Chapter 12
Can IPTV Survive in Singapore’s Small and Over-Crowded Market?

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ABSTRACT
IPTV is a new technology that uses Internet Protocol technology to allow people to view high definition, time-shifted TV program. In this chapter we will discuss the definition and overview of IPTV, the current IPTV status, and popularity in different countries. We will focus on the Singapore market to discuss how IPTV can survive in Singapore’s small but over-crowded marketplace by analyzing and comparing current operations and situations of four IPTV services in Singapore and corresponding suggestions and improvements.

INTRODUCTION
What is IPTV?
The Internet Protocol (IP) technology and broadband being applied to TV services had created a new emerging market called IPTV – Internet Protocol Television. IPTV covers the transmission of television programming taking the form of either full scheduled channels and/or video-on-demand content to households via a broadband connection using Internet protocol. Using the IPTV network, service providers can also offer rich interactivity and services such as television commerce, Voice-over-IP, video conferencing and gaming. Instead of delivering the program channel through traditional broadcast cable format, channels are encoded into IP format and deliver...
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through the technologies, the IP protocol, used for computer networks.

IPTV services often offer both live TV programs, which are multicasting streaming, live as well as Video-On-Demand (VOD), which basically content is stored and played based on consumer selection or combination of these two. Some of the typical services of IPTV might include VOD service, personal video recording (PVR) service, etc. Features and services can differ from the service provider.

With the IPTV, the quality of the video streaming is much better and clearer than the traditional analogue TV. The features such as Video-On-Demand and Personal-Video-Recording make IPTV more interactive. For IPTV, what you need is just broadband connection, a PC or a traditional TV with set up box which is normally provided by service provider to convert the data back to television signal.

**Global Review of IPTV Development**

Currently, IPTV is under the limelight of global TV market in terms of subscription growth. At the end of 2008, there was 21.7 million subscribers to IPTV services worldwide at the end of 2008, which was an increase of 63% compared with the end of 2007, of which nearly 10.4 million were in Western Europe and a further 884,000 in Eastern Europe, giving the region 51.4 percent of the worldwide market. (See Table 1)

Western Europe remains the predominant sole region for IPTV. To be more specific, France enjoys the biggest domestic market so far, representing over half of Western Europe’s 10.2 million subscribers. This is largely due to the competitive carrier Free’s policy of providing CPE which includes an IPTV set-top box to all of its subscribers. All those served by an unbundled line can access some TV services without an extra charge, with on-demand services available for extra fees.

On the other hand, there have been a couple of IPTV service closures. Volny IPTV in the Czech Republic and Tiscali IPTV in Italy have both closed TV operations recently. Both failed to grow in the face of strong competition in their respective markets. These examples, however, are very much exceptions to an overall picture of steady growth in most markets.

In US market, the perception is that the large carriers have been playing IPTV catch-up with Western Europe and Asia. During 2008, North American IPTV did a lot of catching up. For AT&T, a significant milestone was passed in the fourth quarter of 2008. The US operator passed the 1 million mark for IPTV subscribers, joining Verizon.

This increase helped to give North America the largest percentage growth over the quarter, an increase of 19%. In North America, the rollout of fiber has been crucial to the deployment of IPTV.

Although the build-out of fiber took time to reach significant subscriber numbers, it has now reached a position where it provides a large number of homes with an alternative to cable offerings. And in the near future, innovative services could appear that will really differentiate IPTV from cable or satellite TV, such as targeted advertising

### Table 1. IPTV subscribers by region

<table>
<thead>
<tr>
<th>Region</th>
<th>IPTV subscribers at the end of 2008</th>
<th>IPTV subscribers at the end of 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe</td>
<td>10,388,000</td>
<td>7,045,860</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>884,466</td>
<td>465,223</td>
</tr>
<tr>
<td>North America</td>
<td>3,835,544</td>
<td>1,774,671</td>
</tr>
<tr>
<td>South &amp; East Asia</td>
<td>3,615,000</td>
<td>1,840,000</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>3,082,182</td>
<td>2,199,828</td>
</tr>
<tr>
<td>Latin America</td>
<td>21,495</td>
<td>8,991</td>
</tr>
<tr>
<td>Mideast &amp; Africa</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Global total</td>
<td>21,836,687</td>
<td>13,344,573</td>
</tr>
</tbody>
</table>

Source: Broadband Forum/Point Topic
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