KT’s Business Strategies toward the UBB Era

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KT Management Research

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Korean Telecom Market
1. Major Players
2. Broadband and FTTH
3. IPTV

Today’s Issues of KT
1. Growth
2. Competitive Environment
3. New IT Governance

Strategic Directions of KT
1. Customer Base Expansion
2. Media-Telco Transformation
3. Advertisement BM
4. Network Investment

New Business on IP Network
1. IPTV Plan
2. SoIP Plan

Long Term Strategic Goals of KT
1. New Business Domain
2. IT Embedded Service
### Issues in Korean Telecom Market Today

<table>
<thead>
<tr>
<th>Broadband</th>
<th>Coverage Expansion</th>
<th>Speed Competition</th>
<th>Contents Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of Bundling Service</td>
<td>Approval of bundling service for major telcos in Korea speeded up the restructuring of the telecom industry (Jul.’07)</td>
<td></td>
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<tr>
<td>Passage of IPTV Bill</td>
<td>IPTV bill, which had been controversial for a long time, was eventually passed (Nov.’07)</td>
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<tr>
<td>Merger between Hanaro Telecom and SKT</td>
<td>Merger between Hanaro (2nd largest BB provider in Korea) and SKT, created another integrated telco leaving LG group far behind the two giant telcos, KT and SKT</td>
<td></td>
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<tr>
<td>Emergence of Super Regulator</td>
<td>New administration (Feb.’08) separated telecom and broadcasting from IT by placing them together under control of a reshaped regulatory commission</td>
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</table>
Korean telecom market is a global leader in terms of penetration and technology adoption. Both the size and market share have stabilized somewhat through the years.
- Number of subscribers for leading broadband providers have stabilized
- Number of subscribers for Powercom (a new comer) is growing rapidly
Korean Telecom Market

- Regulation has delayed launching of IPTV service
- Hanaro Telecom has been a leader in the Pre-IPTV business
- KT has been aggressive since last year, and it’s number of customers are growing rapidly

IPTV Subscribers

<table>
<thead>
<tr>
<th>Month</th>
<th>HT</th>
<th>KT</th>
</tr>
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<tbody>
<tr>
<td>Nov. 2007</td>
<td>75</td>
<td>29</td>
</tr>
<tr>
<td>Dec.</td>
<td>81</td>
<td>32</td>
</tr>
<tr>
<td>Jan. 2008</td>
<td>85</td>
<td>38</td>
</tr>
<tr>
<td>Feb. 2008</td>
<td>90</td>
<td>49</td>
</tr>
</tbody>
</table>

Unit: ten thousand
CATV players are expanding digital TV coverage to compete with Telco’s IPTV
Digital CATV will replace the analogue TV in the long run

Projected IPTV Subscribers

Unit: million

Source: Hannuri Securities (Dec 2007)
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### Today’s Issues of KT

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<tr>
<th>Transcend Growth Limit</th>
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<tbody>
<tr>
<td>KT’s revenue has not seen substantial growth for over five years</td>
</tr>
<tr>
<td>This year’s target is $12bn</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Innovative Approaches to Competitive Environment</th>
</tr>
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<tbody>
<tr>
<td>Full-scale VoIP service launch</td>
</tr>
<tr>
<td>Acquisition of contents and advertising companies</td>
</tr>
<tr>
<td>Network investment for IPTV infrastructure</td>
</tr>
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</table>

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<tr>
<th>Responding to New Policy Environment</th>
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<tr>
<td>Build role model for new IT era</td>
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</table>
Revenue growth has stalled without new and innovative growth engines
KT’s stock price has also remained at around $45 for the last several years
- In today's convergence environment, industry borders are meaningless
- Alliances with relevant players are very critical
Roll out of bundled services has brought about a price war

KT is currently positioned between SKT’s high-end strategy and LGT’s low-end strategy

<table>
<thead>
<tr>
<th>Players</th>
<th>Bundling</th>
<th>Discount rate</th>
<th>Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>KT</td>
<td>PSTN+BB+IPTV</td>
<td>24.78%</td>
<td>$44.8</td>
</tr>
<tr>
<td>Hanaro Telecom</td>
<td>PSTN+FTTH(100MHz)+IPTV</td>
<td>20%</td>
<td>$36.53</td>
</tr>
<tr>
<td>LG Dacom</td>
<td>PSTN+BB+IPTV</td>
<td>BB: 10% IPTV: 20%</td>
<td>$35.56</td>
</tr>
</tbody>
</table>

*March, 2008*
Portals with extensive customer base and powerful search engines emerged as KT’s competitors.
KT is making every effort to provide contents variety for its IPTV service
Acquired 5 contents developing firms such as Sidus FNH, Olive9 and etc.

KT’s Efforts to Secure Contents for New Business

M&A for Securing Competitive Contents
A super regulator of broadcasting and telecommunication emerged under the new IT governance with recent change in government administration.

**Restructuring of Governance**

1. **Media / Telco Industry**
   - Broadcasting and Communication Commission
   - Regulation
   - Policy
   - IT Policy (R&D)

2. **IT-embedded Industry**

**Implications for KT**

1. Separate broadcasting and telecom from IT industry
2. Emergence of super regulator of broadcasting and telecom
3. Knowledge economy emerging as a new growth area
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Strategic Directions of KT

Customer Base Expansion
- Expand customer base from households to individuals

Media-Telco
- Transform itself into a Media-Telco company

Advertisement BM
- Secure new cash flow from advertisement BM based on robust platform

Network Investment
- All-IP network infrastructure will support all future services
Strategic Directions of KT

- Customer base expansion for new services such as WiBro, IPTV, VoIP
- From households to individuals

Satellite
2,010,000 households (100%)

Broadband
6,552,631 households (45.2%)

Mobile
13,511,560 households (31.9%)

PSTN
21,237,961 households (91.4%)

(July 2007)
Contents diversification ranging from movie/soap opera to news/publications transforming itself into a true Media-Telco Company
Advertisement market is a strategic source of income given KT’s service platform diversity that can effectively reach the relevant market sectors.

"Tailored cross media advertisement"
To support these new business models, KT is heading for an all-IP network transformation.

Simple Network with Structured Architecture

- Application-1
- Application-2
- Application-3
- Application-N

IMS

One Control, Multi Services

All-IP Network

Wired Access

Mobile Access
- Customer value creation through QoS
- Bandwidth provision for QPS
- Integrate nodes and improve reliability

Drive FTTH Rollout
(53% Coverage, $440 mil.)

Expanding Coverage for QPS+
(67% Coverage, $790 mil.)

Establishing Nation-wide
(92% Coverage, $1.3 bn)
Strategic Directions of KT

- Reduction in Capex/Opex and labor cost
- Utilization of telephone office space for other value added purposes

Benefits of the All-IP Network

<table>
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<tr>
<th>CAPEX</th>
<th>OPEX</th>
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<tbody>
<tr>
<td>Accumulated savings of $1.0bn</td>
<td>Accumulated savings of $1.9bn</td>
</tr>
<tr>
<td>$1.2bn</td>
<td>$0.72bn</td>
</tr>
<tr>
<td>2008</td>
<td>2008</td>
</tr>
<tr>
<td>↓ 42%</td>
<td>↓ 35%</td>
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<tr>
<td>2015</td>
<td>2015</td>
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<tr>
<td>1.3bn</td>
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Labor Cost (telephone office)

- 20,067 workers in 2008, 13,044 workers in 2015 (35% decrease)

Space (telephone office)

- 1,110 thousand m² in 2008, 320 thousand m² in 2015 (71% decrease)

Network Investment
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- KT plans to develop IPTV as its representative ‘window’ by personalizing the services and contents
  - Open UCC (UGC) upload portal
  - Establishment of a market place for free flow of IPTV contents
KT will launch advanced service features such as IP hosting, PPV and T-commerce
- Number of KT’s IPTV subscribers is projected at 2.8 million by the year 2012

### Advanced IPTV features and expected # of subscribers

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<tbody>
<tr>
<td>IP Hosting</td>
<td>300</td>
<td>1,260</td>
<td>1,927</td>
<td>2,366</td>
<td>2,640</td>
<td>2,819</td>
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<tr>
<td>PPV</td>
<td></td>
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<tr>
<td>Linking channels</td>
<td></td>
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<tr>
<td>Distinctive T-commerce</td>
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*unit: thousand*
- Linking IPTV to SoIP service will develop SoIP into a window of other services.

**Video Phone SoIP**
- Secure fixed IP device and premium video phone
- Seamless service with 3G phone

**Linkage between SoIP and IPTV**
- Sync the protocol between SoIP device and IPTV STB
- Develop UI for SoIP, SMS/MMS on IPTV screen
- Adding mobility to SoIP by utilizing KT's fixed and wireless network
  - Life style contents will differentiate SoIP from other similar services

- Life style contents through SoIP window

  <LBS Service>

  Yellow Pages

  Personalized service tailored for customer's residence

  1 School
  2 Bank
  3 Hospital
  4 Pharmacy
  5 Restaurant
  6 Bookstore

- USB type 3G, WiBro, VoIP device
- SoIP equipped WiBro Phone
- VoIP, BB, 3G / WiBro: QPS Full Line-Up
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Telecom market is saturated and inter–industry convergence is on the rise
Telcos need to expand its business domain
The new administration aims to support growth industries facilitated by IT rather than revive the IT industry itself.

KT will seek growth through embedding IT to these industries.

**New Administration’s Interests**

1. Next Generation Semi-Conductor
2. Hybrid Cars
3. Robots
4. Bio/Nano
5. New Recycled Energy
6. World Class Products

**Previous Growth Engines**

1. u-City
2. u-Health
3. u-Home
4. RFID
5. USN
6. IT Service

**KT’s IT Embedded Service**

- Construction
- Finance
- Education
- Automobiles
- Health Industry
- u-Health
- IT Embedded