DEVELOPING APPS FOR DEVELOPING COUNTRIES

NATALIE PISTUNOVICH

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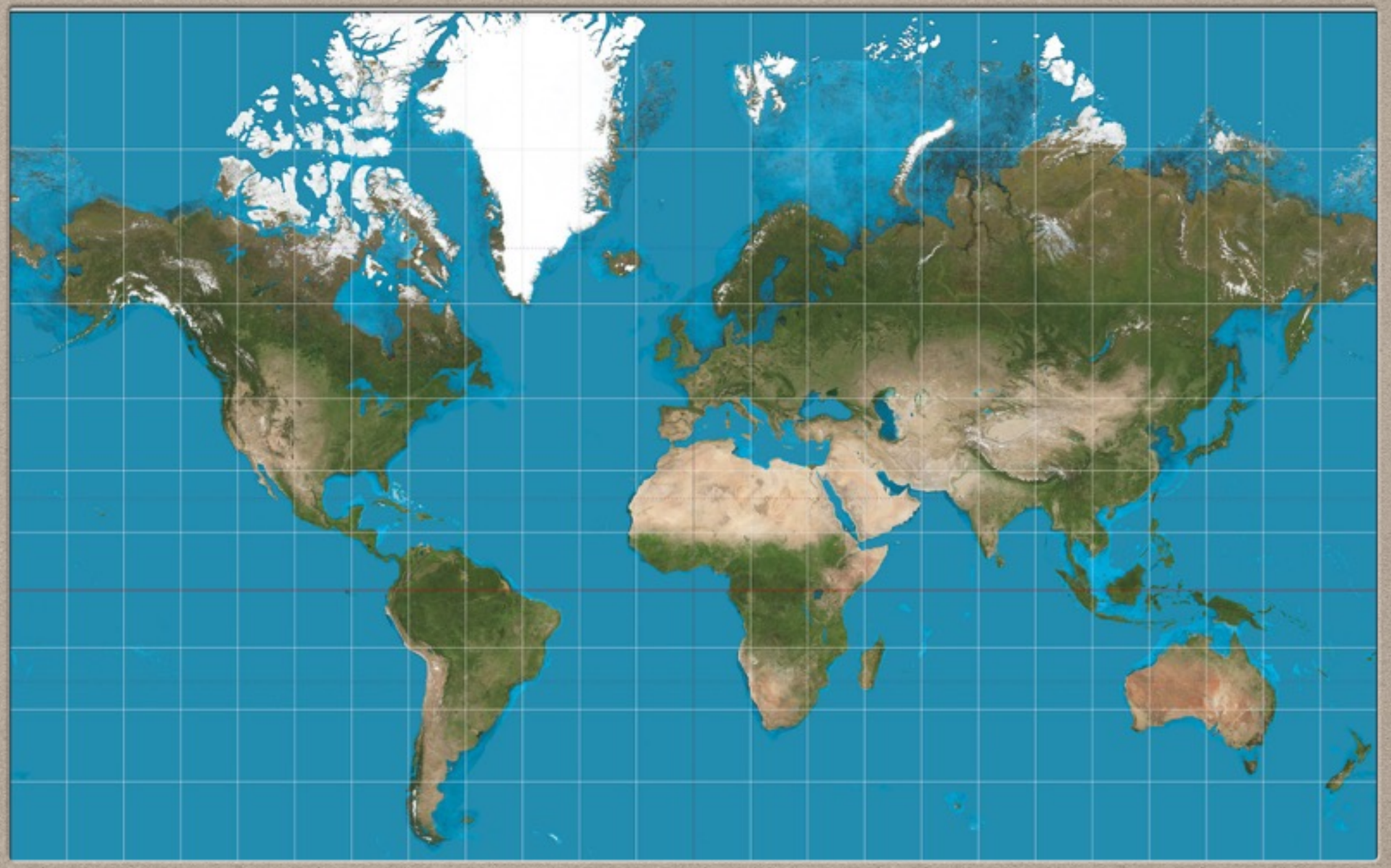
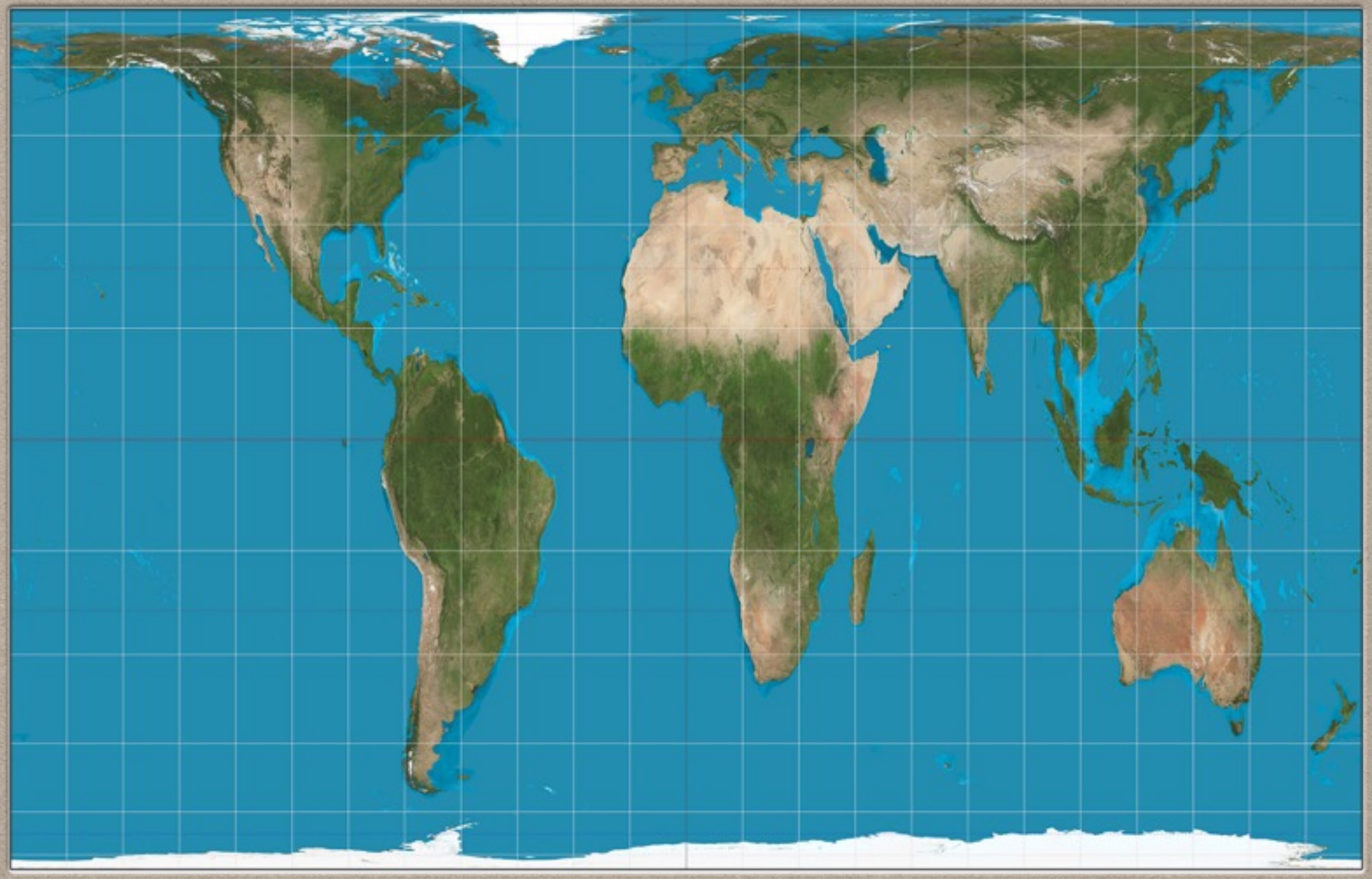
#APPSFORAFRICA



MERCATOR PROJECTION

GIVES THE RIGHT SHAPES OF LAND MASSES



GALLS-PETERS PROJECTION

GIVES THE CORRECT AREA

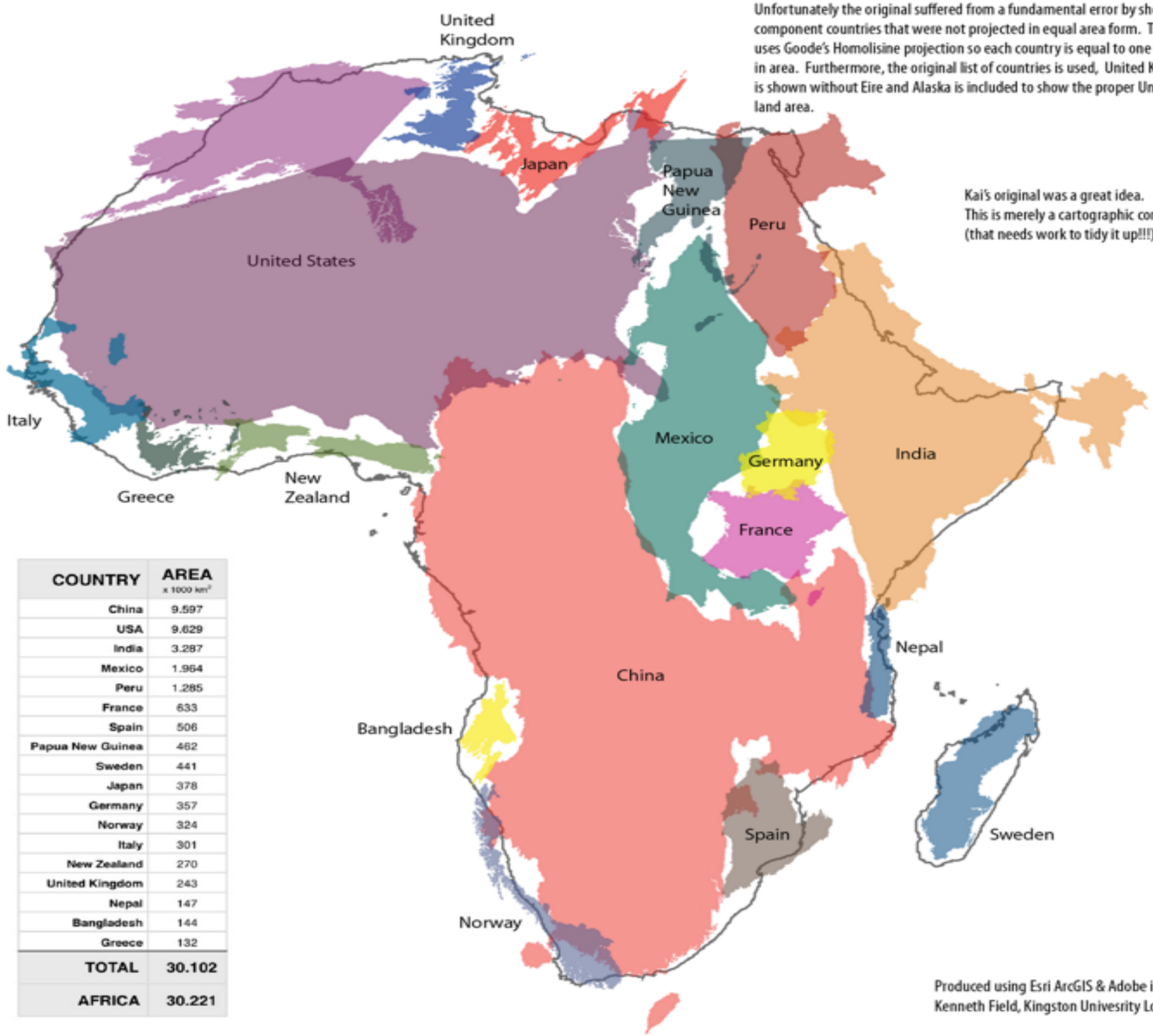
The **True Size** of **Africa**

Correcting the fight against immappancy

The original image by Kai Krause was designed to graphically illustrate the true size of the continent of Africa in relation to various countries mapped by land area. The intention was to counter *immappancy* - that is *insufficient geographical knowledge*.

Unfortunately the original suffered from a fundamental error by showing component countries that were not projected in equal area form. This map uses Goode's Homolisine projection so each country is equal to one another in area. Furthermore, the original list of countries is used, United Kingdom is shown without Eire and Alaska is included to show the proper United States land area.

Kai's original was a great idea.
This is merely a cartographic correction
(that needs work to tidy it up!!!).



COUNTRY	AREA x 1000 km²
China	9.597
USA	9.629
India	3.287
Mexico	1.964
Peru	1.285
France	633
Spain	506
Papua New Guinea	462
Sweden	441
Japan	378
Germany	357
Norway	324
Italy	301
New Zealand	270
United Kingdom	243
Nepal	147
Bangladesh	144
Greece	132
TOTAL	**30.102**
AFRICA	**30.221**

Produced using Esri ArcGIS & Adobe illustrator
Kenneth Field, Kingston Univesrity London

IN NUMBERS

	Africa	Europe	North America
Countries	54	48	23
Population	1,1B	0,7B	0,6B
Area	30,2M km²	10,2M km²	24,7M km²
Languages	1250-3000	225	350
Official Languages	26	24	4

wikipedia

DATA CONSUMPTION IN 2015

	Africa	Europe	North America
Fixed	0,24 EB	15,1 EB	7,1 EB
WiFi	0,7 PB	9,1 EB	8,4 EB
Mobile	356 PB	557 PB	980 PB

Cisco VNI Complete Forecast Highlights Tool

DATA CONSUMPTION IN 2015
(PER PERSON)

	Africa	Europe	North America
Fixed	0,22 GB	21,4 GB	11,6 GB
WiFi	0,63 GB	13 GB	14 GB
Mobile	0,32 GB	0,795 GB	1,63 GB

Cisco VNI Complete Forecast Highlights Tool

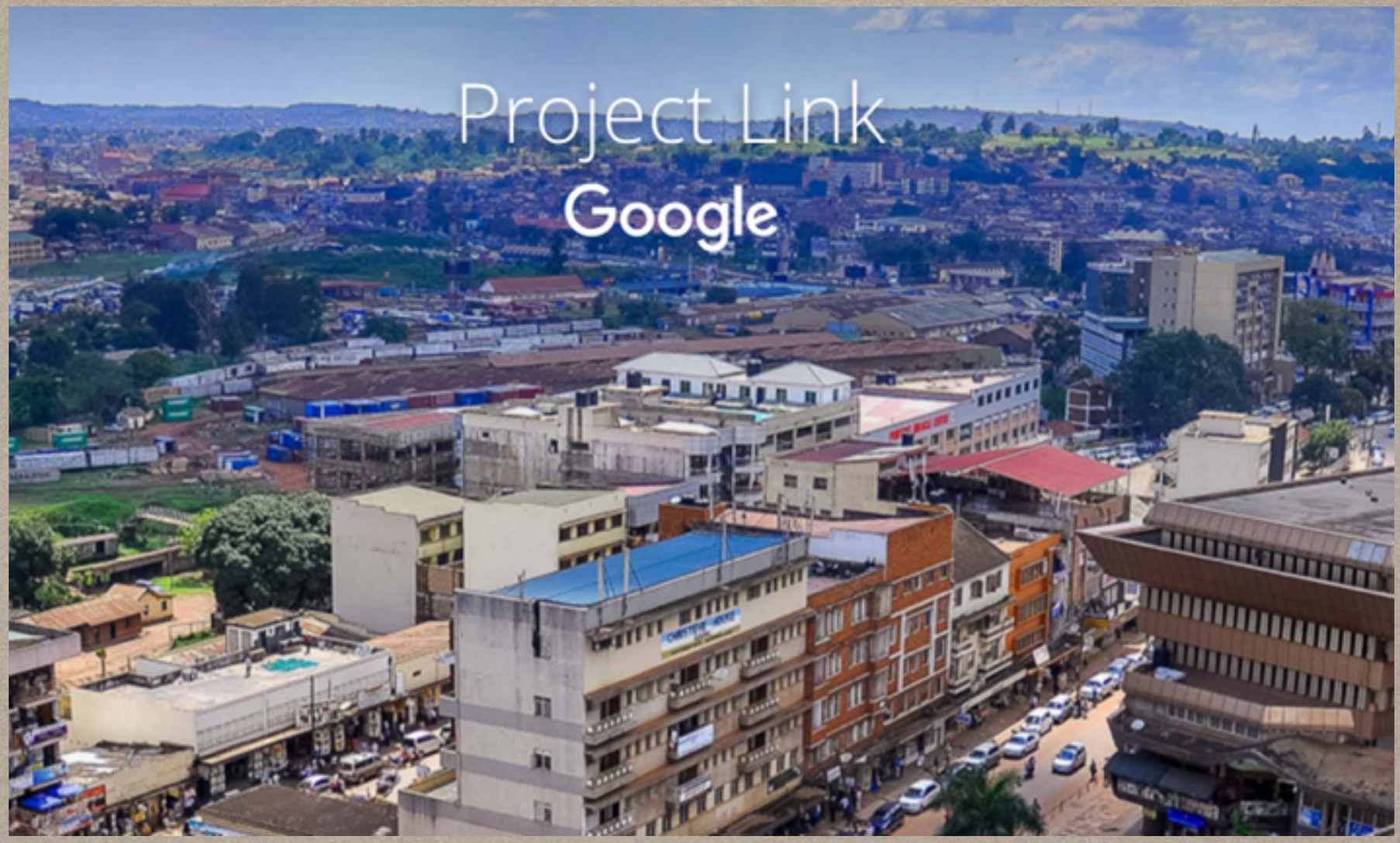
DATA CONSUMPTION IN 2020
(PER PERSON)

	Africa	Europe	North America
Fixed	0,24 EB	15,1 EB	7,1 EB
WiFi	0,7 PB	9,1 EB	8,4 EB
Mobile	356 PB	557 PB	980 PB

Cisco VNI Complete Forecast Highlights Tool

PROJECT LOON

CREATING AN AERIAL WIRELESS NETWORK



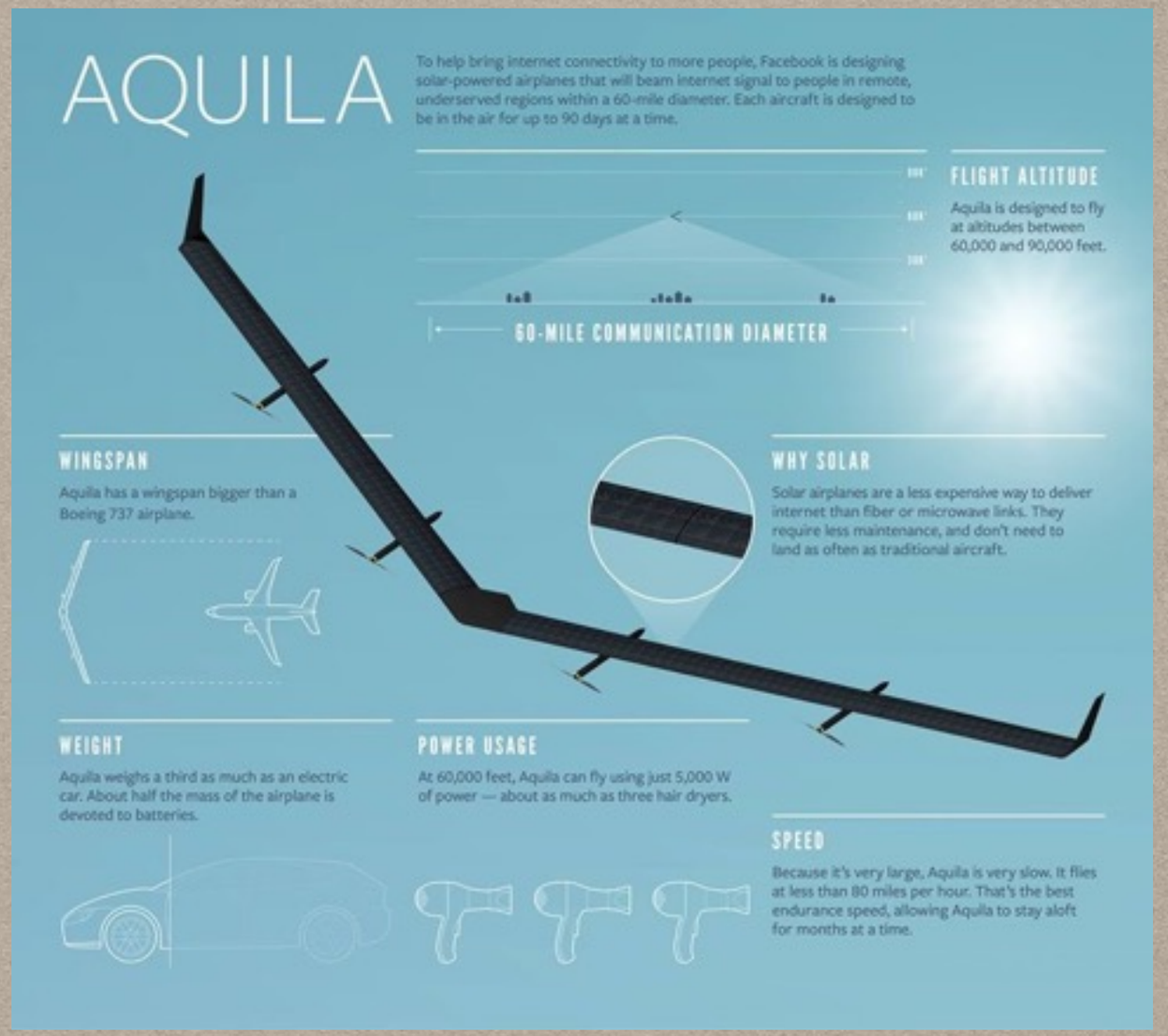
PROJECT LINK

BUILD METRO FIBER AND WI-FI NETWORKS

internet.org

INTERNET.ORG / FREE BASICS

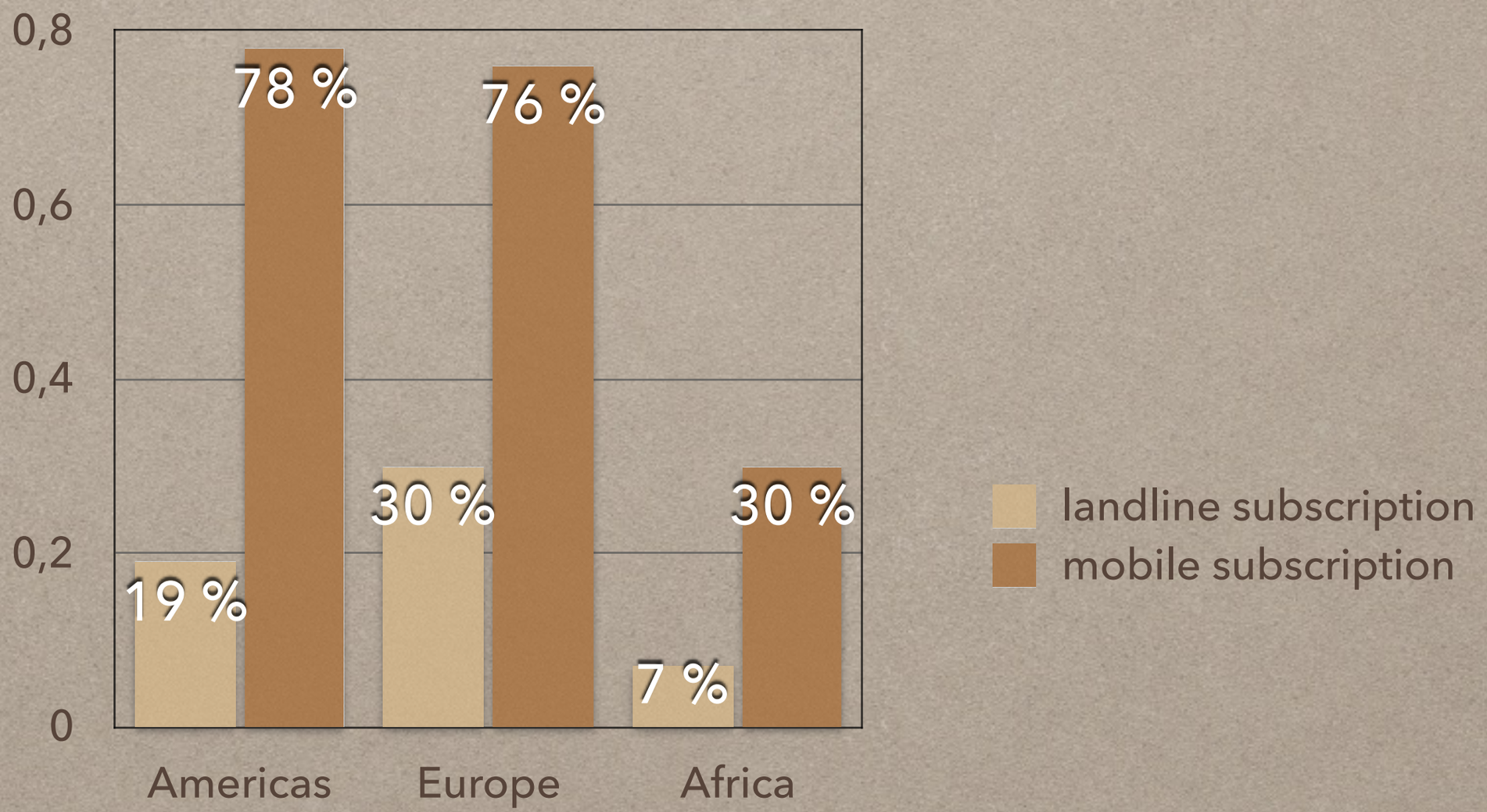
PARTNERSHIP BETWEEN FACEBOOK AND SAMSUNG, ERICSSON, MEDIATEK, OPERA SOFTWARE, NOKIA AND QUALCOMM TO BRING AFFORDABLE ACCESS TO SELECTED INTERNET SERVICES



PROJECT AQUILA

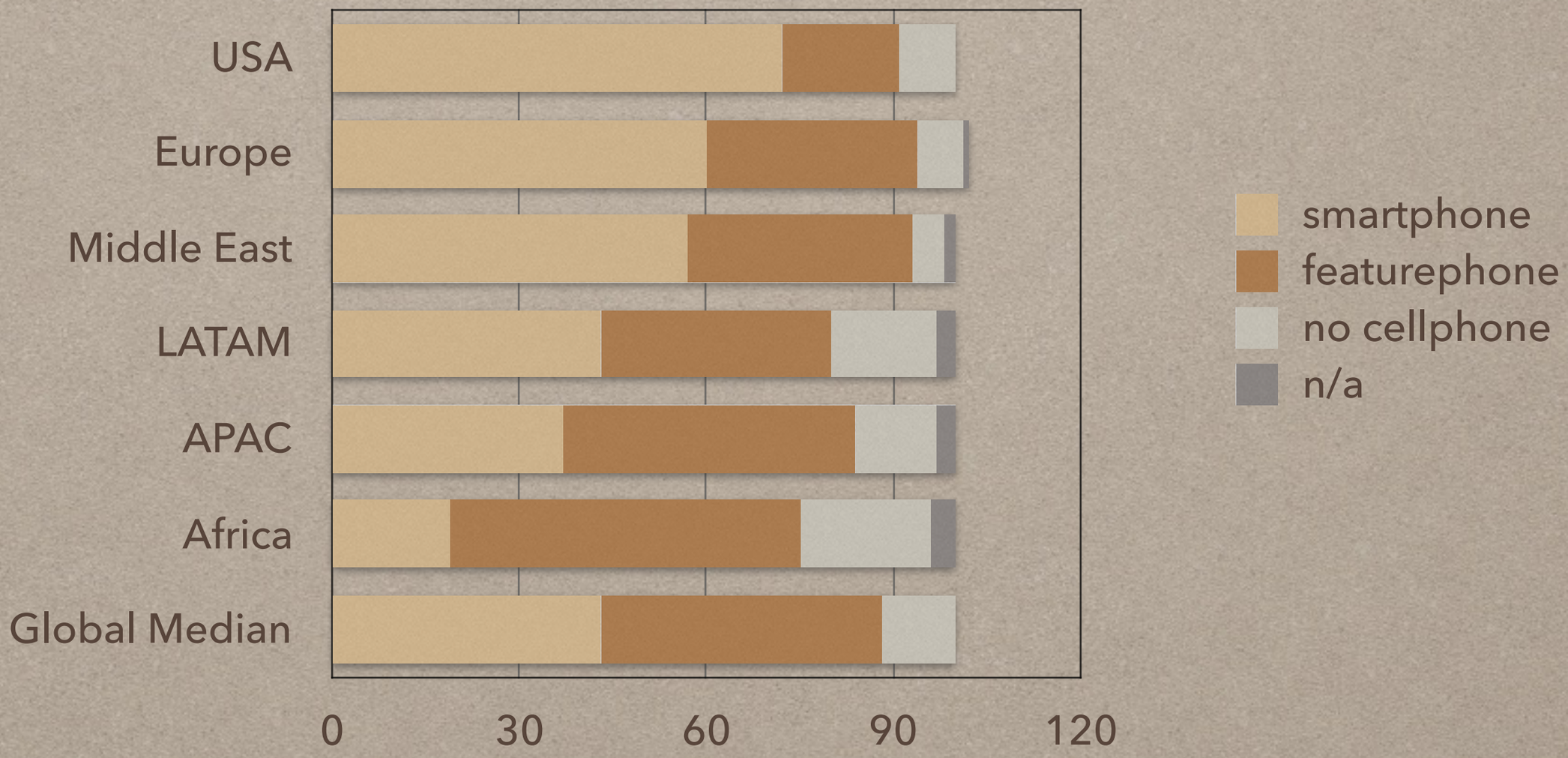
SOLAR-POWERED PLANE BEAMING INTERNET

MOBILE VS. LANDLINE IN 2016



http://www.itu.int/

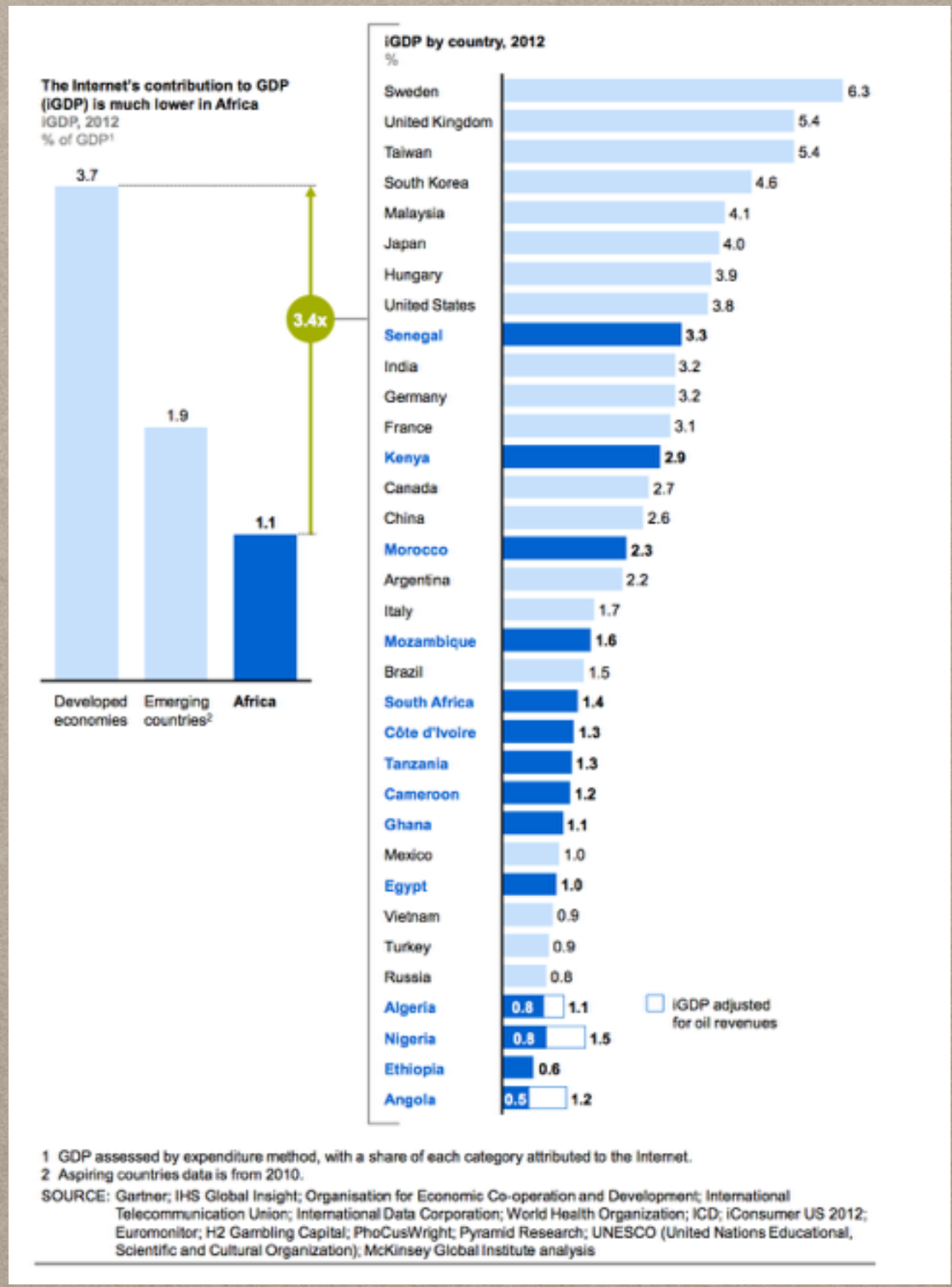
POPULAR PHONES IN AFRICA



spring 2015 GlobalAttitudes survey, PEW research center

IGDP

internet's contribution to economy as a share of the GDP



McKinsey

APP STORE STATS

1	Messenger	= 0	2	Facebook	= 0	3	Snapchat	↑ 1	1	Best Fiends Forever	↑ 4
4	Instagram	↓ -1	5	Smile Inc.	↑ NEW	6	Plants vs. Zombies™ Heroes	↑ 2	4	Pineapple Pen	= 0
7	Pandora® Radio	↓ -2	8	Ever - Free Photo Storage	↓ -2	9	Best Fiends Forever	↑ 26	7	Snapchat	↑ 1
10	Rolling Sky	↑ 5	11	Marco Polo Video Walkie Talkie	↓ -4	12	WhatsApp Messenger	↓ -3	10	Ace Security-Antivirus Applock	↑ 1

2	WhatsApp Messenger	↓ -1	3	Messenger	= 0	5	FIFA Mobile Soccer	↓ -3	6	Facebook	= 0
8	Plants vs. Zombies™ Heroes	↑ 1	9	Instagram	↓ -2	11	eBay Kleinanzeigen for Germany	↓ -1	12	Wish - Shopping Made Fun	= 0

1	iTunes U	= 0	2	SMILE Inc.	= 0	3	Messenger	↑ 5	1	Best Fiends Forever	= 0
4	Snapchat	= 0	5	Ever - Free Photo Storage	↑ 1	6	Facebook	↑ 4	4	Snapchat	↑ 2
7	YouTube	= 0	8	Instagram	↑ 3	9	Bitmoji - Your Personal Emoji	↑ 3	7	Instagram	= 0
10	Plants vs. Zombies™ Heroes	↓ -7	11	Google Maps - Navigation & ...	↑ 2	12	Best Fiends Forever	↓ -7	10	Google Maps - Navigation & ...	↓ -1

2	iTunes U	= 0	3	WhatsApp Messenger	= 0	5	YouTube	= 0	6	Plants vs. Zombies™ Heroes	↓ -2
8	Messenger	= 0	9	Facebook	↑ 4	11	Pinterest	↓ -1	12	eBay Kleinanzeigen - Free. ...	↓ -1

http://apptrace.com

APP STORE STATS

	1 WhatsApp Messenger 0 · 2 Messenger 0 · 3 SUPO Cleaner (Super Power) 0 4 Opera Mini web browser 1 · 5 Facebook -1 · 6 imo free video calls and chat 0 7 Facebook Lite 0 · 8 Instagram 0 · 9 SHAREit - Transfer & Share 0 10 tb GameCenter 0 · 11 french phrases dictionnary 1 · 12 Viber Messages & Calls Guide -1	1 WhatsApp Messenger 0 · 2 Messenger 0 · 3 Truecaller: Caller ID & Dialer 0 4 Opera Mini web browser 0 · 5 Facebook 0 · 6 Tata (formerly Mkopo Rahisi) 0 7 Facebook Lite 0 · 8 Uber 0 · 9 Instagram 1 10 imo free video calls and chat -1 · 11 SUPO Cleaner (Super Power) 0 · 12 All Whatsap Status 1
	1 iTunes U 19 · 2 Sniper 3D Assassin: Gun Sho... -1 · 3 FIFA Mobile Soccer 0 4 YouTube 12 · 5 imo free video calls and chat 0 · 6 Facebook 14 7 WhatsApp Messenger 1 · 8 Gmail - email from Google -6 · 9 Viber 3 10 Dictionnaire français-anglais... 11 · 11 Instagram 12 · 12 Xender - File Transfer & Sh... -2	1 WhatsApp Messenger 0 · 2 Uber 0 · 3 Messenger 1 4 Facebook 1 · 5 Instagram 2 · 6 YouTube 0 7 Truecaller: Number Search &... 1 · 8 iTunes U -1 · 9 imo free video calls and chat 0 10 Gmail - email from Google 2 · 11 Snapchat -1 · 12 Telegram Messenger 2

http://apptrace.com

APP STORE STATS

Android

Vietnam

1	Messenger	↑ 1	2	Zalo	↓ -1	3	Zing MP3	= 0
4	Facebook	= 0	5	Camera360 - Photo Editor	= 0	6	Mobile Legends: Bang bang	↑ 1
7	Facebook Lite	↓ -1	8	Tập Kích	= 0	9	slither.io	↑ 1
10	BIGO LIVE - Live Broadcasting	↓ -1	11	My Talking Tom	= 0	12	SNOW - Selfie, Motion sticker	↑ 5

Japan

1	LINE: Free Calls & Messages	↑ 1	2	ユニゾンリーグ【ユニフレと	↓ -1	3	バンドやろうぜ!	↓ -1
4	天子伝説～祝われた大地～	↓ -1	5	グランマルシェの迷宮	= 0	6	SNOW - Selfie, Motion sticker	= 0
7	AbemaTV-無料インターネット	↑ 2	8	Yahoo! JAPAN　無料でニュース	= 0	9	モンスターストライク	↑ 4
10	SmartNews	↑ 2	11	Amazon Shopping	↑ 5	12	ジーユー	↑ 9

Apple

Vietnam

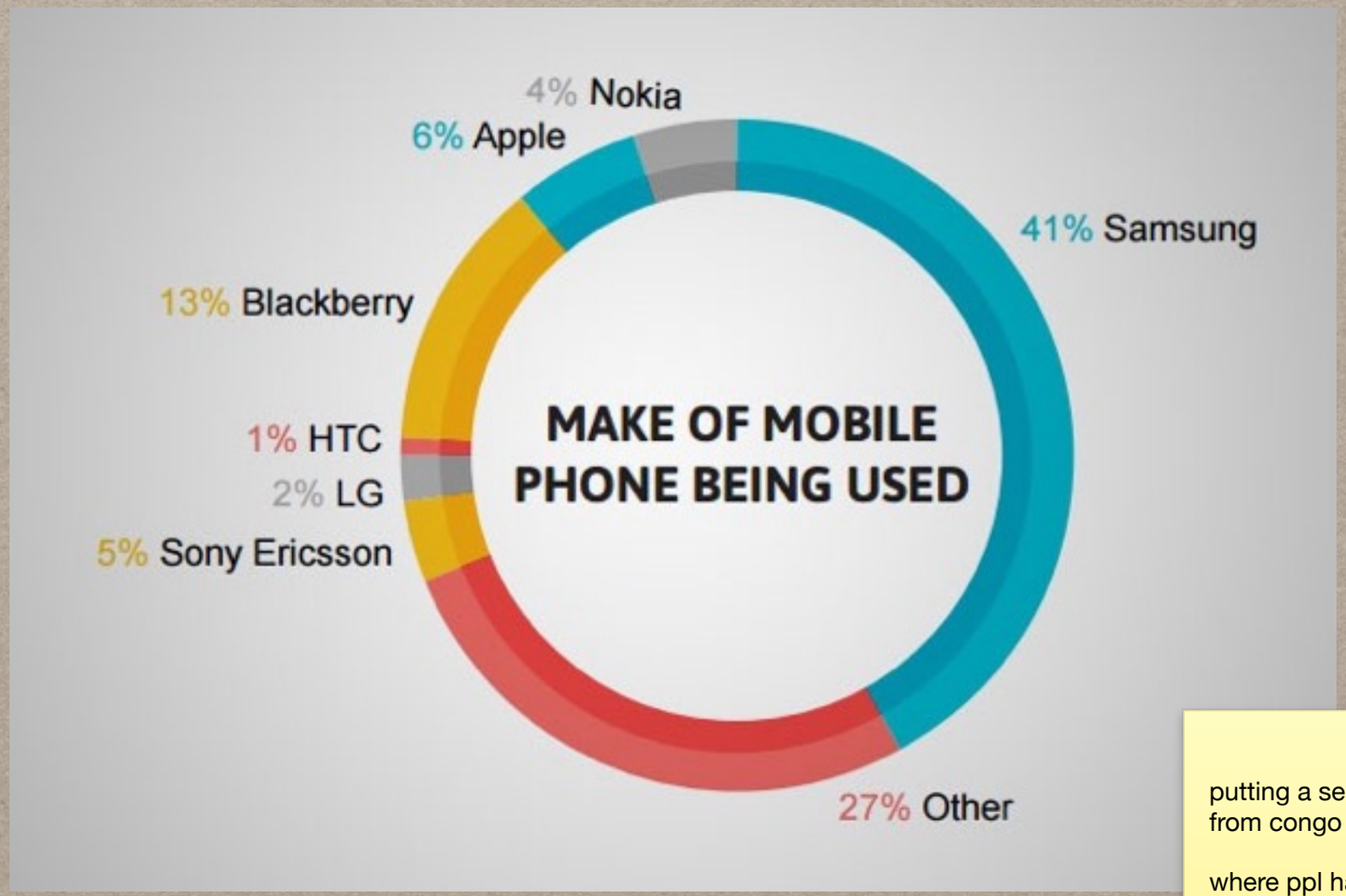
1	Plants vs. Zombies™ Heroes	= 0	2	Zalo	= 0	3	Messenger	= 0
4	Facebook	= 0	5	YouTube	= 0	6	Zing MP3 - Đỉnh Cao Âm Nhạc	= 0
7	Camera360 - Selfie Photo Ed...	= 0	8	SNOW - Selfie, Motion stick...	= 0	9	Google Maps - Navigation & ...	= 0
10	Võ Lâm Truyền Kỳ Mobile - VNG	↑ 1	11	Gmail - email from Google	↓ -1	12	Grab - Car, Taxi, Bike Book...	= 0

Japan

1	iTunes U	= 0	2	LINE	= 0	3	SNOW - Selfie, Motion stick...	↑ 1
4	C CHANNEL -Watch tips & tri...	↓ -1	5	ディズニー マジックキングダ	= 0	6	無料の人気音楽アプリ!	= 0
7	YouTube	↑ 1	8	Block! Hexa Puzzle	↑ 2	9	AbemaTV	= 0
10	トクバイ - 無料 チラシアプリ	↑ 37	11	Instagram	↑ 1	12	Google Maps - Navigation & ...	↓ -1

CANT CHARACTERISE THAT

COMMON MOBILE DEVICES



putting a server in nigeria is different from congo that just has no internet

where ppl have mainly feature phones and internet is barely available

LOCAL DEMAND FOR APPS

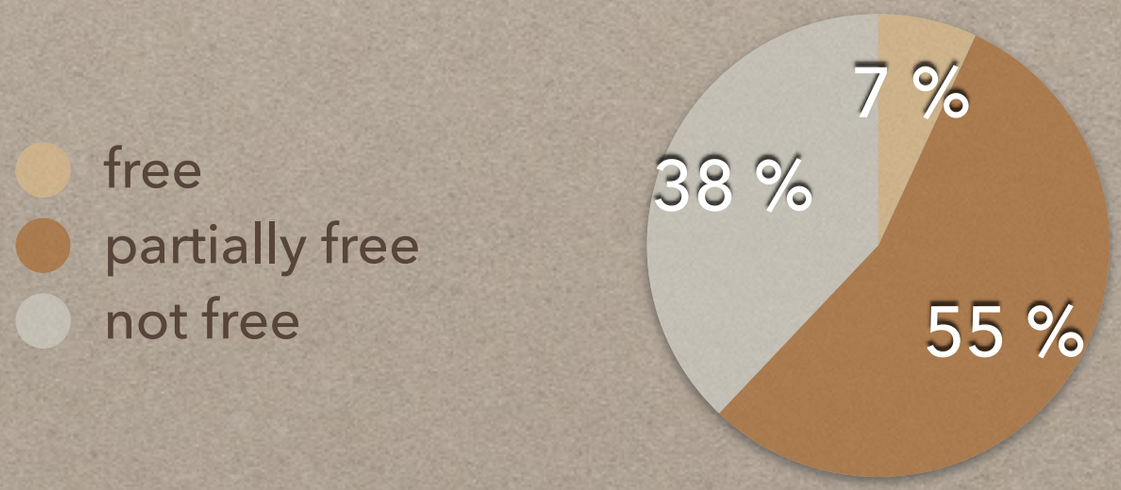
- Medical
- Educational
- Financial
- Weather
- Sharing
- Tourism
- Entertainment
- Social media

APP EXAMPLE: M-PESA

- mobile phone based money transfer, financing and micro-financing service
- launched in 2007 by Vodafone and Vodacom
- available in: Africa, Asia, Balkans
- allows users to deposit, withdraw, transfer money and pay with a mobile device
- 2016 revenue: $22M

CHALLENGES

- Freedom
  - State-Sponsors surveillance
  - Regulation to control online media
- Detention and arrest of social-media activists



CHALLENGES

- UX
  - Probably not what you’re used to
- Localization
  - Translations
  - Symbols
  - Social norms

THANK YOU

@NATALIEPIS
#APPSFORAFRICA