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Broadband TV:

Golden Spike Connects Traditional Television and the Internet



A special report for convergence industry professionals on the commercial challenges and opportunities ahead in settling the IP video frontier

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Golden Spike Series

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Broadband TV: What's Next?

Driven by advances in digital technology, the media industry is experiencing a transformative shift in IPTV and Internet video that will change our business models, delivery platforms, and the consumer experience. It is imperative that those of us working in this rapidly evolving field have a variety of resources to help educate and guide us as we forge ahead.¹

—Albert Cheng, Executive Vice President,
Digital Media, Disney-ABC Television Group

INTRODUCTION — SCOUTING A NEW MEDIA LANDSCAPE

Observers have labeled the radical change that television is undergoing as *Convergence*, *WebTV*, *IPTV*, *TV 2.0*. But no name can capture or tame the frontier opened up as a result of cloud computing connecting the two very different but complementary worlds of Television and the Internet.

Like the growth and change that followed the driving of the golden spike connecting the first transcontinental railroad in the 19th century, the cloud's over-the-Internet provisioning of scalable, as-needed resources has come of age and is changing the media landscape.

“Cloud-based TV will provide, for the first time, a truly customized viewing experience for each user”, says David Jensen, Digital Media Partner at IBM Global Business Services. “A user's subscribed content will follow them to whatever device they use to log in to the cloud service. Through a combination of user profiles stored in the cloud and content streamed from Content Delivery Networks (CDNs) with edge services”, adds Jensen, “the user can access their content from their TV, from a hotel room, or from their phone while they're on the go.”[†]

“Cloud-based TV will provide, for the first time, a truly customized viewing experience for each user.”

Media analyst Michael Wolff agrees. He sees the consumer's relationship to traditional media, and television in particular changing rapidly. In the long term, content distributors like Verizon, Time Warner Cable, and Cablevision “will be paid less because consumers are going other places and will ‘pull the plug and go online’ in search of other sources for their favorite media, at the peril of these traditional content provider revenues.”²

Consider this: in March 2010 alone, nine billion online video streams were viewed in the U.S. And world-wide, broadband subscribers are expected to reach one billion by 2014.³ Already there are nearly eleven million PC-to-TV connections and over thirty-one million broadband connected game consoles in the U.S. alone.⁴

Who will be the winners as the media industry now evolves from traditional linear programming to an interactive, on-demand model? How can Service Providers find advantage in a newly emerging TV ecosystem?

This document examines current industry trends, surveys thought leaders, and suggests some likely results for the stakeholders: Network Providers, Content Providers, and the consumer. Its

purpose is to scout the Broadband TV landscape expected within the next 18 months and consider some strategic options and responses.

PART 1 — TODAY’S DRIVERS: MORE CONTENT, EASIER ACCESS

Television has advanced far beyond the appointment-based, centralized programming experience of just a few years ago. Over-the-top video (OTT, or online video that competes with existing cable, satellite, and nascent IPTV services) viewing is expected to quadruple by 2014 to reach over 46 million households. The industry is focusing on the demographics and their new patterns of media consumption.

While OTT has offered wide access to online video ranging from user-generated-content to movies and TV shows primarily to the PC, its penetration onto the living room’s big screen presents a number of challenges as consumers expect a “TV experience” synonymous with quality, simplicity, and responsiveness. Broadband TV is emerging as the offering from Service Providers that addresses these OTT consumer challenges.

CDNs have become enablers of these advancements by providing consistent bandwidth delivery. By installing high-performance POPs in large Service Provider networks to avoid hops and content caching, this edge storage is delivering a constantly improving viewer experience. As a result, content providers can now “follow their viewers” as they access their favorite video over the web, leveraging their mobile and connected devices.

Network Operators, on the other hand, face the threat of becoming “a fat pipe” that merely charges for data carriage. The introduction of IPTV services was a good response to that risk of commoditization, but its penetration and growth has been tempered in part by costly mid- and last-mile network upgrades and in part by the “me-too” nature of its offering.

For now, consistent consumer access to OTT remains elusive, favoring the computer savvy demographic. In addition, the viewing experience on the PC, the TV and the smart phone is divergent. Smooth cross-platform delivery has been challenged by issues ranging from codec and streaming technology to intellectual property rights.

However, the industry is reaching a new point of convergence that will enable a progressive yet fundamental change in how consumers access and consume TV entertainment.

“Until now, no television service has delivered an integrated experience for users, including both linear and OTT content, especially in conjunction with trusted customer care. Current offerings either lack complete programming spectrum, simple but powerful user-interface, social media features, or ‘three-screen’ delivery. These capabilities are quickly emerging as the hallmarks of the new generation of Broadband TV services”, says Jean-Georges Fritsch, Minerva Networks’ GM & EVP Products. ⁷

Broadband TV remains a work-in-progress. However, the vision that the industry and consumers are gravitating toward may be characterized as a video service that combines legacy TV with an

Key Broadband TV Features

- Leverages existing broadband networks and CDNs
- Combines legacy TV with online content
- Easily accessible on “three screens”
- Offers federated search and social networking features
- Integrates seamlessly with connected devices

unlimited variety of long tail online content. By leveraging existing broadband networks (unlike IPTV) and integrating seamlessly with set-top boxes, personal computers, mobile phones and new connected devices, such a service would be easily accessible through a unified “three screen” user

experience. Broadband TV will likely support comprehensive or federated search, as well as social networking features such as recommendation and chat.

Offering consumers control and easy access to their favorite entertainment, while making it personalized and social is increasingly important.

PART 2 — BROADBAND TV: SERVICE PROVIDER BENEFITS

Service Providers are in a unique position to address the changing consumers' demand for video services by offering Broadband TV.

While younger "Millennials" raised on iPods and the Internet have begun to take advantage of web video, the majority of consumers haven't yet experienced or grasped all the new possibilities. Service Providers are well positioned to change that by offering a service built around an intuitive, unified interface that makes watching TV content across the three screens inviting and simple.

"We all like value", says Malachy Moynihan, Cisco VP, Video Product Strategy, "and when a service provider offers near-limitless access to content ('for one low price per month!') it actually resonates with that part of our brain that defines what value is". Service providers are likely to offer this because they are well positioned in agreements with the content industry. "They're in a good position to monetize" says Moynihan. "The ability to leverage the relationships they have and bring increasingly flexible capabilities to their users to access content on all their devices is a primary value."[†]

With Broadband TV, Service Providers can build on existing strengths in solid service, performance, customer care and billing. They will also benefit from additional traffic and hosting charges according to Greg Douglass, Accenture Global Managing Director, Media and Entertainment Practice.[†]

"Many Service Providers have already invested in their own CDN. Offering a Broadband TV service is a natural next step that adds value to that investment", says Jean-Georges Fritsch of Minerva Networks.[†]

In short, momentum is building. Those Service Providers that invest in this opportunity now have a first-mover advantage in shaping a service and business model that delivers great benefits and rewards to all stakeholders.

PART 3 — BROADBAND TV: BENEFITS TO CONTENT PROVIDERS

For Content Providers, online video is still a new, uncharted medium where appointment-based

Content Provider Benefits
Smooth evolution to new revenue models
New, profitable content release windows
Cross-link of linear and online programming
Secure system that protects intellectual property
Greater subscriber reach
Loyal audience seeking new and long tail programming

TV allegiances of the past no longer apply. But the rewards for success are a smooth evolution from today's carrier fee business model to a profitable revenue-sharing one. Flexible release windows, as well as cross-linking of linear and online programming, are attractive to consumers and add a new profit center for providers. In a secure Broadband TV system that safeguards

intellectual property, the ultimate win is greater subscriber reach and loyalty from an audience that thrives on new and long tail programming.

"If Content Providers embrace it", says Accenture's Greg Douglass, "they could offer additional content that augments their shows for little additional cost. For instance, after *American Idol* runs live from 8–9PM on Fox, you might click over to www.americanidol.com and watch live streamed interviews with contestants backstage."

PART 4 — WHY CONSUMERS CARE

Consumers, the real beneficiaries of new media access, care—and they are voting with their wallets.

Until recently, viewers have been satisfied with news, sports, and sit-coms. Today they are beginning to expect more variety such as local news, social networks, Craigslist, search for content—as well as ordering pizza online while watching TV.

An estimated 800,000 so-called "cord-cutters" have abandoned their traditional television providers in search of an alternative to their monthly subscription fees. This number will double in 2011 according to the Convergence Consulting Group.⁵

Viewers are also increasingly reluctant to pay for content they don't need. "Our survey work consistently shows a low perceived 'value for money' among pay television consumers", says

Ben Piper, Director of Multiplay Market Dynamics at Strategy Analytics.

"Consumers feel that they have lost control, and that they are paying too much for too little."⁷

What's In It For The Consumer

- A single portal for content access
- Simple and consistent User Interface
- Personalized long-tail content
- Easy-to-use, customizable system preferences
- Cross-platform availability

Viewers are beginning to look for a single portal or platform to access quality VOD, OTT, Pay-per-View, Live Sports, and News. They seek a consistent User Interface that delivers personalized content in an easy-to-use system with

customizable system preferences that conforms to their media habits. Cross-platform availability across the "three screens" is another important consumer sweet spot.

Just as the Internet is viewed as an "always-accessible and personalized channel for content", so the public now expects that same level of accessibility and personalization from their television Service Providers.⁶

PART 5 — A NEW SERVICE PLATFORM

What's ahead is a cloud-based platform that "will help Service Providers, content owners and advertisers alike maintain control over content and maximize the ability to monetize content assets", says Strategy Analytics' Martin Olausson. Broadband TV will enable Service Providers to explore and implement new business models "without cannibalizing their existing revenue models".⁷

In addition to enabling more TV entertainment, Broadband TV service platforms support new applications. Imagine an online dating service that turns a combination TV/IP-camera into an integrated source of data says Timothy Napoleon, Co-Founder of AllDigital, formerly Chief Strategist, Akamai Technologies. "The future of connected devices and their associated digital services" says Napoleon "depend on high-speed bi-directional exchanges of data."⁷ Now that the last mile problem has been mainly solved, he says, devices are 'talking back' and Content Providers are thinking of fresh ways to leverage an interactive and engaged audience. Other

applications that can be delivered on a Broadband TV service platform include tele-healthcare, distance learning, residential video-mail and video chat just to name a few.

The complete Broadband TV picture is still coming into focus as it is pulled in different directions by technology and business forces. But “the customer has spoken” says Strategy Analytics’ Piper, who believes Network Providers and Content Providers have begun to listen. “We cannot forget that an entire generation of consumers is waiting in the wings” says Piper. “Today’s teenagers are tomorrow’s subscribers, and they have very different preferences and behaviors when it comes to consuming content.”

This blending of passive television watching with the interactive Web experience will be a significant phenomenon by the end of 2010 according to Deloitte, as consumers imagine and expect the two to be combined. They want to talk about TV programs with friends (or strangers), check movie reviews before watching, and “search out gossip on a current show, or check sports statistics while the game is under way.”⁷

PART 6 — WATCH, SURF, CONNECT

These new watchwords for TV consumers pose both a challenge and an opportunity to the media business.

Nearly 50% improved brand impact is reported when combining online and TV-delivered advertising. With an estimated four billion TV viewers world-wide and a \$180 billion global TV advertising budget in the balance, the risks and rewards are significant.

Content Providers and Service Providers now understand they need each other to achieve their business objectives. By combining core competencies, they can offer the consumer a unified user experience integrating legacy linear programming with the web’s limitless access to entertainment content. The trend is audiences seeking high quality of service for TV as well as web content, along with advanced, federated search and interactive applications that go beyond traditional program viewing and can be accessed from any device in the home or on the go.

After many years, the collective, shared resources of Internet-based cloud computing have reached commercial strength. Without ceremony, CDNs and Broadband TV are now driving the golden spike connecting television and the Internet. They enable cost-effective distribution of an ever-growing pool of content, and the means to organize, give access to, and monetize a personalized entertainment service that consumers are increasingly eager to embrace.

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Go Associates is a technology and business consultancy providing strategic counsel to corporate and early stage companies in Silicon Valley, U.S. and Europe. As media, marketing, and partnership experts, Go Associates has an extensive track record in the converging Internet, Broadcast, and Telecommunications sectors and turning innovation into profitable products and services.

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