

POPULATION COVERAGE EXCEEDS INTERNET USERS 3 TO 1

Africa Total Population

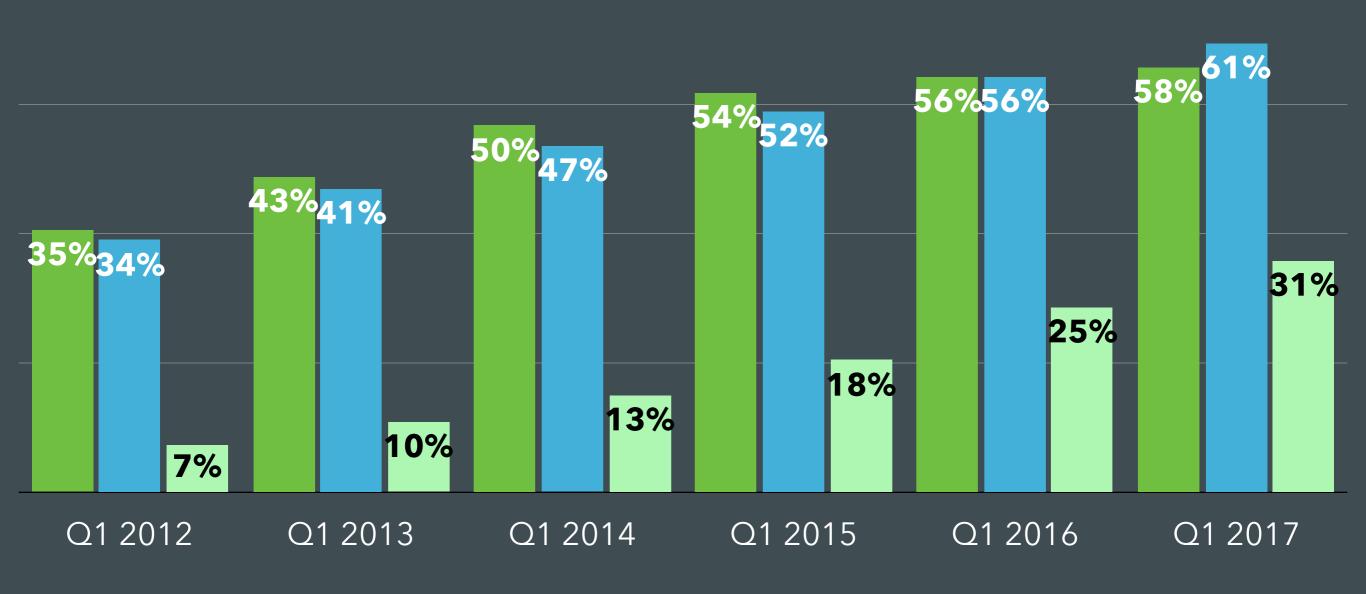
1.2 Billion

960 Millionpeople covered by 2G
Signal in Africa

310 Million Internet Users in Africa

Mobile Broadband Stats (Source GSMA)

- 3G Network population coverage
- % unique Mobile Internet subscribers
- % of smartphones among active connections

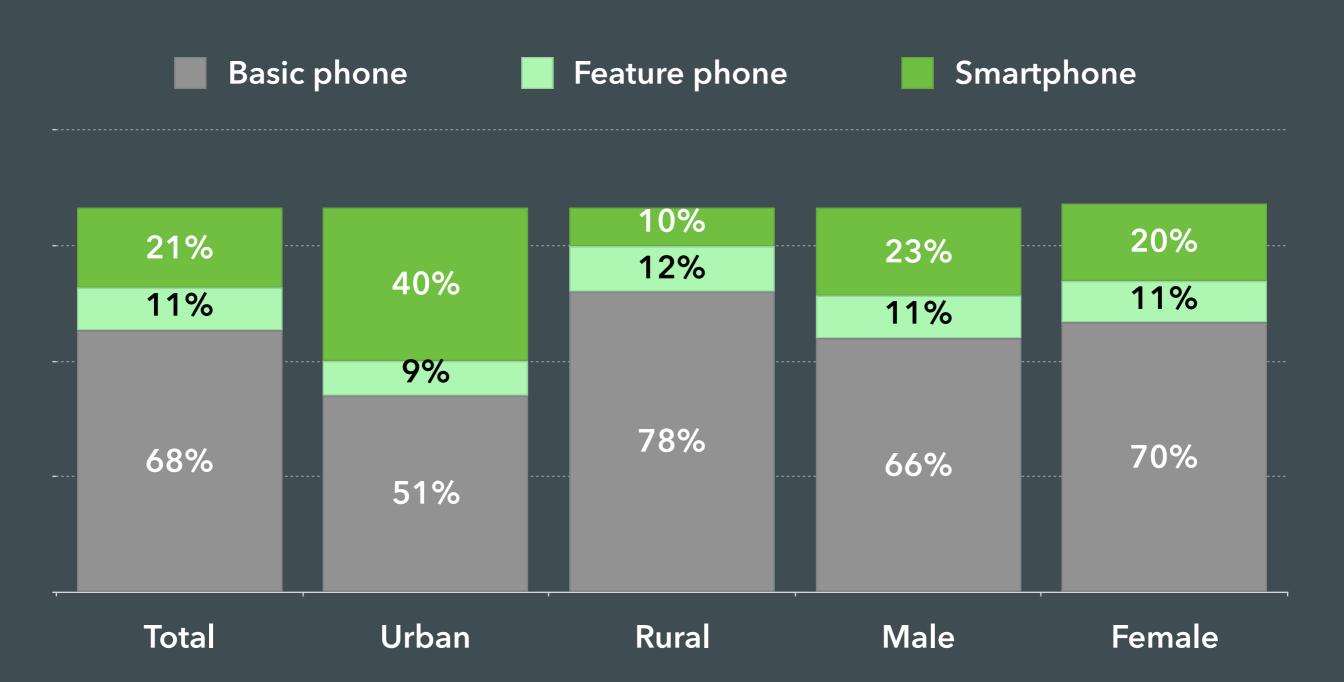


Research ICT Africa

Tanzania 2017: Nationally representative household survey

Individuals 15+	owning a mobile phone	knowing what the internet is	using the internet	using social media
Tanzania	57.0%	44.6%	29.8%	11.9%
Male	62.7%	51.3%	31.5%	14.3%
Female	52.0%	38.7%	27.8%	9.8%
Urban	72.6%	59.2%	55.4%	28.9%
Rural	50.5%	38.6%	13.6%	4.8%

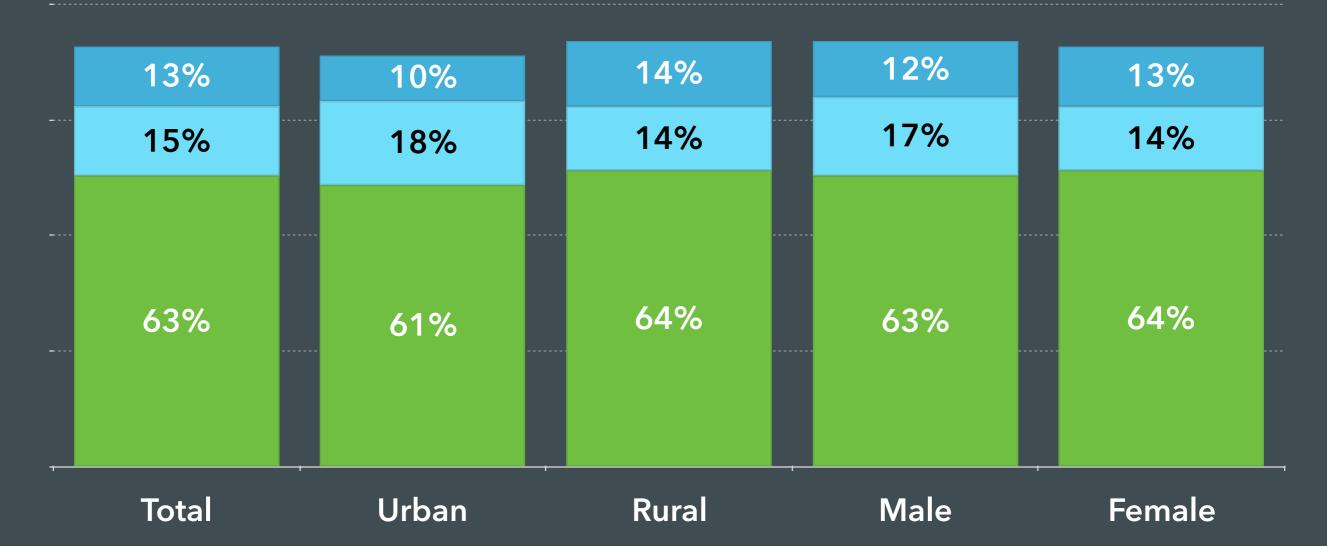
Low Smartphone Penetration



Tanzania (2017): mobile users 15+ without smartphone Research ICT Africa

Nothing to use the Internet with

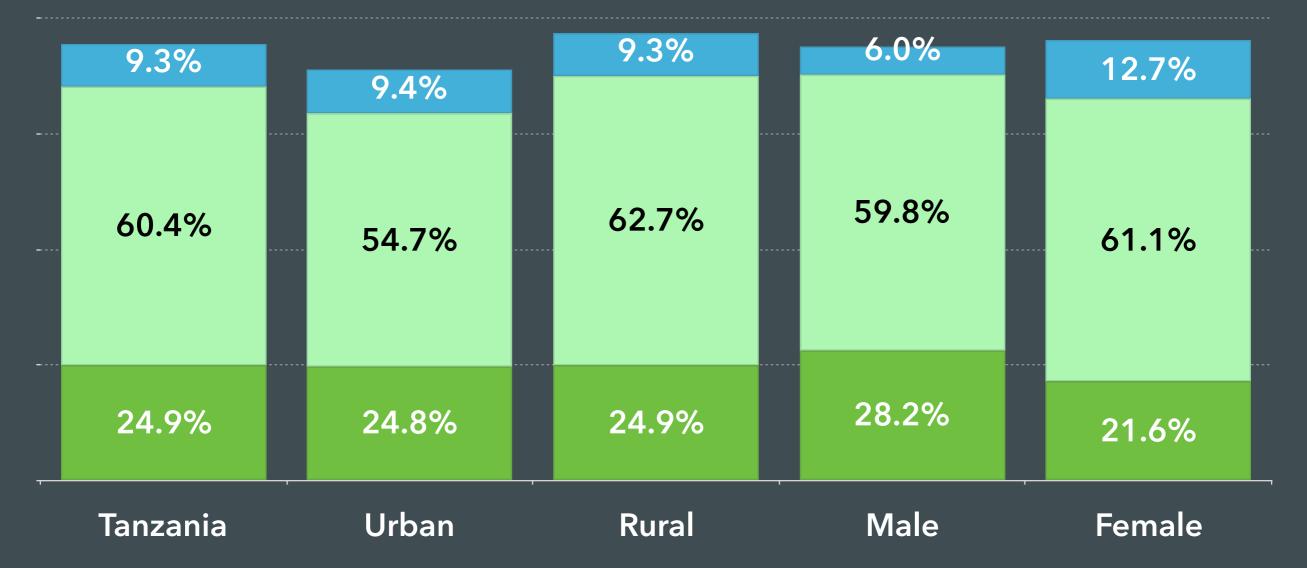
- I don't know how to use it
- No interest/not useful
- No access device (computer/smartphone)



Tanzania (2017): Main reasons why not using Internet Research ICT Africa

Smartphone Cost Main Barrier

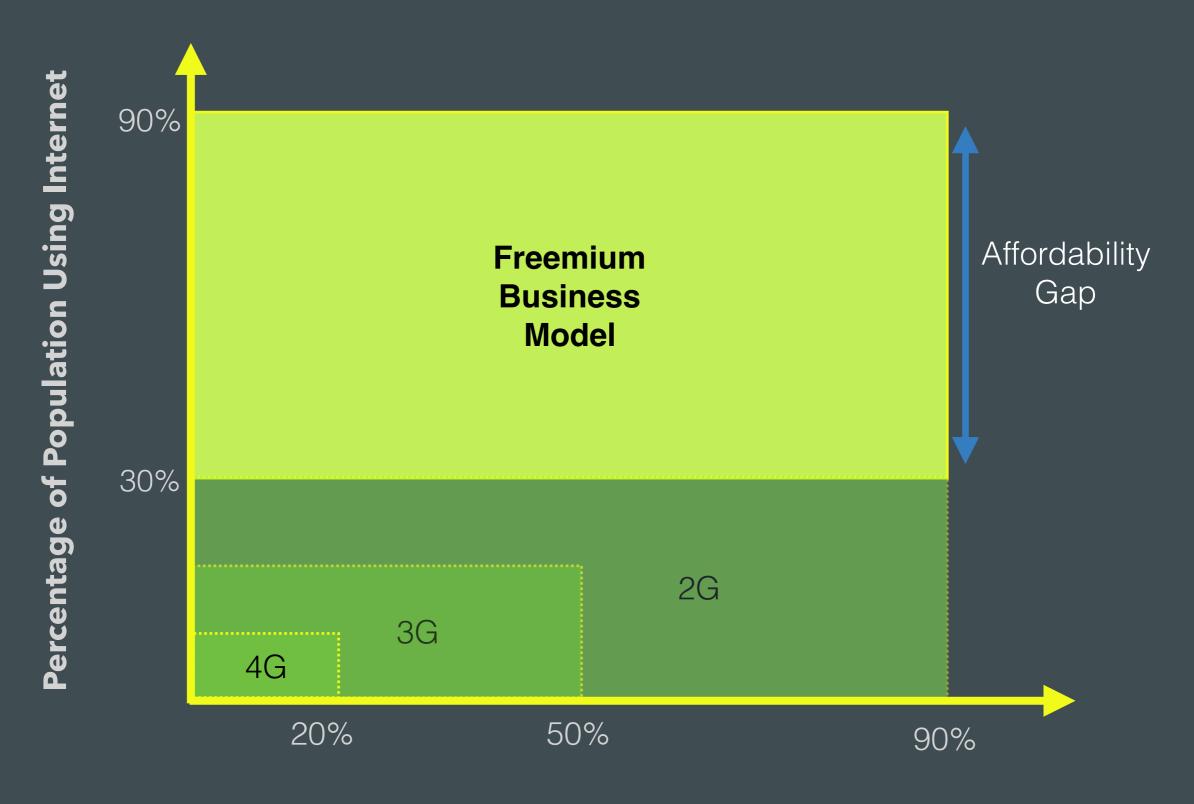
- It is too complicated for me/I do not know how to use one
- I cannot afford one, it is too expensive
- I do not need one (a feature/basic phone is sufficient for me)



Tanzania (2017): mobile users 15+ without smartphone Research ICT Africa

FREEMIUM INTERNET

FREEMIUM INTERNET: FREE SLOW INTERNET - 2G

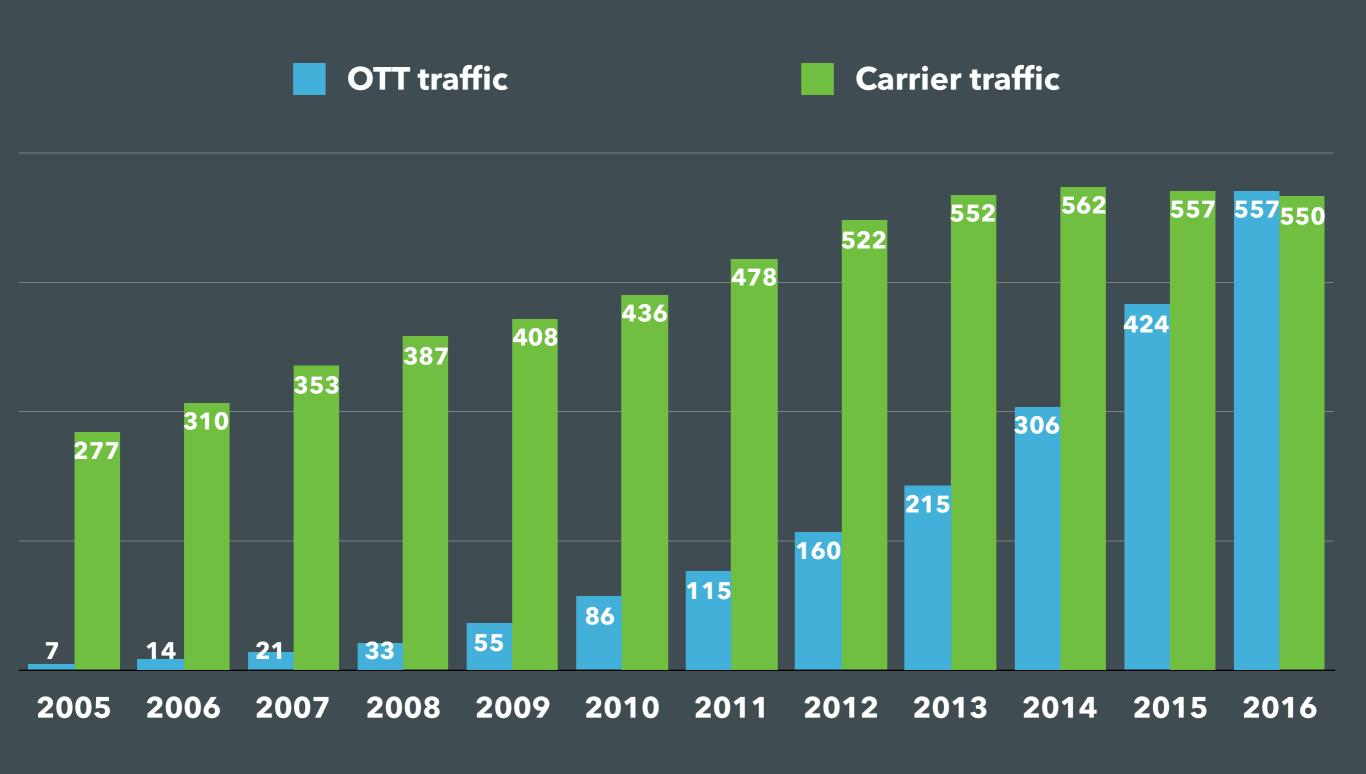


Comparing Free Basics to Freemium Internet

	Free Basics	Freemium 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		

DATA + OTT

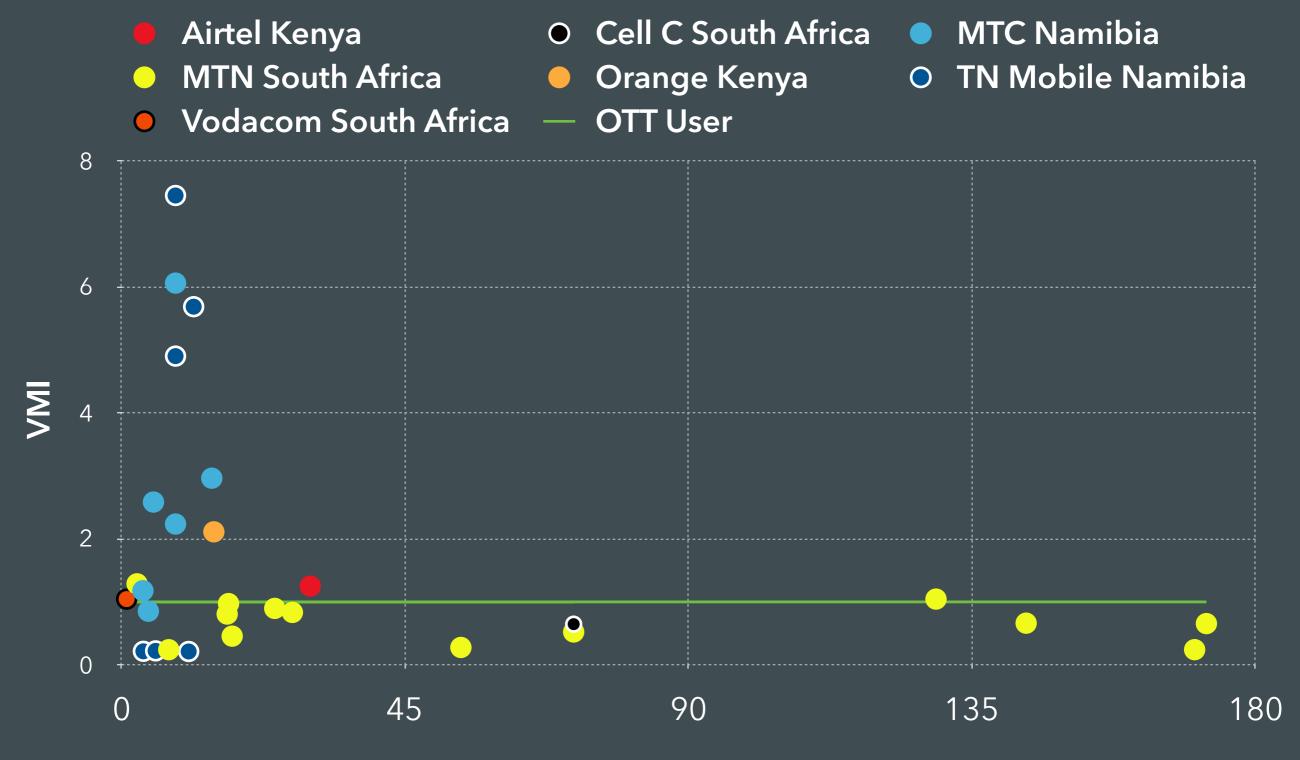
International traffic in billion minutes (Source: Telegeograpgy)



Towards top-up (bundles) and OTT

Lowest prices in country	Out of bundle prices			1 MB based on
US cents Q4 2016	1 MB	1 SMS	1 Minute	1 GB top up
South Africa	1.04	1.80	4.29	0.58
Uganda	1.40	2.15	5.16	0.14
Tanzania	1.50	1.31	4.21	0.22
Ethiopia	2.11	2.11	4.05	1.00
Ghana	2.46	0.98	1.60	0.16
Cote d'Ivoire	3.29	4.12	7.88	0.29
Mozambique	2.65	2.31	6.50	0.13
Kenya	8.00	1.00	2.67	0.50
Namibia	6.47	2.52	2.73	0.17

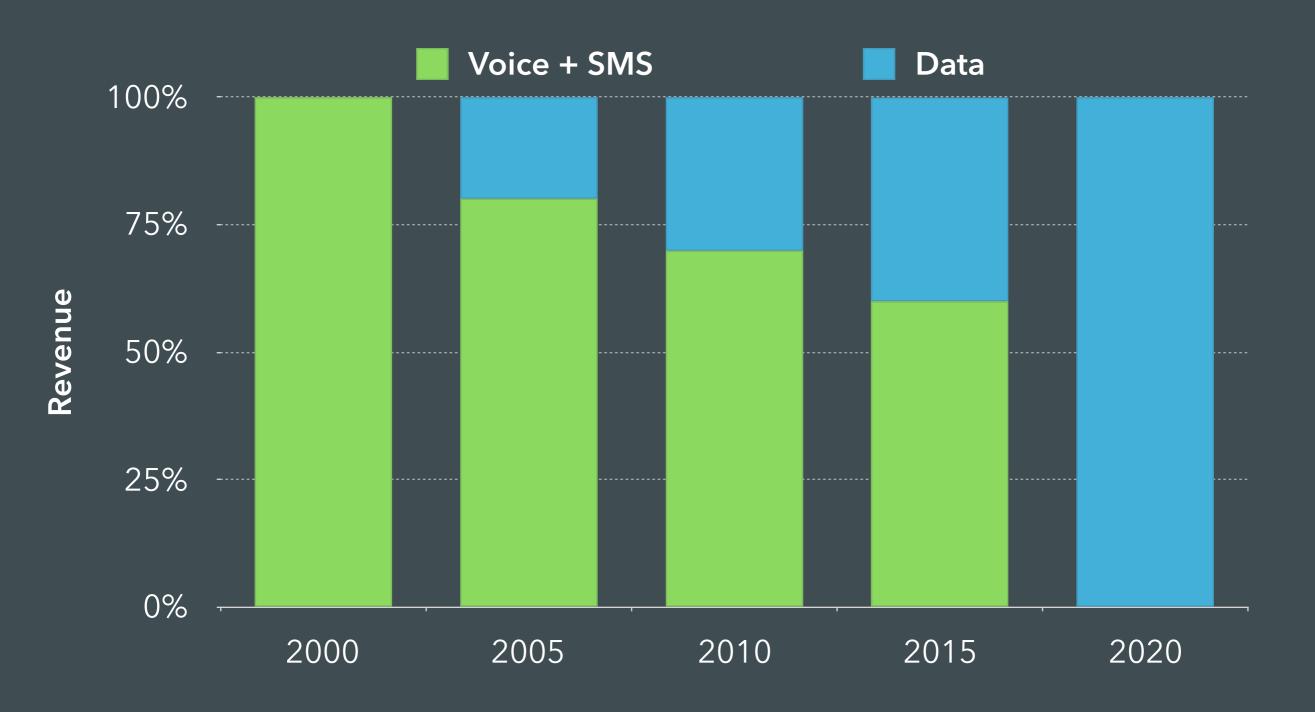
Value for Money Index (VMI) Q4 2016 based on OTT user perspective



Monthly cost of top up in USD

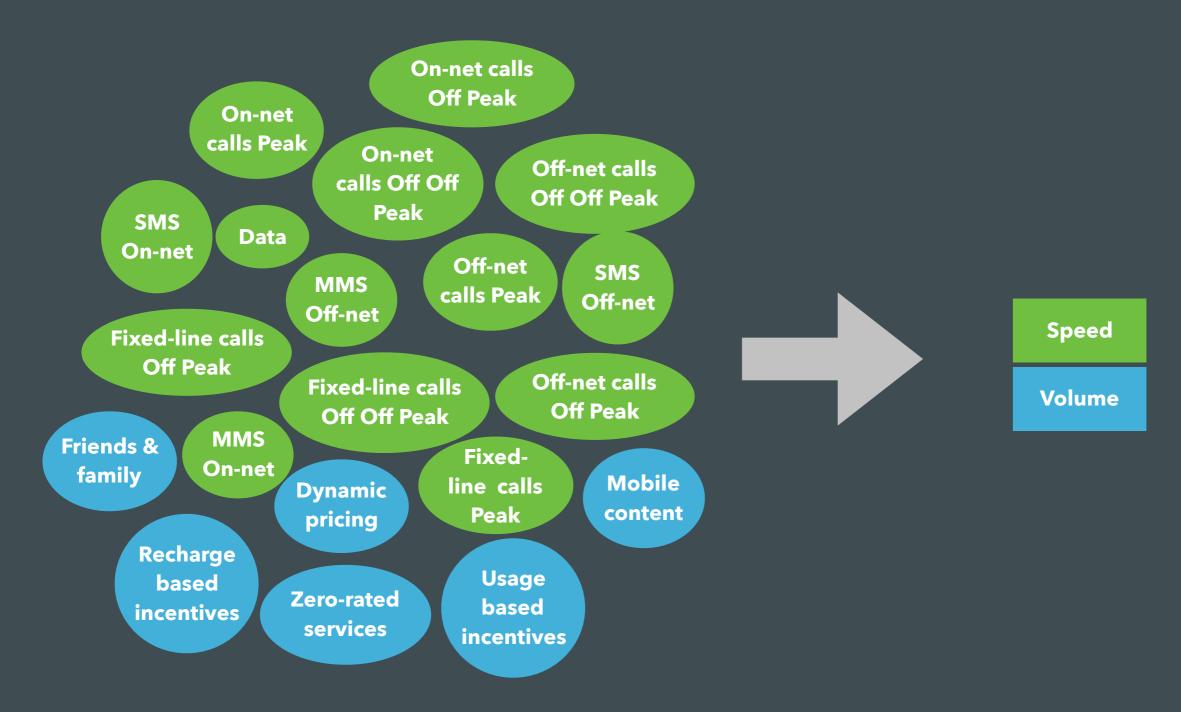
NEW BUSINESS MODEL

Retail pricing: In future only charging for data



Old Business Model

New



- 1) Complex product design
- 2) High marketing cost
- 3) Complex billing system
- 4) Postpaid Expense risk: Tx / ISR

- 1) Simple product s
- 2) Low marketing cost
- 3) Simple billing system
- 4) Total risk = 1 month subs.

RESEARCH ICT SOLUTIONS



DR. CHRISTOPH STORK

PARTNER, RIS PHD, ECONOMICS

17 years ICT sector research experience in Africa

Designed and managed household and business surveys on ICT access and use across Africa

+27 84 999 000 2



STEVE ESSELAAR
PARTNER, RIS
MBA

15 years ICT sector experience

Senior Technology Consultant focused on strategy, policy and regulation. Conducted multiple FGDs over the last decade.

+1 778 865 5695

steve@researchictsolutions.com