

UNIVERSAL BASIC INTERNET

CHRISTOPH STORK

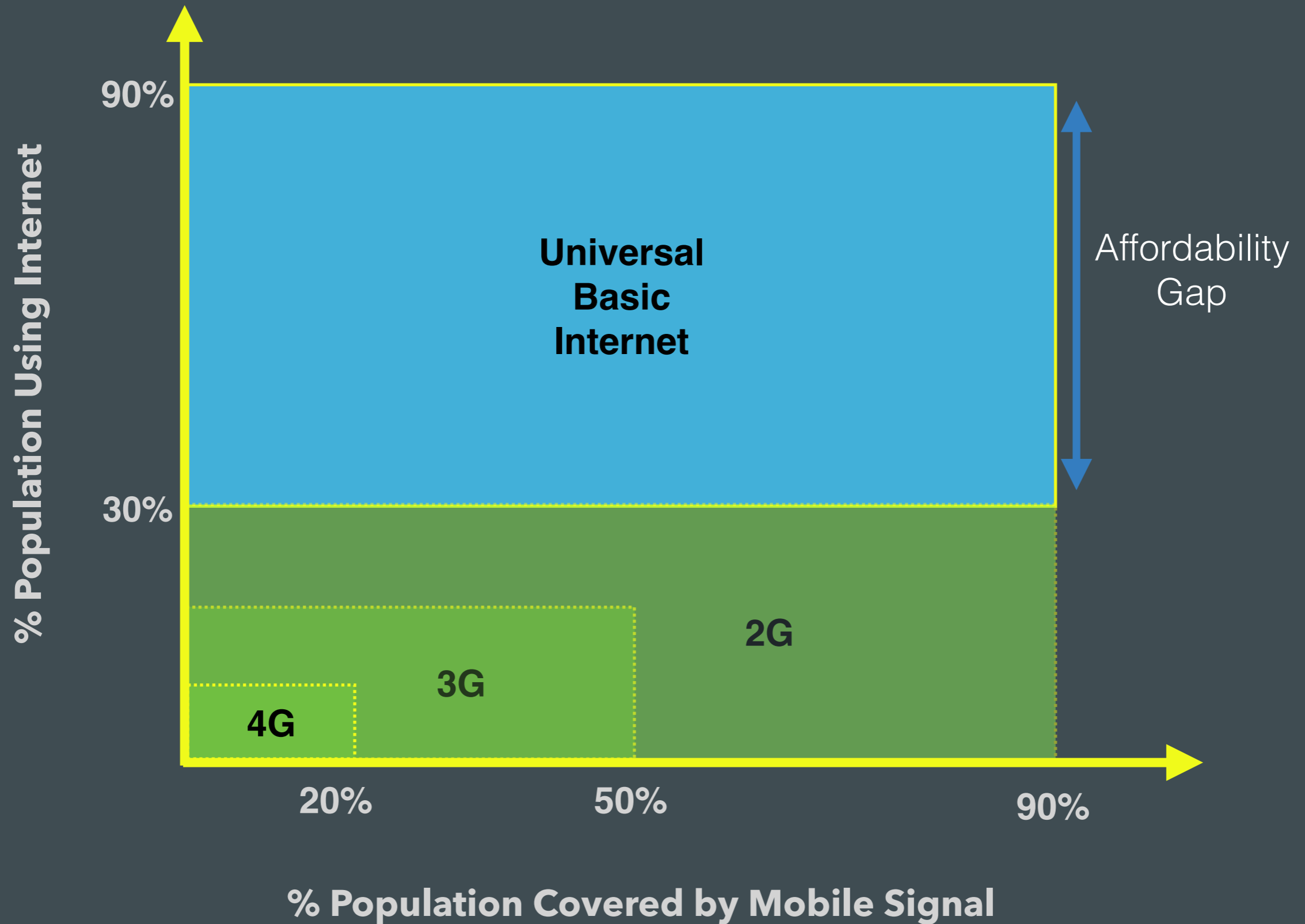
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FREEMIUM INTERNET: UNIVERSAL BASIC INTERNET



**POPULATION
COVERAGE
EXCEEDS
INTERNET
USERS
3 TO 1**

Africa Total Population
1.2 Billion

960 Million
people covered by 2G
signal in Africa

310 Million
Internet Users
in Africa

**/WE WANT TO TURN
ON THE INTERNET
FOR EVERYONE WITH
A DATA-CAPABLE
PHONE**

/ FREEMIUM INTERNET

- Business model where some access is free and better access costs money
- 64kbps free - higher speeds chargeable
- Too slow for a regular user
- Will not lead to lower data use of regular users
- Enough for basic IP based communication e-health, e-gov and disease and disaster warning
- Enough to try the Internet without risking a bill shock

✓ Airport_Free_WiFi

Airport_Paid_Premium_WiFi



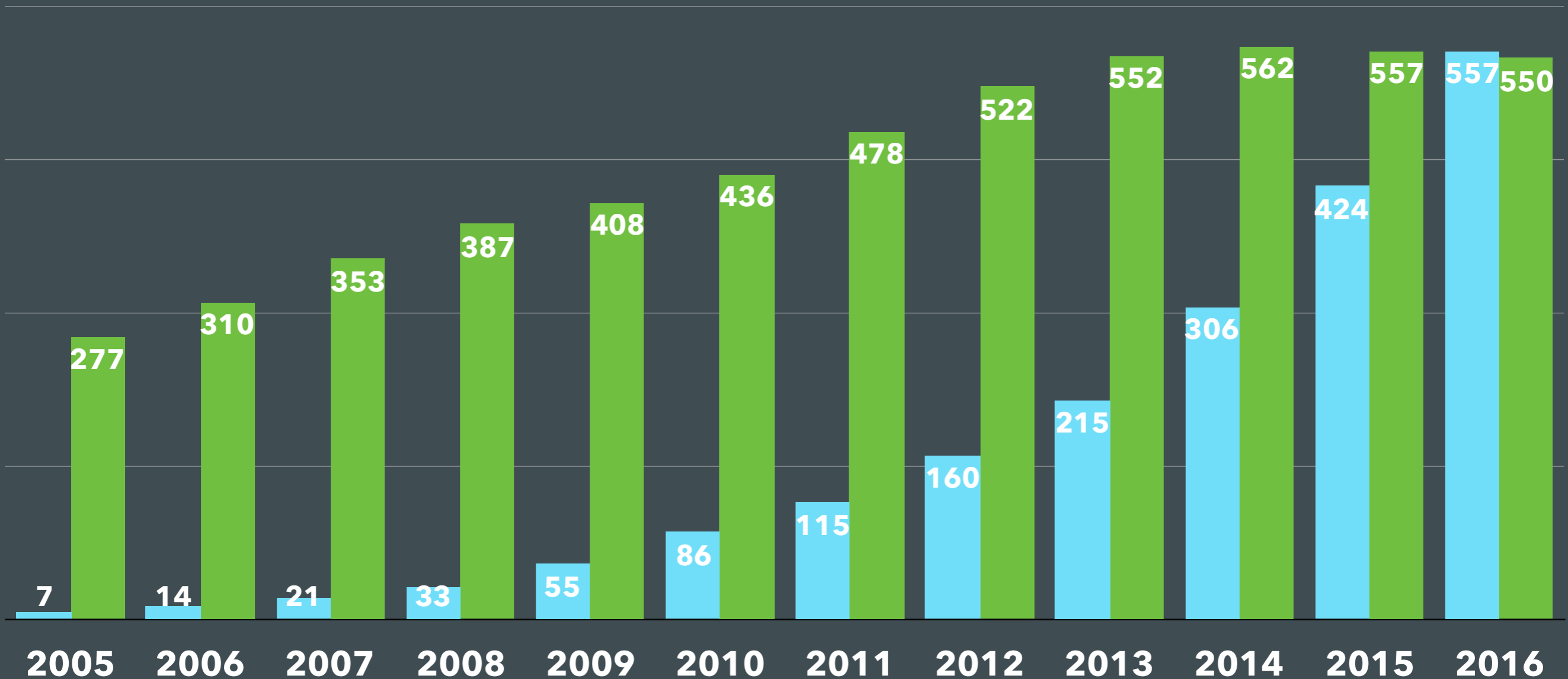
	Facebook Free Basics	Universal Basic Internet
What is free	zero rated content	Internet access
Content	controlled by Facebook	open
Speed	any	2G speeds eg up to 64 kbps
Initiated	MNO	MNO / Regulator
Defaults	Facebook	None

International traffic in billion minutes

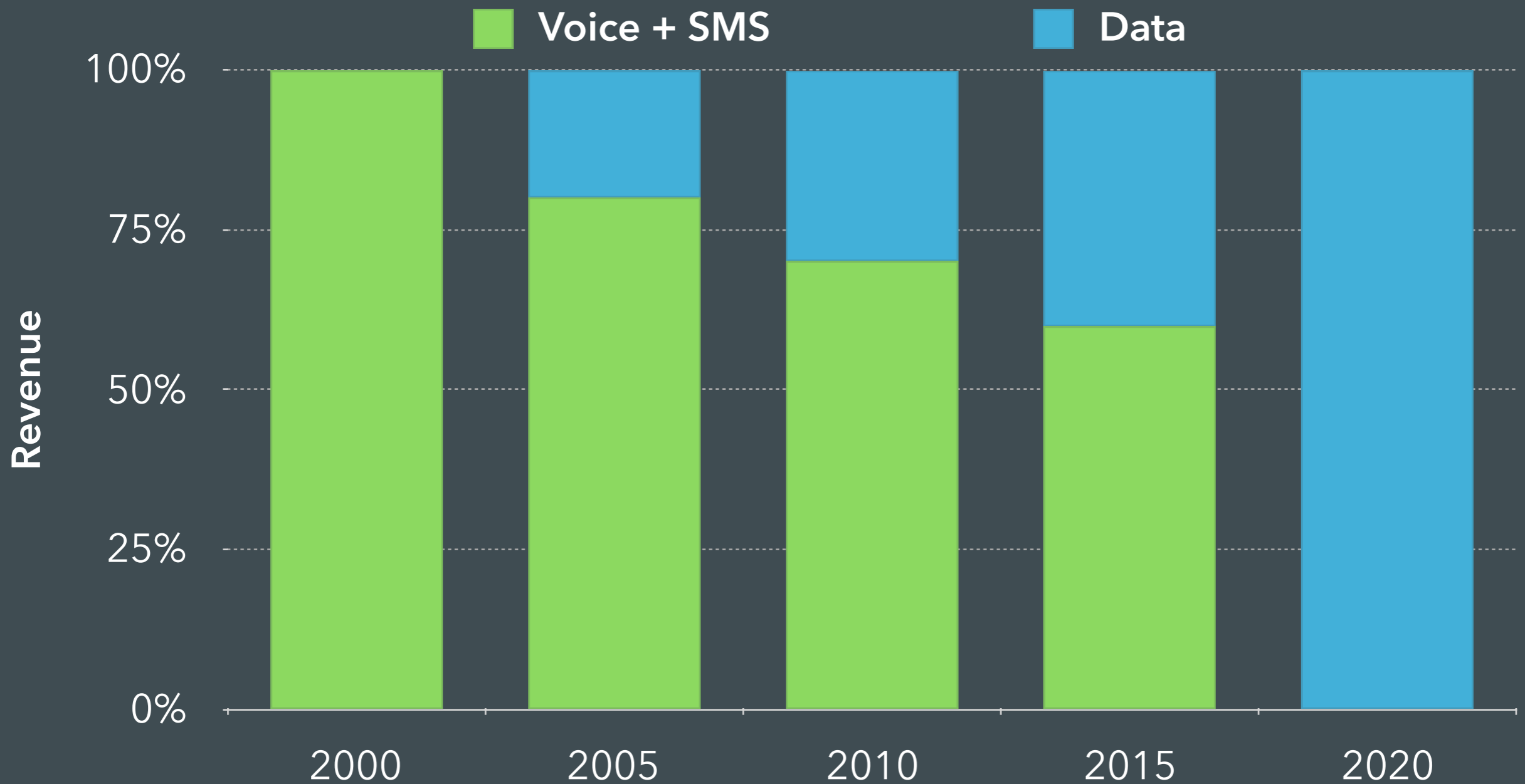
(Source: Telegeography)

OTT traffic

Carrier traffic



Retail pricing: In future only charging for data



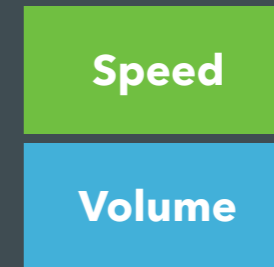
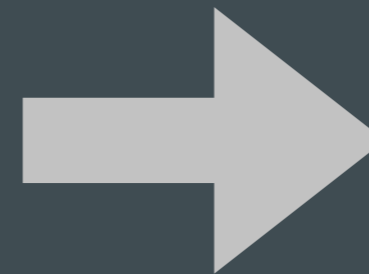
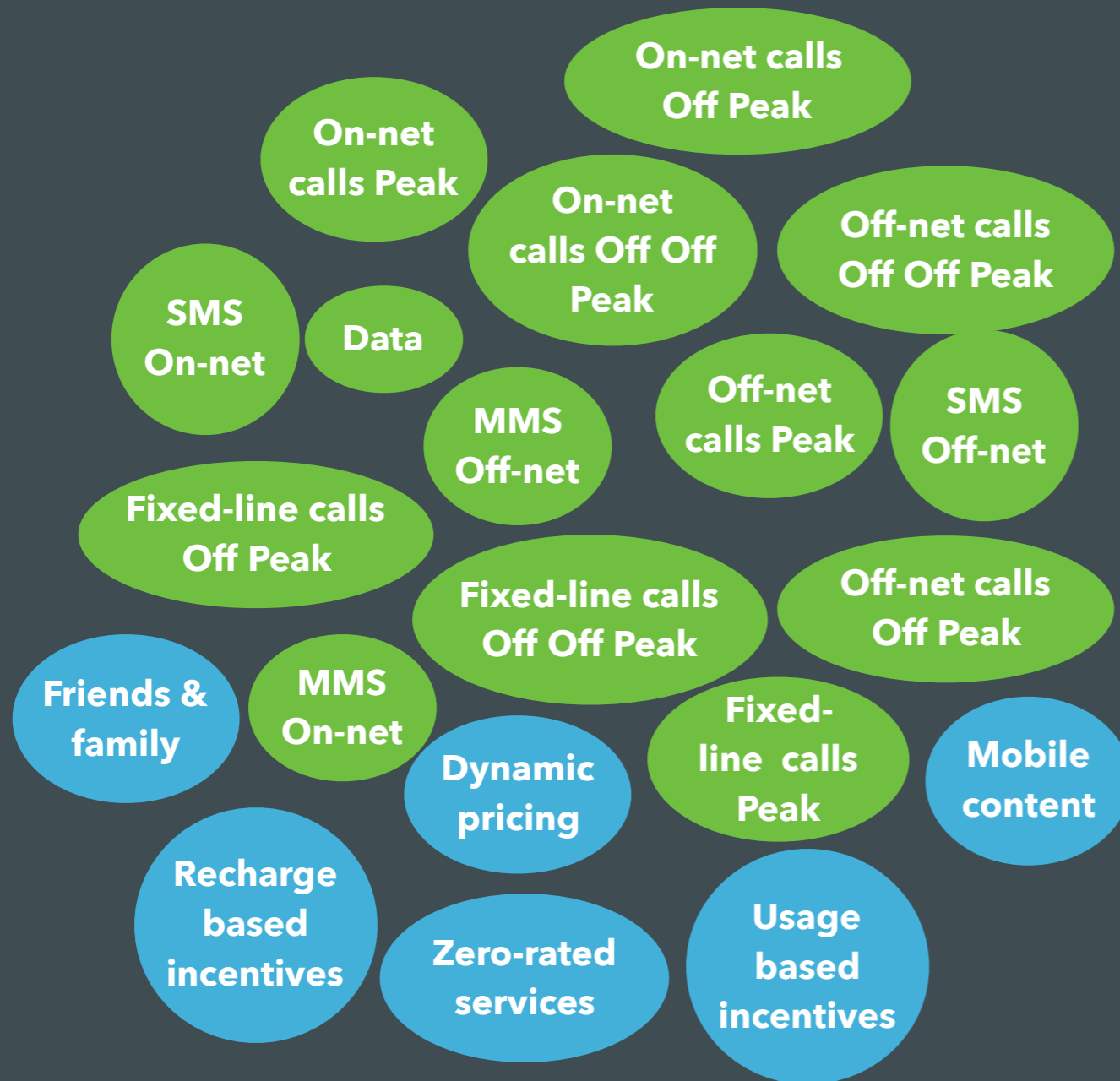
Separation of access and service platforms

Transition to a next generation business model

Item	Traditional Voice, SMS and Data business Model	Next Generation Business Model
Services	Voice, SMS, Data	Data
Billing	Detailed access and usage billing: voice, SMS, MMS, data, off-net / on-net, peak / off-peak ...	Simple access billing
Traffic Monitoring	Detailed traffic monitoring as part of the billing system	Usage monitoring limited to data use
Post paid subscribers	Detailed vetting to reduce risk of revenue loss and expenses that arise from call termination, international calls and subsidised handsets	Postpaid risk limited to one months subscription fee

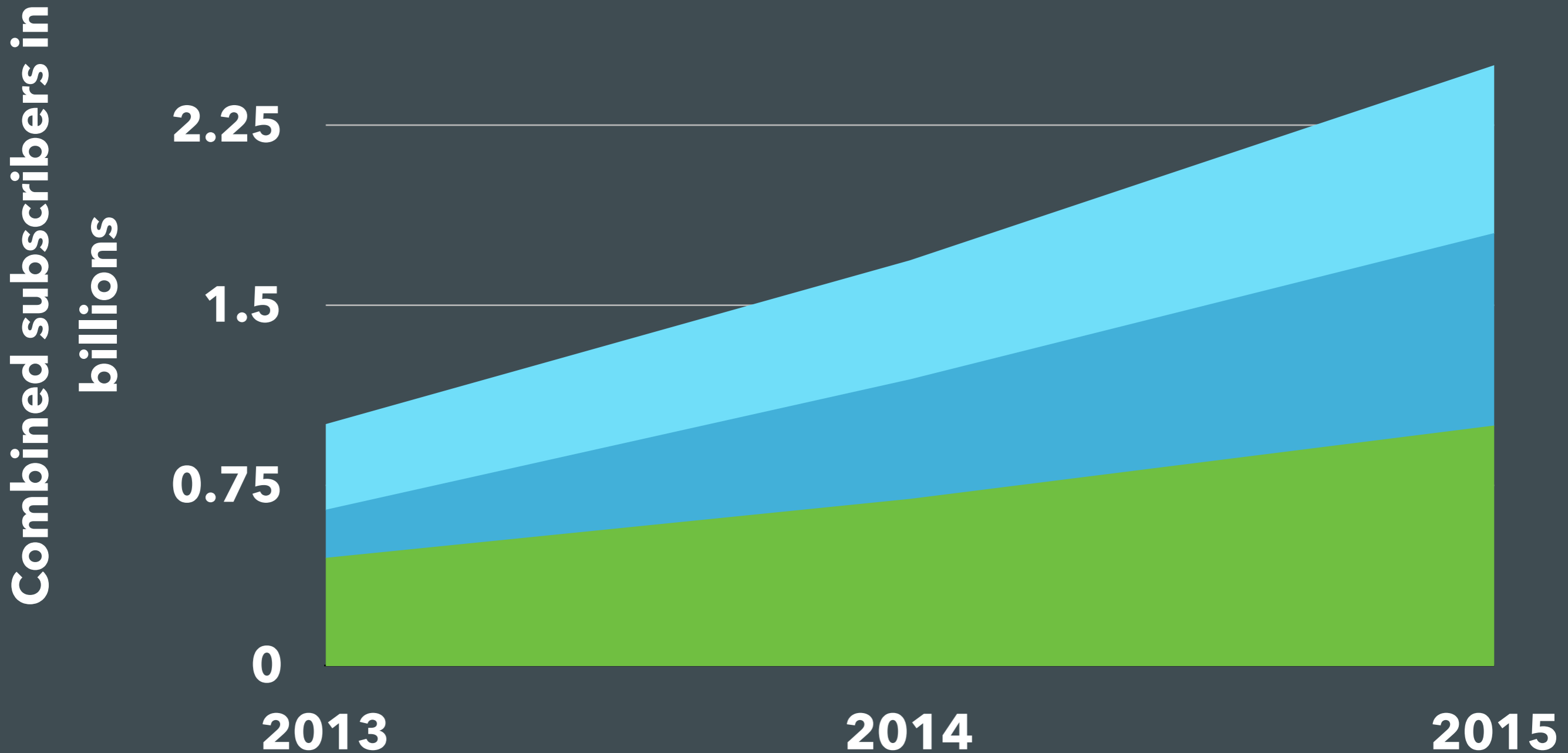
Current Business Model

New



Slow Internet is valuable

WhatsApp Facebook Messenger WeChat



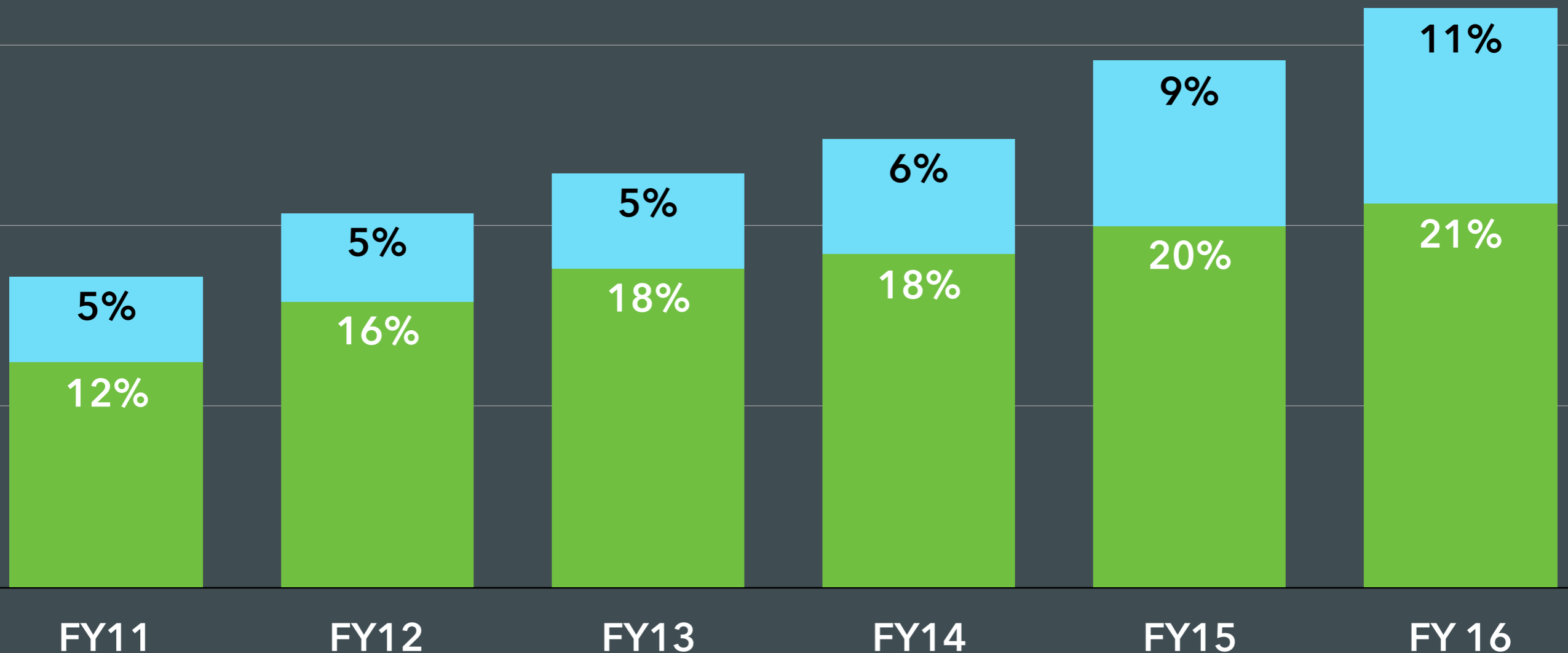
Source: Facebook and WeChat

OTTs as source of MNO revenues

	Communication OTTs	Mobile Content OTTs	Non-Telco OTTs
Description	<ul style="list-style-type: none">• VoIP• instant messaging	Audio and video by MNO or 3rd parties	Other sectors benefiting from an IP based connectivity platform
Examples	WhatsApp, FB Messenger, Twitter, Skype, WeChat	Facebook, ringtones, Youtube, Instagram	Uber, Internet of Things (IoT), e-Gov, e-Health, e-Edu, mobile money
Additional data revenues	Significant potential	Low potential (mostly zero-rated)	Modest potential
Other revenues	Low potential	Modest potential	Significant potential

Safaricom's M-Pesa and mobile data revenues as share of total revenues

■ M-Pesa revenue as share of total ■ Mobile data revenue as share of total



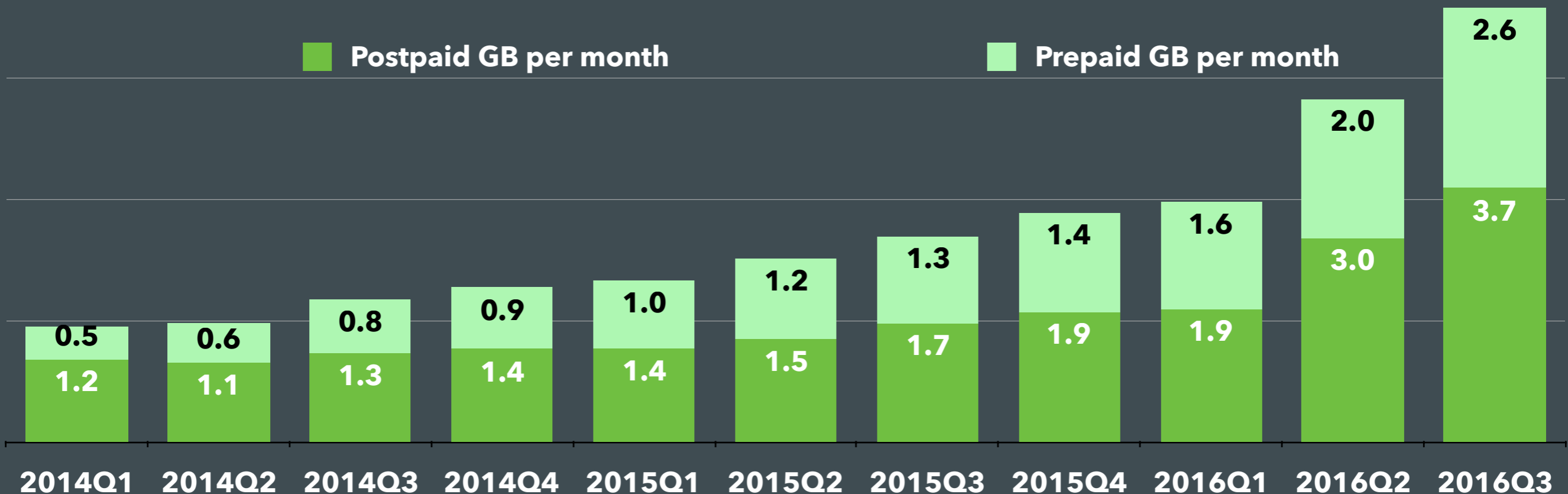
FREEMIUM INTERNET TODAY

/ JIO - INDIA

- Introductory free data traffic offers in India have pushed up global traffic noticeably”
Ericsson Mobility Report 2017
- While the Jio offer was only introductory, it demonstrated an important point: Free Slow Internet significantly drives up user numbers and data traffic

MAXIS - MALAYSIA

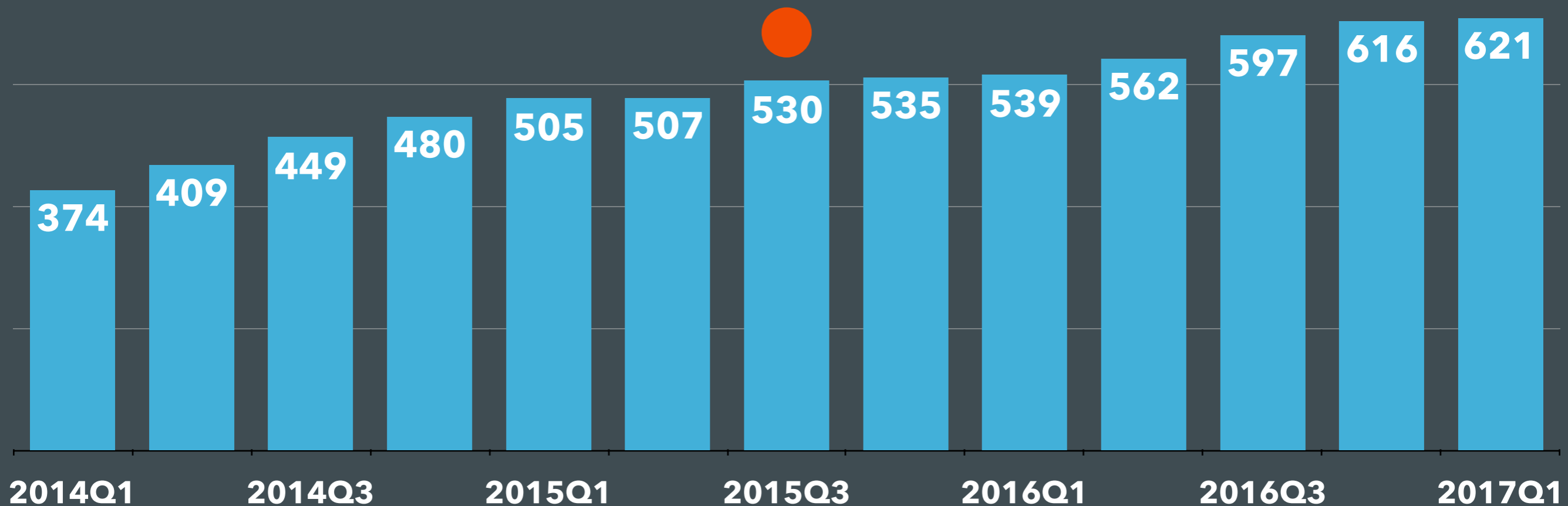
- First to offer Freemium Internet in 2013
- Prepaid and postpaid data use per subscriber in GB per month has steadily increased over the last 3 years
- EBITDA margin of 52.8% in FY 2016
- All of Maxis's competitors followed suit by Q4 2016



MAXIS growth in data use per subscriber in GB per month

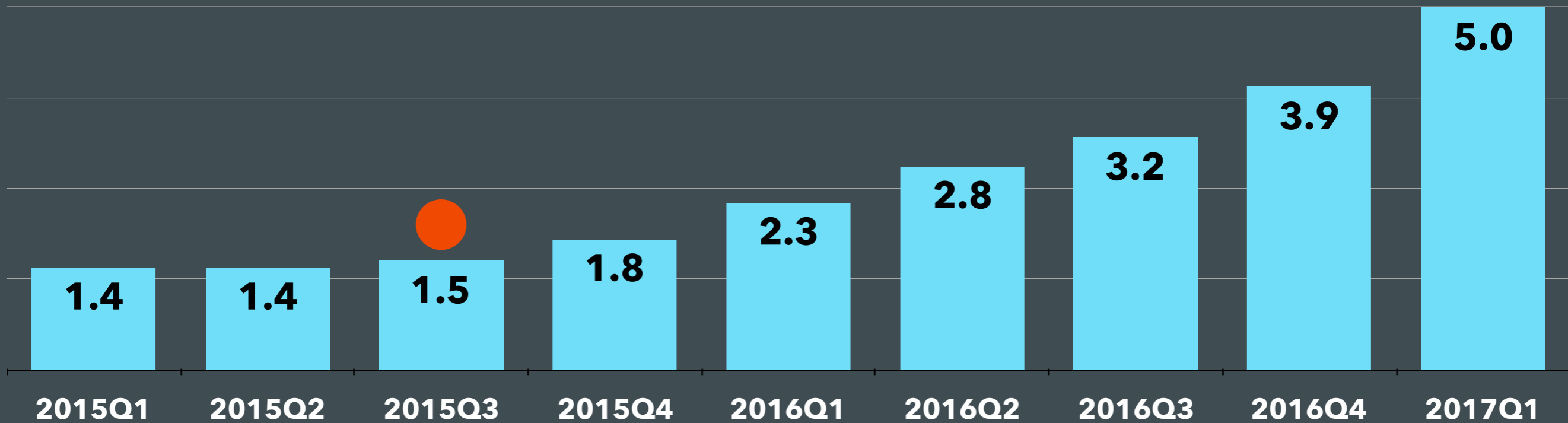
DIGI - MALAYSIA

- Digi along launched Free Basic Internet in Q3 of 2015
- Internet data revenues have grown by 17% since



Digi Internet data revenues in RM million

DIGI DATA USAGE PER DATA SUBSCRIBER PER MONTH IN GB



- Data usage per subscriber has grown over the same time period

CELCOM - MALAYSIA

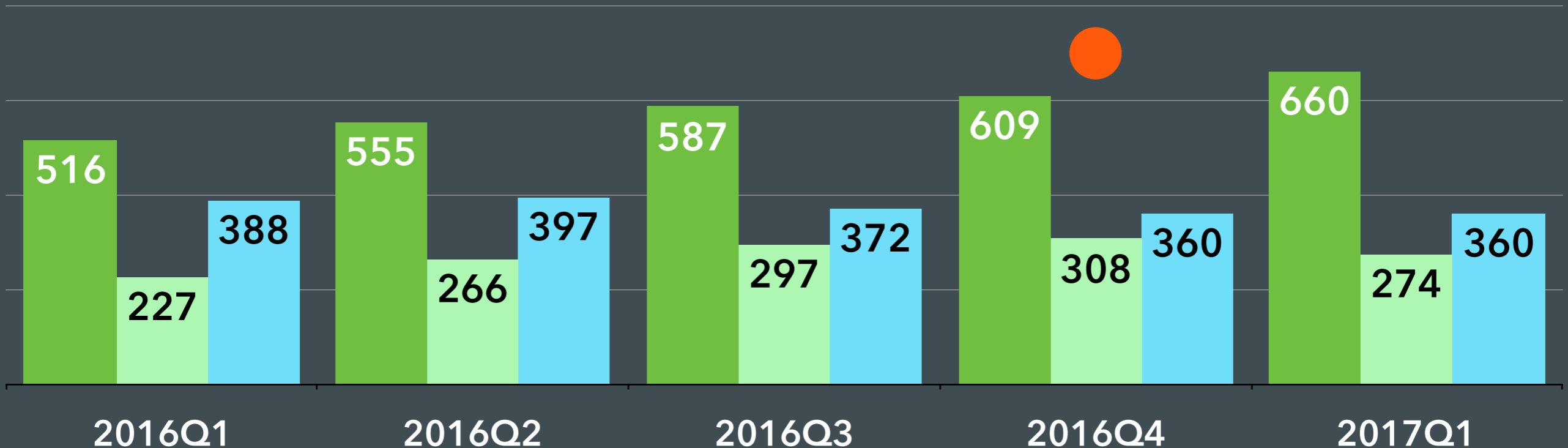
- Lost 1.7 million subscribers in 2016
- Lead to the introduction of Free Basic Internet in December 2016
- Data revenues have grown 8% and network costs declined since then
- The expectation that Free Basic Internet would drive up network costs and lower data revenues are unfounded

■ Data revenues (Internet) RM m

■ Network Cost RM m

● Launch of Freemium Internet

■ Direct Expenses RM m



**/UNIVERSAL BASIC INTERNET
WILL BE THE NEXT HYGIENE
FACTOR:**

**IF YOU DON'T HAVE IT,
SUBSCRIBERS WILL MOVE
TO OTHER OPERATORS**

INCENTIVE FRAMEWORK

Implementation profiles

Strategies	Mostly 2.5G & poor network quality	Mostly 2.5G but data channel is under-utilised	Mostly 3G+
Commercial Viability	No	Potentially	Yes
Strategy 1: Drive data demand by getting all prepaid customers to	No	Yes	Yes
Strategy 2: OTTs will increase data	No	Yes	Yes
Strategy 3: Utilise 2G capacity for	No	Yes	Yes
Strategy 4: Drive non-ICT value (mobile money)	Yes	Yes	Yes

/REDUCED USF FEE

- USF levies may be reduced or waived for MNOs offering Freemium Internet
- Regulatory Impact: Lower USF revenues, which may be difficult to implement if controlled by treasury and not the regulator
- MNO Incentive: Direct monetary benefit



/DEDICATED SPECTRUM

- Improvements in spectrum management can make valuable 4G spectrum available in selected parts of the country
- No significant expense to the regulator
- MNOs hoard spectrum to prevent other operators from using it. Shift to 4G and 5G means that operators need new spectrum ranges, MNOs will hence be open to a dialogue about a new spectrum regime



REDUCED LICENCE FEES

- Operators that offer Freemium Internet could be offered a lower service licence fee
- Regulators are unlikely to go this route as it reduces their budgets and therefore power and influence
- Direct monetary benefit to MNOs



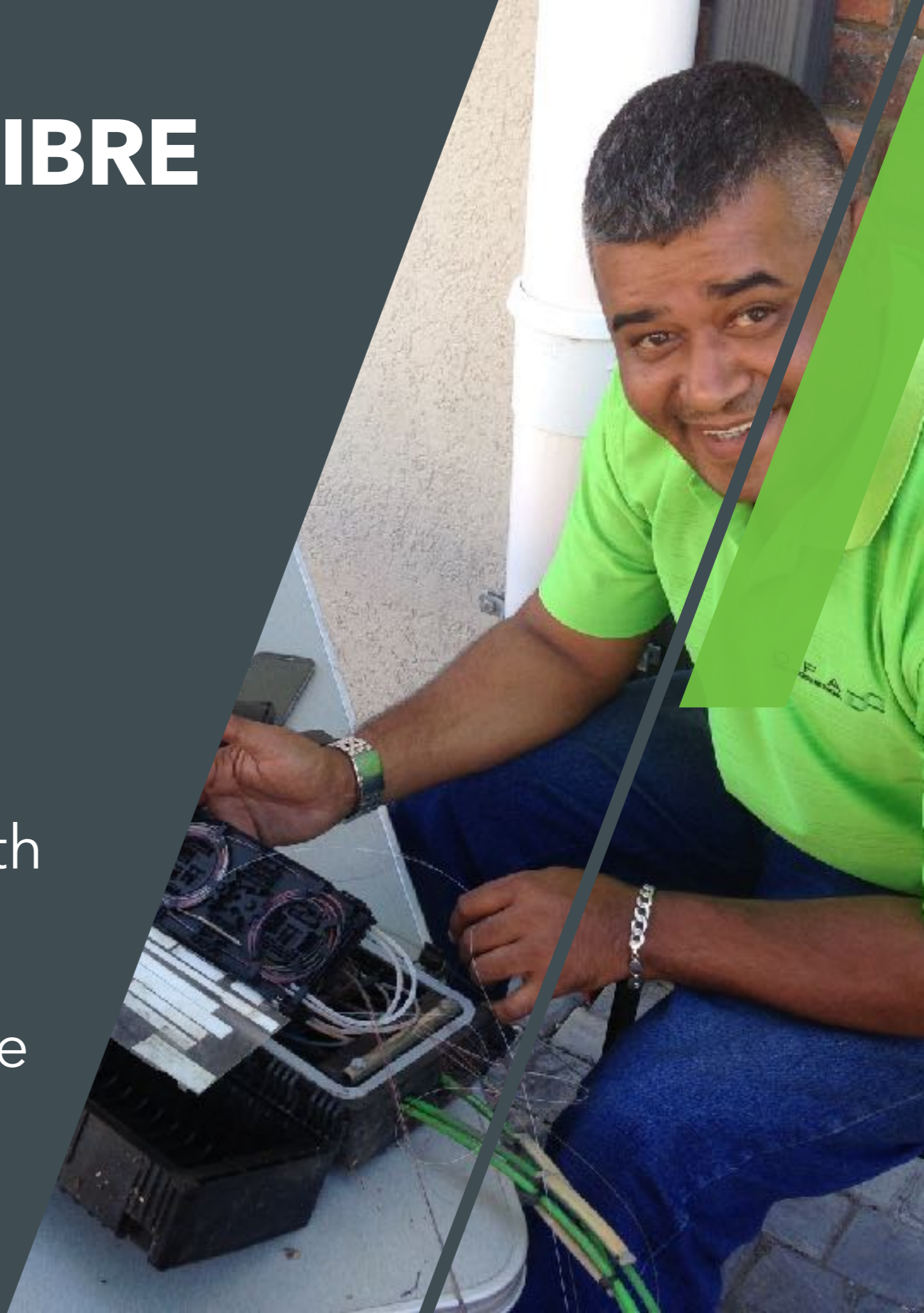
FREEMIUM INTERNET LICENCES

- Separate new licences including spectrum and rollout obligations with condition to offer Freemium Internet
- The regulatory burden is the same as for any other new licence
- The New MNO would be limited to the next generation business model strategy but could immediately plan a mix of 4G and Wifi networks



ESTABLISHING FIBRE BACKHAUL

- Many 2G base stations have insufficient data backhaul for 3G or 4G
- Regulator has several intervention points but needs to co-ordinate with other entities
- Allows MNOs to increase the revenue base of existing base stations



600M

More Africans could be using Internet

UAS

Universal Service mostly a question of business model

MNOs

Freemium Internet makes business sense

REVENUE

Helps gain new data subscribers

VOLUME

Pushes data volume

TRANSITION

Towards an IP-only business model

**/CONNECTING THE
NEXT BILLION MAKES
BUSINESS SENSE**

/RESEARCH ICT SOLUTIONS



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