

# **Internet Enabled TV: Financial Market View**

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All relevant disclosures and certifications appear on page 10 of this report.<sup>1</sup>

# Investment Terrain

- Game 1: Intramodal Competition
  - ILECS v. CLECS
  
- Game 2: Intermodal Competition
  - Bells v. Cable (and wireless and satellite)

# Government Policy and Technology Driving Changes in Communications Markets

- Consolidation
- Rearchitecture of the Network
- Bundling
  
- Remaining Issues: Local Franchise Relief, Access to Programming

## Game 3: Edge v. Networks

- Prospect of Third (fourth, fifth?) Pipe to the Home
- Monetize Internet Traffic
- Google/You Tube v. Verizon and Comcast

## OVERVIEW OF EDGE SERVICE OFFERINGS

<b>Provider</b>	<b>Voice</b>	<b>Video</b>	<b>Data</b>	<b>Wireless</b>
<b>eBay</b>	* Skype	* <b>None</b>	* Leading auction and shopping services * Leading online payment system	* SkypeZones
<b>Google</b>	* Google Talk	* Segments	* Portal Utilities	* Mobile Gmail * Google SMS * Mobile Maps
<b>AOL</b>	* AIM & AIMPhoneline	* Segments	* Internet Access * Portal Utilities	* Multiple AOL Services * AIM and AOL Mail * Phone and service purchase
<b>Yahoo!</b>	* Yahoo!Messenger	* Segments	* Portal Utilities	* Mobile Messenger * Yahoo! Photos
<b>Amazon</b>	* <b>None</b>	* <b>None</b>	* Largest bookseller/Internet retailer	* <b>None</b>
<b>Apple</b>	* iChat	* iTunes / Segments	* iTunes * Quicktime * Podcast format	* Developed phone with Motorola, but reportedly developing iPhone
<b>Microsoft</b>	* Live Messenger * Microsoft Communicator (Office)	* DRM * WMP 11 * WMV HD * Segments	* MSN / Hotmail * IE 7 * Office 2007 * Windows Vista	* Windows Mobile suite of software
<b>Vonage</b>	* Vonage (PSTN-type service)	* <b>None</b>	* <b>None</b>	* WiFi Phones (hotspots)
<b>SunRocket</b>	* SunRocket (PSTN-type service)	* <b>None</b>	* <b>None</b>	* <b>None</b>

Source: Stifel Nicolaus Telecom, Media & Tech Regulatory Research, company data.

## EDGE VIDEO OFFERINGS

	<b>Google</b>	<b>Yahoo!</b>	<b>AOL</b>	<b>Apple</b>	<b>Microsoft</b>
<b>Name</b>	Google Video	LAUNCHcast	AOL Video	iTunes	MSN Video
<b>Cost of Primary Service</b>	Free	Free	Free	1.99 / item	Free
<b>Full-Length Content:</b>					
<b>TV Shows</b>	1.99	No	Free	1.99	Free Clips
<b>Music Videos</b>	1.99	Free	Free	1.99	Free
<b>Movie Trailers</b>	No	Free	Free	No	Free
<b>Full Length Movies</b>	\$9.98 & Up	No	No	No	No
<b>News</b>	No	No	Free Highlights	No	Free Highlights
<b>Comedy</b>	Limited	No	Free Clips	No	No
<b>Sports</b>	\$0.99 & Up	No	Free Clips	No	Free Clips
<b>Leading Technology</b>	Existing Codecs	Existing Codecs	Intel VIIV	Quicktime/M4A	Windows Media Format
<b>Ad-based</b>	No	Yes	Yes	No	Yes
<b>Other Video:</b>	* Google Internet search for video	* \$3.99 / month for ad-free subscription with extra content and high-quality audio	* AOL Hi-Q Video: DVD quality programming but Windows XP only and with limited content	* Quicktime Format * Podcasts: limited content currently	* WMV HD * DRM * WMP 11
<b>Web sites</b>	video.google.com	music.yahoo.com movies.yahoo.com	video.aol.com	iTunes software	video.msn.com

Source: Stifel Nicolaus Telecom, Media & Tech Regulatory Research, company data

# Outstanding Issues

- Copyright
- Indecency
- Kids
- Political
- Network Neutrality
- Scaling
- Consumer Preferences and Willingness to Pay
- Business Plan Complexities

# Illustrative Companies

- NMS Communications
- Integra5
- NeuLion
- Veoh

# Parting Thoughts

- No single "IPTV."
- Network Owners have no choice.
- Private equity big winners and losers.
- Most interesting cultural/tech phenomena; market significance?

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