Connecting Asia's poor through the "budget telecom network model": Innovations, challenges and opportunities

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Overview

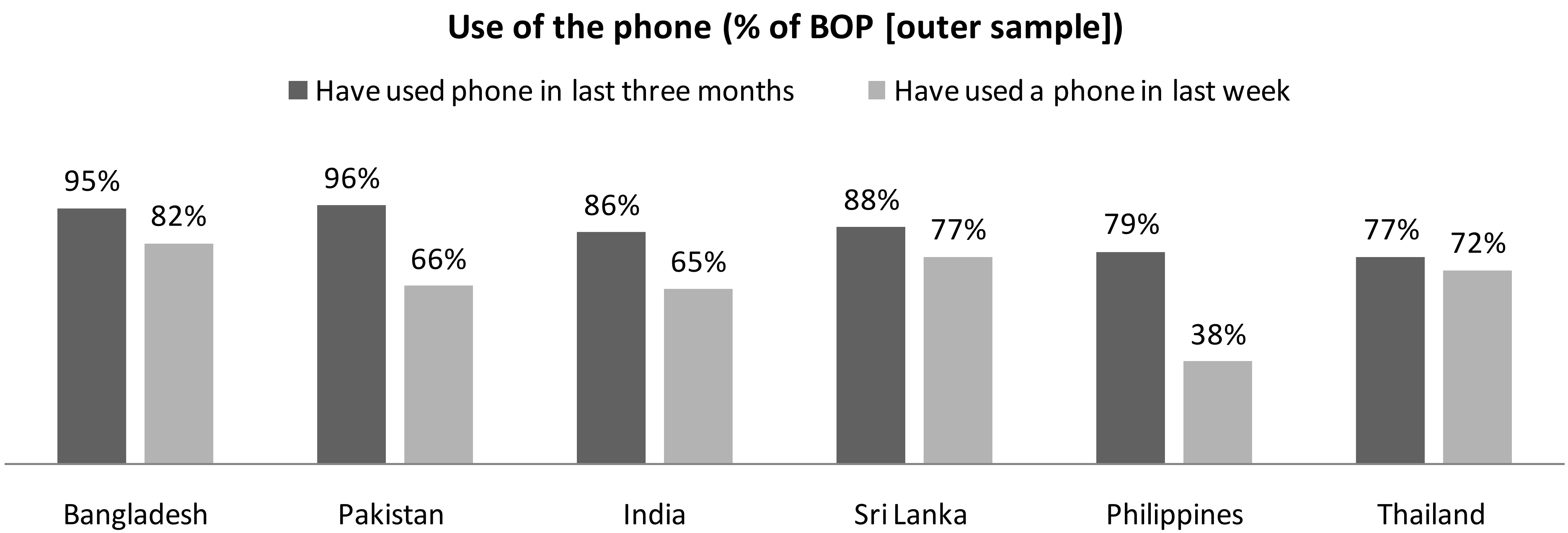
- Mobile is dominating communication channels in developing markets, even among the poor
- Operators in these markets have been able to get service cost down to below USD5 (even lower) to enable them to get connected; how?
- Innovations driven by intense competition; the evolution of the “budget telecom network model”

Bottom of the pyramid, a large, valuable, under-tapped market

- Lowest socio-economic groups
  - Roughly living on USD2 per day
  - SEC D + E (LIRNE*asia*)
- Many consumers consuming little amounts
  - Estimated 3 billion, globally
- Many opportunities for companies (as well as consumers)

SOME INSIGHTS FROM ASIA'S BOP

Most have *used* a phone in the last 3 months



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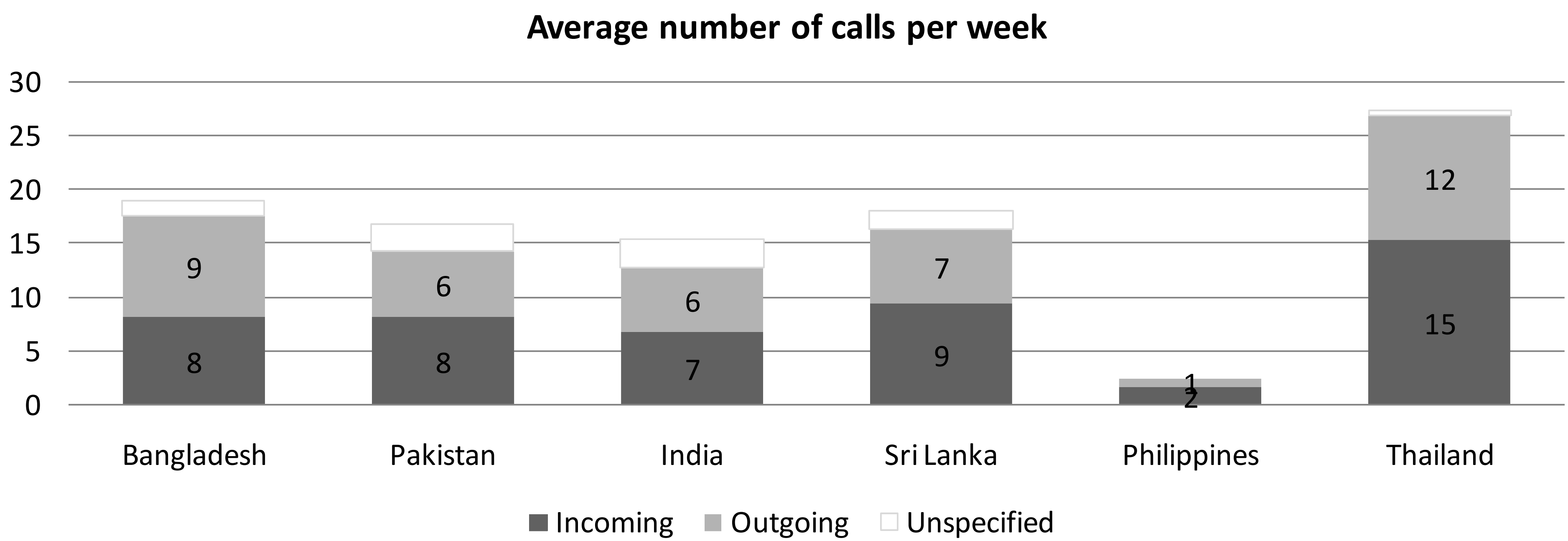
Among BOP

BOP make about 1 call per day



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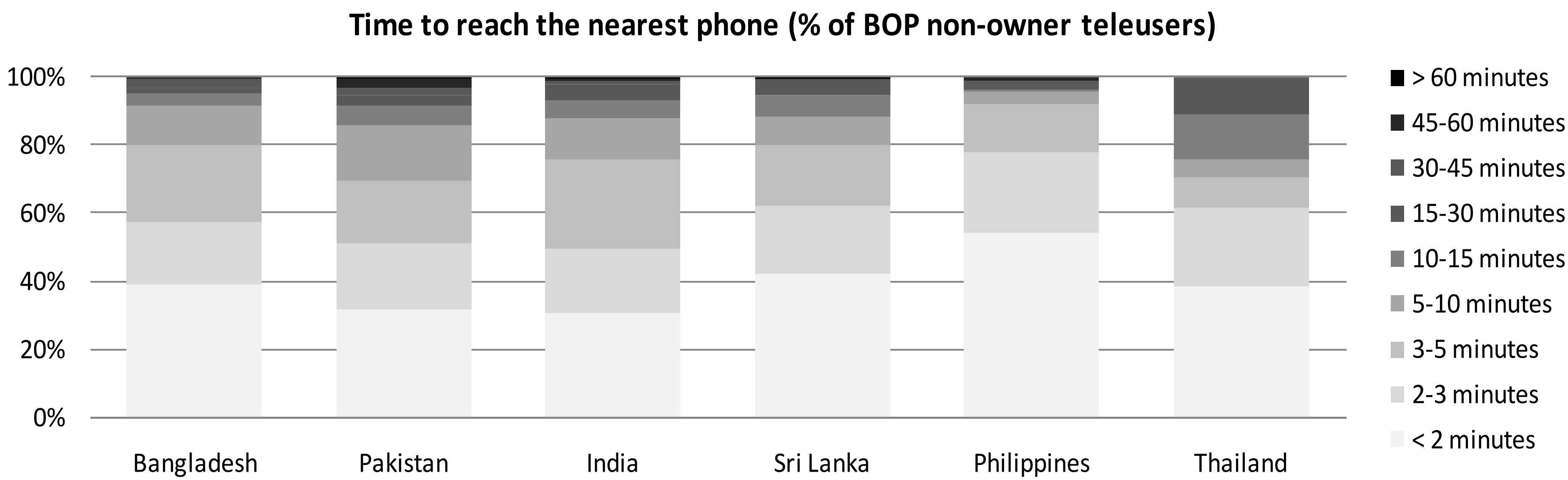
Diary responses

Non-owners can get to a phone in ~5 minutes (walking)



- Over half have access *within* house (mostly via other household members' mobiles)

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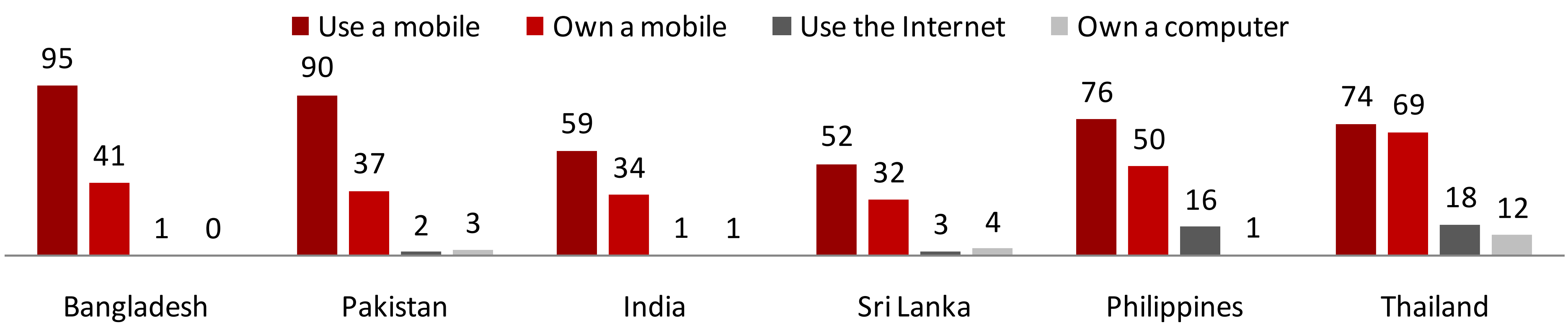
Among BOP non-owner teleusers

Even those that don't *own* mobiles already *use* them

ICT use and ownership (% of BOP)



- Many not even heard of the Internet!

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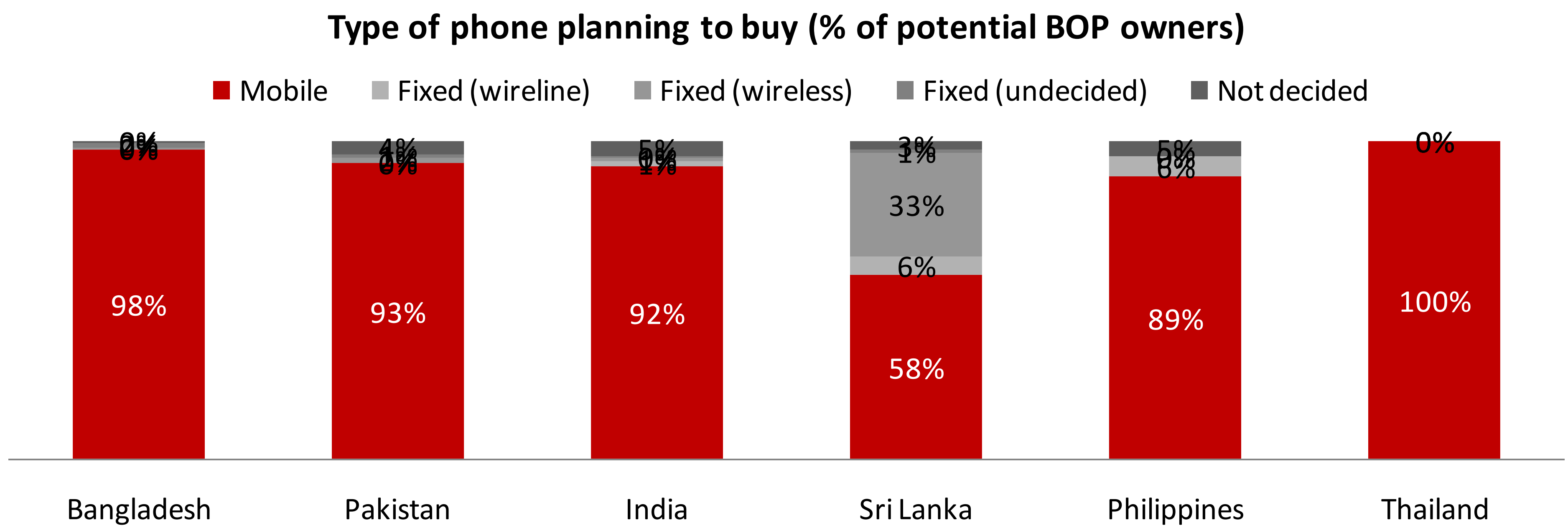
Among BOP

Many non-owners planned to get connected within 1 year from survey; mostly to mobile



- Many would like to get mobiles with coloured screens, cameras, radios and torches
  - Some demand for SMS and MMS capabilities, Internet and Bluetooth in PH and TH

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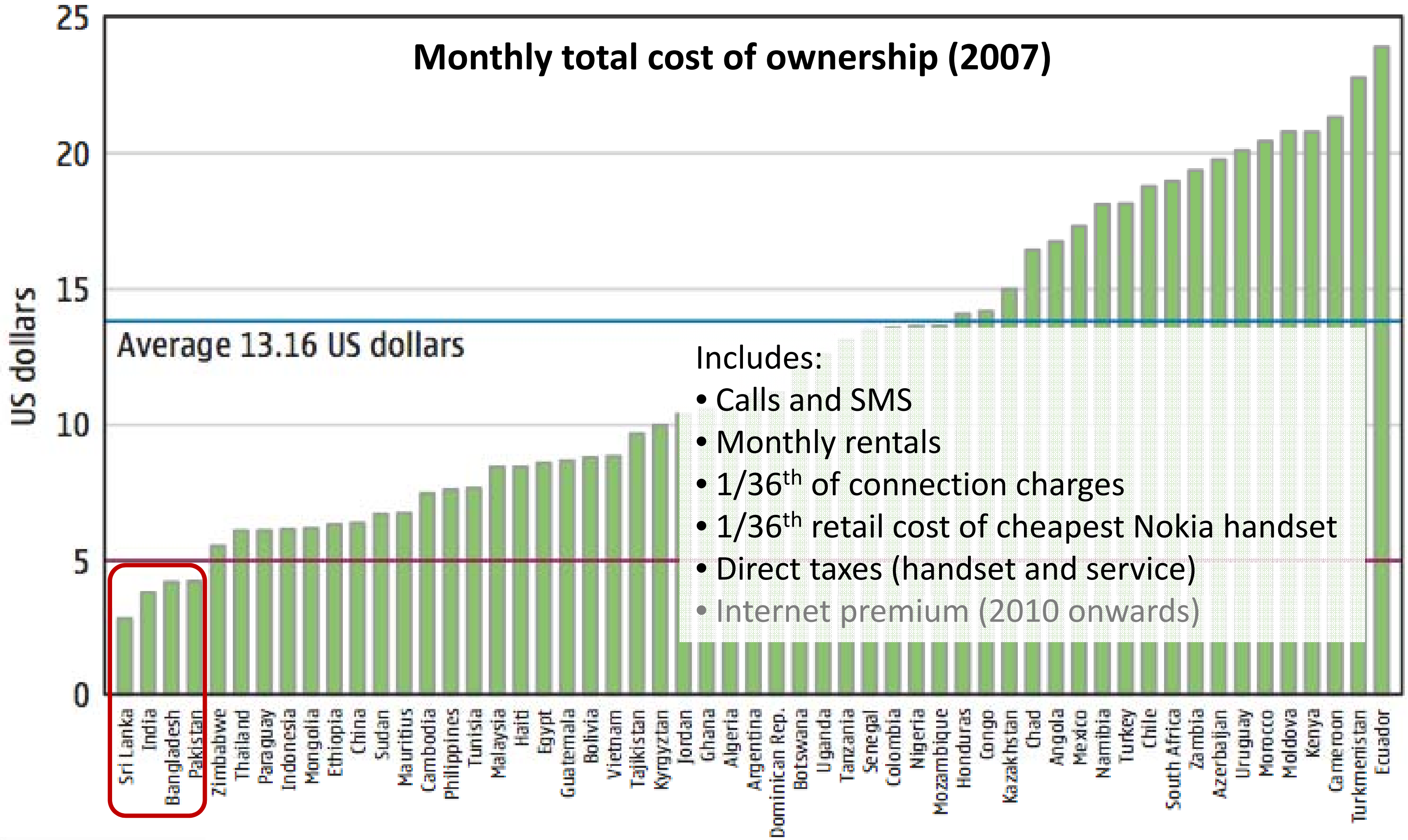
Among BOP non-owner teleusers planning to get connected

HOW WERE OPERATORS ABLE TO SERVE THIS SEGMENT?

South Asian operators saw the opportunity and brought down total cost of ownership



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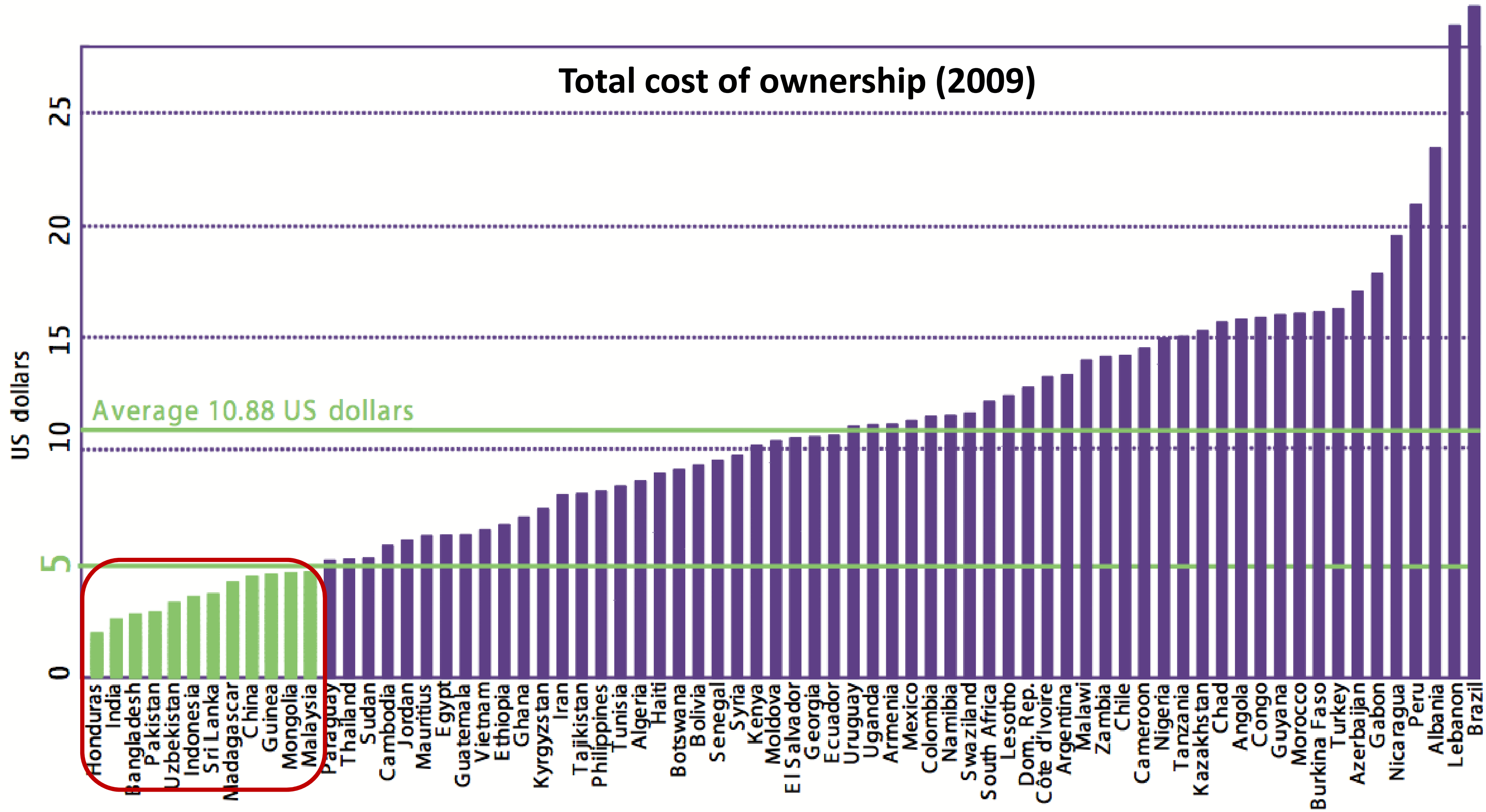
Source: Nokia, 2007; TCO for 77 emerging economies

...others followed



Source: Nokia, 2009; TCO for 77 emerging economies

Monthly TCO compares cost of same bundle

- Basket of OECD low-user calls and SMS for prepaid user
- Monthly rentals
- 1/36th of connection charges
- 1/36th retail cost of cheapest available Nokia handset
- Direct taxes (handset and service)
- Internet premium (2010 onwards)

High EBITDA margins, suggesting new business model

	Weighted EBIDTA margin (%), 2007	Notes
Bangladesh	31%	Excl. Warid & Teletalk; Banglalink negative
India	37%	Industry; not mobile only
Sri Lanka	45%	Excl. Tigo

Operators managed to get TCOs down (and make profits) by innovation

- The "budget telecom network model"
- Innovation driven by intense competition
  - In spite of poor policy/regulatory environment
  - Key factor was removal of barriers to market entry (transparent or not) where there are enough players, with one of them at least being willing to engage in disruptive competition
  - Operators forced out of comfort zones, forced to innovate

Better utilization of existing network

- Increased network utilization levels to accommodate higher traffic volumes
  - Base-station software updates to improve utilization
  - Network capacity expanded on call attempts/second-basis, rather than subscriber-basis

Catering better to consumers with low-incomes and low, irregular spending patterns

- Prepaid solutions better matched BOP income and spending patterns

% of BOP mobile owners

	Bangladesh	Pakistan	India	Sri Lanka	Philippines	Thailand
Prepaid connection	99	99	98	95	100	98
Postpaid connection	1	1	2	5	0	2

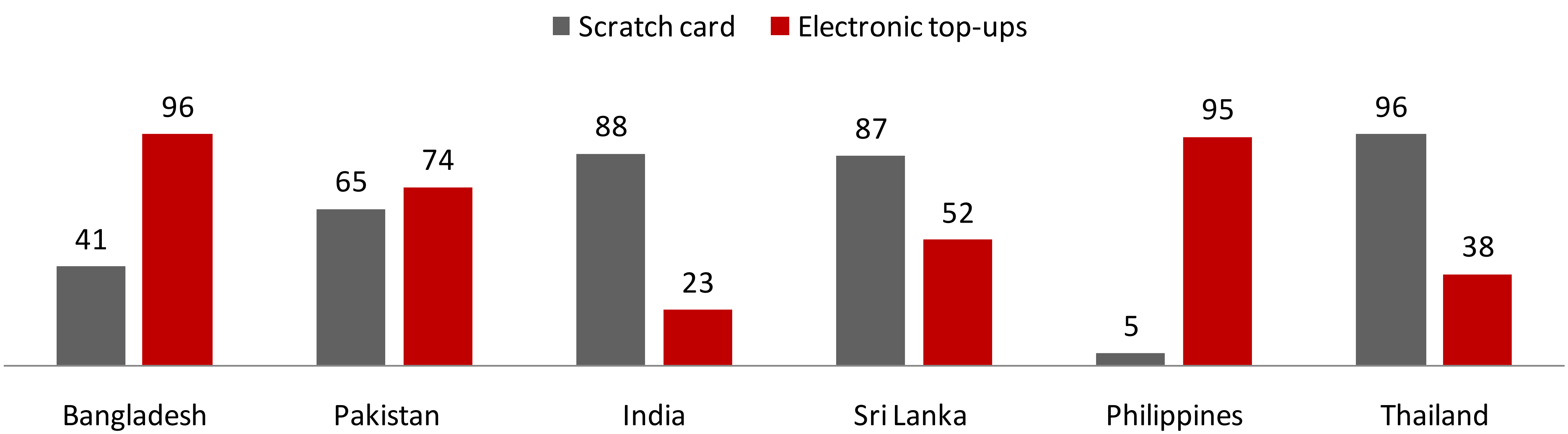
- Shift away from large-denomination scratch-cards toward any-amount micro-top-ups

Among BOP mobile owners

Owners spend little, but often; micro-top-ups used widely

	Bangladesh	Pakistan	India	Sri Lanka	Philippines	Thailand
Last top-up (USD)	0.50	0.87	1.71	1.26	0.65	2.49
No. of days expected to last	4	7	13	12	2	11

Scratch cards vs electronic top-up usage (% of BOP prepaid mobile owners)



Among BOP prepaid mobile owners

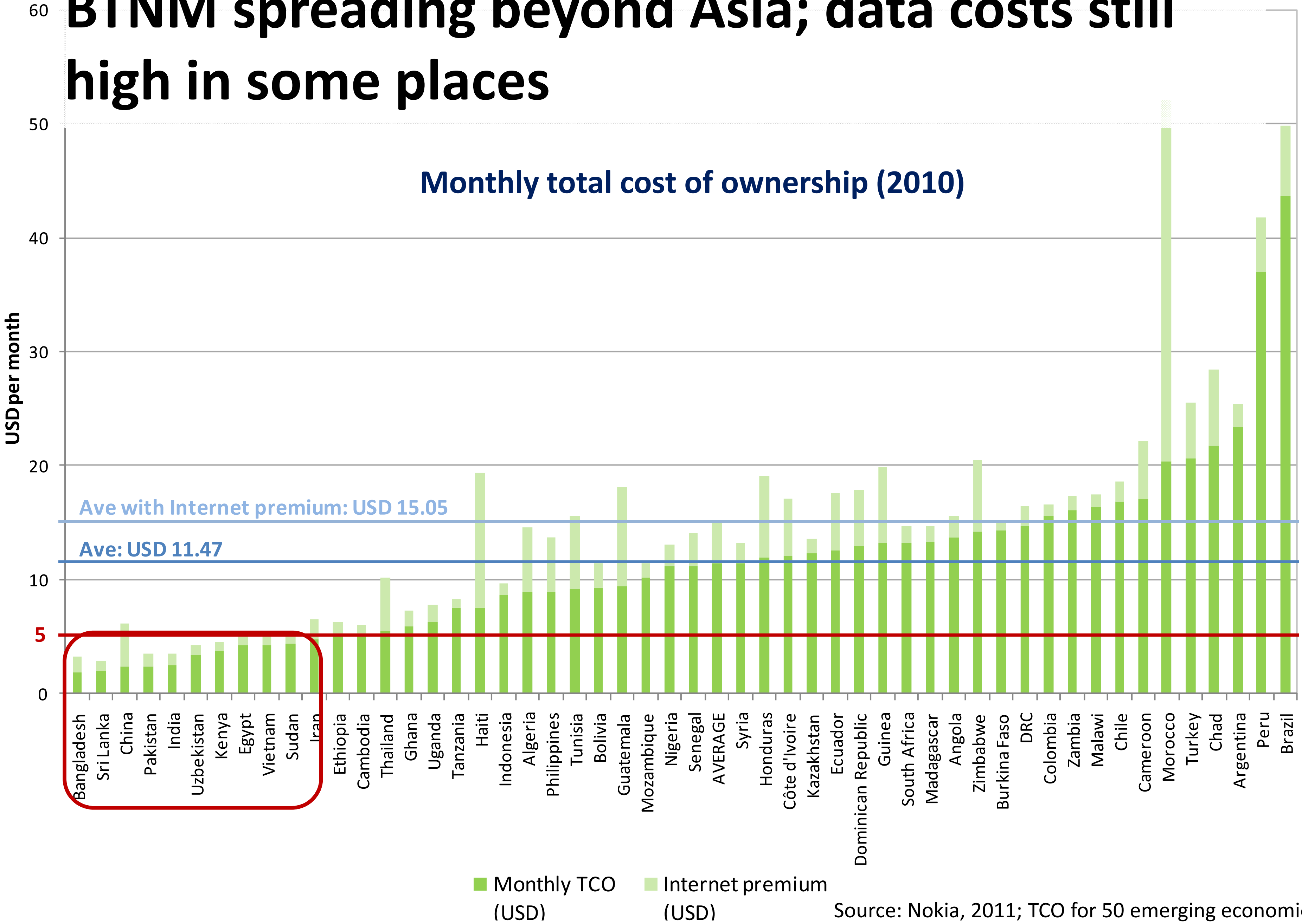
Reducing customer acquisition and retention costs

- Distribution costs cut by controlling level of commissions paid out to dealers who acquire customers
  - E.g., acquisition cost of USD1 in LK; no commission paid unless subscriber stayed on network for certain period.

Concluding thoughts:

EXTENDING THE BTNM, BEYOND ASIA? BEYOND VOICE?

BTNM spreading beyond Asia; data costs still high in some places



Source: Nokia, 2011; TCO for 50 emerging economies

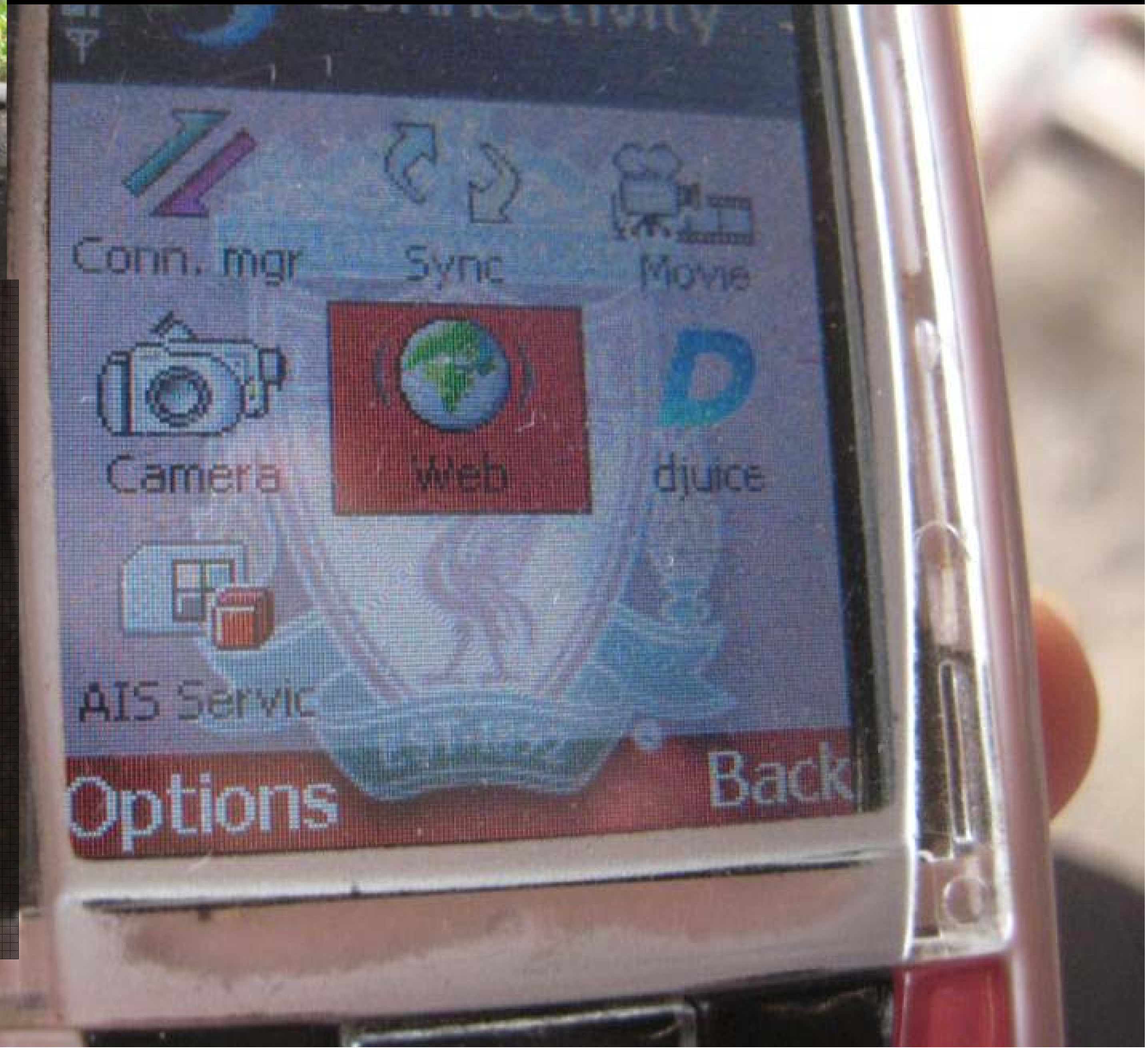
BOP mobile use mostly voice, SMS and missed calling; mobile Internet and applications yet to pick up

	BD		PK		IN		LK		PH		TH	
	Regularly	Not regularly	Regularly	Not regularly	Regularly	Not regularly	Regularly	Not regularly	Regularly	Not regularly	Regularly	Not regularly
Banking and financial services						1%		2%		1%		3%
Payment services								3%	2%	3%	1%	4%
Government services								2%		2%		
Health services		1%				1%		8%		1%		2%
Voting, competitions, reality shows, etc					1%	1%	1%	5%		7%	1%	8%
General information services		1%		1%				3%		2%	5%	11%
Agricultural or fisheries information								1%				

- Reasons for non-use:
  - Don’t know how
  - Not applicable to me
  - Too expensive
    - When they're available free via other modes
    - Insufficient prepaid credit for transactions

Dinn | Automobile mechanic
15 years | Jae Hom, Thailand

- Previously subscribed to sports news on his mobile, until he felt that the service was not worth spending on, since the same information is available for free on the TV and Internet.
- Tried using the Internet on his mobile, but he lost all his credit (THB50) in less than 5 minutes. He no longer uses it on his mobile. Instead, he goes to a cyber café and downloads ringtones, wallpapers and themes for his mobile and uploads his mobile photos to his Hi5 page. A two hour visit only costs him THB20.



Some variant of BTNM is what's likely to work wrt data connectivity

- Depends on, inter alia
  - release of 3G frequencies
  - Reduction in opex (incl. backhaul costs)
  - service pricing
  - relevant services
  - device pricing

www.lirneasia.net (search term: BOP)

Teleuse@BOP3 dataset available at http://lirneasia.net/projects/2008-2010/bop-teleuse-3/
TCO data: Nokia
Photos: CKS Consulting