TELECOMMUNICATIONS CONSUMPTION TREND AND SERVICE BUNDLING

Ghana’s Experience

International Telecommunications Union (ITU)
ICT indicators symposium
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National Communications Authority, Ghana
Overview

- Bundling of telecommunications products & services has become the new innovative pricing strategy in Ghana.
- It started with voice and sms.
- The convergence of voice and data has changed the market dynamism of bundling.
- In addition social media such as whatsapp has been added to the bundle of services.
Outline of presentation

Telecommunications Consumption Trend

• Subscription
• Voice traffic (domestic + international)
• Data traffic
• Tariffs

Bundling of telecom services in Ghana

• Evolution
• Services and products
• Outlook of bundling

Conclusions and Recommendations
Mobile subscription

Figure 1: Mobile subscription in Ghana

- Liberalisation in mid-1990s stimulated growth in mobile subscription
- Ghana’s market comprise six mobile operators
  - MTN – 48.0%
  - Vodafone – 22.1%
  - Tigo – 14.4%
  - Airtel – 12.8%
  - Glo – 2.5%
  - Expresso – 0.3%
- Total subscription as at end of September 37,239,720
- Penetration rate 131.9%
Domestic voice traffic in minutes (billion)
Declining international voice traffic

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Inbound International Traffic</th>
<th>Outbound International Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2013</td>
<td>225.00</td>
<td>225.00</td>
</tr>
<tr>
<td>Q2 2013</td>
<td>180.00</td>
<td>200.00</td>
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<tr>
<td>Q3 2013</td>
<td>170.00</td>
<td>180.00</td>
</tr>
<tr>
<td>Q4 2013</td>
<td>160.00</td>
<td>180.00</td>
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<tr>
<td>Q1 2014</td>
<td>150.00</td>
<td>170.00</td>
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<td>Q2 2014</td>
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<td>160.00</td>
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<tr>
<td>Q3 2014</td>
<td>130.00</td>
<td>150.00</td>
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<tr>
<td>Q4 2014</td>
<td>120.00</td>
<td>140.00</td>
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<tr>
<td>Q1 2015</td>
<td>110.00</td>
<td>130.00</td>
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<tr>
<td>Q2 2015</td>
<td>100.00</td>
<td>120.00</td>
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<tr>
<td>Q3 2015</td>
<td>90.00</td>
<td>110.00</td>
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<tr>
<td>Q4 2015</td>
<td>80.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Q1 2016</td>
<td>70.00</td>
<td>90.00</td>
</tr>
<tr>
<td>Q2 2016</td>
<td>60.00</td>
<td>80.00</td>
</tr>
<tr>
<td>Q3 2016</td>
<td>50.00</td>
<td>70.00</td>
</tr>
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</table>
Growth in mobile data usage in Ghana (GB) millions

Volume of data in gigabyte (millions)

Total data traffic in million (GB)

Q1 2013: 1.98
Q2 2013: 2.37
Q3 2013: 2.69
Q4 2013: 2.82
Q1 2014: 3.69
Q2 2014: 7.44
Q3 2014: 5.10
Q4 2014: 5.44
Q1 2015: 6.02
Q2 2015: 7.44
Q3 2015: 5.10
Q4 2015: 10.77
Q1 2016: 12.50
Q2 2016: 14.94
Broadband data subscription increasing

Figure 6: Broadband subscription in Ghana

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<tbody>
<tr>
<td></td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
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<tr>
<td>2015</td>
<td>83,201</td>
<td>93,126</td>
<td>100,873</td>
<td>101,851</td>
<td>109,124</td>
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<tr>
<td>2016</td>
<td></td>
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</table>
Increase in Broadband mobile data usage in GB (000)
Average SMS Per Subscriber

![Graph showing average SMS per subscriber from March 2013 to September 2016. The graph compares off-net SMS, on-net SMS, and total SMS. The data shows fluctuations in SMS usage over the period.]
# Default tariffs of mobile services in Ghana

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Average on-net mobile tariff (¢ US)</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Average off-net mobile tariff (¢ US)</td>
<td>3.2</td>
<td>3.2</td>
<td>3.2</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Average on-net SMS tariff (¢ US)</td>
<td>1.1</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Average off-net SMS tariff (¢ US)</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Average data/Mb tariff (¢ US)</td>
<td>2.6</td>
<td>2.6</td>
<td>2.9</td>
<td>2.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>
Average Minutes of Use (MoU) per subscriber
Bundling of telecommunications services in Ghana
Evolution of bundling in Ghana

- Bundling has been a feature of the Ghanaian telecommunications’ market since 2000.
- Recently there has been a significant rise in the number and range of bundles services by service providers.
- Forms of bundle: voice and data; SMS and data or voice; SMS, data and voice
- Fixed lines are not available as separate services but are only provided together as a bundle. ex. DSL by Vodafone, voice and data.
Evolution of bundling in Ghana

- Low-end customers (flashing)
- Acquisition of multiple SIMs
- MNOs response (bundling)

Demand Side (Customers)
Drivers of bundling

- Government policies
  - ICT4AD Policy: One of the Pillars called for - Increase the use of ICT in all sectors of the economy

- Consumers
  - Flexibility of preferred services
  - Variety of services at reduced price

- Operators
  - Offers guaranteed revenue for innovations and improved service delivery
## Voice and data bundles

<table>
<thead>
<tr>
<th>MNOs</th>
<th>Mobile Telephony (voice+SMS)</th>
<th>Fixed Telephony</th>
<th>Mobile Broadband</th>
<th>Television</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTN</td>
<td>√</td>
<td>×</td>
<td>√</td>
<td>×</td>
</tr>
<tr>
<td>Vodafone</td>
<td>√</td>
<td>●</td>
<td>√</td>
<td>×</td>
</tr>
<tr>
<td>Tigo</td>
<td>√</td>
<td>×</td>
<td>√</td>
<td>×</td>
</tr>
<tr>
<td>Airtel</td>
<td>√</td>
<td>●</td>
<td>√</td>
<td>×</td>
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<tr>
<td>Glo</td>
<td>√</td>
<td>×</td>
<td>√</td>
<td>×</td>
</tr>
<tr>
<td>Expresso</td>
<td>√</td>
<td>×</td>
<td>√</td>
<td>×</td>
</tr>
</tbody>
</table>
## ISP and Broadband Wireless Access digital bundling

<table>
<thead>
<tr>
<th>ISP/Broadband</th>
<th>Broadband Data</th>
<th>Social media</th>
<th>News portal</th>
<th>Entertainment website</th>
<th>Online library</th>
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</thead>
<tbody>
<tr>
<td>Surfline</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>BBH</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Blu</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Busy</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Revenue, growth and regulation

**Revenue**
- Revenue from 30% of customers who bundle is greater than revenue from 70% who don’t bundle

**Growth**
- Bundling of data is increasing
- Assistance for “illiterate” customers

**Regulation**
- Monitoring to ensure it does not distort market and stifle competition
Challenges

- How to develop rules, regulations and guidelines that sustain the industry growth and at the same time prevent unfair/uncompetitive pricing strategies.
- Difficulty in effectively assessing the role of the bundling product in determining the prepaid voice, data and sms basket.
Outlook

- Growth in broadband penetration
- More independent backhaul providers
- Introduction of unified license

Data is now the main product and other freebies are bundled

Google and Comsys

Broadcasting + fixed network to be bundled
Conclusion

» Bundling has become the new pricing strategy in the prepaid market
» helped mobile operators to drive acquisitions and increased products and services uptake
» The bundling is the wave of the future
» The voice + data +SMS is the commonest bundling offer
» Social media bundle is the latest trend
Recommendations

- The complexity and variance of bundling highlights the need for a comprehensive data model to assess the value of bundle products in the Ghana’s dynamic telecom market.

- Need to develop polices, rules and guidelines that fosters bundling but at the same time do not inhibit fair competition.
THANK YOU

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