Mobiles beyond voice:
identifying the conditions for use

Ayesha Zainudeen, Senior Research Manager, LIRNEasia
Dimuthu Ratnadiwakara, former Researcher, LIRNEasia
CPRsouth5, Xi’an, China

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Key takeaways

• “Beyond-voice” services offer new revenue sources for operators
• Social influence a key factor in beyond-voice service adoption
  – Leveraging on this can help bring less educated and recently connected segments of BOP into market
• Innovations in pricing of services for affordability needed
• Other conditions (e.g., payment services, delivery services, etc) need to be satisfied also
Study data: Teleuse@BOP3

- Representative survey of ICT use among 15-60 year old BOP teleusers in Bangladesh, Pakistan, India, Sri Lanka, Philippines & Thailand
  - BOP defined as SEC groups D + E*
- 10,000+ individuals surveyed in 2008; 200+ studied in depth via FGDs, mini-ethnographies and home visits in 2009
- What this means in emerging Asia... **579 million**

* SEC E only in Philippines
** 15-60 age groups only
“Beyond voice” awareness and use are low, esp in BD, PK and IN

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Bangladesh</th>
<th>Pakistan</th>
<th>India</th>
<th>Sri Lanka</th>
<th>Philippines</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regularly</td>
<td>Not regular</td>
<td></td>
<td>Regularly</td>
<td>Not regular</td>
<td>Regularly</td>
</tr>
<tr>
<td>Banking and financial services</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Payment services</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Government services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
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<tr>
<td>Health services</td>
<td>1</td>
<td></td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Voting, competitions, reality shows, etc</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>General information services</td>
<td>1</td>
<td>1</td>
<td></td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Agricultural or fisheries information</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
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<td></td>
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</tbody>
</table>

Use of mobile Internet services (% of BOP teleusers aware of the Internet)

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Bangladesh</th>
<th>Pakistan</th>
<th>India</th>
<th>Sri Lanka</th>
<th>Philippines</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile internet</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>2</td>
<td>6</td>
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</tbody>
</table>

Among BOP teleusers who are aware of services
Understanding of factors influencing probability of “beyond-voice” mobile use can inform business strategies to better target BOP

• Factors influencing probability of “beyond-voice” use modeled using logistical regression

• Factors investigated:
  – Demographics, education, income, distance from nearest town, mobile ownership, duration of mobile ownership, social influence perceived usefulness, Internet use via computer
<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Odds Ratio</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age squared</td>
<td>-0.001</td>
<td>0.999</td>
<td>0.09</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.153</td>
<td>0.858</td>
<td>0.04</td>
</tr>
<tr>
<td>Secondary education</td>
<td>0.242</td>
<td>1.274</td>
<td>0.00</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>0.391</td>
<td>1.478</td>
<td>0.00</td>
</tr>
<tr>
<td>Duration of mobile ownership</td>
<td>0.013</td>
<td>1.013</td>
<td>0.02</td>
</tr>
<tr>
<td>Walk time to nearest town</td>
<td>-0.012</td>
<td>0.988</td>
<td>0.19</td>
</tr>
<tr>
<td>% of phone-owning contacts</td>
<td>0.820</td>
<td>2.270</td>
<td>0.00</td>
</tr>
<tr>
<td>Sum of perceived benefits (uselfuls)</td>
<td>0.078</td>
<td>1.081</td>
<td>0.00</td>
</tr>
<tr>
<td>Use Internet through computer</td>
<td>1.958</td>
<td>7.085</td>
<td>0.00</td>
</tr>
<tr>
<td>Philippines</td>
<td>-1.789</td>
<td>0.167</td>
<td>0.00</td>
</tr>
<tr>
<td>Thailand</td>
<td>-1.160</td>
<td>0.313</td>
<td>0.00</td>
</tr>
<tr>
<td>Constant</td>
<td>-6.340</td>
<td>0.000</td>
<td>0.00</td>
</tr>
</tbody>
</table>

\( n = 2524; \) Nagelkerke R Square: 0.354
Social influence a key predictor of probability of beyond-voice services

• Other significant factors:
  – Internet use via computer
  – Education
  – perceived benefits (usefulness)
  – duration of mobile ownership
Key barriers to uptake include lack of knowledge and relative cost...

- Don’t know how
- “Not applicable to me”
Too expensive, when they're available free or cheaper via other modes...
Other conditions need to be satisfied also

### CellBazaar

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

### Amazon Marketplace

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

*Stages included (full functionality)*

*Stages not included*
Why is this important?

- Even at the BOP non-owners have access

* Excludes CDMA fixed wireless phones in Sri Lanka
Cost of ownership is declining (below USD5 in several emerging economies)

- Four S Asian countries in less-than-USD 5 TCO club among 77 emerging economies (average TCO = USD10.88)
- Includes services, taxes and cheapest handset
Operators finding it harder and harder to make money from basic services

Source: TRAI, 2010; USD= INR (June 2010)
Concluding thoughts

• Developing world is connecting to the Internet via mobiles
  – Mobile access/ownership growing; affordability increasing
  – “Mobile2.0” and mobile Internet (data) services seen as a way to boost revenues and reduce churn AND provide access to an array of important services to BOP at lower transaction costs
  – Operators need to target “older” mobile owners, more educated, and current Internet users at the BOP
    • Leveraging on social networks can push services out

• Innovations in pricing of services for affordability needed
• Other conditions (e.g., payment services, delivery services, etc) need to be satisfied also