Mobile Value Added Services (VAS)

30th of March, 2011
Defining Mobile Value Added Services (VAS)

Mobile Services

Mobile Data Services

Messaging

- Peer to Application (P2A) SMS
- Application to Peer (A2P) SMS

Premium Content

- Entertainment
- Caller ring back tone/ringtones
- Screensavers/wallpaper
- Music
- Video
- Games
- Information
- E-mail
- News
- Others
- Mobile banking
- Mobile commerce
UAE Mobile Value Added Services Market Dynamics

**Market Drivers**

- **Short Term**
  - 3G Adoption Up
  - App Stores Introduced

- **Medium Term**
  - Cheaper Data Tariffs
  - Mobile Primary means of Internet Connectivity

- **Long Term**
  - High per capita income levels
  - TRA pushes sustainable call rate policy
  - Increased introduction of business apps

**Market Restraints**

- **Short Term**
  - Lower Margins due to Price Competition
  - Greater Awareness required in older customer segments

- **Medium Term**
  - Lack of business centred apps
  - Data tariffs still relatively high

- **Long Term**
  - Requirement for more Arabic content still not met
  - Duopoly can restrict new content development

In collaboration with...
Understanding the Mobile VAS Market in the SAMENA region

<table>
<thead>
<tr>
<th>Current VAS</th>
<th>Future VAS</th>
<th>Key Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>- Astrology, Bollywood, Cricket, Devotional content, CRBT&lt;br&gt;- Racing/Adventure games</td>
<td>- Utility Services, Mobile ticketing and Bill payments&lt;br&gt;- Social Networking, Mobile data</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>- Voting for Reality TV Shows&lt;br&gt;- Cricket and Music content&lt;br&gt;- CRBT, wallpapers</td>
<td>- Mobile Video, Video advertising and other 3G based services&lt;br&gt;- CRBT, wallpapers to continue</td>
</tr>
<tr>
<td>Pakistan</td>
<td>- Ringtones and wallpapers&lt;br&gt;- Interactive Voice Response (IVR) popular as mode of delivery&lt;br&gt;- Mobile Gaming</td>
<td>- T-20, Cricket based VAS&lt;br&gt;- Innovative products such as UExaminer and UConnect</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>- News, Sports and Islamic content delivered through SMS&lt;br&gt;- Mobile advertising</td>
<td>- Mobile advertising and personalized advertising&lt;br&gt;- Data driven applications</td>
</tr>
<tr>
<td>Egypt</td>
<td>- Local music, games and videos along with reality TV shows&lt;br&gt;- SMS Channel is popular</td>
<td>- m-payment and m-commerce likely to gain traction&lt;br&gt;- Voice based services</td>
</tr>
<tr>
<td>UAE</td>
<td>- Arabic songs and Content&lt;br&gt;- Mobile TV and other 3G based video offerings</td>
<td>- Managed VAS&lt;br&gt;- Innovative products such as money remittance</td>
</tr>
</tbody>
</table>

Source: Frost & Sullivan
### MENA Quantitative Market Comparisons

<table>
<thead>
<tr>
<th></th>
<th>Egypt</th>
<th>KSA</th>
<th>UAE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Mobile Revenues ($ Million), CAGR (2011-15)</strong></td>
<td>4,806, 4.6</td>
<td>11,200, 4.2</td>
<td>4,354, 3.2</td>
</tr>
<tr>
<td><strong>Subscribers (Million), CAGR (2011-2015)</strong></td>
<td>55.4, 6.6</td>
<td>44.8, 4.1</td>
<td>11.2, 6.3</td>
</tr>
<tr>
<td><strong>Penetration (%) 2010</strong></td>
<td>70.2</td>
<td>177</td>
<td>201.3</td>
</tr>
<tr>
<td><strong>Blended ARPU ($) 2010</strong></td>
<td>7.2</td>
<td>22.9</td>
<td>30.1</td>
</tr>
<tr>
<td><strong>Data Share (%) of Mobile Revenue 2010</strong></td>
<td>4.6</td>
<td>4.0</td>
<td>7.2</td>
</tr>
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</table>
SAMENA Qualitative Market Comparisons

<table>
<thead>
<tr>
<th>Country</th>
<th>Market Maturity Stage</th>
<th>Market Size (Revenue $ million)</th>
<th>Competition</th>
<th>Network Deployment Stage</th>
<th>VAS Market Fragmentation</th>
</tr>
</thead>
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<tr>
<td>India</td>
<td>Growth</td>
<td>1,259.5</td>
<td>High</td>
<td>~ 3G</td>
<td>High</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Growth</td>
<td>21.7</td>
<td>Medium</td>
<td>3G</td>
<td>Low</td>
</tr>
<tr>
<td>UAE</td>
<td>Growth</td>
<td>313.5</td>
<td>Low</td>
<td>3G</td>
<td>High</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>Growth</td>
<td>448.0</td>
<td>High</td>
<td>~ 4G</td>
<td>Low</td>
</tr>
<tr>
<td>Egypt</td>
<td>Growth</td>
<td>222.0</td>
<td>Medium</td>
<td>&gt; 3G</td>
<td>Medium</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Growth</td>
<td>107.5</td>
<td>Medium</td>
<td>&lt; 3G</td>
<td>Medium</td>
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Legend
< Less than > Greater than ~ Very close to
Future Trends in the UAE VAS Market

- Both operators have launched app stores, as have several handset vendors
- This trend is expected to continue and expand in the country with greater download and development of mobile apps
- Social networking, entertainment and games are the most selected apps

- Greater focus on Bottom of Pyramid subscribers is expected as operators make services more accessible
- Mobile money transfer is an example of this trend and Frost & Sullivan expects high growth in the take up of this service in particular

- There is an increased trend in the development of platform-specific apps
- Android, Blackberry and Apple are the leading platforms at present
- Newer VAS developers typically target these platforms in order to achieve quick and sustained growth
About Frost & Sullivan
Who is Frost & Sullivan

The Growth Consulting Company

- Founded in 1961, Frost & Sullivan has over 45 years of assisting clients with their decision-making and growth issues.
- Over 1,700 Growth Consultants and Industry Analysts across 32 global locations
- Over 10,000 clients worldwide - emerging companies, the global 1000 and the investment community
- Developers of the Growth Excellence Matrix – industry leading growth positioning tool for corporate executives
- Developers of T.E.A.M. Methodology, proprietary process to ensure that clients receive a 360o perspective of technology, markets and growth opportunities
- Three core services: Growth Partnership Services, Growth Consulting and Career Best Practices
What Makes Us Unique

• Exclusively Focused on Growth
  Global thought leader exclusively focused on addressing client growth strategies and plans – Team actively engaged in researching and developing of growth models that enable clients to achieve aggressive growth objectives.

• Industry Breadth
  Cover the broad spectrum of industries and technologies to provide clients with the ability to look outside the box and discover new and innovative ideas.

• Global Perspective
  32 global offices ensure that clients receive a global coverage/perspective based on regional expertise.

• 360° Perspective
  Proprietary T.E.A.M.TM Methodology integrates all 6 critical research methodologies to significantly enhance the accuracy of decision making and lower the risk of implementing growth strategies.

• Growth Monitoring
  Continuously monitor changing technology, markets and economics and proactively address clients growth initiatives and position.

• Trusted Partner
  Working closely with client Growth Teams – helping them generate new growth initiatives and leverage all of Frost & Sullivan assets to accelerate their growth.
T.E.A.M. Methodology

- Frost & Sullivan’s proprietary T.E.A.M. methodology, ensures that clients have complete “360 Degree Perspective” from which to drive decision-making. Technical, Econometric, Application, and Market information ensures that clients have a comprehensive view of industries, markets and technology.

<table>
<thead>
<tr>
<th>Technical</th>
<th>Real-time intelligence on technology, including emerging technologies, new R&amp;D breakthroughs, technology forecasting, impact analysis, groundbreaking research, and licensing opportunities.</th>
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<tr>
<td>Econometric</td>
<td>In-depth qualitative and quantitative research focused on timely and critical global, regional, and country specific trends, including the political, demographic, and socioeconomic landscapes.</td>
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<tr>
<td>Application</td>
<td>Insightful strategies, networking opportunities, and best practices that can be applied for enhanced market growth; interactions between the client, peers, and Frost &amp; Sullivan representatives that result in added value and effectiveness.</td>
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<tr>
<td>Market</td>
<td>Global and regional market analysis, including drivers and restraints, market trends, regulatory changes, competitive insights, growth forecasts, industry challenges, strategic recommendations, and end-user perspectives.</td>
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</table>
Global Perspective

- 1,800 staff across every major market worldwide
- Over 10,000 clients worldwide from emerging to global 1,000 companies