Lessons from the mobile-voice success for policymakers, regulators, operators, applications providers & manufacturers

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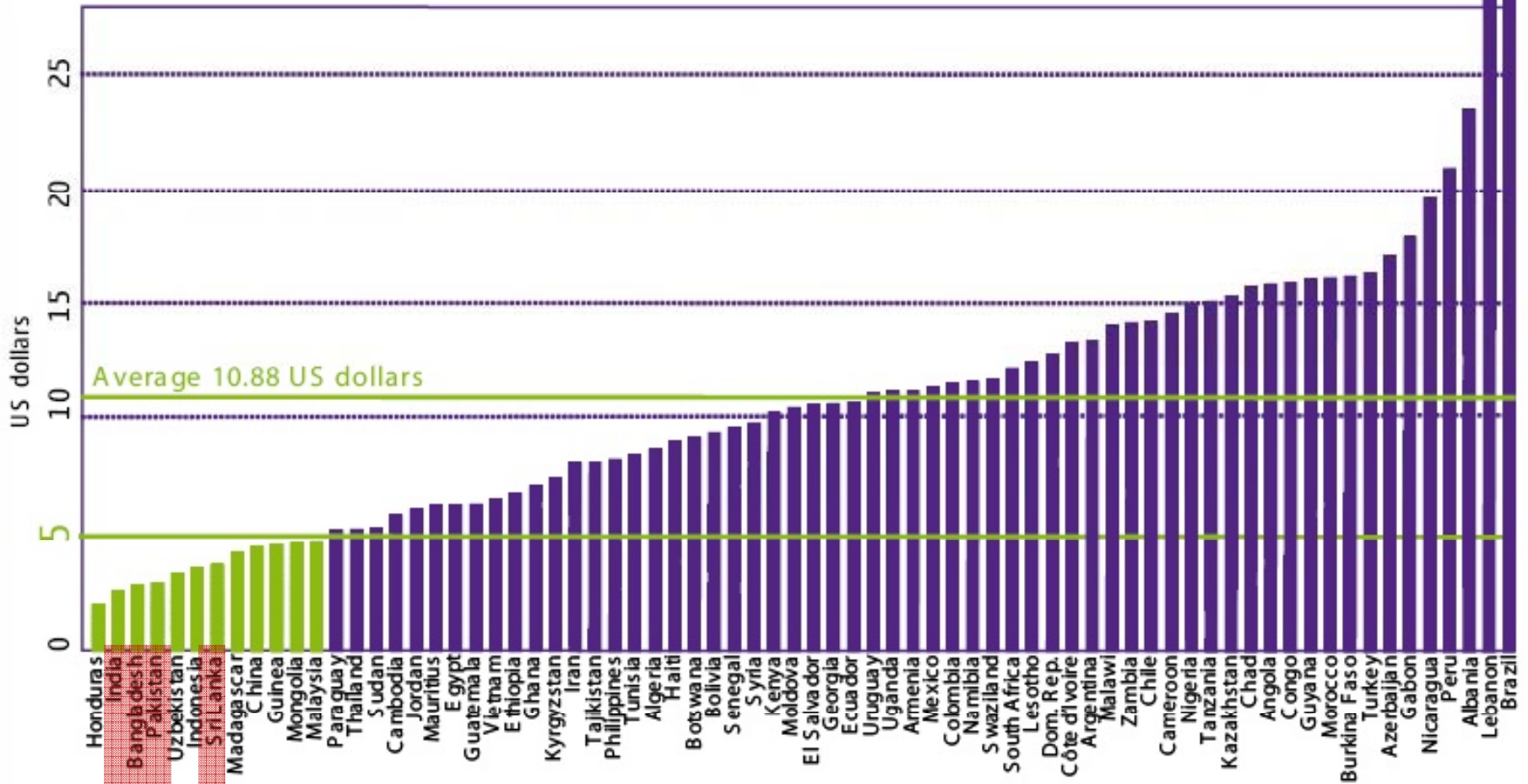www.LIRNEasia.net; rohan [at] lirneasia.net

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Mobile voice is a great success, with Asia leading the way; will the success extend to more-than-voice?
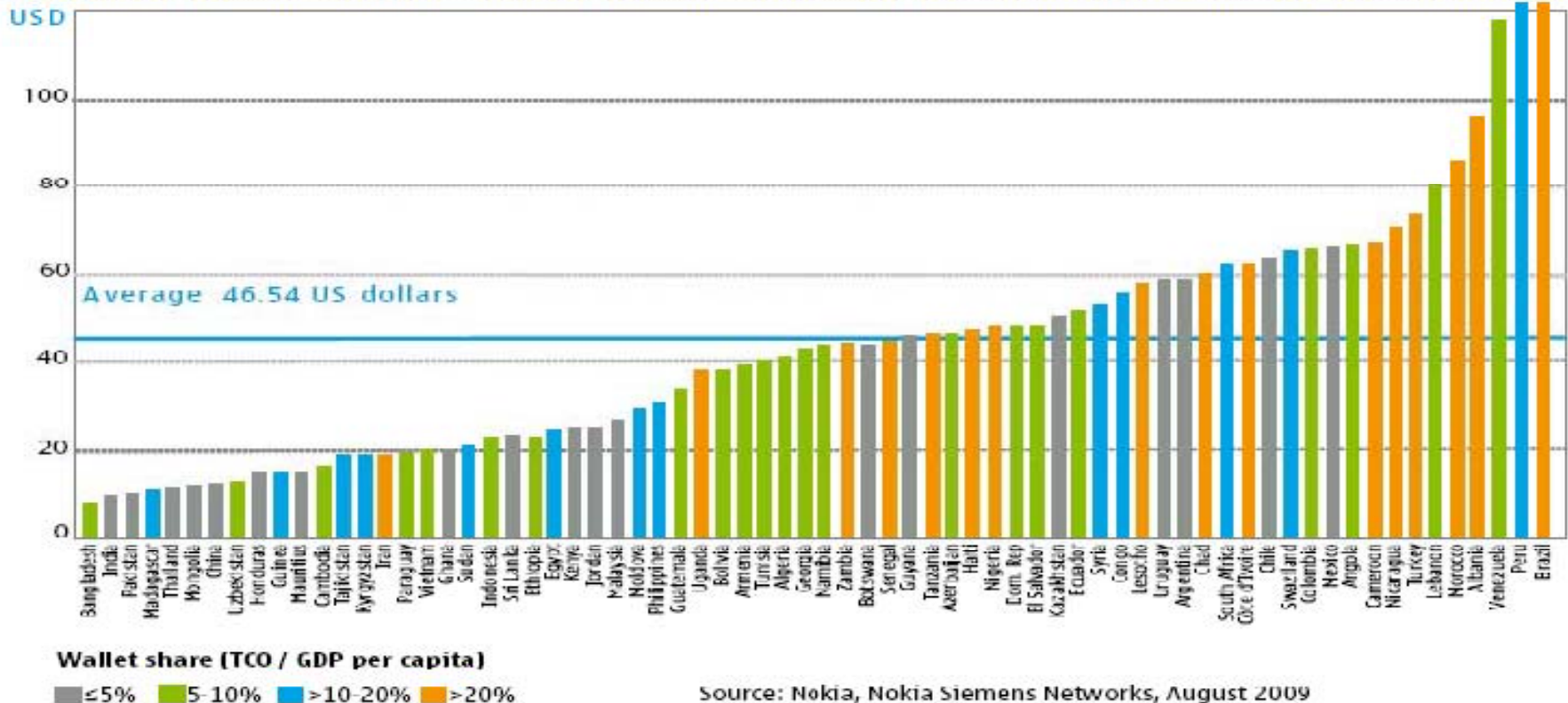
Total cost of mobile ownership in 77 emerging economies
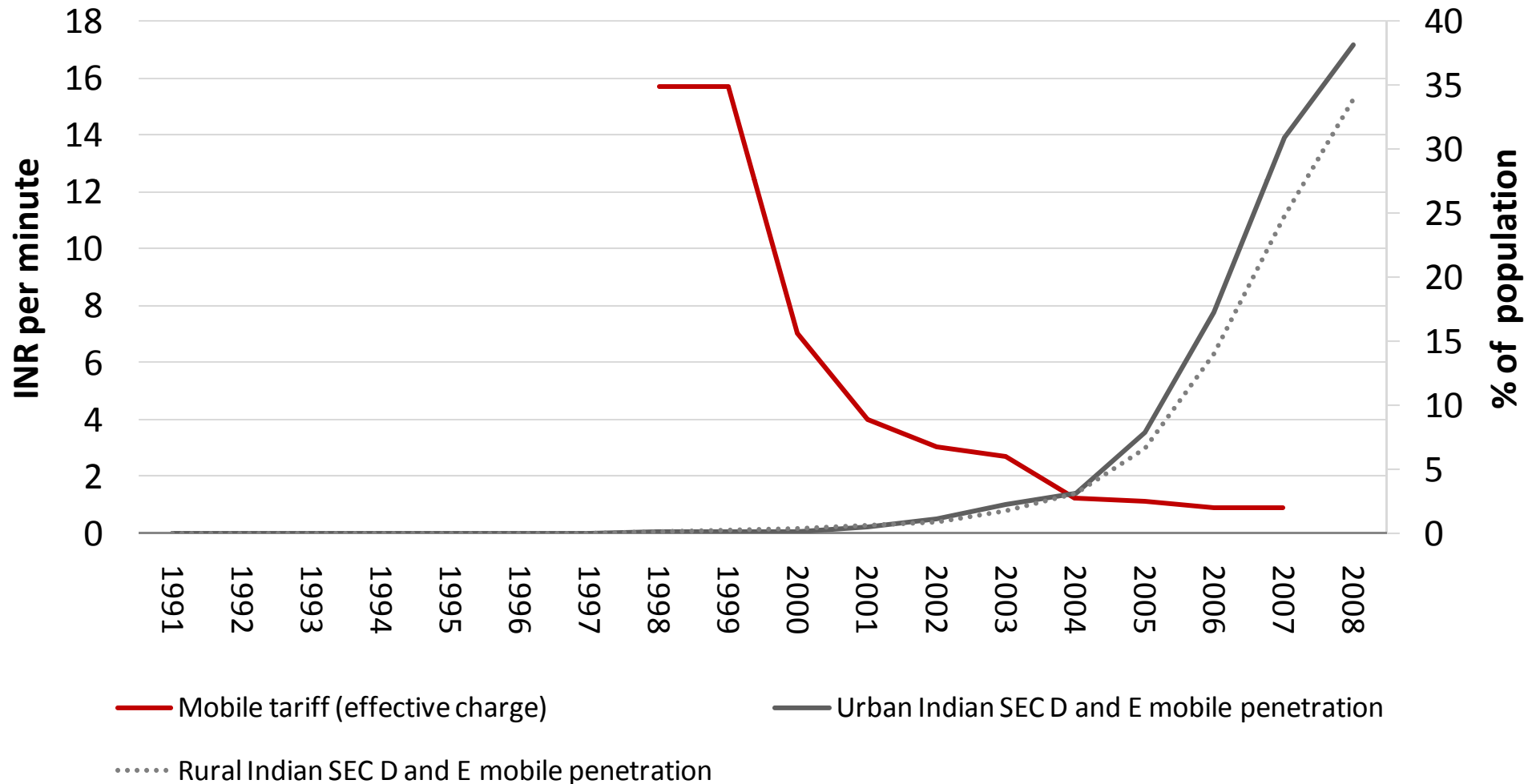

Monthly TCO by country

US dollars — Average 10.88 US dollars

Source: Nokia Research 2009

Voice + data basket TCOs for 78 emerging economies, with wallet shares (grey is good; orange is bad)

Brazil is off the chart: USD 225

Low prices ➔ greater participation by the poor (urban/rural)

Legend:
- Mobile tariff (effective charge)
- Urban Indian SEC D and E mobile penetration
- Rural Indian SEC D and E mobile penetration

10,000-sample, 6-country Teleuse@BOP survey in 2008 found that most poor people had . . .

Used a phone in the last 3 months

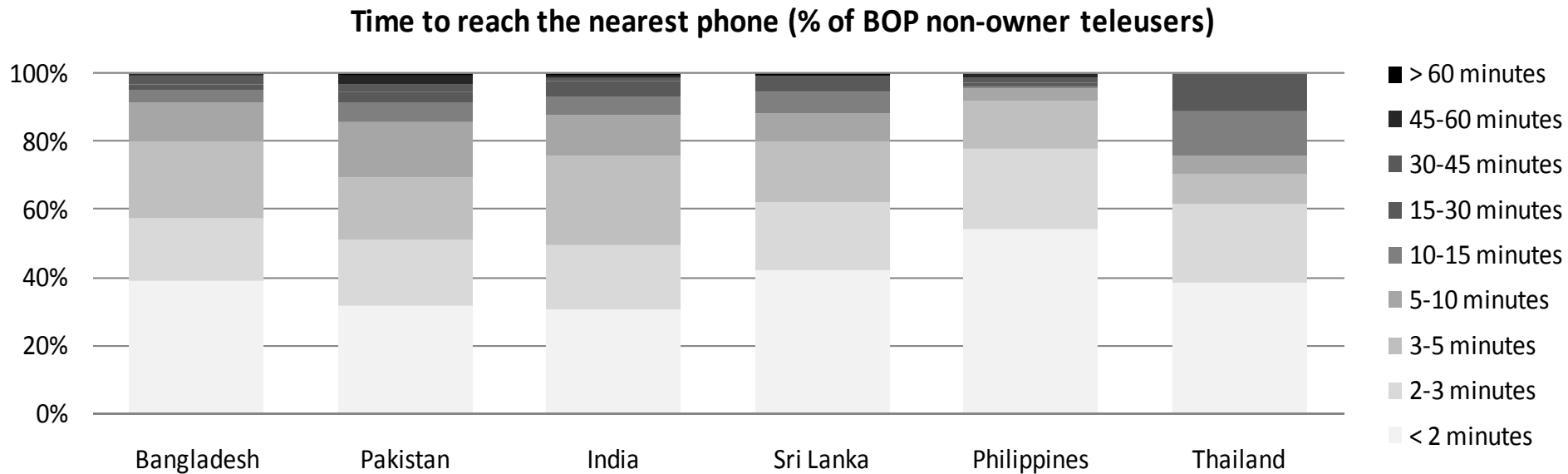|	Bangladesh	Pakistan	India	Sri Lanka	Philippines	Thailand
% of BOP (outer sample)	95%	96%	86%	88%	79%	77 %

Used a phone in the last week

	Bangladesh	Pakistan	India	Sri Lanka	Philippines	Thailand
% of BOP (outer sample)	82%	66%	65%	77%	38%	72%

Caused by SMS reliance

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Among BOP (OUTER SAMPLE)

Among non-owners, ~80% could get to a phone in under 5 minutes in 2008

Time to reach the nearest phone (% of BOP non-owner teleusers)

Legend:
- > 60 minutes
- 45-60 minutes
- 30-45 minutes
- 15-30 minutes
- 10-15 minutes
- 5-10 minutes
- 3-5 minutes
- 2-3 minutes
- < 2 minutes

Categories: Bangladesh, Pakistan, India, Sri Lanka, Philippines, Thailand

Most non-owners walk to the nearest phone

Among BOP non-owner teleusers

Elements of the Budget Telecom Network Model

- Enable excellent (if highly volatile) returns by serving "long-tail" markets of poor people by
  - Dramatically reducing transaction costs through prepaid
  - Allowing poor people to pay in small amounts for services when they need it and when they have money (as opposed to fixed monthly payments)
  - Controlling operating expenses through business-process innovation (e.g., software, low-energy base stations)
  - Focusing on revenue-yielding minutes rather than ARPUs
- Akin to Budget Airline Model that allows RyanAir/Air Asia to make profits while conventional airlines flounder
- Downsides
  - Patchy quality of service for consumers
  - Volatile returns; increased risks for suppliers

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Next is more than voice . . .

- Mobile voice success was achieved because the necessary conditions were created for massive investment in network build-out
- Building networks capable of broadband is not just incremental; it is the building of an overlay network that requires massive investment, but
    - Not enough cash flow from commodity voice business
    - Governments are extracting lots of taxes
    - Great Recession (tempered by Arab & other funds seeking non-US locations)
    - Internet economics: unprofitable companies being purchased for high prices
    - Regulation has become politicized with higher profile
    - In many countries, license renewal uncertainties are affecting investment
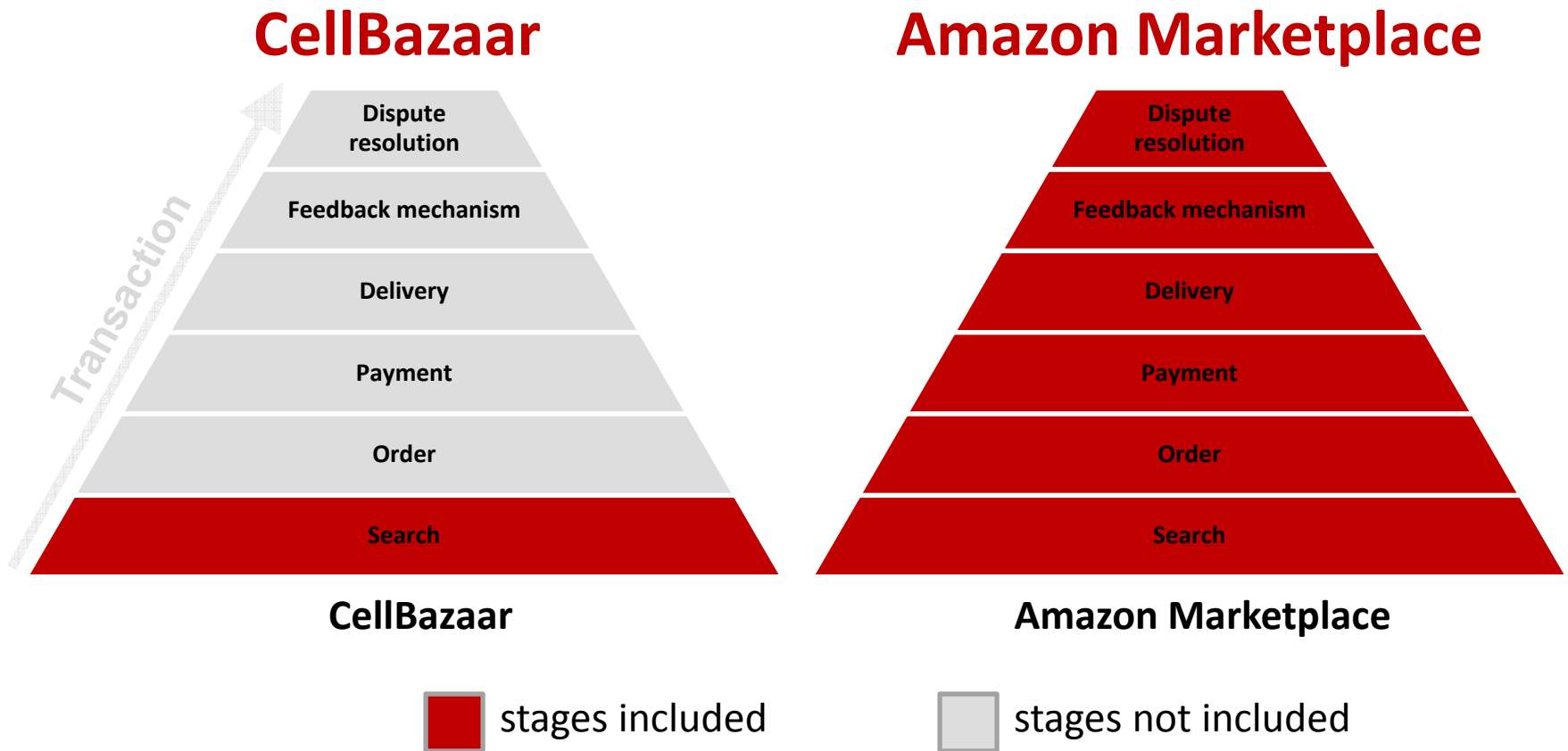
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What policymakers & regulators can do . . . (in order of priority)

- Market entry and spectrum management, including refarming, have to be given highest priority; uncertainty caused by license terms ending must be reduced

- More emphasis on availability of, and wholesale access to, "fat pipes" than on termination rates per se

- Attention to anti-competitive practices, especially vertical price squeeze

- Old style price regulation to be replaced by forms of forbearance, if necessary bounded to address competition concerns

- Gentle on Quality of Service (QOS) regulation

- Phase out universal-service levies and rationalize taxes

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What operators can do . . .

- Innovative pricing
  - Same as with voice and shampoo, poor people need to be able to pay for Internet when the need arises and when money becomes available
- Be hospitable to applications providers ("app store")
  - Create a platform for seamless entry by applications providers
  - Reasonable revenue shares with app providers, e.g.
    - 40% if no advertising is done by app provider
    - 90% if app provider advertises (oral offer by Pakistan telecom operator)

What applications providers can do . . . New services/applications

CellBazaar

| Dispute resolution |
| Feedback mechanism |
| Delivery |
| Payment |
| Order |
| Search |

Transaction

CellBazaar

Amazon Marketplace

| Dispute resolution |
| Feedback mechanism |
| Delivery |
| Payment |
| Order |
| Search |

Amazon Marketplace

■ stages included   ☐ stages not included

- Today CellBazaar can only do search; if payment policy firmed up they can add payments; if postal system improved they can start delivery, etc.

What hardware suppliers can do . . .

- Low cost has been achieved
  - Second-hand markets will take the necessary handsets down to the Bottom of the Pyramid (BOP)
- Interfaces require lots more work
  - Voice activation
  - Menu-based
  - Etc.

Achievements; challenges

- **Achievements**
  - Business model for voice was a major innovation: cluster of business process innovations
- **Challenges**
  - Policy and regulatory innovations
  - More business process innovations from operators
    - Include purely technical innovations such as lowering energy costs
  - App store approach and innovative revenue/risk sharing
    - Decentralized innovations on applications
  - Interface design

Questions?

- Is this only a BOP story?
- What about the top of the pyramid? Same narrative or different narrative?
- Is there life after voice?
- In the Philippines and US, voice already overtaken by data
  - Will this happen everywhere?
- . . . .

For more information

- Samarajiva, R. (2009). How the developing world may participate in the global Internet economy: Innovation driven by competition, in *ICTs for development: Improving policy coherence*, pp. 75-118. Paris: OECD. http://www.oecd.org/dataoecd/39/15/44003919.pdf
- www.lirneasia.net