

A regulatory regime that benefits citizens

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Agenda

- The success of voice & the challenge of Digital Bangladesh
- What can regulation contribute?
 - Not a comprehensive discussion
- How to do good regulation
 - Bracketing the need for new law and policy

Voice: A success in difficult circumstances

- ~100% of national territory covered by signals
- High uptake
 - 99% at BOP say they have used a phone in last 3 months
 - More phones than radios (and even TVs) in BOP households
- Prices among lowest in the world
 - Result of **Budget Telecom Network** (BTN) business model
- Voice has become a commodity; profits a problem → mobilizing capital more difficult

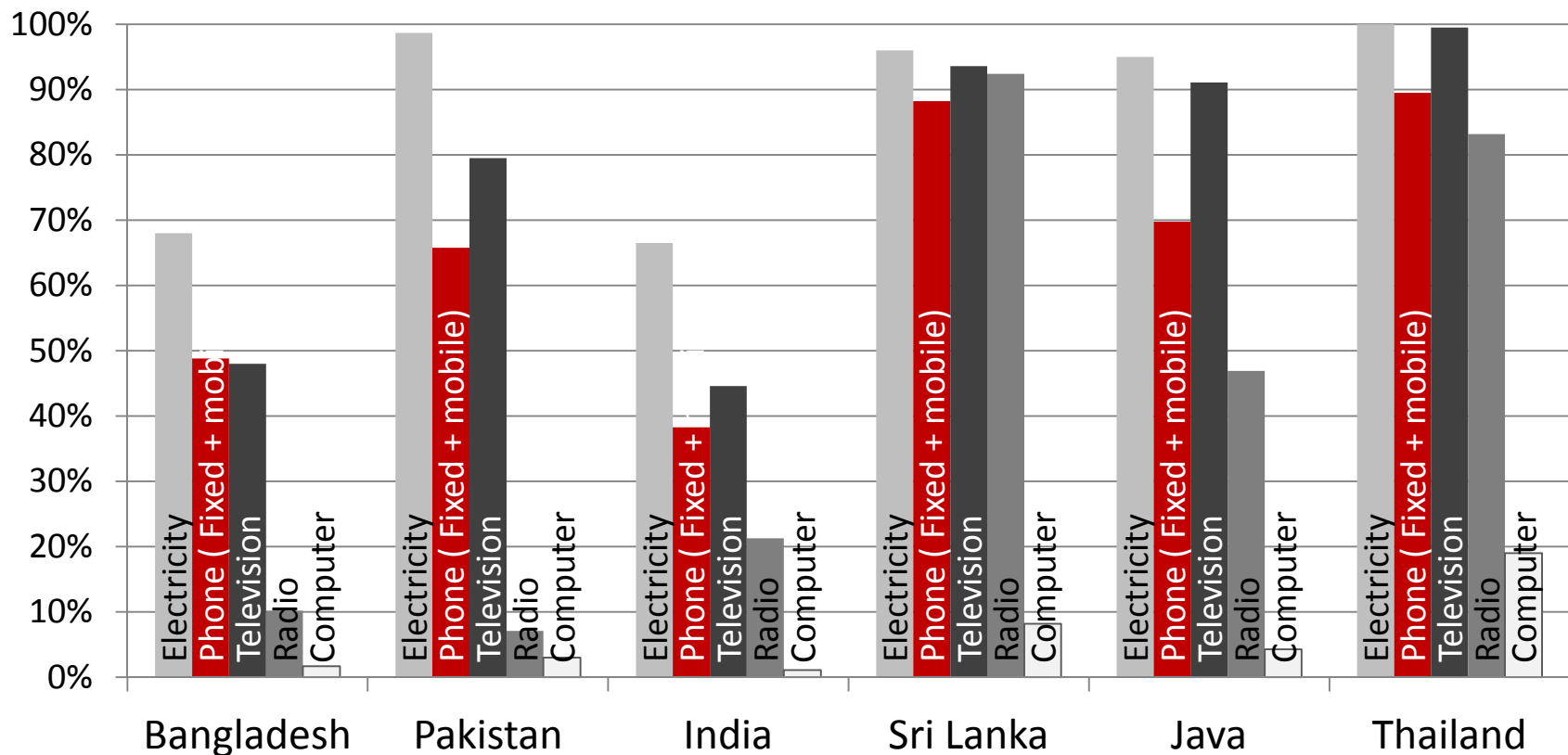
99% of BOP have used a phone in previous 3 months

	Bangladesh	Pakistan	India	Sri Lanka	Java	Thailand
2008	95%	96%	86%	88%	-	77 %
2011	99%	96%	89%	90%	90%	91%

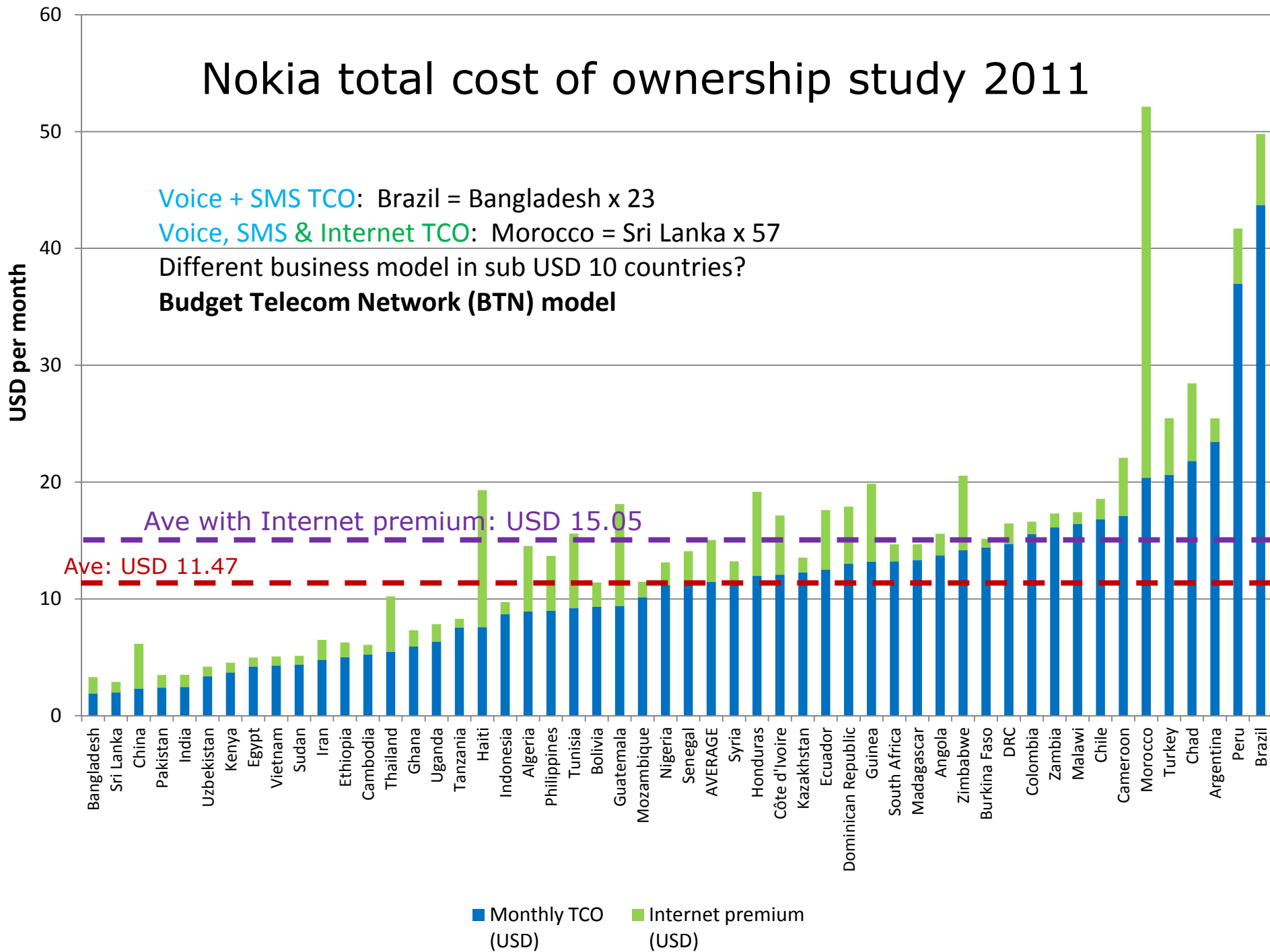
SEC D& E, corresponding to those living on less than USD 2/day
Representative sample of 2,050, +/- 2% at 95% confidence interval

Household access to electricity, phone, TV, radio, computer

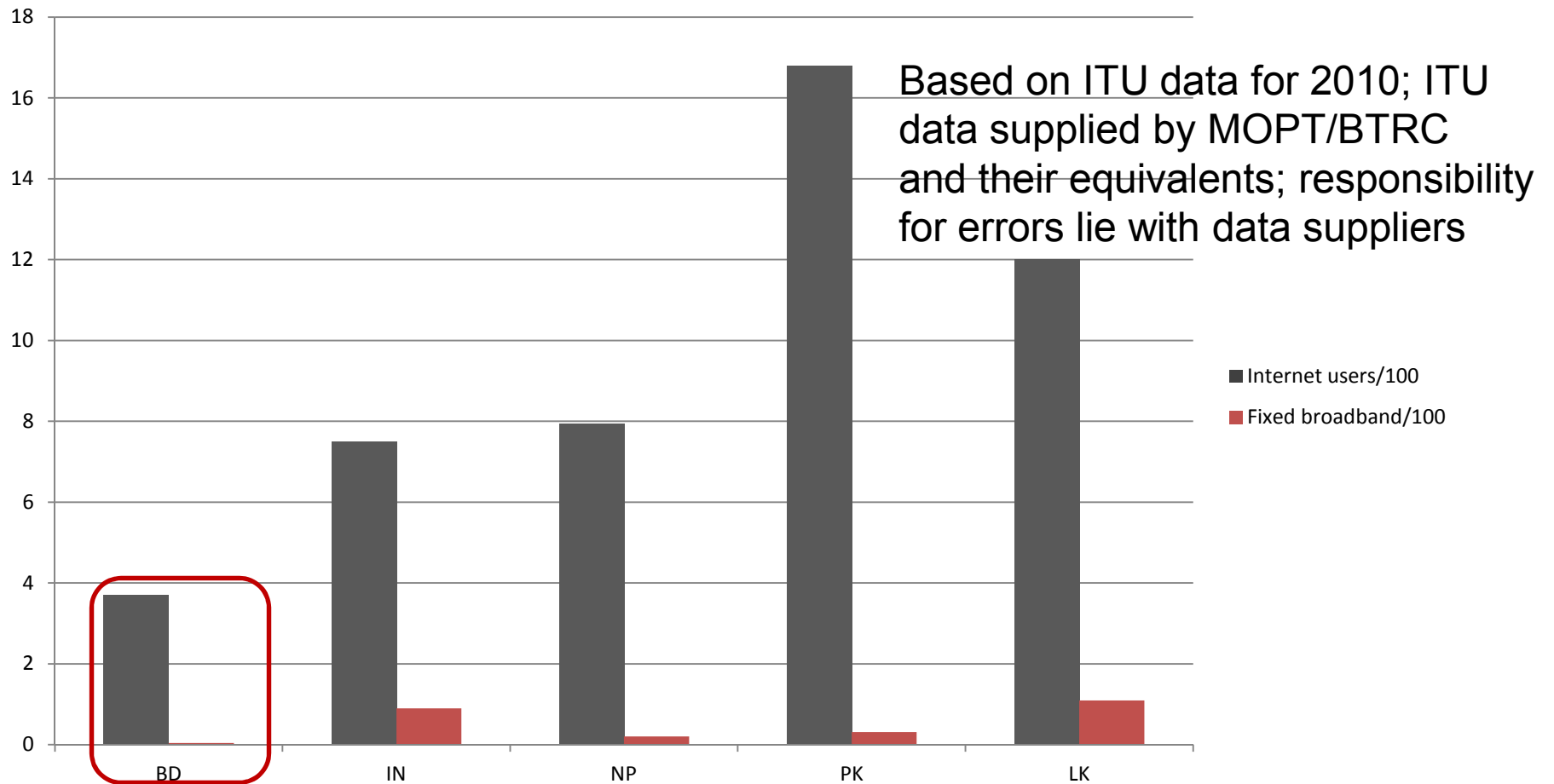
Household access (%BOP outer sample)



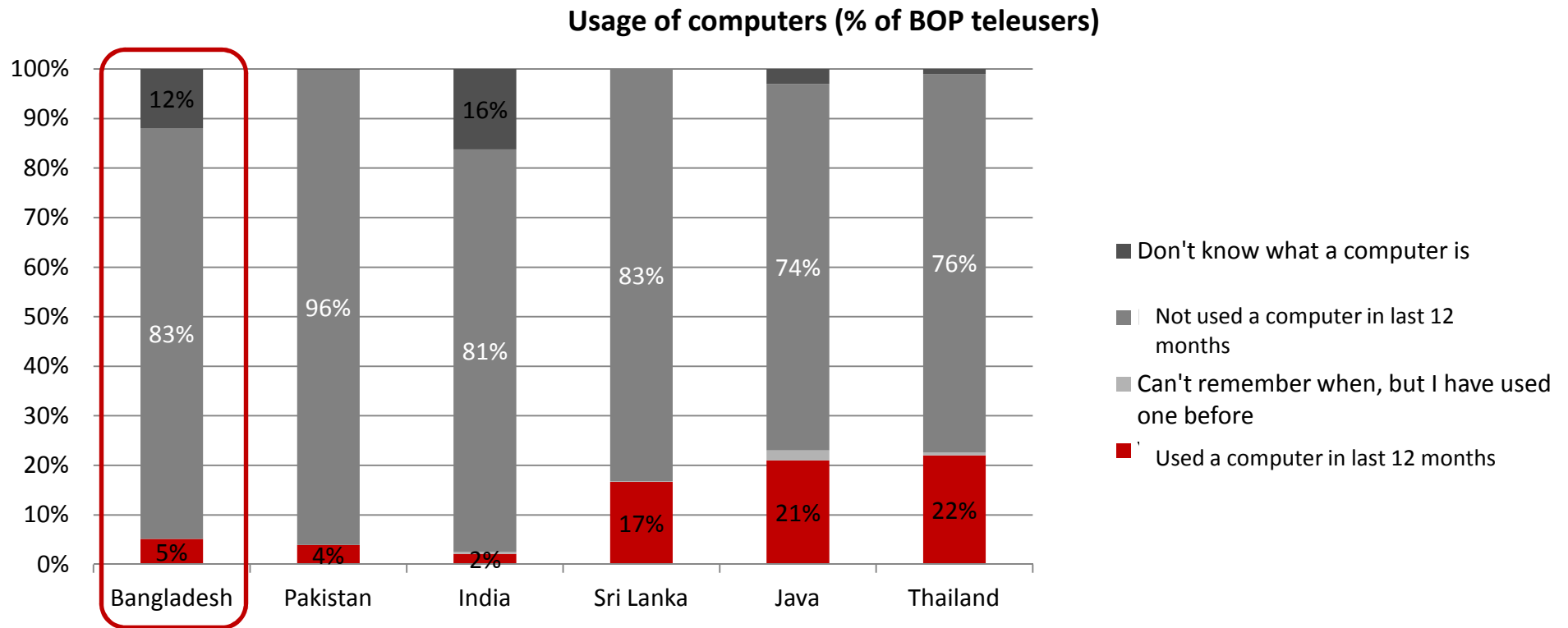
Nokia total cost of ownership study 2011



The challenge for Digital Bangladesh: Lowest Internet users & fixed broadband subs/100 in region (mobile broadband not reported)

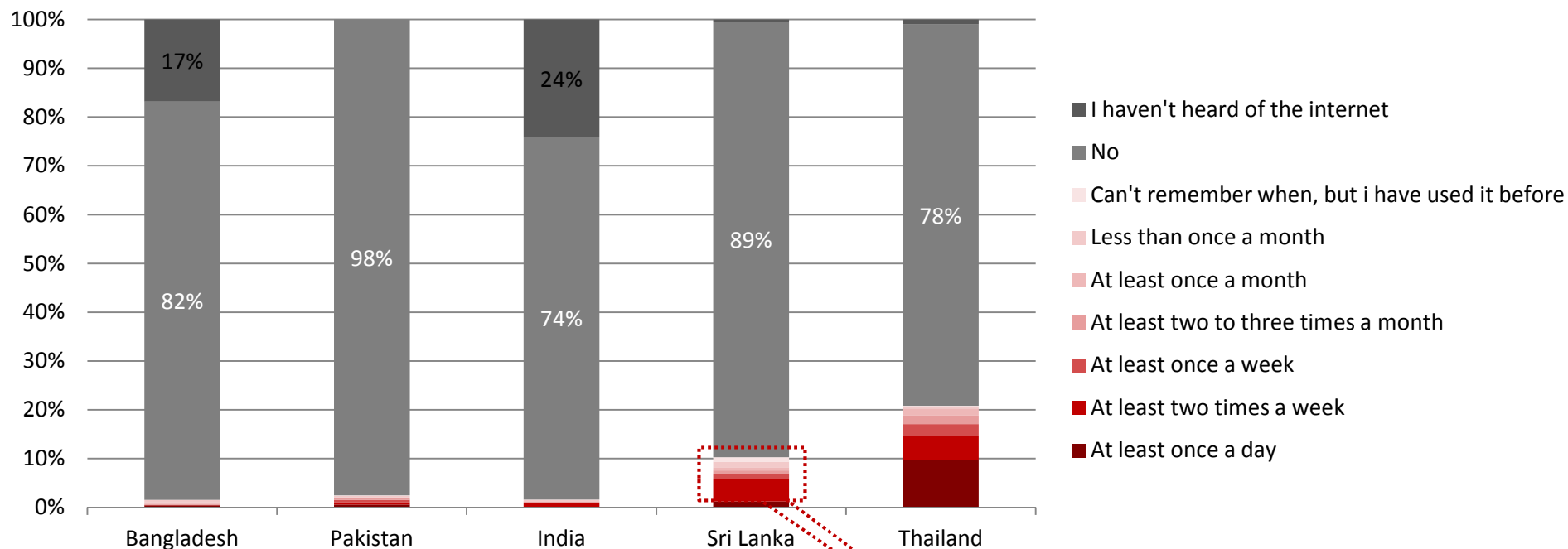


Computer use @ BOP low overall



Internet use similarly low@BOP; awareness problems in BD & IN

Internet use (% of BOP teleusers)



	Bangladesh	Pakistan	India	Sri Lanka	Thailand
Use the Internet (% of BOP teleusers)	2%	2%	1%	9%	21%

A challenge that can only be met . .

- By creating conditions for extending the **Budget Telecom Network** model to broadband
 - Low prices essential
 - Costs must be kept down if low prices are to be sustained
- By enabling the build out of wireless access networks capable of handling data cost-effectively
 - Backed up by non-discriminatory, cost-oriented access to fiber backhaul, including redundant capacity
- By offering applications that are of value to consumers, giving them reason to use broadband

Regulatory contributions to Digital Bangladesh

- Understand that what amount to overlay networks will have to be built; Also understand that creating platforms for applications will require investment
 - Major investments, with relatively long gestation periods, required
 - **Regulatory risk** must be reduced, especially re licenses, renewals & spectrum
- Develop, in consultation with stakeholders, a roadmap on when and what spectrum will be made available
 - And adhere to it
- Leverage the BTN model to achieve policy objectives, rather than work at cross purposes to it

Reduce regulatory risk for Digital Bangladesh networks

- Market entry
 - Build on recently concluded license-renewal debate to establish coherent market entry-exit policies
 - Model: Pakistan licensing policies of 2003
 - Emphasized transparency and predictability
 - Resulted in all operators being brought to a level playing field
 - Renewal handled in exemplary manner
 - But market-entry policies are incomplete without market-exit rules

Reduce regulatory risk . . . (market exit)

- Who can best decide number of suppliers?
 - Not Minister; not regulator; but the market
 - Transparently assign as many licenses as resources (spectrum) permit in blocks adequate for data and voice; no point in fragmenting → increasing costs
 - Allow secondary trading so operators can find the optimum distribution of spectrum
 - Create orderly exit mechanisms (ideally, known at time of entry), so that market can settle at optimum level
 - Includes rules on spectrum, secondary trading is a solution
 - Also safeguards for consumers

Reduce regulatory risk . . . (scarce resources)

- Spectrum is the most critical input in providing wireless broadband access
 - Spectrum refarming is central
 - All users of spectrum must understand that assignments are not for ever; that countries that are technology-takers must realign their spectrum assignments periodically
 - Difficult process; I did it in 2002-04 (900 and 1800 bands)
 - Requires extensive consultation with all affected stakeholders
 - Lots of listening and talk
 - Need to use proceeds of auctions to compensate “losers”
 - Operators must be able to plan and to mobilize resources
 - Not just a question of auctions versus administrative allocation
 - Auctions are best, but unless embedded within a credible **roadmap**, they will distort bidder’s incentives

Reduce regulatory risk . . . (road map)

- Best way to improve spectrum regulation is to set out **principles** and a schedule for refarming actions (known as roadmap)
 - Build on 2009 consultation, but make principles explicit and include time (when specific blocks will be refarmed/made available)
 - To the extent possible, reduce technology bias in spectrum assignments: e.g., why should 900 band be limited to specific technology?
 - Change and certainty
 - All should recognize that nothing is permanent in spectrum assignments
 - But change should be predictable and the path decided through extensive consultation based on principles

Reduce regulatory risk . . . (other scarce resources)

- Costs (time and money) of obtaining rights of way are escalating
 - Multiple levels of government involved
 - Not necessary to rewrite laws/Constitution
 - Simply enact amendments that provide for compulsory arbitration and time limits
- Numbers are a finite resources that is running out because all (regulators and operators) are treating it as infinite
 - Consider pricing and incentives to reuse
 - Start work on numbers/addresses for a converged world

Focus on high priority tasks and pull back from others

- As retail prices come down, greater attention must be paid to vertical price squeeze
- Building on inchoate decision to separate BTCL's backhaul operations create PPP to manage publicly funded backhaul (including international)
- Pull back from tariff regulation
 - A form of banded forbearance exists in Bangladesh
 - Why not make it formal, allowing reallocation of regulatory resources and reducing regulatory risk

How to regulate well

- Focus on **legitimacy** = acceptance in the eyes of others
- Sources of legitimacy
 - Expertise
 - Transparency
 - Fair procedure, including consultation
 - Willingness to explain reasons for actions
 - Openness to review and appeal

Expertise → legitimacy

- Requires good hiring procedures
 - Focus on those willing to learn; continual need for new knowledge
- Ability to hold and motivate good people
- Consistent focus on training
- Now, both Ministry and BTRC require expertise
- Without expertise, little basis for ex-ante, sector-specific regulation
 - But state of markets and technology are such that individual expertise alone is not enough

Procedural legitimacy

- When things are done the right way, more likely that outcomes will be seen as right
- In addition, serves to appeal-proof decisions
- Also permits regulatory authorities and staff to draw from a range of information sources and to assess the veracity and value of information

Explain, explain

- Regulators should behave like idealized bureaucrats, not as quasi-judges
 - Reasons for decisions must be given to
 - Stakeholders
 - General public via the media

Appeal and review

- Appeal and review should not be seen solely as causes of delay
- To the extent appeals and reviews can be done expeditiously, they relieve the pressure on the regulatory agency

For more . . .

- Samarajiva, R. (2010). Leveraging the budget telecom network business model to bring broadband to the people, *Information Technology and International Development*, 6, special edition: 93-97. <http://itidjournal.org/itid/article/view/630/270>
- Samarajiva, R. & T. Iqbal (2009). Banded forbearance: A new approach to price regulation in partially liberalized telecom markets, *International Journal of Regulation and Governance*, 9(1): 19-40.
- Samarajiva, R. (2006). Preconditions for effective deployment of wireless technologies for development in the Asia-Pacific, *Information Technology and International Development*, 3(2): 57-71. <http://itidjournal.org/itid/article/view/224/94>
- Samarajiva, R. (2004). Getting from dysfunctional government to e(ffective) government: Mapping a path in Sri Lanka, *International Journal of Regulation & Governance*, 4(2): 171-85.
 - A discussion of designing a Digital Bangladesh like initiative with regulatory reforms and details on spectrum refarming
- Samarajiva, R. (2002) Why regulate?, chapter 2 of *Effective regulation: Trends in Telecommunication Reform 2002*. Geneva: International Telecommunication Union.
- Samarajiva, R. (2001). Regulating in an imperfect world: Building independence through legitimacy. *Info*, 3(5), 363-68.