Winning Business Models

Generating Revenue in the Broadband Arena in Asia

Lynn Liu
President & CEO, Aicent, Inc.

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Asian Mobile Internet Market Overview
Asian Mobile Internet Market

👍 World’s fastest growing mobile subscriber base
  - Asia Pacific accounts for over 30% world’s total mobile market
  - China is the single largest market in the world
    - 160M mobile subscribers in 2002, around 13% of market penetration
    - 5M new subscribers per month, reaching 200M by 2004

👍 2.5G/3G migration already underway
  - China Mobile launched national GPRS service in July 2002
    - Projected GPRS subscriber base reaching 30M by 2005
  - Japan and Korea led the world in mobile Internet services
    - Impressive mobile Internet subscriber base, in 2Q 2002:
      - DoCoMo i-Mode 35M, KDDI Ezweb 11M, J-Phone J-Sky 11M
      - SKT 6M, KTF 2M, LGT <1M
    - World’s first to launch 3G services in 2001

👍 Mobile Internet service is the highest priority
  - Introducing new data services to increase ARPU (Average Revenue Per User)
  - Still in its infancy development stage
NTT DoCoMo i-Mode and 3G ARPU

<table>
<thead>
<tr>
<th>Year</th>
<th>March 1999</th>
<th>March 2000</th>
<th>March 2001</th>
<th>March 2002</th>
</tr>
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<tbody>
<tr>
<td>i-Mode Data ARPU</td>
<td>0.3%</td>
<td>1.4%</td>
<td>10.2%</td>
<td>16.6%</td>
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</tbody>
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SMS proves to be a successful business by growing revenue for operators

- 2 billion SMS transmitted worldwide everyday
- China generated 19 billion SMS messages in 2001, reaching 60 billion in 2002

MMS viewed as a natural upgrade to SMS and the next killer application for revenue generation

- 40 GPRS operators launched MMS service by October 2002, with 9 MMS capable GPRS handset models, up from 1 operator in March with only 1 handset
Opportunities and Challenges

**Opportunities**
- Mobile data market is poised to take off in 2003-2004
- First mover has significant market advantage
- Asia Pacific leads the world

**Challenges**
- New business model and value chain will take time to establish
- Competition is emerging
- Opportunities abound, strategic focus is key to success
- Revenue growth will depend on mass market adoption rate
Aicent Introduction
Aicent’s Mission

To provide the global managed data network infrastructure that enables the next-generation mobile data services.
Product Roadmap

Global Wireless Access
- 2.5G, WLAN, 3G

Global Messaging Delivery
- SMS, MMS

GRX Services
- 2.5G (GPRS, CDMA 1X)
- 3G (W-CDMA, CDMA 2000)

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<tr>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
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Aicent GRX Network

80% Asia Pacific Market Share

- 20+ Asia Pacific GPRS operators
- 180 million subscribers
- 100 GPRS networks reachable worldwide
- Extended to CDMA2000/W-CDMA networks

Aicent Data Roaming Network

- China Provincial operators
- National Operator
- Japan
- Japan operators
- Korea
- Korean operators
- Taiwan
- Taiwan operators
- Hong Kong
- Hong Kong operators
- Southeast Asia operators
- Singapore
- USA
- European operators
- American operators

GPRS operators
Expanding CDMA2000, W-CDMA operators

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Aicent Value-Added Services over GRX

- SMS over IP
- MMS Interworking
- GPRS/CDMA/WLAN Global Access

Enablers:
- Number Addressing
- GRX Root DNS
- IMSI/NAI auth. Routing
- Billing mediation, settlement

Operator A

Operator B

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Contact Information:

Lynn Liu  
President and CEO  
Aicent, Inc.

www.aicent.com