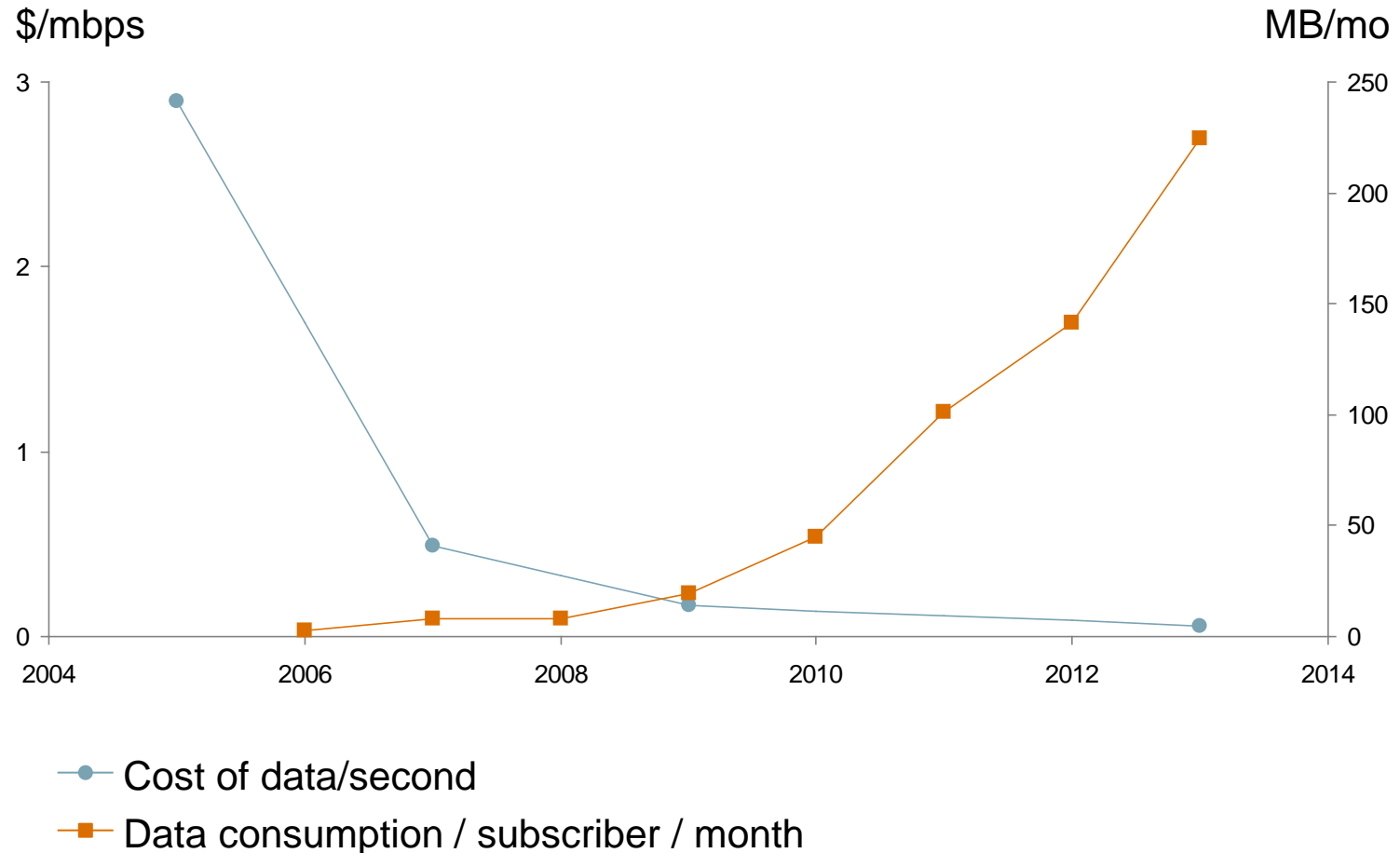**Saidat Ramadhani**
Mlandizi, Tanzania

Past decade: Dramatic gains in mobile cost and data speed

Mobile data cost decline and usage increase, as 4G rolled out

Legend:
- Cost of data/second
- Data consumption / subscriber / month

Note: Data speed indicates maximum downlink speed, not average observed speeds. Average observed speeds depend on many factors including infrastructure, subscriber density, device hardware and software, etc.
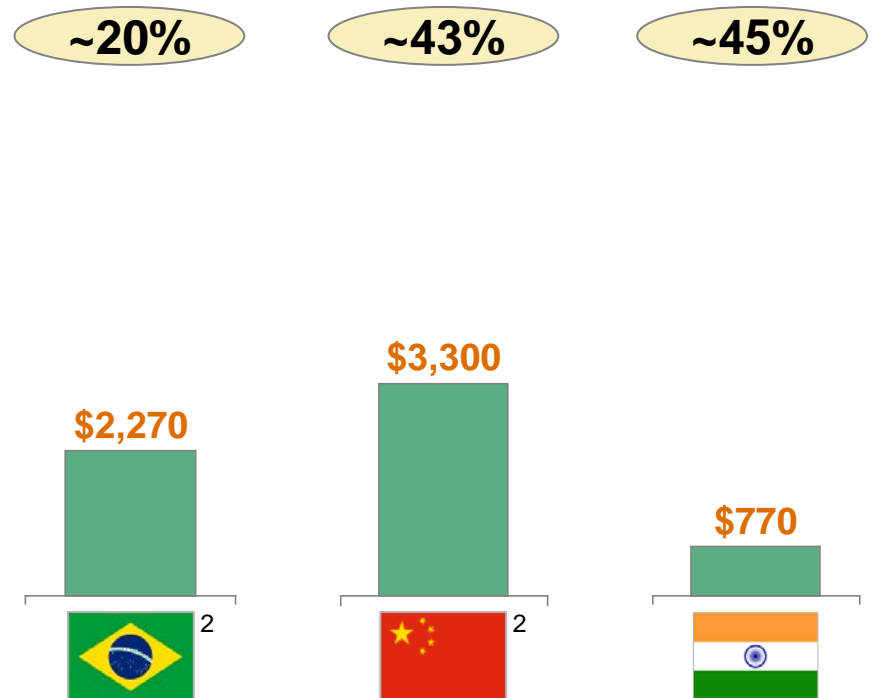**Sources:** Cisco VNI, ITU, IEMR, Qualcomm, BCG analysis

What's it worth to you? A lot. And even more to some

Consumer value placed upon 4G devices in developed economies[2]

~11%	~13%	~12%
$5,800	$6,300	$3,150
🇺🇸	🇩🇪	🇰🇷
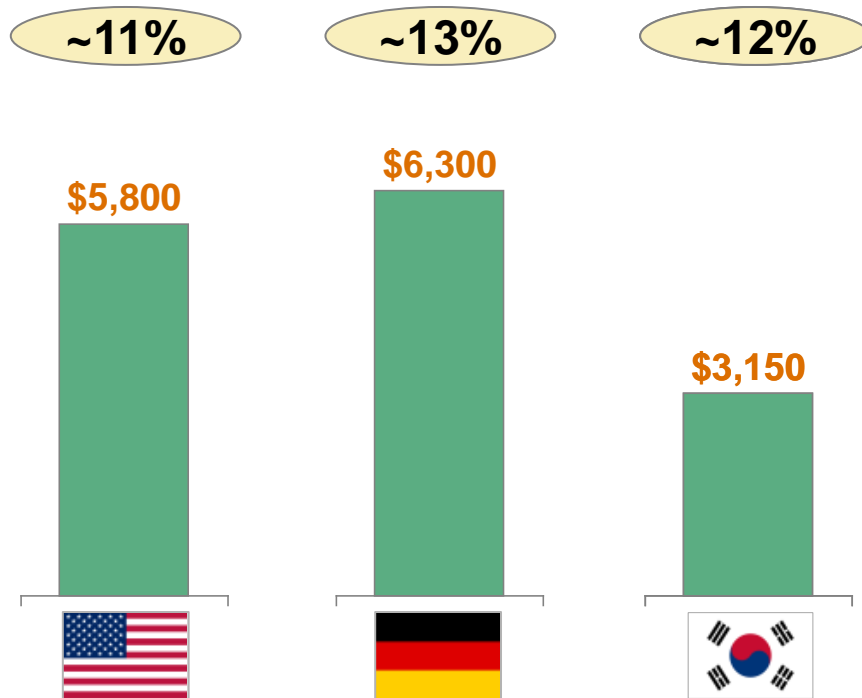
Consumer value placed upon 3G devices in emerging economies[2]

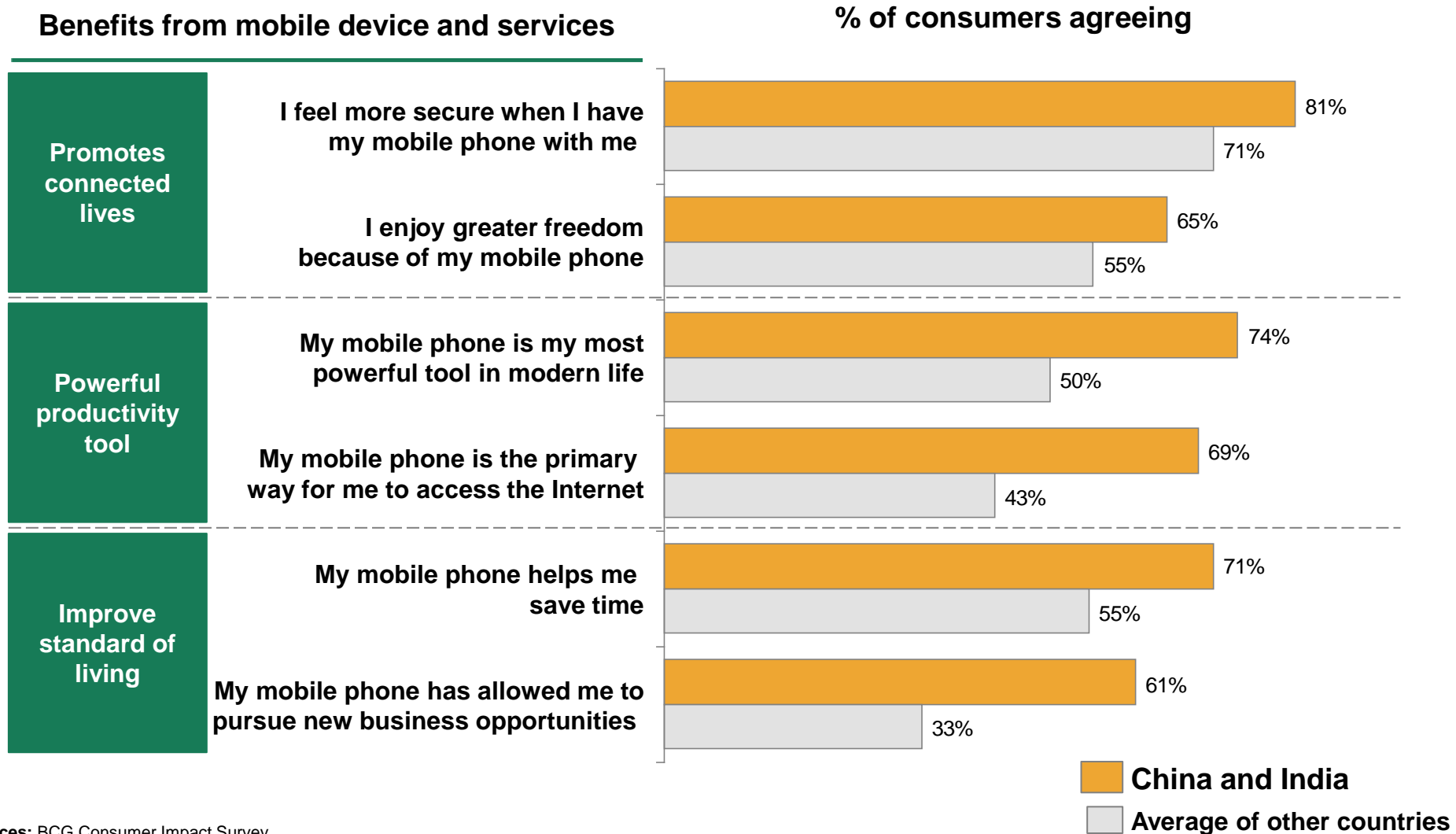|		
~20%	~43%	~45%
$2,270	$3,300	$770
🇧🇷 [2]	🇨🇳 [2]	🇮🇳

Value as % of Income[3]

1. Developed country our reference consumer is a 4G user 2. For Brazil and China, 3G consumers as 4G only very recently rolled-off in both countries
3. Based on the nominal GDP per capita (2013)
Source: Conjoint analysis, BCG Consumer Impact Survey

Advanced mobile access brings inclusiveness and income

Benefits from mobile device and services

% of consumers agreeing

Promotes connected lives

I feel more secure when I have my mobile phone with me
- 81%
- 71%

I enjoy greater freedom because of my mobile phone
- 65%
- 55%

Powerful productivity tool

My mobile phone is my most powerful tool in modern life
- 74%
- 50%

My mobile phone is the primary way for me to access the Internet
- 69%
- 43%

Improve standard of living

My mobile phone helps me save time
- 71%
- 55%

My mobile phone has allowed me to pursue new business opportunities
- 61%
- 33%

■ **China and India**
■ **Average of other countries**

FightBack –"India's first mobile app for women safety"

[fB]

FightBack allows users to send out a security alert when in danger

Helps prevent crimes

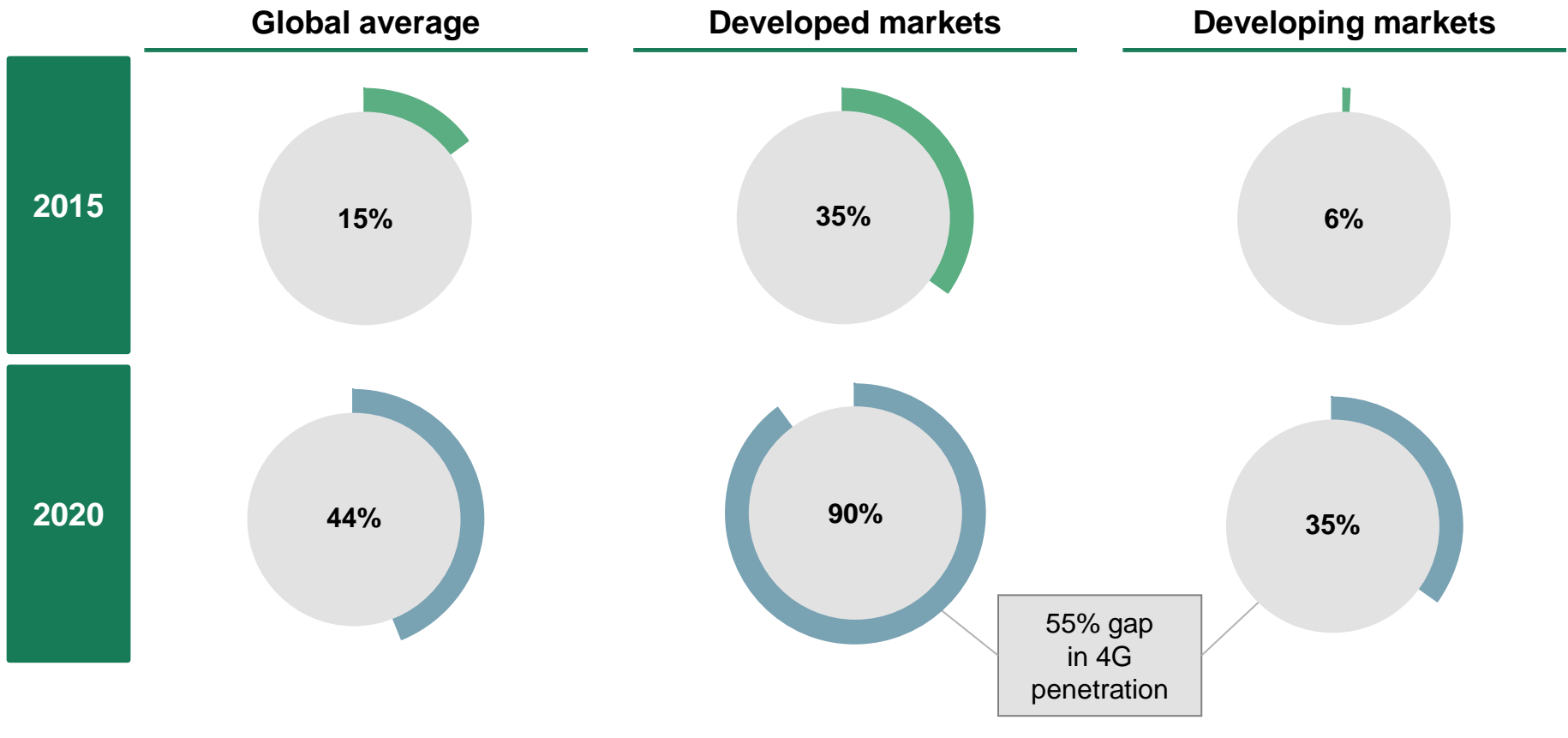"You can register the police station number and they can monitor alerts 24x7"

Sends instant message to contacts when in distress

"... There were a bunch of guys... stalking...I felt insecure... I raised the panic button on FB and got help"

Instills confidence and sense of security

" They (colleagues) definitely feel much secure, they know they can depend on this."

Yet modern mobile access is not reaching the developing world fast enough

	Global average	Developed markets	Developing markets
2015	15%	35%	6%
2020	44%	90%	35%

55% gap in 4G penetration

4G mobile access, first launched in 2009, will still reach only a third of emerging market consumers by2020 !

Why doesn't my smartphone have a network?

What we heard in one developing market:

"Trying to protect local industry means we cannot get affordable handsets"

"Operators cannot get local government approval for new cell sites"

"Operators cannot get affordable backbone lines from monopoly incumbent"

"700MHz spectrum is unavailable for years. 2.5Ghz not fit for rural areas"

"One major operator is nearly bankrupt due to bad management, and has not bid for spectrum"

Current forecasts for 4G penetration by year 2020

China	**58%**
India	**38%**
Nigeria	**23%**
Indonesia	**21%**
South Africa	**18%**
Ethiopia	**7%**

There are five main barriers at play

1   **Failure of governments to set universal advanced mobile access as a goal**

2   **Poor allocation and management of the needed radio spectrum**

3   **Insufficient capital investment in mobile networks in rural areas**

4   **Failure to address the affordability of mobile devices**

5   **A lack of local content and services**

Actions which need to happen

Ensure the prioritization of universal mobile access as a top policy goal

Smart allocation of radio spectrum

Accelerate capital investment in advanced networks, especially in rural areas

Ensure that everyone has access to affordable advanced handsets and affordable "lifeline" mobile data plans

Support the development of localized content and services.

The inclusive growth impact of taking action

Consumer economic surplus
- A billion more subscribers, at $1000 consumer surplus each: $1 Trillion dollars

Additional GDP impact:
- An additional billion subscribers creates an additional $350 billion in annual GDP

Additional public good infrastructure investment
- Opportunity for additional $200 billion in capex per year

A massive impact on inclusiveness
- The incremental subscribers are all poorly connected today
- The platform on which new content and services will be built

Specific action steps

Extend the consumer research that we have conducted in China, India, and Brazil to encompass additional emerging markets.

Issue a challenge to all national governments to make universal mobile access a priority. **Develop and publish an annual "mobile access policy scorecard"** to enable transparency, and call out governments that are failing to set this as a priority.

Place particular focus on progress in eleven key countries in order to have an impact on the largest population groups most quickly. These countries are Brazil, China, Ethiopia, India, Indonesia, Nigeria, Pakistan, the Philippines, Russia, South Africa, and Thailand.

Develop customized "pathways to universal mobile access plans" for each of these eleven countries, specifying policy actions that are needed in each country.

Engage multilateral lending institutions, including the new BRICS Bank, China's Infrastructure Bank, and existing institutions such as the World Bank and Asia Development Bank.