2008 Foresight: The Opportunities and Challenges of Mobile TV Market

Ying-Yu Wang
Research Manager
IEK/ITRI

2007/12/06

Content
◆ Global Mobile TV Roundup
◆ 2008 Beijing Olympic Games and Beyond
◆ Conclusion
Content

◆ Global Mobile TV Roundup
◆ 2008 Beijing Olympic Games and Beyond
◆ Conclusion

Global Mobile TV roundup

◆ Mobile TV market dynamics are heavily influenced by geographical characteristics and respective regulatory frameworks.

Source: IEK1TR, 2007
Mobile TV standards are region-specific

- The main technological solutions seem to have found their place in different regions, with DMB prominent in Asia/Pacific, DVB-H preferred in Europe, and MediaFLO the frontrunner in the U.S.

Status quo in early adopters markets

- **Europe**
  - Mobile TV market driven by Mobile operators
  - Italia and Finland offering commercial DVB-H service. Austria, France, Germany, Netherlands, Spain, and Switzerland expected to open in 2008

- **N. America**
  - Verizon and AT&T offering commercial MediaFLO service.
  - After Modeo dropped out, Qualcomm could have a clear run with FLO technology in the States.

- **Asia**
  - Broadcasters driving the market forward
  - Several Asian countries testing Mobile TV and have plans to launch commercial soon base on DVB-H or MediaFLO
  - China national Mobile TV standardization still open question
Italy: only 3 Italy has been successful

- Italy is the most developed European market. 3 Italy has attracted more than 720K subscribers.
- 3 Italy heavily subsidizes its handset, TIM and Vodafone are less willing to take on the cost of DVB-H handsets.
- The most- and longest-watched channel on the service is Sports. Interactive services are in infancy.

Korea: S-DMB is threatened by T-DMB

- S-DMB is pay-only service, thus threatened by free T-DMB based Mobile TV
- Combination with WiBRO for interactive services.
- Neither S-DMB nor T-DMB have made money yet.

<table>
<thead>
<tr>
<th>T-DMB service providers</th>
<th>S-DMB service providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder's equity</td>
<td>Revenues</td>
</tr>
<tr>
<td></td>
<td>Net losses</td>
</tr>
<tr>
<td>2005</td>
<td>90,319</td>
</tr>
<tr>
<td>2006</td>
<td>71,343</td>
</tr>
</tbody>
</table>
USA: Qualcomm holds a key position

- Verizon and AT&T market Qualcomm’s MediaFLO broadcast Mobile TV service. It enables very limited interactivity.
- Qualcomm owns the spectrum, runs the MediaFLO broadcast network and provides the service on a white-label basis.
- Mobile TV services of Verizon and AT&T integrate unicast and broadcast technology.

Many solutions, but...

- Models: Broadcast, Cellular Unicast, Cellular Multicast
- Devices: Various phones and devices
- Revenue: Subscription, Pay-per-view, Advertising

Source: ITRI 2007
Compatible devices drag down

DMB
(LGE, Samsung)

# of Model

ISDB-T
(Japanese Vendors)

DVB-H
(Nokia, LGE, Samsung, SE, HTC)

Vendor Supporting

MediaFLO
(LGE, Motorola)

Content

◆ Global Mobile TV Roundup
◆ 2008 Beijing Olympic Games and Beyond
◆ Conclusion
Olympics and Broadcasting

- The Olympic Games have seen tremendous growth in broadcast coverage over the past 20 years.
- From 1984 until the present day, the IOC has concluded broadcast agreements worth more than US$ 10 billion.

![Olympic Games and Winter Games Revenue Graphs](image)

Source: IOC

---

The sport activity contributes to the growth of media's rating

- Sports are most popular in Mobile TV channels, according 3 Italy's experiences.
- International sport activity will be the driving force for Mobile TV market.

![Sport Activity Contribution to Media Rating](image)

Source: EKATR, 2007
Mobile TV trend-scouting

◆ Mobile TV broadcasting services will reach 140 million subscribers, and create near 4.4 billion USD revenue at end of 2012.

Content

◆ Global Mobile TV Roundup
◆ 2008 Beijing Olympic Games and Beyond
◆ Conclusion
Possibilities for Mobile TV

◆ Short-term
  ➢ The development of mobile broadcast remains limited in most countries before 2008, due to regulatory and spectrum availability constraints
  ➢ The high-quality mobile TV devices are expected to be mostly limited to the high-end market before 2008

◆ Long-term
  ➢ From 2008, mobile broadcast gets deployed much more widely. But channel capacity for mobile broadcast remains limited because the digital switchover has not yet occurred in most countries.
  ➢ We also expect new device form factors to integrate a mobile TV receiver, including dedicated portable TV tuners, game decks and media players.

Key Challenges

◆ Environment
  ➢ Spectrum availability
  ➢ Consumer Expectations

◆ Business
  ➢ Proven business models
  ➢ Differentiation among Competitive Offerings
  ➢ IP rights and content protection

◆ Technology
  ➢ Handset availability and limitations
  ➢ Competing Technologies for Transferring Digital Content
Thank you for your attention!

IEK—
Market Analysis, Policy Research, and Consulting Arm of ITRI