	5.05
2014	32.72	5.99
2015	0.00	0.00
2016	-9.25	-2.29
2017	-0.02	0.00
2018	-8.00	-2.01
2019	-25.01	-5.58



Nigeria Unemployment Rate



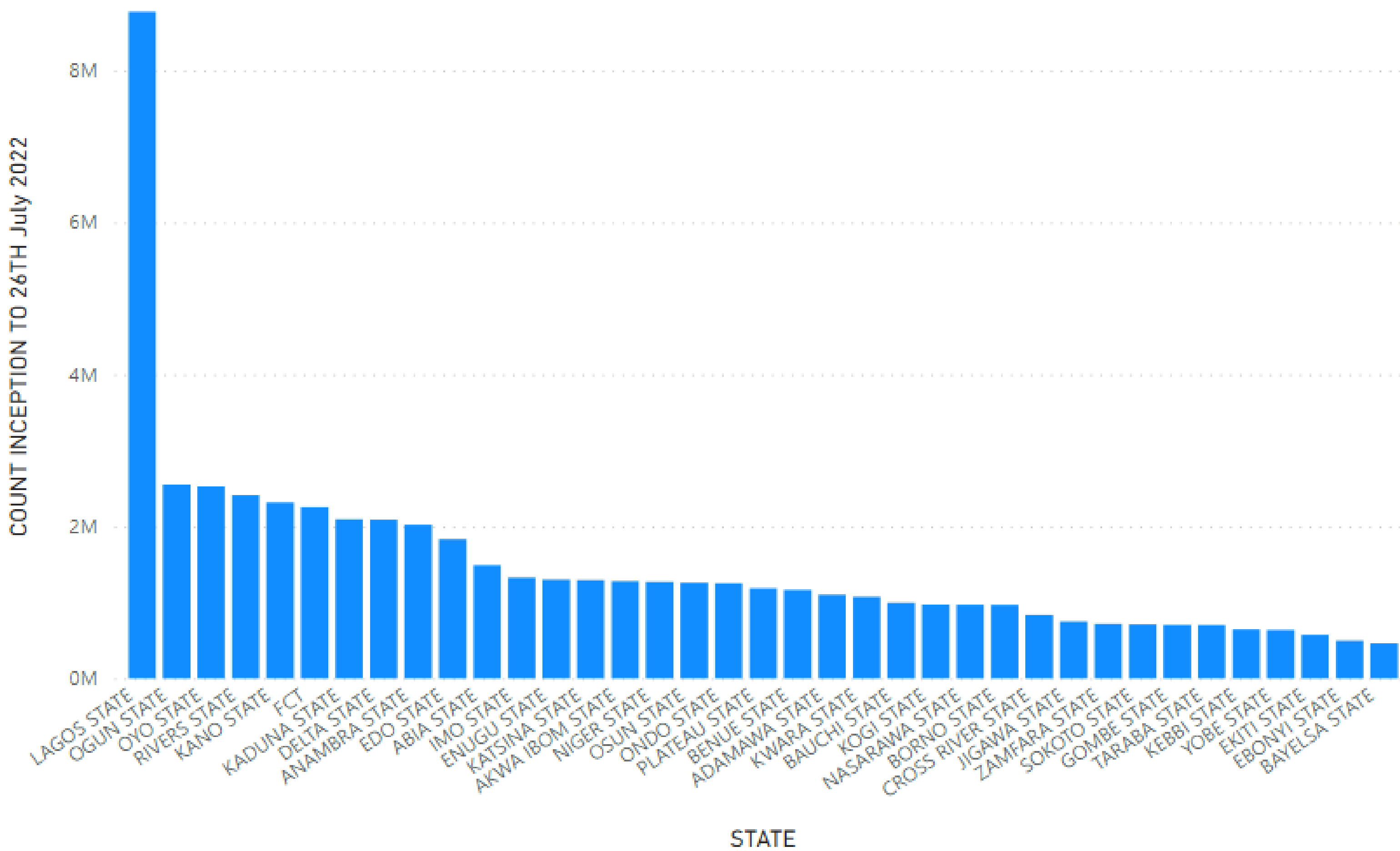
date	Annual Change	Unemployment Rate (%)
2000	-0.04	3.95
2001	-0.02	3.94
2002	-0.05	3.88
2003	0.02	3.90
2004	-0.02	3.88
2005	0.00	3.87
2006	-0.02	3.86
2007	-0.02	3.84
2008	-0.02	3.82
2009	-0.02	3.80
2010	-0.02	3.78
2011	-0.01	3.77
2012	-0.03	3.74
2013	-0.04	3.70
2014	0.86	4.56
2015	-0.25	4.31
2016	2.75	7.06
2017	1.33	8.39
2018	0.07	8.46
2019	0.07	8.53
2020	1.18	9.71
2021	0.07	9.79

BVN Enrollment by State up to July 2022

55M

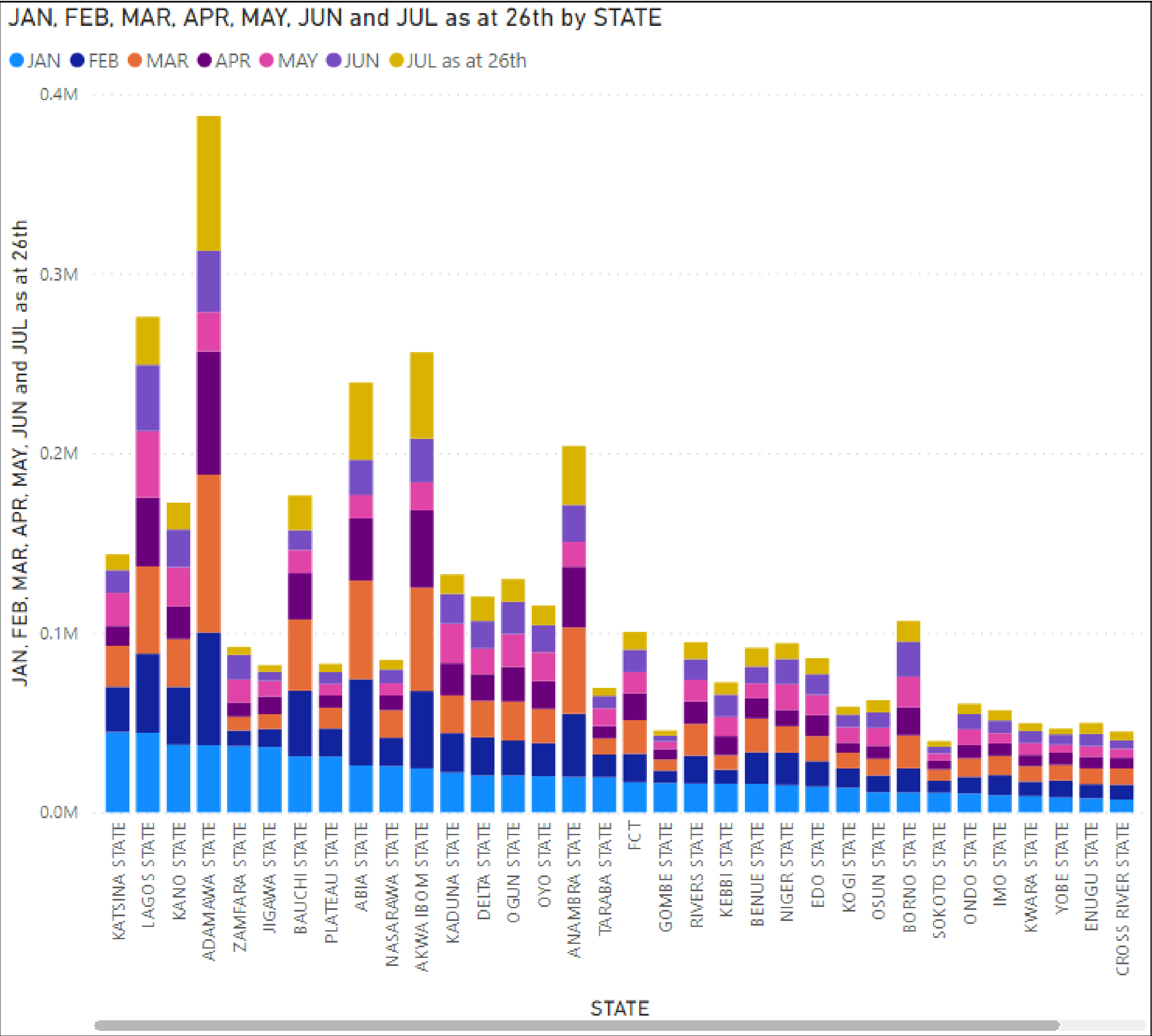
Total BVN from inception till 26th of July 2022

COUNT INCEPTION TO 26TH July 2022 by STATE



STATE	COUNT INCEPTION - 26 JULY 2022
ABIA STATE	1488482
ADAMAWA STATE	1100330
AKWA IBOM STATE	1281772
ANAMBRA STATE	2021157
BAUCHI STATE	998664
BAYELSA STATE	464786
BENUE STATE	1166484
BORNO STATE	966258
CROSS RIVER STATE	834896
DELTA STATE	2090576
EBONYI STATE	498551
EDO STATE	1834839
EKITI STATE	576772
ENUGU STATE	1302667
FCT	2254774
GOMBE STATE	705520
IMO STATE	1327683
JIGAWA STATE	750716
KADUNA STATE	2096073
KANO STATE	2313930
KATSINA STATE	1296277
KEBBI STATE	645949
KOGI STATE	969744
KWARA STATE	1073802
LAGOS STATE	8768854
NASARAWA STATE	967957
NIGER STATE	1272879
OGUN STATE	2549626
ONDO STATE	1251692
OSUN STATE	1261190
OYO STATE	2526682
PLATEAU STATE	1185888
RIVERS STATE	2411529
SOKOTO STATE	714581
TARABA STATE	703453
YOBE STATE	638704
ZAMFARA STATE	721387

BVN Enrollment by State From January to July 2022



STATE	JAN	FEB	MAR	APR	MAY	JUN	26th JUL
ABIA STATE	26264	47937	54910	34722	12988	19597	42976
ADAMAWA STATE	37419	62763	87820	68640	22030	34046	75088
AKWA IBOM STATE	24561	43117	57518	42957	15622	24315	48097
ANAMBRA STATE	19745	35239	48104	33698	13995	20403	32863
BAUCHI STATE	31319	36534	39747	25775	12872	10927	19334
BAYELSA STATE	5942	11708	16377	11619	4433	5494	10706
BENUE STATE	15821	17698	18815	11193	8371	9356	10347
BORNO STATE	11160	13432	18323	15644	17057	19514	11406
CROSS RIVER STATE	7216	8255	9055	5916	4958	4783	4890
DELTA STATE	20627	21290	20314	14758	14298	15291	13667
EBONYI STATE	4877	5034	4940	3739	3426	3761	2967
EDO STATE	14384	14178	13965	11567	11412	11544	8847
EKITI STATE	3812	3416	3784	3321	3944	3371	2792
ENUGU STATE	7812	7873	8874	6432	5918	6752	6259
FCT	16853	15860	18629	15032	11816	12541	9812
GOMBE STATE	16424	6904	6180	5844	4151	3277	2840
IMO STATE	9601	11281	10684	6871	5751	6974	5687
JIGAWA STATE	36488	9905	8393	9912	8542	5096	3643
KADUNA STATE	22224	22007	21003	17943	21989	16569	10710
KANO STATE	37656	32315	26555	18100	21927	20988	14930
KATSINA STATE	44827	25216	22798	11033	18318	12729	8854
KEBBI STATE	15904	7990	8026	10641	10652	12467	6864
KOGI STATE	13724	10859	8622	5634	8613	7016	4469
KWARA STATE	9138	8103	8531	6349	6483	6756	4433
LAGOS STATE	44412	43988	48597	38260	37173	36766	26795
NASARAWA STATE	25858	15802	15272	8259	6826	7578	5379
NIGER STATE	15172	18098	14726	9050	14416	14029	8684
OGUN STATE	20615	19445	21804	19241	18191	17961	12613
ONDO STATE	10465	9406	10244	7448	8679	8564	5726
OSUN STATE	11289	9325	9297	7298	9957	8552	6855
OYO STATE	20108	18503	19031	15576	15947	15104	10979
PLATEAU STATE	31249	15490	11565	6870	6366	6607	4663
RIVERS STATE	15999	15798	17552	12572	11858	11696	9251
SOKOTO STATE	10951	6679	6394	4899	3903	3854	3079
TARABA STATE	19597	12734	8869	6955	9873	6952	4472
YOBE STATE	8370	9429	8743	6619	4532	5724	3321
ZAMFARA STATE	36988	8673	7616	7970	12747	13803	4284

Digital Revolution: Meaning and Trends



DR describes technology that rely on expansive use of information and digital resources.

New ways of doing things based on extensive diffusion of data/information, telecommunications and computer technology.



Digital Revolution: Meaning and Trends

Cognitive technology and data-driven decision making is a major digital transformation?.

More people have access to mobile phones than clean toilet (1 in 3 would rather give up sex than their phone)

Buying decisions increasingly influenced by social media

More people trusting AMAZON/Ali baba and the likes than their banks.

Today's college students have never licked postage stamp

Rise of influencer as more people get influenced by words/actions of others



Value Chain

...Ultimate value is in the ability DR to be as purpose-based and customized as possible



Flexibility

Limitless scope for adoption and application

Scalability

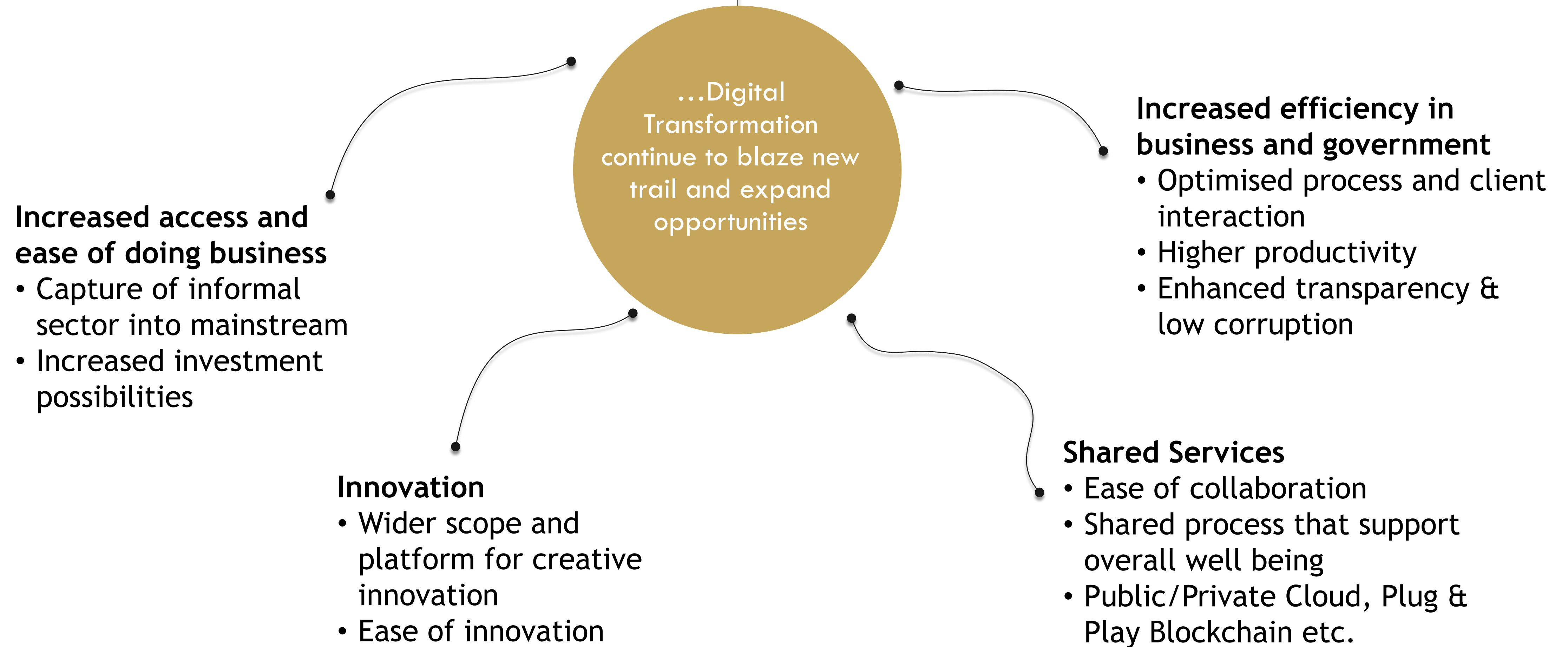
Ability to scale according to peculiar requirements

Efficiency

Optimization and generation of more value

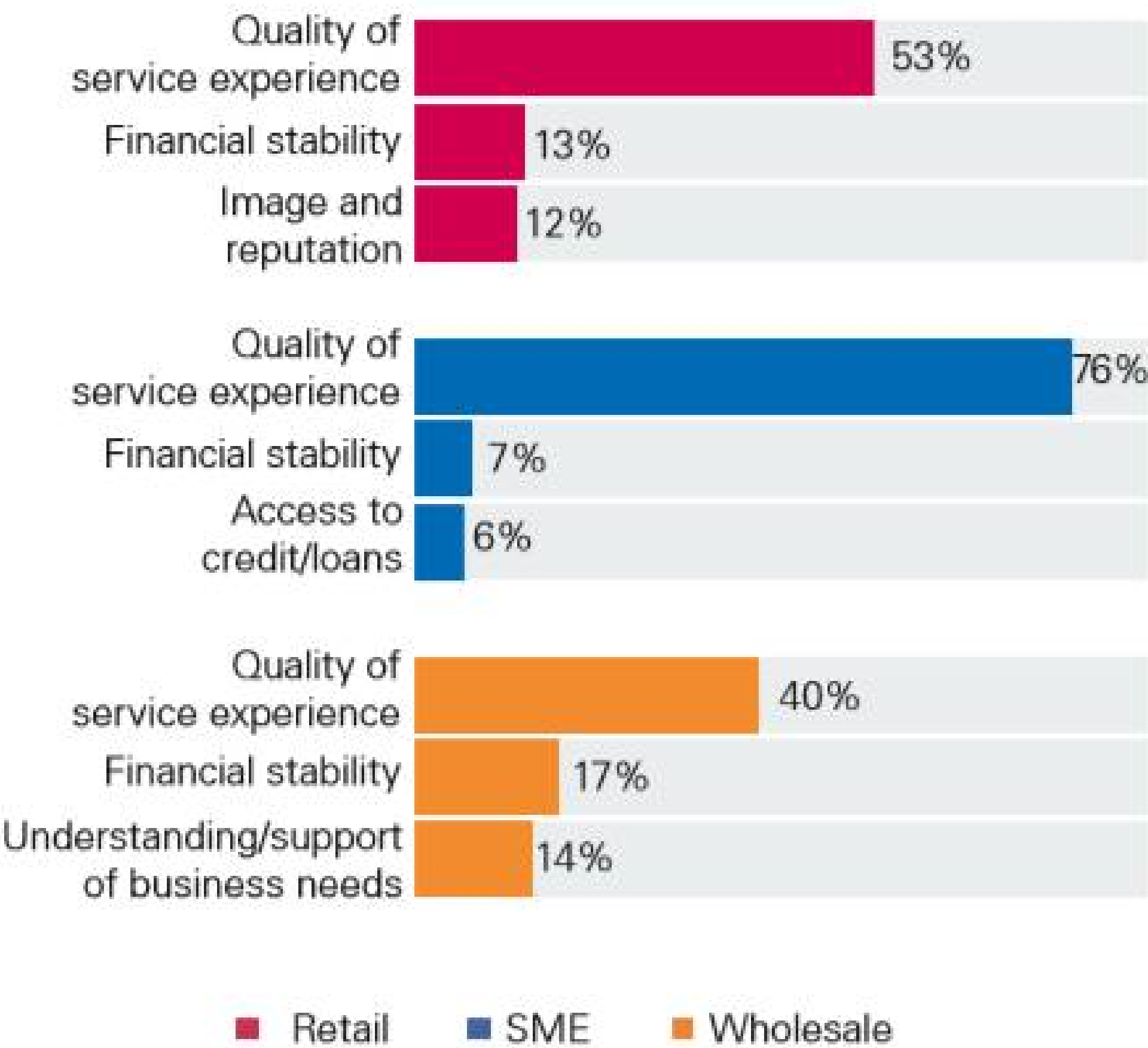


Digital Revolution and Banking Business contd...



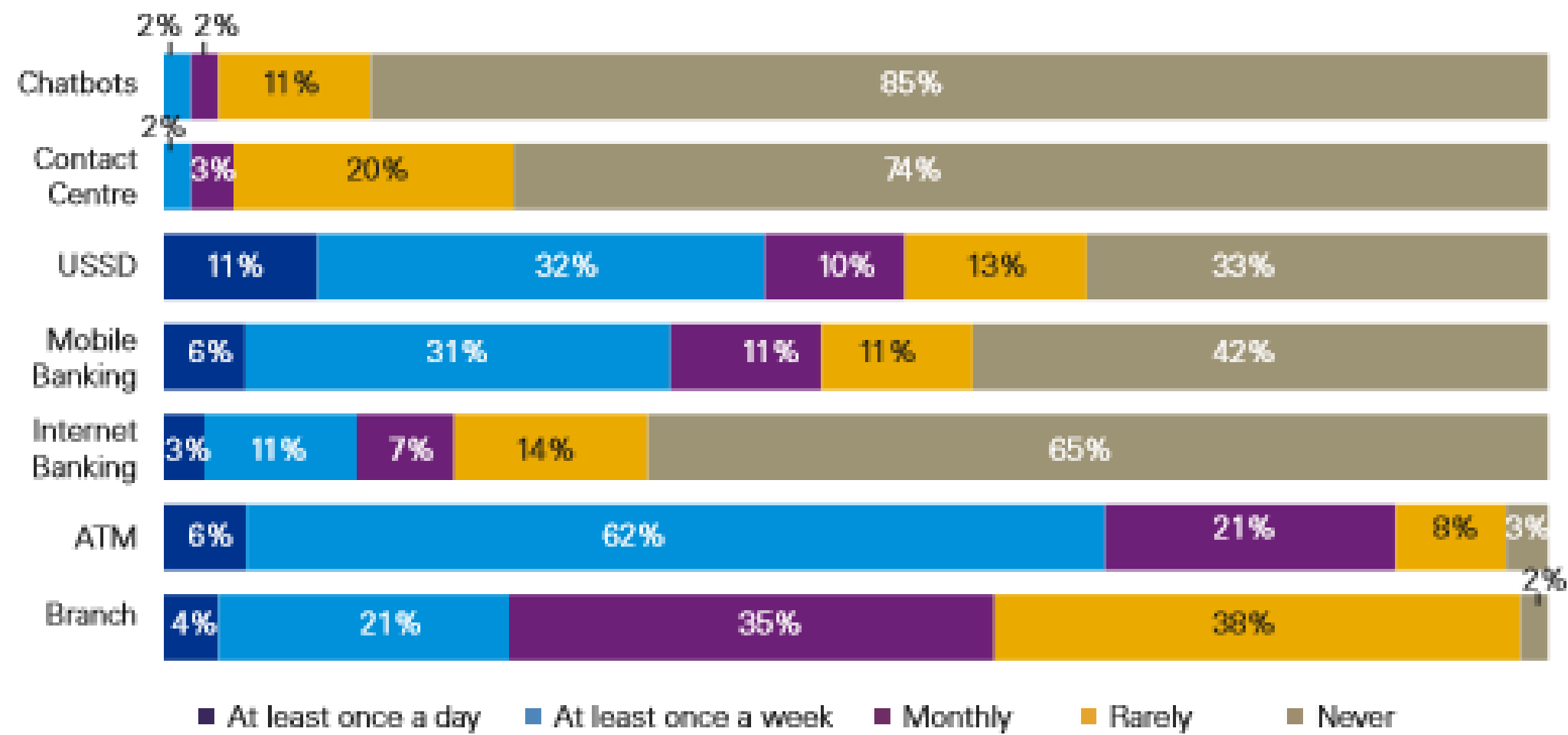
2019 – Pre Covid 19 Consumer Reality

Top three reasons for maintaining banking relationships



Source: 2019 KPMG Nigeria Banking Industry Customer Experience Survey

Overall Channel Usage



Source: 2019 KPMG Nigeria Banking Industry Customer Experience Survey

¹ ncc.gov.ng, data accessed 29 November 2019



2022 – Post Covid 19 Consumer Reality

- 4 Outcomes of KPMG extensive research on Banking Consumer Reality. Consumer Needs, Preferences and Behaviours were considered.
 - Economic Impact
 - Erosion of Trust
 - Rise of Digital
 - Home is the New Hub



Digital Revolution and Banking Business

...future of banking will be defined by the battle for data on customer insight



- Accelerator of economic activities
- Changes to the way we:
 - Talk & Interact
 - Communicate
 - Trade
 - Do business
 - Live

- Process optimization
- Big data management
- Realtime reporting showing:
 - Process performance
 - Cost estimates /drivers
 - Risk management

- Front Office – Smart devices
- Middle Office – APIs or Plug and play solutions
- Back Office - Cloud and data analytics

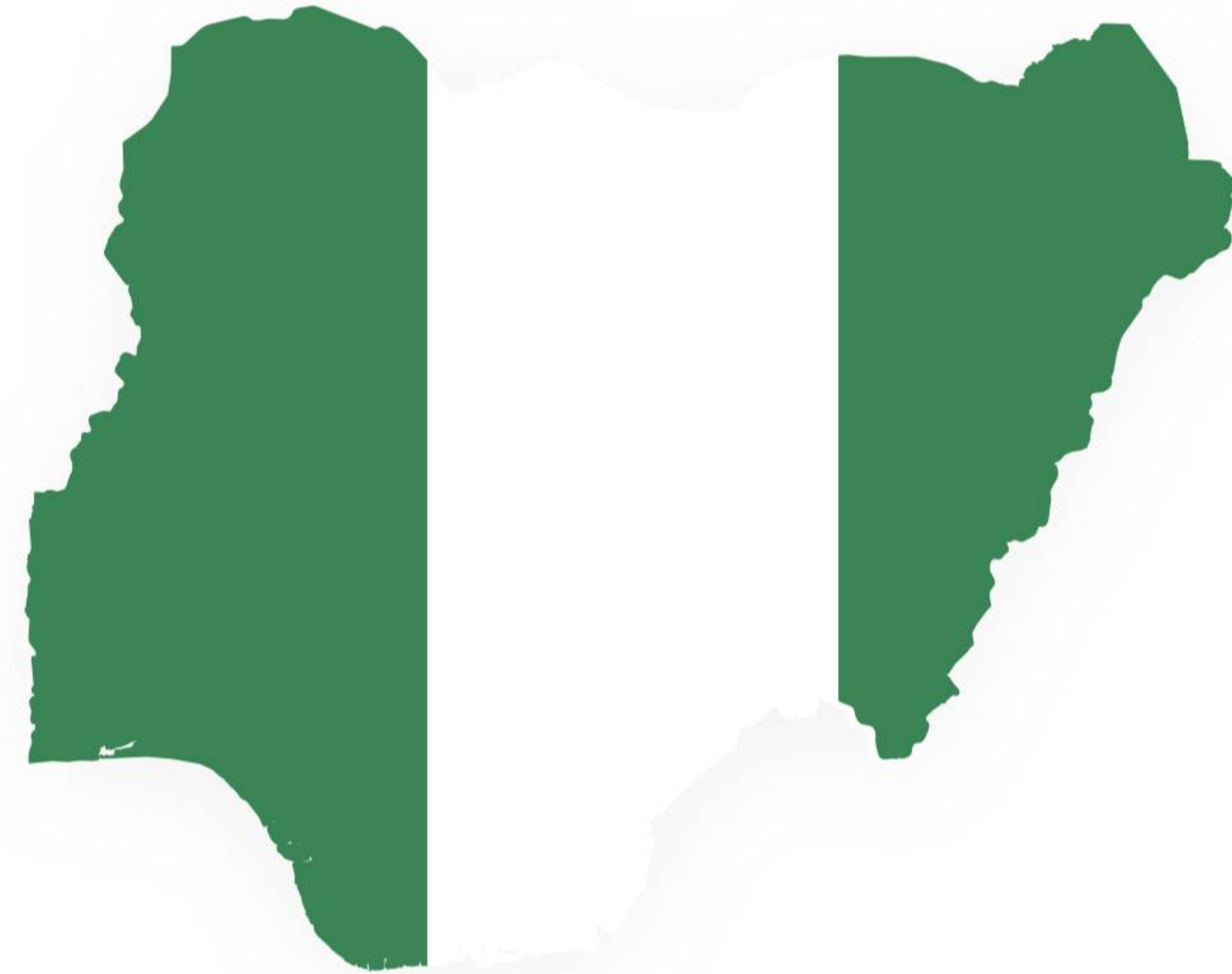


FinTech Growth in Nigeria

Country Spotlight: Nigeria

Nigeria has more than 206 million inhabitants, equivalent to 2.6% of the world population¹. **The country's economic crisis that the population has been facing for some time explains why 38 million inhabitants lack banking services.**

High poverty rates, mistrust of financial service providers, and the cost of maintaining an account are some of the exclusion drivers



Central Bank of Nigeria
Sustainable Nation

2020 Total population

206 million

38

million unbanked

High poverty rates, mistrust of financial service providers, and the cost of maintaining an account.



Mobile Penetration



Median age **18 years**



Internet penetration
51% of the total population²
= **109.2 million internet users**



90% of the **Adult** population has mobile phones → the average daily time spent on mobile Internet: **4 hours 55 minutes**³.

Following successful trials in the cities of Lagos, Abuja and Calabar, **a 5G network is expected to be rolled out across the country, facilitating nationwide digitisation**⁴.

Fintech Ecosystem

3.4% of Nigerians were among the world's 1.7 billion financially excluded adults⁵.

3rd

African country
with the most
progress in
Fintech activity



currently
more than

170

fintech
companies



Fintech Investments

From 2011 to 2018

200 million dollars

in Fintech investments

In 2021

+800 million dollars

(due to boom in the digital market: expansion of payment services and e-commerce)^{6 7}.

Major players in the industry⁸

 cowrywise

 Flutterwave

Interswitch 

 kuda.

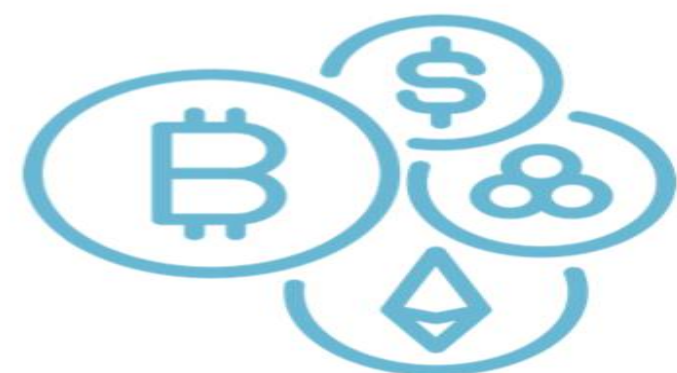
 FairMoney

 KongaPay

 paga

 ALAT

 paystack



3.2% of Nigerians own cryptocurrencies⁹ → a new way of preserving money in an unstable economy.

Crypto lending platforms → immediate loans, no need to demonstrate credit history.

Oct 2021: The State created a Digital Currency to reduce financial exclusion: eNaira →

Nigeria became the first country in Africa - and one of the first in the world - to launch a digital currency for citizens.

Nigeria is a country full of opportunities to improve social inclusion



Millennials



Internet penetration



Economic opportunity



Central Bank of Nigeria
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Going Forward

Leverage existing data and embrace data driven strategy.

Collaboration:

Address trust deficit to promote

- Shared services
- Adoption and incubation of FinTechs

01

Consumer Protection:

- Value creation
- Dispute resolution
- Fraud Prevention

02

Leadership:

Leadership team in the organization with professional technology experience to overcome resistance to facilitate adoption of new technology

03

Citation:

<https://unstats.un.org/sdgs/report>

<https://nibss-plc.com.ng>

<https://www.macrotrends.net/countries/NGA/nigeria>

<https://www.credolab.com/industries>

<https://www.ncc.gov.ng/docman-main/research-development>

<https://home.kpmg/xx/en/home/insights/2020/09/consumers-new-reality-banking.html>



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Sustainable Nation

Thank you