

Regional specificities of broadband policy & regulation

Expert Forum by LIRNEasia

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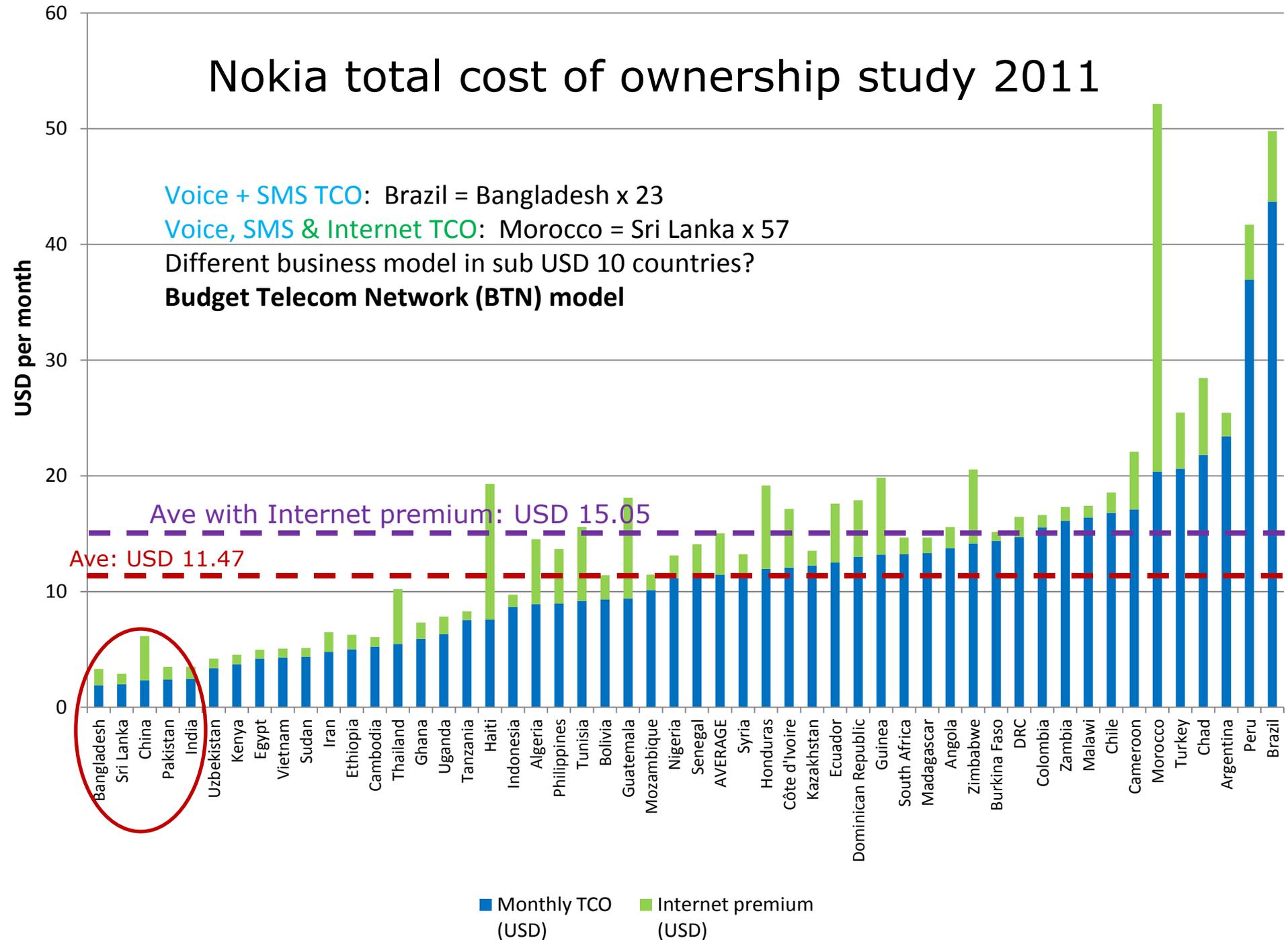
Nokia total cost of ownership study 2011

Voice + SMS TCO: Brazil = Bangladesh x 23

Voice, SMS & Internet TCO: Morocco = Sri Lanka x 57

Different business model in sub USD 10 countries?

Budget Telecom Network (BTN) model



As India goes, so does the region it seems

- Rapid growth of the Indian (and Chinese) voice markets led to lower network equipment and handset costs, a necessary condition for the Budget Telecom Network (BTN) business model in voice
- Markets dominated by wireless, which brought down per-line costs
- Very high levels of competition:
 - India 2011 HHI = 0.1381, though best to report by circle
 - Pakistan 2011 HHI = 0.2233
 - Bangladesh 2011 HHI = 0.3009
 - US DoJ Horizontal Merger Guidelines Moderately concentrated = 0.1500-0.2500
- Prepaid, another necessary condition, was not pioneered in the region, but was widely adopted
 - Drastically reduced transaction costs of dealing with “long-tail” customers
 - Suited the earning patterns of bottom-of-the-pyramid customers

All prepaid at BOP in PK, IN and BD: Postpaid only in LK and TH

Primary mobile connection (% BOP mobile owners)

	Bangladesh	Pakistan	India	Sri Lanka	Java	Thailand
Pre paid	100	100	100	95	100	96
Post paid	-	-	-	5	-	4

2011 Teleuse@BOP4 survey

Broadband success

- Will depend on
 - Extending the BTN model
 - Ensuring adequate investments occur
- But above not sufficient, since Internet use requires more skills than voice telephony
 - More applications that people find useful (including entertainment)
 - Easier-to-use interfaces
 - Literacy to some extent
 - Demand-side stimulation

What can policy & regulation do to ensure adequate investment?

- Reduce “regulatory risk” (a term of art that includes all form of government action, not limited to those of regulatory agency, including taxation)
 - Licensing (including market entry and exit policies) is critical
 - Predictability of input of costs, as far as government action is concerned → not only spectrum availability but credible roadmaps of when what spectrum will be available

Policy & regulation has greatest impact on supply-side

- Internet use can be thought of as a chain:
terminal device → access network → domestic
backhaul → international backhaul
 - Chain is as strong as the weakest link
- International backhaul prices must come down
for sustainable working of the BTN model
- India is directing USF money to domestic
backhaul, which is good, especially if it ensures
cost-oriented, non-discriminatory access to all
operators, allowing them to focus on access
networks and customers

What can policy & regulation do for access networks?

- Need to be upgraded for broadband
- Take wireguides as close to customers as economically justified, since all customers will be connected wirelessly
 - Few meters in densely populated urban areas
 - Few kilometers elsewhere
- For wireguides: remove barriers; facilitate rights of way; clear rules re conduits in multi-story dwellings
- For wireless: ensure adequate spectrum; encourage shared infrastructure; facilitate tower construction

Price & QoS

- Pricing flexibility essential for BTN model; TRAI's forbearance approach needs to be continued
- One negative aspect of BTN model is fluctuating quality
 - Requires monitoring of QoSE (diagnostics to identify where problems are)
 - Ensure truth in advertising
 - Reduce barriers to changing of suppliers
 - Create conditions for quality to become a marketing tool
 - Hard regulation of quality can have negative effects, especially for marginal customers

Outside the purview of NRAs

- Taxation
 - Governments need revenues; but there must be predictability
 - If Internet is considered a merit good that is subsidized on one hand, does it make sense to over tax it on the other?
- Electricity
 - Given unsatisfactory supply, reliance of diesel at edges as well as middle of networks
 - What can be done? PK example of tying USO funds to off-grid power sourcing
- Rights of way
 - Multiple authorities → delays, discretion
 - Time-bound arbitration of disputes?

Demand-side stimulation

- Government's most crucial role may be on demand side
 - Encouraging entrepreneurship and innovation in the m applications space
 - Freeing up government data for apps developers
 - Support for local languages
 - Perhaps targeted literacy programs