## The Effect of Pricing Policies on Internet Consumption

Erezi Ogbo, PhD

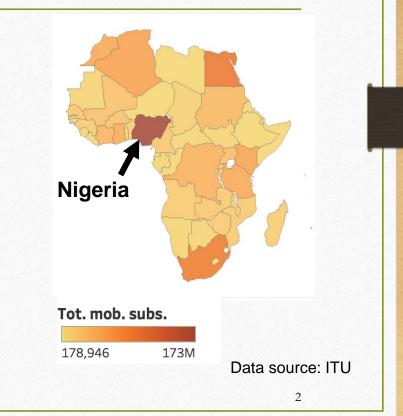
PTC'22: Reunite. Rethink. Renew.

Honolulu, Hawaii

January 18th, 2022

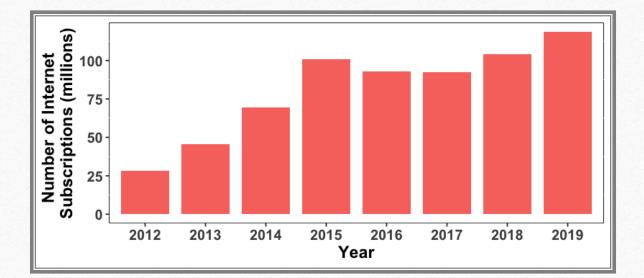
Nigeria: the largest mobile market & largest contributor to the expected growth in SSA

- Population: 213 million (2021)
- Mobile market
  - Subscriptions: 170 million (2018)
  - Unique subscribers:83 million
  - Projected growth: 30 million new subscribers (2020 to 2025)
- Internet use
  - Fixed telecommunications is virtually non-existent
  - Half of mobile users use the Internet



Pricing policies and Internet adoption rates in Nigeria

- In 2013, the Nigerian Communications Commission introduced a data floor price
- In 2015, the floor price was removed to "ensure sustainability, growth and development of the data service market segment"



## Sampling and data

- Data source major mobile carrier in Nigeria
- Sample size 18,000
- Data Panel data over seven months in 2016

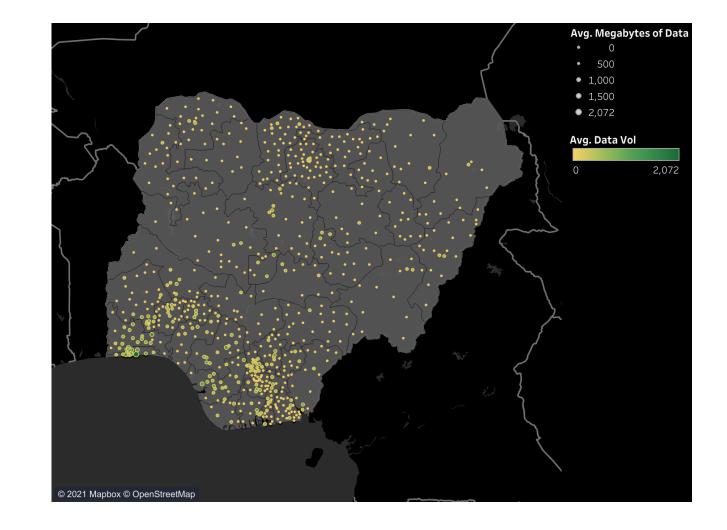
## Sample demographics

	Rural (n=5620)	Urban (n=12221)	Overall (n=17841)	Nigerian population 2016 (n = 186 million)
Gender				
Female	26%	34%	31%	51%
Male	74%	67%	68%	49%
Age				
Mean (SD)	35.2 (10.9)	36.1 (10.9)	35.8 (10.9)	-
Median [Min, Max]	33.0 [16.0, 67.0]	34.0 [16.0, 67.0]	34.0 [16.0, 67.0]	17.9
Zone				
South	43%	72%	62%	49%
North	58%	29%	38%	51%
Tenure on Network				
1 - 2 years	13%	10%	11%	-
2 - 4 years	23%	16%	18%	-
Over 4 years	64%	74%	71%	<u> </u>

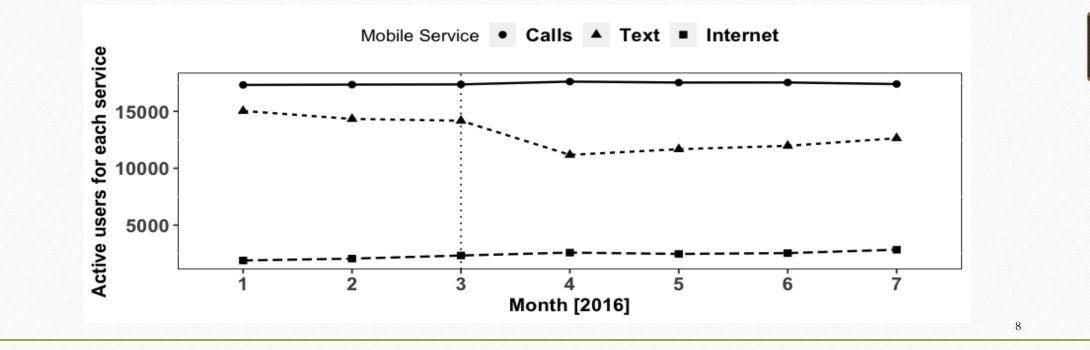
Internet, calls,
and texting
consumption

	Rural	Urban	Overall
	(n=5620)	(n=12221)	(n=17841)
Internet (Megabytes)			
Mean (SD)	713 (1100)	965 (1530)	905 (1450)
Median [Min, Max]	286 [100, 14100]	390 [100, 22400]	362 [100, 22400]
Missing	4488 (79.9%)	8619 (70.5%)	13107 (73.5%)
Calls (Outgoing Minutes)			
Mean (SD)	144 (172)	182 (221)	170 (207)
Median [Min, Max]	86.9 [1.50, 2090]	112 [1.27, 3280]	103 [1.27, 3280]
Missing	3 (0.1%)	13 (0.1%)	16 (0.1%)
SMS (Outgoing Count)			
Mean (SD)	10.4 (22.7)	14.1 (31.1)	12.9 (28.8)
Median [Min, Max]	5.00 [1.00, 836]	6.25 [1.00, 966]	5.83 [1.00, 966]
Missing	255 (4.5%)	369 (3.0%)	624 (3.5%)

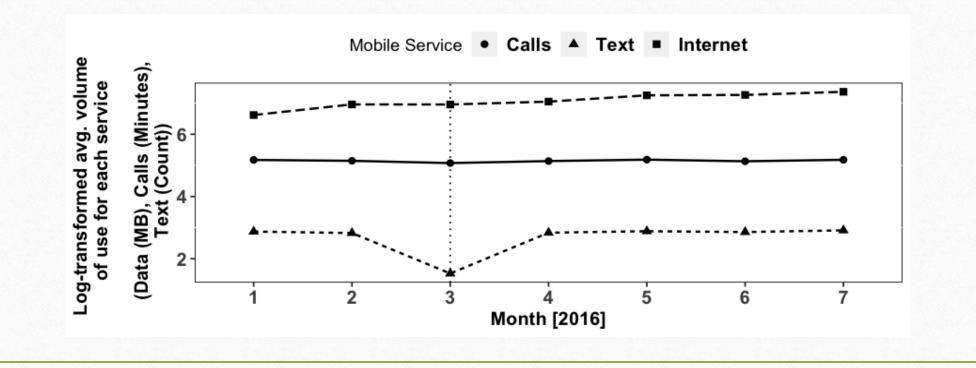
Internet consumption varies significantly across local government areas



After price change, there is a reduction in the active text users and increase in Internet users



Steady increase in Internet use, voice use and texting remained mostly flat



9

## Key Findings

• After the price change, data consumption increased by 75%

• We do not see evidence that reducing the prices of mobile Internet plans would "close" the second-level digital divide

