GLOBAL LANDSCAPE: DATA TRAILS OF DIGITALLY INCLUDED POOR (DIP) PEOPLE

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17 MAY 2023

Webinar Logistics

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Sophie Sirtaine

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03 **Panel Discussion**

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Buhle Goslar
Jake Kendall

04 **Q&A with Audience**

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Moksumul Haque, 2016 CGAP Photo Contest

Meet The Speakers

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Key Findings: Global Landscape of Digitally Included Poor (DIP) People

Adam Yussif, 2017 CGAP Photo Contest

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Message 1: Digitally Included Poor (DIP) people are a growing segment spread unevenly across regions

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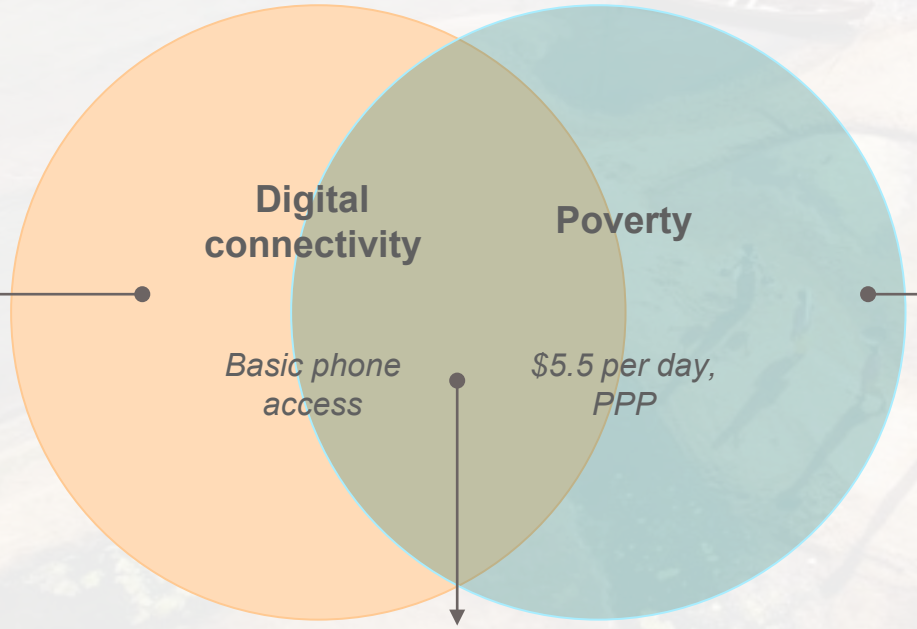
Digitally included poor (DIP) people are defined as adults (above the age of 15) in low- and middle-income countries, earning under $5.5/day, with ownership or access to a phone

Non-poor
Population above age 15 in the global south who are above the poverty line and are digitally connected



Digitally excluded
Population above age 15 in the global south who are below the poverty line and are digitally excluded

Digitally included poor (DIP): Population above the age 15 in the global south who are below the poverty line and are connected digitally

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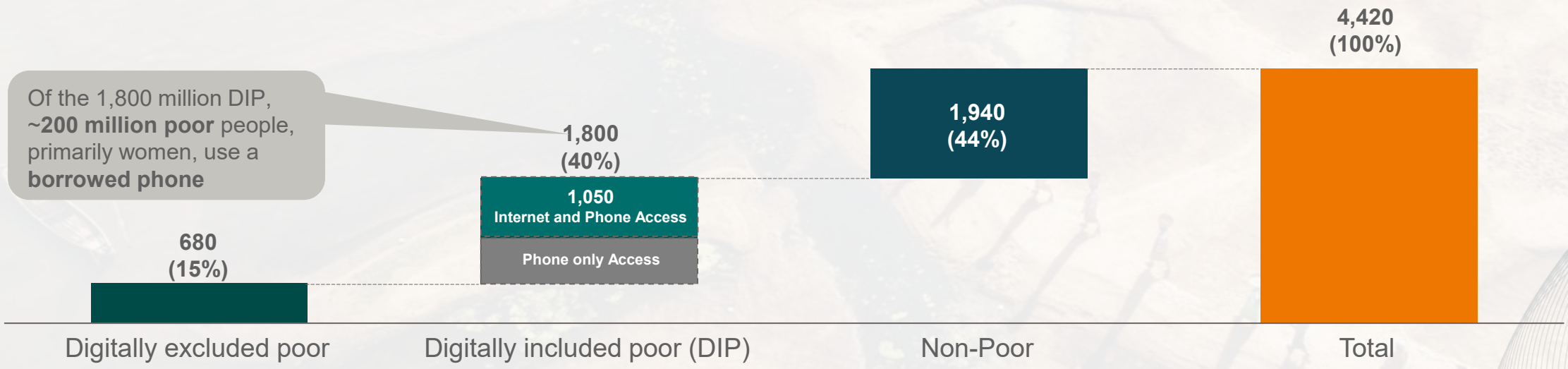
Phyu Aye Pwint, 2017 CGAP Photo Contest

An estimated 1.8 Billion poor people (~41% of the population in low-and middle-income countries) and 73% of poor people are digitally included



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Sources: World Bank database: Population estimation; World Bank database: Poverty intelligence; Global Findex 2017 & 2021; World Bank Database; Pew Research: Mobile Connectivity and Internet Users

Phyu Aye Pwint, 2017 CGAP Photo Contest

Across low- and middle-income countries, the poor are split across those that have no access to phone (L0) to those who have access to the internet (L3)

Level 0 No access to phones – **680 Mn** (**15%** of adult population)

Level 1 Access to a shared phone – **200 Mn** (**4.5%** of adult population)

Level 2 Ownership of basic or smartphone (no access to mobile internet) – **550 Mn** (**12.5%** of adult population)

Level 3 Access to the internet[1] – **1,050 Mn** (**24%** of adult population)

The richness of data trails increases as we move from Level 0 to Level 3

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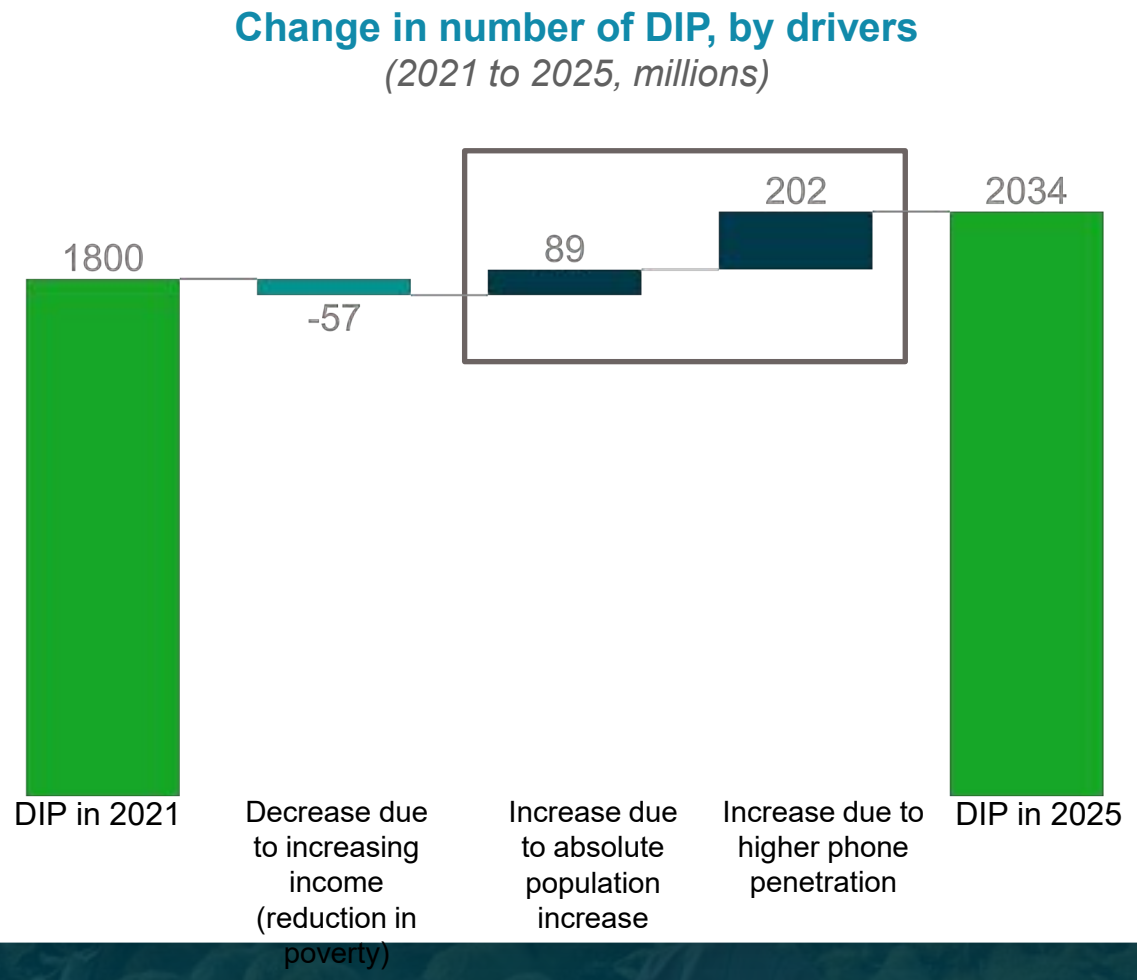
Sources: World Bank database: Population estimation; World Bank database: Poverty intelligence; Global Findex 2017 & 2021; World Bank Database; Pew Research: Mobile Connectivity and Internet Users

By 2025, the DIP segment could include over 2 billion people



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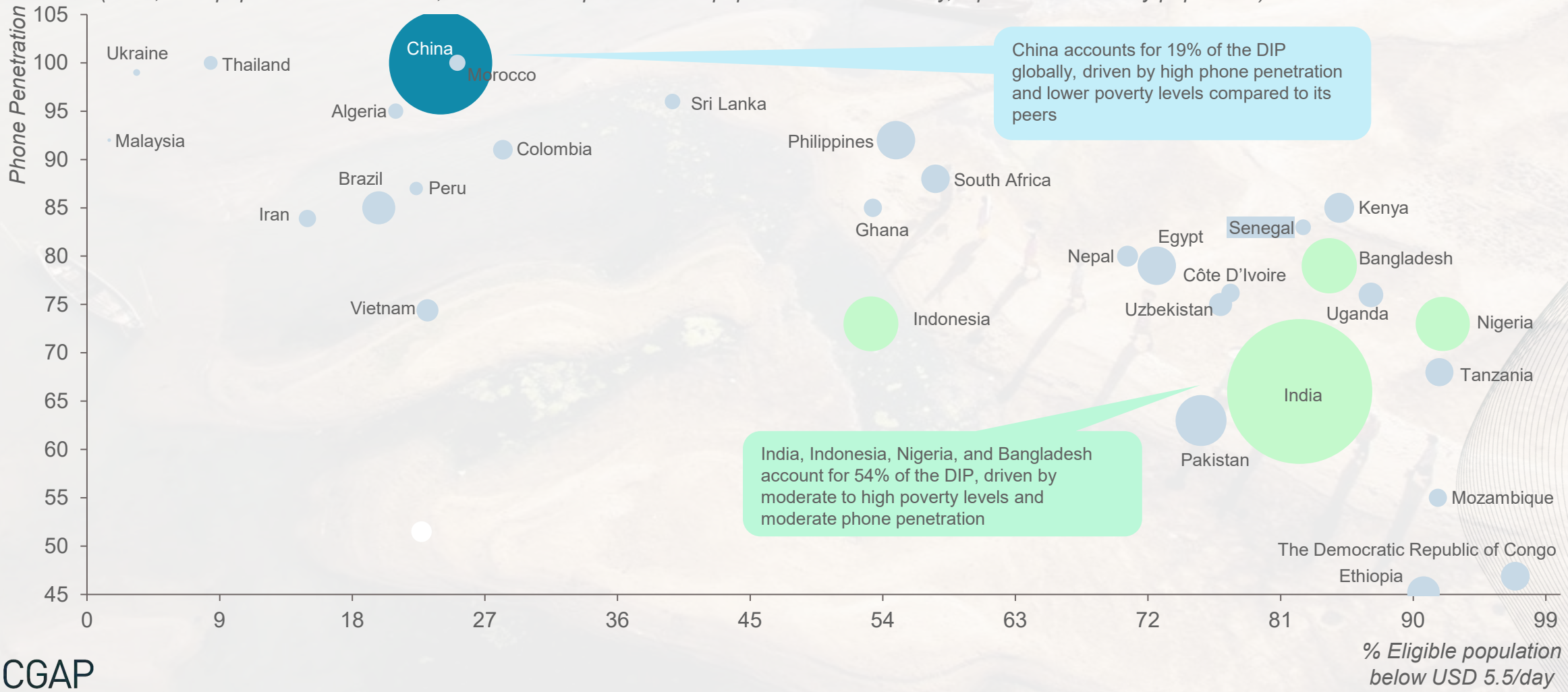
Sources: World Bank database: Population estimation; World Bank database: Poverty intelligence; Global Findex 2017 & 2021; World Bank Database; Pew Research: Mobile Connectivity and Internet Users

India, China, Indonesia, Nigeria and Bangladesh account for 73% of DIP (and 59% of the world's poor population)

Phone penetration and prevalence of poverty in LMIC countries in the global south

(2021, % of population on both axis, bubble size represents DIP population of the country, top ~30 countries by population)



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Sources: World Bank database: Population estimation; World Bank database: Poverty intelligence; Global Findex 2017 & 2021; World Bank Database; Pew Research: Mobile Connectivity and Internet Users

Globally among the DIP, 81% have a national ID (1.46 Bn individuals), 67% have an account, 32% have used digital payments, 26% have used deposits, 12% have borrowed from a financial institution

Digitally included poor

(2021)

% with a National ID — **81%** (1.46 Bn)

81% of DIPs have a national ID, with **78% of DIP having a digital National ID**

% with Accounts — **67%** (1.2 Bn)

2/3rd of DIP own a Bank account and National ID, thus meeting high standards of identification requirements

% who use digital payments — **32%** (580 Mn)

% who have used deposits — **26%** (470 Mn)

% who have borrowed from an FSP — **12%** (216 Mn)

- 33% (i.e., 600 Mn) of DIPs do not have an account
- Bringing them into the financial system would reduce financial exclusion by nearly 50% from 1.4 Bn people to 800 Mn

There is an opportunity to leverage this data to enable service providers to offer more and better financial services to more poor and vulnerable people

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Sources: World Bank database: Population estimation; World Bank database: Poverty intelligence; Global Findex 2017 & 2021; World Bank Database; Pew Research: Mobile Connectivity and Internet Users

Message 2: Gender differences exist in digital access and, as a result, in the generation of data trails

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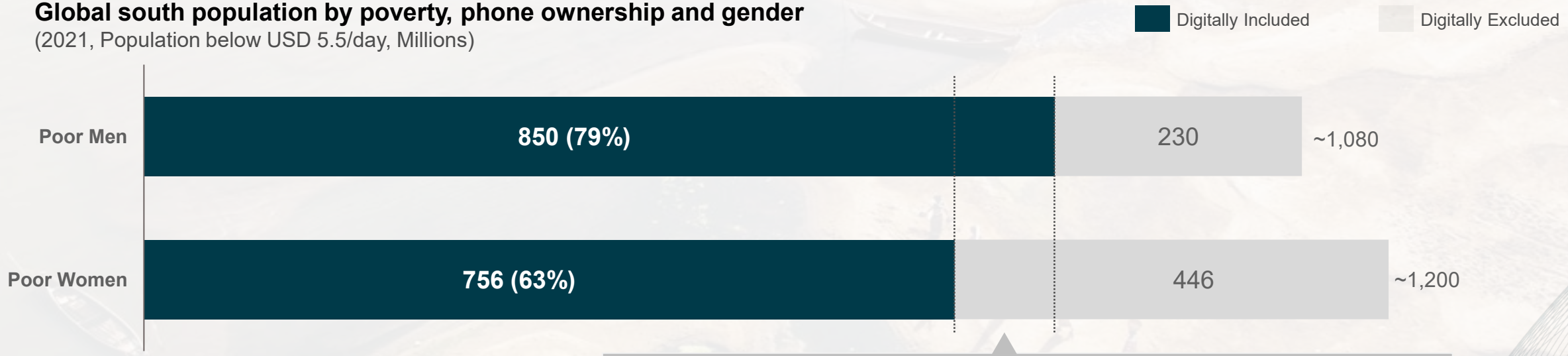
63% poor women (compared to 79% men) in eligible countries own a phone

Global south population by poverty, phone ownership and gender
(2021, Population below USD 5.5/day, Millions)



To close the gender gap of 16 p.p. between poor women and men,
192 Mn more poor women would need to be digitally included

Women's lack of access to devices like smartphones and dependency on shared devices limits their digital footprint. For example: Women in low- and middle-income countries are 18% less likely to own a smartphone and 16% less likely to use mobile internet than men

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Sources: World Bank database: Population estimation; World Bank database: Poverty intelligence; Global Findex 2017 & 2021; World Bank Database; Pew Research: Mobile Connectivity and Internet Users

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Message 3: There are some patterns in the types of data trails being generated by smartphone users

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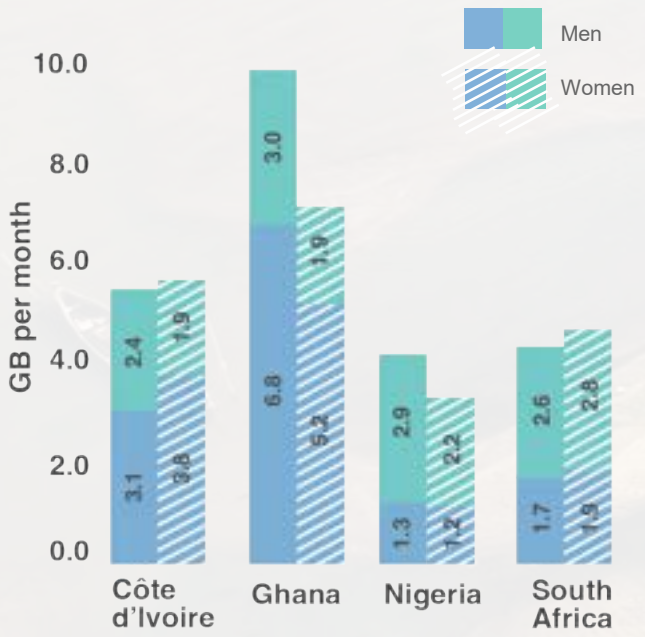
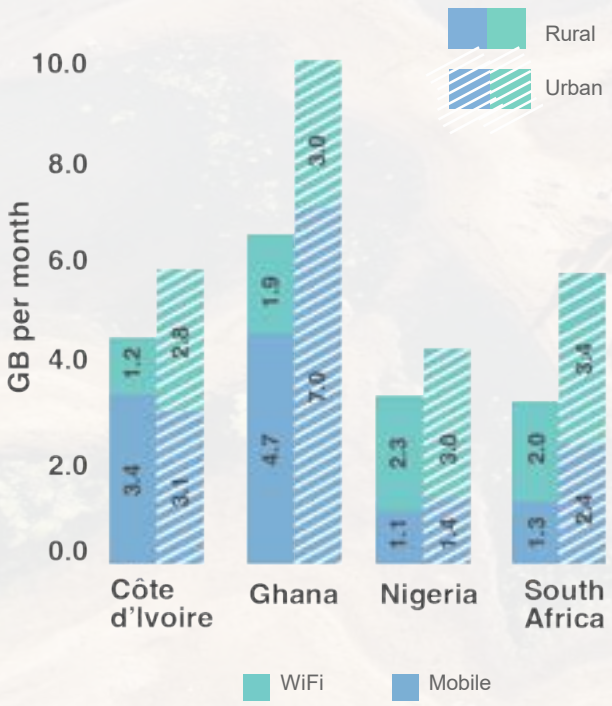
Data trails of smartphone users vary across markets as well as by gender, locality, and age

Data consumption 2019-2020

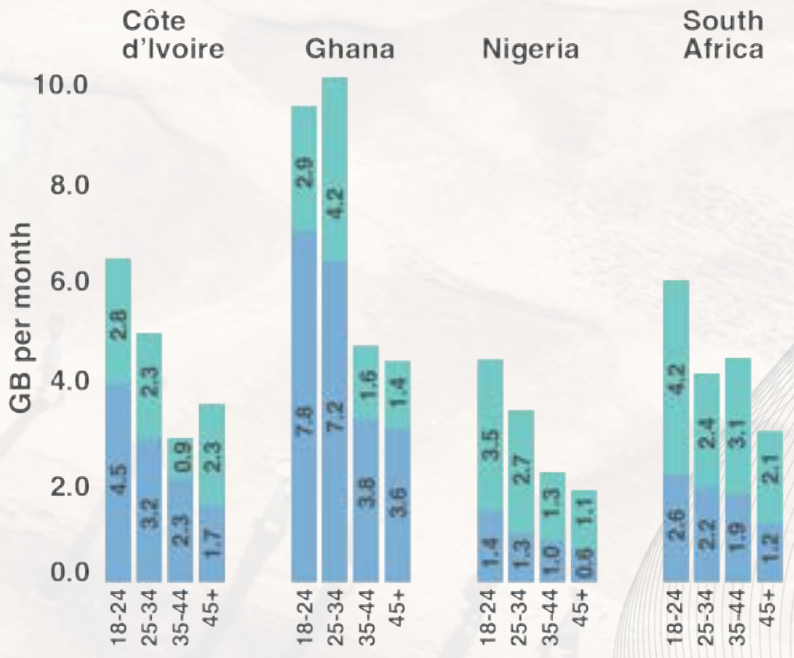
By gender



By locality



By age



- Men and urban dwellers consumed significantly more data per month. Across all markets, individuals consumed significant amounts of data over WiFi connections, with variances on the percentage of data consumed over WiFi by market and by segment
- Youth (ages 18-24) consume the most amount of data relative to other age groups. This is not surprising as this age group are digital natives

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Source: CGAP - Caribou Digital Research Study

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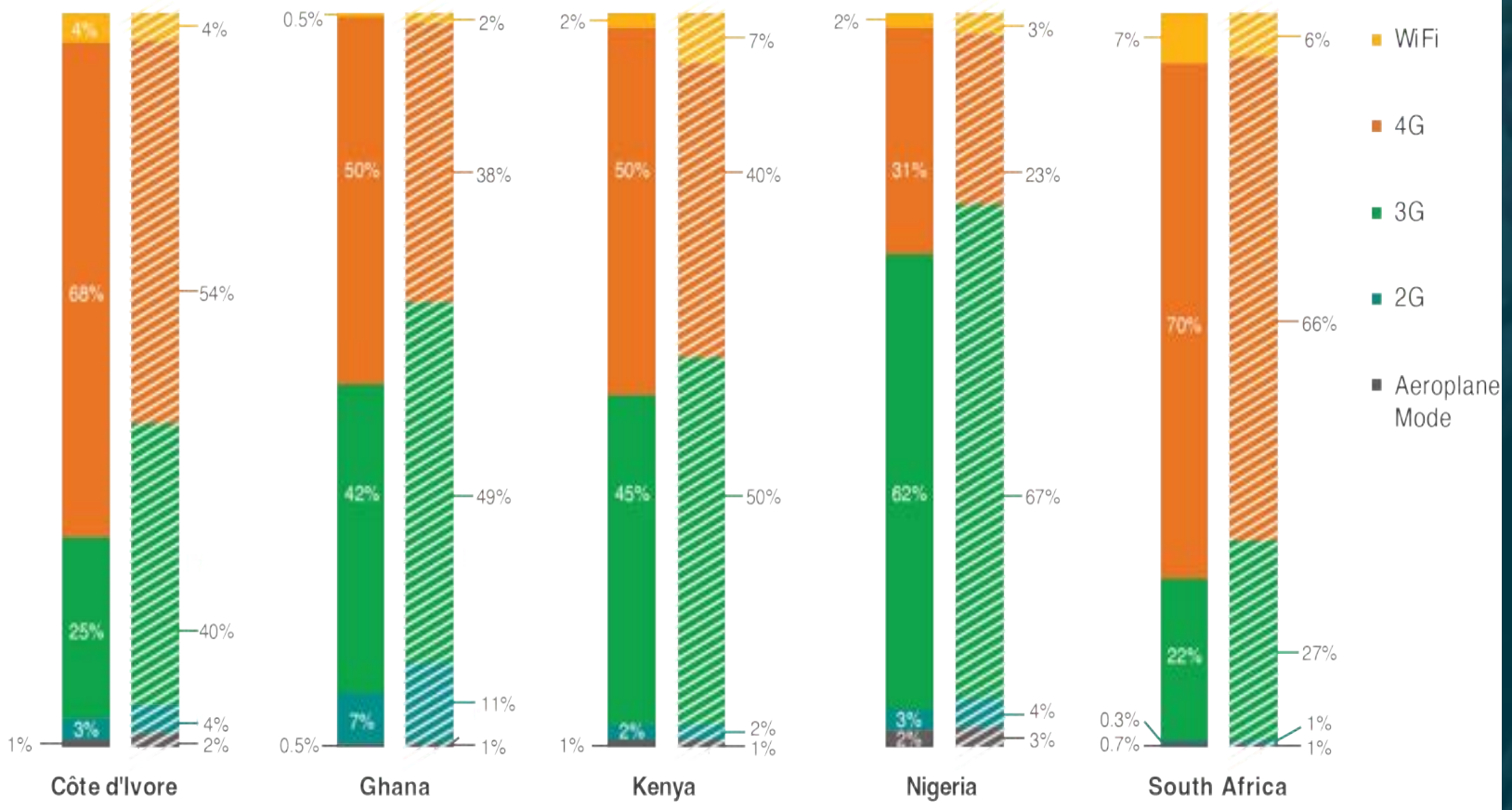
Across markets, men typically spend more time connected to higher quality networks than women

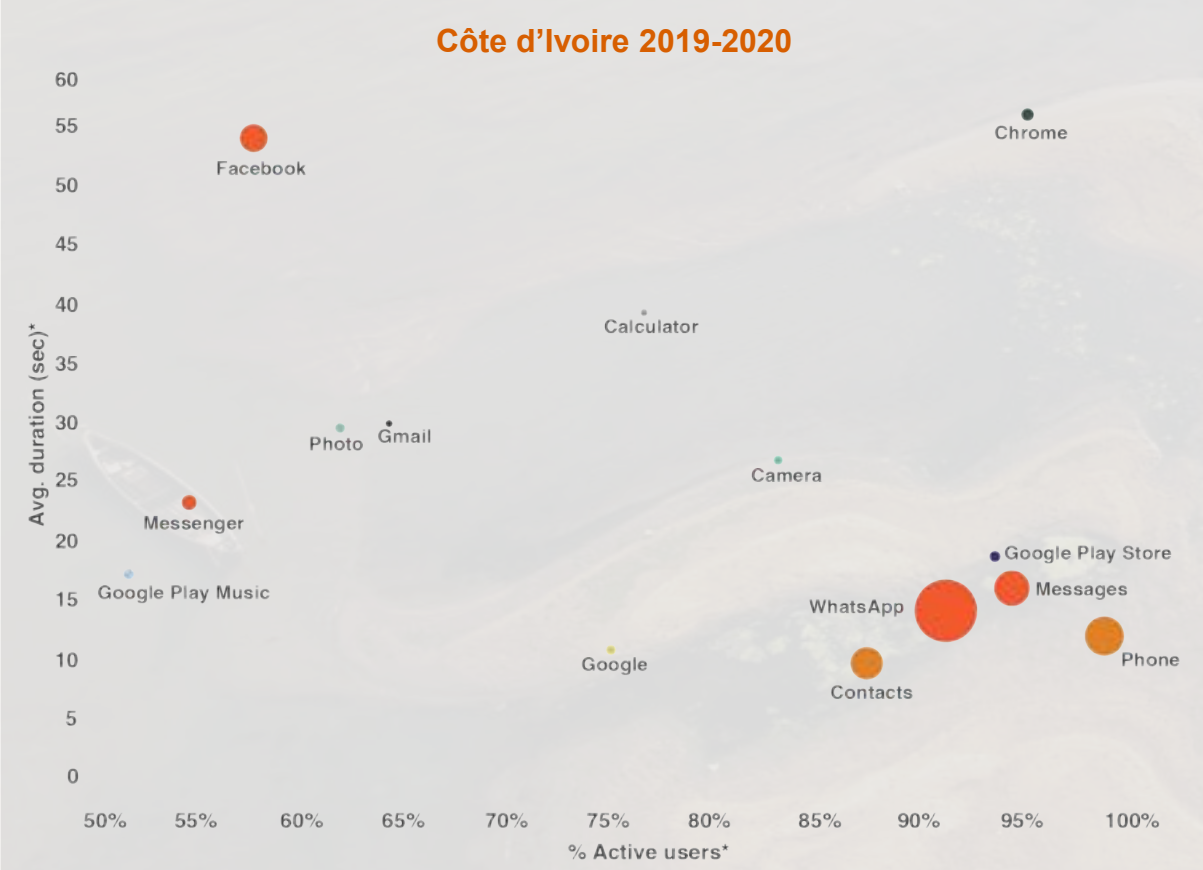
Time spent connected to each network modality, by gender: 2019-2020

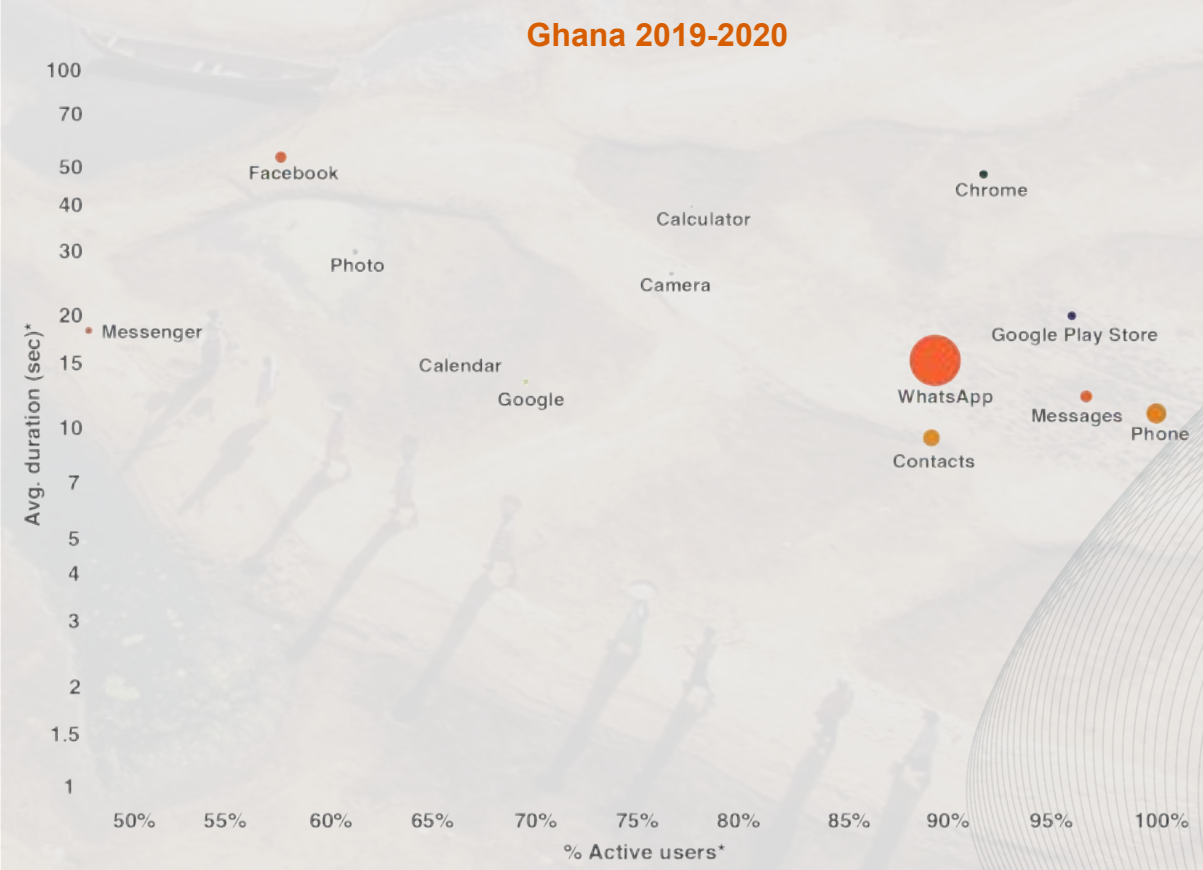


Source: CGAP - Caribou Digital Research Study

Women spending less time on higher quality networks could indicate that, on average, women have lower quality handsets than men

Most app data is controlled by Meta (primarily driven by WhatsApp but also Facebook)





- In addition to phone calls, nearly all users in Cote d'Ivoire and Ghana use SMS messaging, WhatsApp, and Google's Chrome browser, with very high frequency usage of WhatsApp
- Facebook and WhatsApp could be effective channels for lending / insurance products or financial literacy communication

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Note: 1. Size of bubble indicates frequency of use; Source: CGAP - Caribou Digital Research Study

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Message 4: Telecom data (data on airtime tops, P2P transactions) is the most widely available digital data trail from smartphones; data on loans and savings is limited

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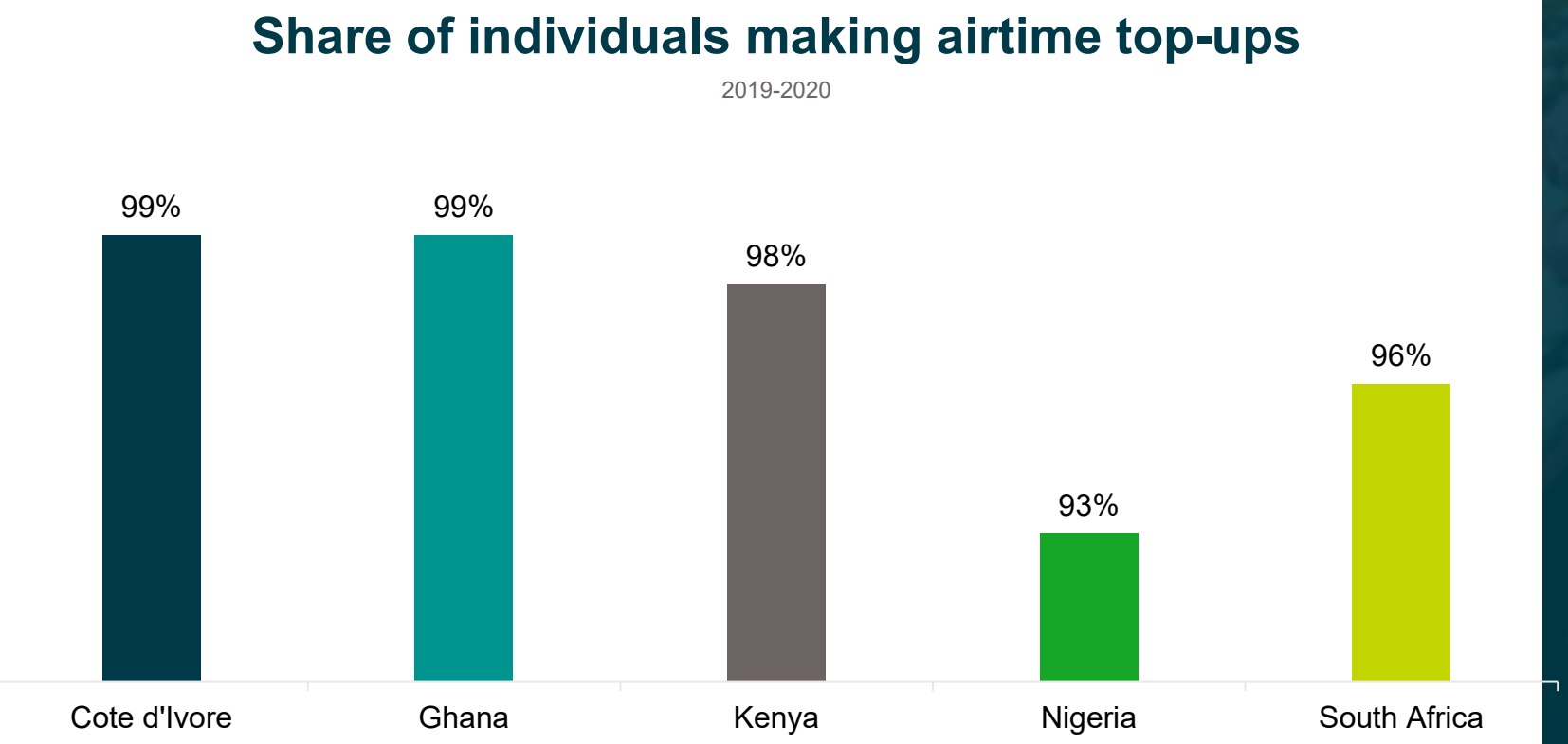
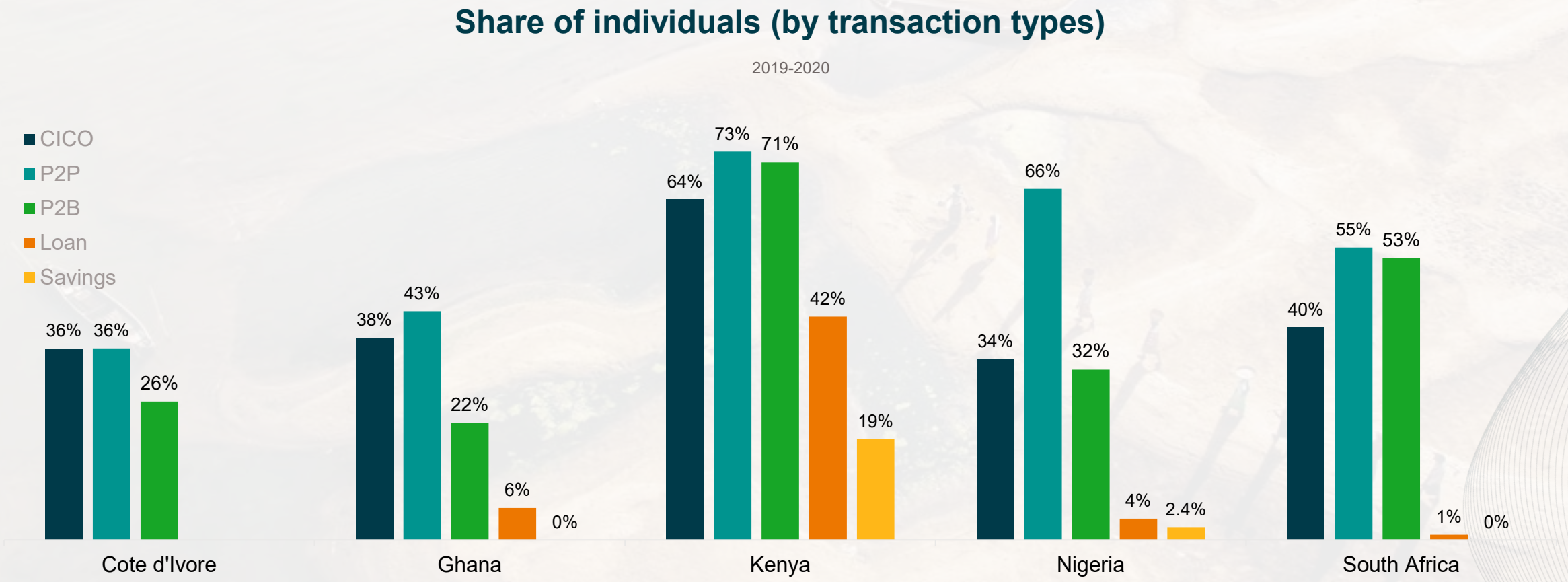
Airtime top-ups have widespread availability across markets and are valuable data trails



For women who have digital access (when gaps in digital access disappear), there are some important similarities in the data trails being generated by men and women

CGAP Source: CGAP - Caribou Digital Research Study

About half the smartphone users are making financial transactions beyond top-ups, ranging from 36% in Cote d'Ivoire to 73% in Kenya



- P2P is the most common use (after top-ups) across markets, loans and savings are very low across

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Source: CGAP - Caribou Digital Research Study

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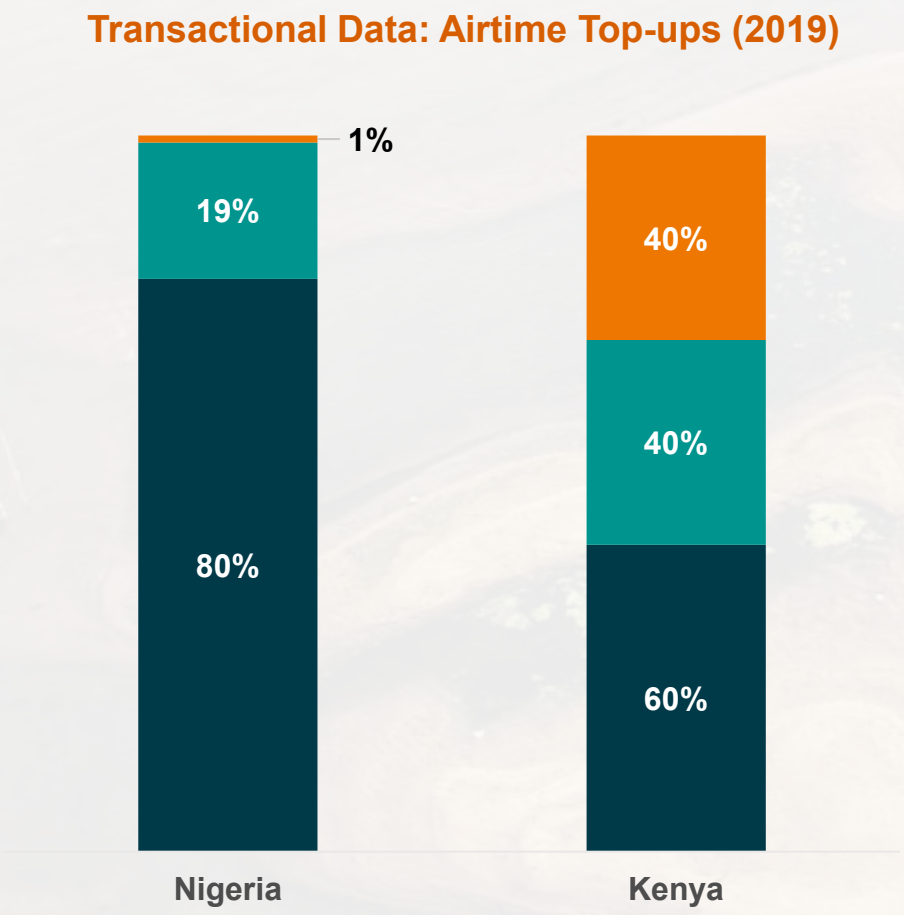
Most transactional data for smartphone users is concentrated in MNOs and banks



MNO
Bank
Fintech
Others

CGAP Source: CGAP - Caribou Digital Research Study

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Insights and Emerging Opportunities

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Our Research Confirms (1/2)

The Digitally Included Poor (DIP) are a growing segment

- By 2025, the DIP could include 2 Bn people, primarily owing to growth in phone penetration

Gender differences exist in digital access and as a result, in the generation of data trails

- Women's lack of access to devices like smartphones and dependency on shared devices limits their digital footprint. For example: Women in the global south are 18 p.p. less likely to own a smartphone than men.

For women who have digital access (when gaps in digital access disappear), there are some important similarities in the data trails being generated by men and women

- Across five markets in Sub-Saharan Africa, over 90% women and men who are smartphone users generate data on airtime tops

Telecom data (data on airtime tops, P2P transactions) is the most widely available digital data trail of the DIP but there are other important sources of data being generated as well

- The other important types of data include cellular, demographic, individual identifier, personal network, and location
- Data on the DIP largely sits with government registries, banks, and telecom and utility providers

Our Research Confirms (2/2)

Smartphones users generate a very small data footprint *in low- and middle-income markets. However, there are some patterns in the types of data trails being generated by smartphone users*

- Airtime tops are the most common data trails being generated across markets, followed by P2P transactions
- Data generated on loans and savings is very limited with variations across markets

The DIP are currently being underserved by FSPs, and this could be addressed by leveraging their digital data. Roughly 81% of the DIP have a national ID (roughly 1.46 Bn individuals)

- FSPs can leverage the digital footprint offer more and better services including accounts, remittances, credit, savings

Offline channels like USSD generate data that could help FSPs better understand the financial behavior of the DIP who use feature phones

- FSPs could use MNO transaction data and handset data like call and message history to understand the behavior of low-income individuals. For instance, JUMO in Africa is using MNO data in credit scoring models for USSD users

Meta (including Facebook, WhatsApp, Instagram) controls a large part of the app data that is being generated through smartphones in low- and middle-income markets

- As smartphone adoption picks up and the smartphone data footprint expands, Facebook and WhatsApp could be important data sources and effective channels for lending/ selling insurance products or financial literacy communication

Women who are smartphone users have higher median total value of monthly airtime top-ups than men

- FSPs could take this into consideration while they design products for and deliver to women since airtime top-ups are an important source of data

We have identified potential areas for action or further research

Researchers

- Commission more research at the country level (and disaggregated by gender) to understand how the digital footprint of low-income individuals is evolving, specifically data trails generated from smartphones
- Understand how customer-level data can be integrated with public data sources to expand the richness of data trails
- Understand how data sharing models like Open Banking are enabling FSPs to cater to low-income customers

FSPs

- Leverage findings of this study to expand the types and sources of data being leveraged in product design and delivery, especially for low-income customers
- As the digital footprint of low-income individuals expands and data sharing models evolve, explore new and innovative use cases of data that go beyond credit. For example: overdraft protection, personal financial management, enhanced KYC processes

Funders

- Support FSPs that are developing business models which rely on digital data trails such as airtime top-up data, P2P transaction data, social media data since this data is being generated by low-income customers
- Support country-level research on the digital footprint of low-income individuals

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Panel Discussion

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Meet The Panelists

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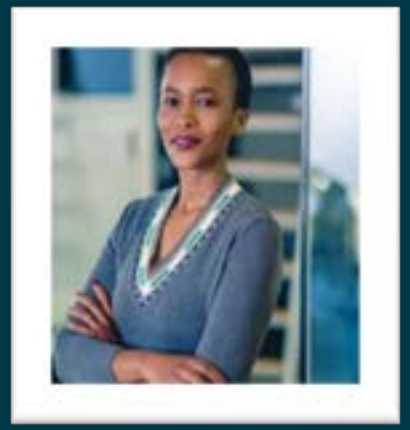

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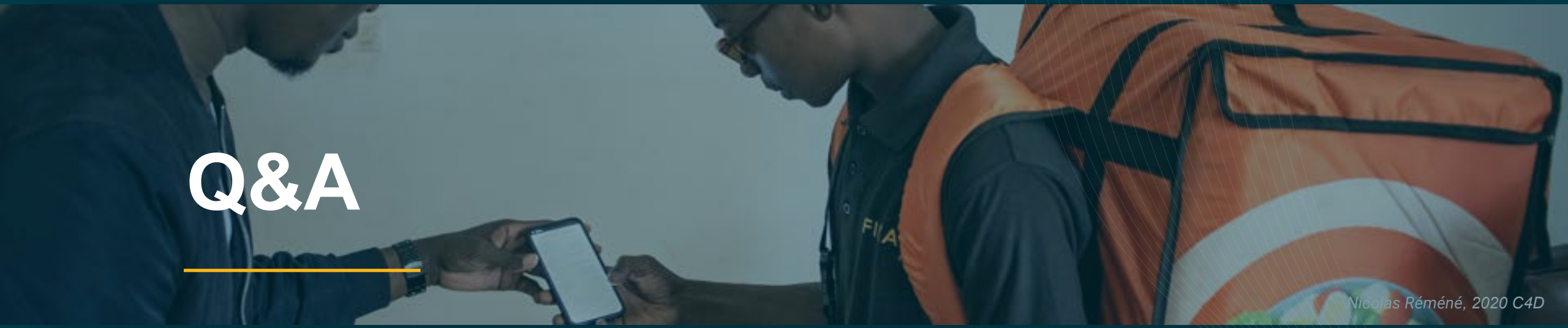
Q&A



Nicolas Réméné, 2020 C4D

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