PBS FY09 ENVIRONMENTAL SCAN

MEDIA/TECHNOLOGY

Content + Technology = Media Success

According to Les Moonves, President and CEO of CBS Corporation, "Technology will continue to alter the distribution landscape, allowing people to access content on their own schedule, wherever they are, in all kinds of ways. Current technologically-driven distribution channels will expand and new ones will open. But without compelling content, every new platform is an empty shell. Companies that can combine world-class content with powerful national and local distribution will have the competitive advantage."[1]

The Impact of Technology

Less than two years after ABC TV shows first appeared on iTunes, kick-starting widespread attention to new distribution possibilities for video, technology is leading to multiple challenges and opportunities for media organizations – with the Internet leading the disruptive change[2]:

- 19% of adult Internet users watch or download video on a typical day
- 33% of Internet users aged 18 to 29 watch or download video on a typical day

The most prominent success story over this period is YouTube (with 46 million users in April 2007, an increase of 271% in one year[3]), but traditional media companies have also been very active in how and where they distribute their TV shows:

	Streaming Video Available From:	***Downloads Available From:***
ABC	ABC.com and affiliate websites, AOL, Cox.net	iTunes
CBS	CBS.com and affiliate websites, AOL, Joost, Bebo, Veoh	iTunes, Amazon.com, Xbox
Fox	Fox.com and owned affiliate websites, Hulu (AOL, CNET, Comcast, MSN, MySpace.com, Yahoo)	Amazon.com, BitTorrent, Walmart.com, iTunes
NBC	NBC.com and affiliate websites, Hulu (AOL, CNET, Comcast, MSN, MySpace.com, Yahoo)	NBC Direct (launching this month), Amazon.com

Who's Hulu?

Hulu is NBC Universal and News Corporation's online video joint venture. The site is set to launch this Fall and will focus on professional content. Hulu videos will be played in their own embeddable branded player and include content from at least a dozen TV networks and two major film studios. Initial distribution partners include AOL, Comcast, MSN, MySpace & Yahoo.

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[1] Accenture's Global Content Study 2007
[2] Pew Internet & American Life Project, July 2007
[3] Nielsen/NetRatings

PBS is also distributing its content widely. Full-length shows are currently available through multiple sites including PBS.org, iTunes, Amazon.com, Netflix.com, Vudu, BitTorrent, Vuze, and AOL. Short-form promotional content is also on YouTube, Veoh, Metacafe, and Dailymotion.

The success of YouTube and many other video-sharing sites, as well as the widespread distribution of TV shows and movies, indicates that multiple forms of video are thriving online:

- Short- and long-form video
- Professionally-produced and user-generated video

User-generated content (UGC) is a hot topic in the press and refers to media created by individuals and freely accessible to anyone. Amateur video posted to YouTube is a frequently cited example of an activity where users are generating content, but blogs, discussion boards, and product ratings are other forms of UGC with wider adoption[4]:

Percent of online North American consumers that do each activity online at least monthly

Contribute to a discussion board or forum	26%
Submit a rating or review of a product or service	26%
Publish your own blog or personal journal	11%
View or publish a video blog	10%
Publish your own Web pages	8%
Upload video you created to the Internet	7%

Streaming Beating Downloading

Although downloading started the TV trend (with the iTunes/ABC deal), streaming is currently the most popular method for viewing online video - consumers are almost six times more likely to stream than download[5]. This does not mean that subscription or pay-per-download business models are not viable, but advertising-supported distribution is a safer option for many, reducing piracy fears and better addressing current consumer perception that content should be free on the Internet.

Download? Streaming?

Generally speaking, downloaded content is free of advertisements and often costs a fee. Examples include a mix of free and for-a-fee content on iTunes and Amazon Unbox, the BBC's free (and ad-free) iPlayer, and NBC Direct (an upcoming ad-supported service containing NBC's signature series).

Streamed content is increasingly ad-supported; but it depends on the content. Professionally-produced content like network TV shows are nearly always ad-supported (e.g. *Lost* on abc.com) but user-generated content has tended to be free of sponsorship. This situation is now changing as sites like YouTube look to generate a financial return from their worldwide user base, often using pre-roll advertising.

[4] Forrester Research – January 2007 – Leveraging User-Generated Content
[5] MediaPost – November 20, 2006 - Study: Web Users More Likely To Stream Video Than Download

You’re Never Alone

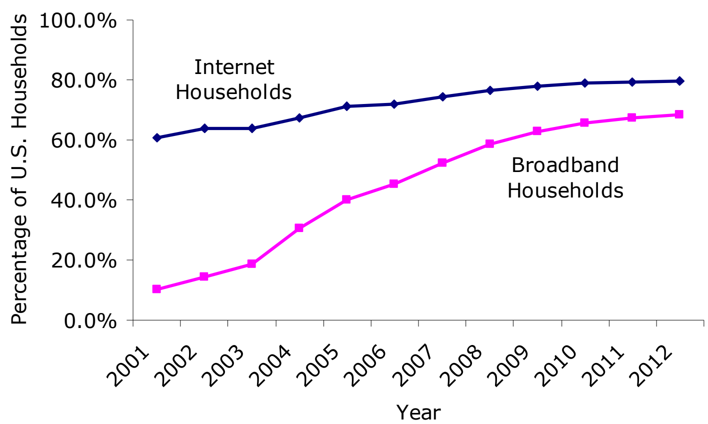
Along with YouTube, the social networks MySpace and Facebook have also been grabbing the media headlines over the last year as a result of their overwhelming popularity – demonstrating how much people want to share and interact with one another online[6 7]:

- MySpace – 110 million members, used by 1 in 6 Americans, 300,000 people sign-up every day
- Facebook – 69 million users, doubled in size since its high school/college restriction was lifted a year ago

This desire to interact is reinforced by a Pew Internet & American Life Project report that found that more than half of online video viewers (57%) share links to the video they find with others, and three in four (75%) say they receive links to watch video that others have sent to them.

Internet Adoption

None of the above would be possible without an Internet connection. The prevalence of Internet access in U.S. homes and work places and the increasing adoption of faster broadband connections help explain why online video and social interaction have grown in popularity.



According to Forrester, nearly 75% of U.S. households have access to the Internet in 2007 and 52% of all households use high speed broadband connections – this means 71% of Internet homes currently connect using broadband. By 2012, it is predicted that 86% of Internet homes will be connected at broadband speeds; meaning high bandwidth content like video will be accessible to an even larger audience.

The U.S. Trails[8]

From a worldwide perspective, the U.S.’s broadband penetration rate of 52% is not that impressive – 24 in the world in Q1 2007. South Korea leads the pack at 89%, with Hong Kong at 87%, Monaco at 83%, Iceland at 76%, Singapore at 76%, and the Netherlands at 73%.

[6] Abclocal.go.com – October 1, 2007 – Breaking up with MySpace
[7] comScore (August 2007)
[8] Weboptimization.com

Mobile

Technology is not just about Internet-based distribution; video is increasingly being distributed and viewed on mobile phones and other portable devices.

The iPhone Has Landed

Apple's iPhone debuted June 29 and 74 days later the company announced that it had sold its millionth phone – by comparison, it took almost two years for Apple to sell a million iPods.

Apple describes the iPhone as three devices in one—a mobile phone, a widescreen iPod, and the best mobile Internet device ever—all based on Apple's multi-touch interface and pioneering software. Steve Jobs says he expects to sell 10 million iPhones in 2008 to take a 1% share of the mobile phone market.

With at least one mobile phone in over 83% of American households, the carry-everywhere mobile is very appealing to content providers and telecom companies alike. Mobile video is not nearly as prevalent as online video but there is significant growth in the U.S. market[9]:

	Q1 2006	Q1 2007	Growth
Mobile Video Revenue ($M)	49	146	198%
Number of Subscribers (millions)	3.3	8.4	155%
Penetration (% of all mobile subscribers)	1.6%	3.6%	

The appeal of portable devices is also helped by their increasing connectivity. The iPhone as well as several other mobile phones and mp3 players (including the new iPod and upcoming Zune player) offer integrated Wi-Fi that allows people to connect to the Internet using a local wireless access point such as a hotspot. This gives viewers even more opportunities to consume media, as they can acquire content at times and in even more places than they have before.

Despite these advances, media executives surveyed by Accenture believe that it will be some time before mobile video reaches critical mass in terms of critical uptake – 50% of those surveyed believe it will reach mass market within 1 to 3 years, with 37% believing the timeframe is more likely to be 3 to 5 years. Barriers identified include:

- Consumer readiness (32% of respondents)
- Network readiness (25% of respondents)
- Availability of media-optimized handsets (15% of respondents)

[9] Telephia Press Release – June 26, 2007

The Impact on Television

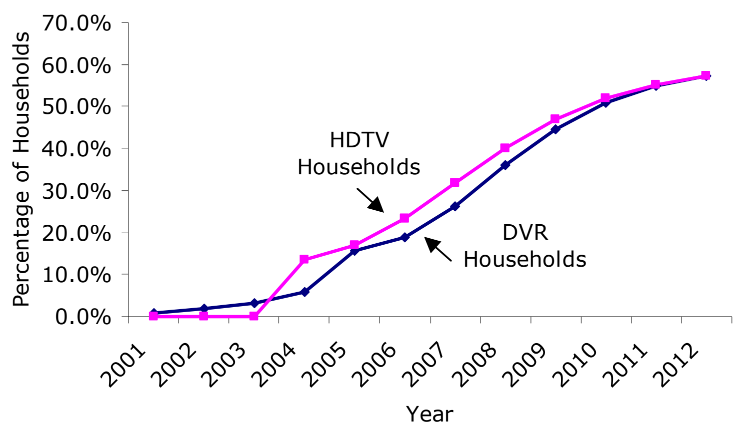
So is the prevalence of content on other platforms killing traditional television viewing? The answer, for the time being, appears to be no. User consumption of media is forecast to rise from approximately 70 hours per week today to over 80 hours weekly by the end of the decade as digital distribution is predicted to complement, rather than cannibalize traditional media. The consumption increase is predicted to come from increased leisure time and multitasking users.

This view is supported by the Census Bureau's annual *Statistical Abstract of the United States*, that reports that Americans' use of media keeps climbing:

- In 2007, the Census Bureau estimates that the average American will spend 3,518 hours using the media throughout the year, up from 3,333 hours at the start of the decade
- Of this, 1,555 hours will be spent watching television, up from 1,467 in 2000. (This includes 678 hours watching broadcast TV and 877 watching cable and satellite.)

Television's continued appeal can be partially explained by ongoing technology developments related to the television set. For example, Video-On-Demand, Digital Video Recorders, and High Definition content and devices (televisions and DVD players) have increased the quality and flexibility of television viewing. And the appeal of these consumer devices is expected to grow even more in the future:

- The number of DVR households is forecast to double by 2010
- The number of HDTV households is expected to double by 2012



The television is also helped in its position as the platform of choice by the merging of the television set with computing and networking capabilities, i.e. the release of products and services that help extend television's reach. For example:

- Hardware from companies such as D-Link, Netgear and Apple helps consumers take content from their PC to the TV screen
- Akimbo and TiVo set top boxes enable consumers to access web content on their TV through services such as Amazon Unbox

- Sling Media’s (recently acquired by EchoStar) Slingbox makes it possible to watch and control the living room television from anywhere by turning an Internet-connected laptop or PC into a personal television
- Internet-connected game consoles provide consumers access to video content through services offered by Microsoft and Sony
- Online video sources such as Joost and Veoh, which provide viewers/users with both user-generated and professionally produced content, increase the attraction of connecting the TV screen to the internet

Summary

What does this mean for media organizations? An Accenture study of worldwide leaders and decision-makers in the media and entertainment sectors concluded that:

> “The global content industry is at a vibrant and dynamic inflection point. Media companies, in order to become high-performance enterprises, need to evolve the way they go to market and operate their businesses. This involves developing innovative approaches to strategy and execution, including people, processes, and systems:
>
> - Increase Reach: Distribute content to a wider set of channels and platforms.
> - Increase Engagement: Drive user interaction through relevance, increasing retention and value.
> - Increase Monetization: Adapt business models to new content types and leverage deep user insight.
>
> Today, the statement ‘content is king’ is being challenged – by distributors, technology and communications companies and, for the first time, by the very consumer of media. It is incumbent upon content creators and owners to rise to the challenge and seize the opportunity that digital provides.”[10]

The executive summary from the Accenture report follows on the next page.

[10] Accenture’s Global Content Study 2007

Beyond the Hype: How New Content and Technology are Redefining the Future of Media

Accenture's Global Content Study 2007

Accenture's Global Content Study 2007 solicited opinions from media executives around the globe to gauge their views of where the greatest opportunities and challenges will come over the next five years. Key findings include:

• 62% of executives look to "new platforms" as being the most important key to growth, followed by 31% "new content" and 7% "geographic expansion" as the key growth lever.

• Of these new platforms, online and mobile dominated; a combined 43% viewed online as most important (of which 17% represented a distribution of content through online portals or entertainment/information sites, and a further 13% through social networking sites and 13% through eCommerce sites), while mobile drew 17% of responses.

• 53% of executives surveyed indicated that "short form content" offered the largest opportunity for "new content," with "long form" or "full length" video content (greater than 60 minutes) garnering 11% of responses. In addition, "video gaming" was viewed as a key growth area, according to 13% of executives.

• Asked what they believed was a top threat to the business, over half of the executives (57%) identified "consumer-based competition" or "user-generated" content; 46% of respondents viewed "piracy or IP theft" as a top three issue.

• However, despite the perceived threat, 68% of respondents believe that they will be able to harness user-generated content to create revenue within one to three years.

• Nearly 80% of those surveyed believed that there was no bubble in the Web 2.0 space, with 70% of respondents also observing that social media was a natural, "evolutionary" progression for media (versus 25% calling social media "revolutionary" and 5% calling it "a fad".) As a reflection of this upbeat perception, over 90% of the executives said that their companies would become involved in social media over the next 12 months.

•Half of executives indicated that advertising could grow to become the most prevalent business model in the industry within five years, with digital advertising driving growth.

• Content remains king (according to 37% of respondents), although the crown is under attack by technology companies (26%) and telecommunications players (9%).

The full report is available at http://www.accenture.com/NR/rdonlyres/51CEB4E4-9044-4B01-A3F7-B4AB287C2D04/55683/BeyondHypeFinal4.pdf

PBS FY09 ENVIRONMENTAL SCAN

PUBLIC TELEVISION FINANCIAL HIGHLIGHTS

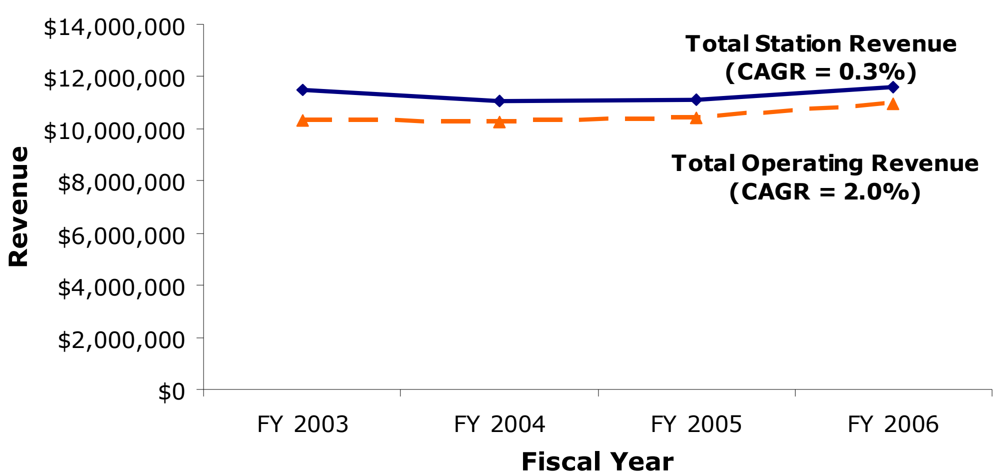
Public Money is Vital to Public Media

In January 2007 the General Accountability Office's report, *Issues Related to the Structure and Funding of Public Television*, concluded that:

- Public television is structured around local ownership and control of stations, with assistance from national-level organizations
- Public television stations provide a variety of national and local programs and services
- Individuals, businesses, and the federal and state governments provide the majority of funds for public television
- Public television stations are pursuing a variety of nonfederal funding sources, but substantial growth to offset a reduction or elimination of federal support appears unlikely
- Public television is unlikely to generate significant additional back-end revenues

Below Inflation Growth

Data from the annual Station Activities Benchmarking Study (SABS) underlines many of these conclusions and reveals that the average public television station has been experiencing below inflation growth over the past four years.

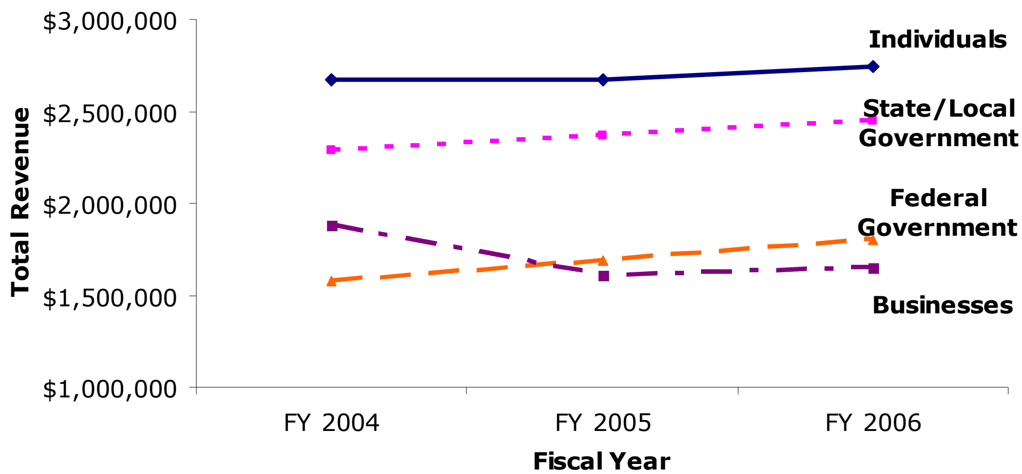


Total revenue at the average station has grown at a compounded annual rate of 0.3% per year, compared with an inflation rate of 2.7% per year over the same period. It is a more positive picture when operating revenue is analyzed (total revenue less capital funding), with annual growth of 2.0% per year.

According to a recent analysis of the system's finances by Booz Allen Hamilton, commissioned by CPB, public broadcasting's expenses will outgrow its revenues by 2011, based on present growth rates of expenses and revenues.[11]

Individuals Are the Biggest Funding Source

When station finances are broken down into funding sources, it reveals that individual giving is the biggest source of revenue for the average station, providing 24% of all revenue in fiscal year 2006. This is approximately equivalent to $2.7 million at the average station, or nearly $500 million system wide.



The top four funding sources combined account for 75% of the average station's revenue. Looking at these sources more closely reveals that:

- Individuals' contribution has grown at an average rate of 1.2% per year over the past 3 years
- State/local government revenue (21% of total) has grown at 3.4% per year
- CPB and federal government revenue (16% of total) has grown at 6.9% per year
- Businesses revenue (predominantly from underwriting) has declined at 6.3% per year (accounting for 14% of the total in fiscal year 2006)
- Revenue from foundations (not featured in chart) has declined at an average annual rate of 14% (from $925K at the average station in fiscal year 2004 to $685K in fiscal year 2006)

Declines in funding from businesses and foundations help explain why station revenue overall has not grown despite above inflation growth in state/local and federal funding.

Summary

Although revenue at the average station is not declining, growth is below the rate of inflation. Stations are now slightly more reliant on federal money than in the past, while revenue generated from foundations and businesses has declined.

[11] Current - Sept. 24, 2007 - Fiscal Outlook: 'The trend is not our friend'