Challenges in measuring affordability and understanding user strategies: Kenya, Rwanda, South Africa and Nigeria study
Approach to affordability

Supply side: Indices and Baskets

Demand Side: Qualitative approach

Demand Side: Quantitative research
Supply side: Comparative price indices

Research ICT Africa Mobile Pricing (RAMP)

1GB Basket
Cheapest prepaid broadband product in Africa (1GB Basket)

Value for Money
Highest Value for Money prepaid bundle product in Africa (Voice, Data, SMS)

OECD Basket
Cheapest mobile prepaid voice product in Africa (30 Calls / 100 SMS)

http://www.researchictafrica.net/pricing/ramp.php
How do the four countries compare to the cheapest 1GB product in Africa?
Q1 2017 1GB (USD) Cheapest operator vs Operator with dominance

- **Rwanda**
  - Airtel vs Tigo: 3.06 vs 3.67

- **Nigeria**
  - MTN Nigeria: 3.21 vs 3.21

- **Kenya**
  - Safaricom: 4.92 vs 4.92

- **South Africa**
  - Telkom vs Vodacom: 7.49 vs 11.27

**Research ICT Africa**
## VMI: Top performing bundles

<table>
<thead>
<tr>
<th>Country</th>
<th>Operator/product</th>
<th>Cost</th>
<th>Product offer</th>
<th>VMI score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwanda</td>
<td>Airtel Max pack 5000</td>
<td>USD 6.11</td>
<td>Unlimited on-net calls, 90 minutes off-net, 600 SMS and 5GB</td>
<td>14,1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(RWF5000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>Telkom Free me</td>
<td>USD52.91</td>
<td>30GB data, unlimited SMS &amp; on-net calls, 300 minutes off-net, zero rated WhatsApp text and free Wi-Fi</td>
<td>6,1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ZAR699)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>MTN xtra talk</td>
<td>USD 6.42</td>
<td>244 voice minutes calculated from N9,750 airtime &amp; 625 MB</td>
<td>6,0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(N2000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>Orange Holla Premium</td>
<td>USD 0.48</td>
<td>180 min on-net, 10 min off-net, 500 on net SMS, 100 off-net, 50 MB. Free Wikipedia and Facebook</td>
<td>2.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(KSh 49)</td>
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</tbody>
</table>
Alternative offerings

- Operators introducing alternative products to draw price sensitive consumers
- Complexity of products impacts on ways to track them from market perspective
- These products include
  - “Snack bundles” (shorter validity products)
  - Zero rated offerings
  - Promotions
  - Service specific data
  - Add on social media data
## Mobile network data offerings to consumers

<table>
<thead>
<tr>
<th>Data type</th>
<th>Key elements</th>
<th>Cost to consumer</th>
<th>Data variations</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Prepaid data package**| Characterised by the quantity or volume that the user purchases and the expiry date of the bundle purchased, i.e., validity. | **Full cost on customer.**     | - **Set volume of data above 1MB with validity** that is daily, nightshift (between midnight and 5am)  
- **Pay for unlimited Internet access for a set period**  
- **Combined-service top-up:** user buys a combination of two or more services, without a breakdown of how much each service costs. | - Buy once-off 100MB of data valid at night  
- Unlimited Internet for 30 days  
- Buy 100MB data + 100 call minutes + 100 SMSs + 100MB for social media (or unlimited data for social media). |
| **Rewards**             | Based on activities the user does that qualifies the user for a reward from the operator, extra data, extra SMS or airtime credit. | Customer does not pay directly for the service in rewards. | - **Recharge certain amount = extra data**  
- **Recharge = accumulation of points.** | - Recharge USD50 and get 150MB or USD100 of data before they have used the airtime for a service  
- For every USD10 spent, the customer gets one point. Points can be converted to a service |
| **Zero-rated data**     | Applications or services that do not carry a data charge to the user’s data. | No cost.                        | - Social media sites  
- Educational sites. | - Zero-rated Free Basics or Twitter. |
| **Service specific data** | Buying bundles to use for a specific service. | Customer pays the cost for the service selected only | - Social media bundle  
- Music subscriptions. | - Buy monthly data for WhatsApp only. |

*Source: RIA African Mobile Pricing (RAMP) Index (RIA, 2015) based on operator advertised products*
Navigating costs from a demand side perspective

“Network is one great challenge, then the cost. You want to download a book, before it is complete you hear a message ‘tititit’ you are running short of bundles, the bundles are almost depleted. **The cost is taking a toll on the users.** And then the cost of the gadgets, many would want to but the phones are costly, so you go for the small one ‘katwin’ (twin SIM, a feature phone)you try to do anything it tells you insufficient memory. You have all sorts of limitations.”

- Semi-urban female respondent, Kenya
# Mobile Data saving strategies

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Peri-urban</th>
<th>Rural</th>
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</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>- Prepaid package data</td>
<td>- Zero rating,</td>
<td>- BlackBerry plans</td>
</tr>
<tr>
<td></td>
<td>- Reward data</td>
<td>- Prepaid package data,</td>
<td>- Reward data</td>
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<tr>
<td></td>
<td>- Service specific bundles</td>
<td>- Reward or promotional data</td>
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<td></td>
<td></td>
<td>- Tethering</td>
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<tr>
<td>Kenya</td>
<td>- Prepaid package data</td>
<td>- Promotional data</td>
<td>- Prepaid package data</td>
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<td></td>
<td>- Promotional mobile data</td>
<td>- BlackBerry data</td>
<td>- Rewards data</td>
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<td>- Modem data</td>
<td>- Zero rating</td>
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<tr>
<td>South Africa</td>
<td>- Prepaid package data</td>
<td>- Rewards data through operator promotions</td>
<td>- Prepaid package</td>
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<tr>
<td></td>
<td>- Service specific bundles</td>
<td>- Mobile tethering hotspots</td>
<td>- Rewards data through operator promotions</td>
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<tr>
<td></td>
<td>- Rewards data</td>
<td>- Mobile airtime</td>
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<tr>
<td></td>
<td></td>
<td>- Zero rating</td>
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Demand Side: Quantitative

- Research ICT Africa Household and Individual Surveys in 13 countries

  Average spending at country level/income group
  Average country/income groups income

- Approaching affordability based on:
  - Average Income spend on communications monthly
  - Average Income spend on data monthly

- Measure gives us average share of income spend on telecommunications cost at a national level
  - Broken down to income groups to reflect disparities at different levels
Conclusion

- 1GB basket mobile broadband does not truly reflect user practices and market dynamics
- ICT ecosystem approach enables one to piece the puzzle to affordability
- Assessing pricing, consumption patterns and income spend indicate an aspect to affordability
- Questions of quality of service, device affordability and gendered issues such as time
References:

Definitions...

Methodology:

**Voice/SMS basket (OECD basket):** 30 voice calls for a total of 50 minutes and 100 SMSs per basket per month.

**1 GB basket:** monthly cost of 1GB data based on prepaid data top-ups or bundled top-ups. Both baskets are converted to USD for comparison across African markets.

*Bundled Value for money index*

- Only bundles offering data combined with voice and SMS or, data and voice, or data and SMS are captured.
- The index places monetary value in terms of USD on bundled minutes, SMS and data from an OTT perspective.
- Data is more valuable than voice and SMS.
- The ratio is set at:
  - Data MB= 1 US cent; Social Media MB=0.5 US cent; Any voice minute=0.5 US cent On-net voice minute=0.25 US cent Any SMS=0/01 US cent and On net SMS=0.005 US cent
- Unlimited calls, SMSs or data contracts were made comparable to capped packages by applying the following rules:
  - Unlimited minutes = 240 minutes per day or 7200 minutes per month
  - Uncapped SMS = 240 SMSs a day or 7200 per month.
  - Uncapped data = the smaller value out of the fair terms of use policy limit and 30 GB.
Definitions.

Mobile phone expenditure: spend on voice, SMS and data (airtime and subscription)

Mobile data expenditure: Data only, dedicated top up or data bundles

Income: Salary/wages/pension/social grants/gifted money/intra household transfers
Thank you
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