



Digital Media & IP for Enterprise Communications 2008 Reflections

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2008: Difficult Times, but Significant Advancements

2008 was a difficult year for most everyone, most companies and most organizations. There are not too many who could, or would, dare to debate this: certainly, not the economists, politicians, news media, or the unfortunate recipients of cutbacks and downsizing.

However, rather than dwell on bad news, I'd like to touch on some of the positives. Especially, as they relate to the use of digital media in enterprise organizations. The positives can be summed up in a couple of words: **Digital** and **IP**. When combined with the new media and applications they enable, digital solutions and IP have a significant positive impact.

Possibly, the most important contribution is the congressionally legislated mandate from the Federal Communications Commission (FCC) for **television stations to migrate to digital transmissions** by February 17, 2009. This action can be credited with advancements and improvements, such as:

1. The proliferation of digital televisions. Yes, High Definition Television (HDTV);
2. The upgrade of video production equipment and systems to High Definition (HD);
3. The inevitable movement toward the Quad Play: utilizing wireless, mobile, hand-held devices (PDAs - personal digital assistants).

Realistically, HDTV has been on the cusp of happening for more than 20 years. If not for the FCC digital mandate, it is difficult to determine how long it may have floundered. However, the digital mandate which triggered a domino effect that has been years in the making, including:

- The broadcast television networks and production companies upgraded to high definition video production capabilities;
- The broadcast networks, cable companies, satellite service providers, and other competing service such as AT&T's U-Verse and Verizon's Fios upgraded their transmission services to include bandwidth allocations for HD;
- Content providers began shooting and/or producing their content in HD;
- Manufacturers of production equipment are cranking out HD systems, leaving standard definition (SD) in its wake;
- Manufacturers of television systems are enjoying the perfect storm, providing the LCD, plasma, and DLP systems for consumers and to address the lucrative (and growing) digital signage market for the enterprise organizations.

As a result, the digital mandate has enhanced the viewer experience on large flat screens. Also, and equally important, it will enable the proliferation of applications and services to handheld, mobile devices: small screens. This is commonly referred to as the Quad Play and will gain traction in 2009, once the bandwidth from the local television stations becomes available.

In fact, the Quad Play (mobile services) is one of the key factors that drove the FCC mandate to better utilize the television transmission airwaves. As stated on the government's web site for the digital transition:

Why Are Broadcast Stations Switching to Digital?

Federal law requires the switch, which will free up the airwaves for police, fire, and emergency rescue communications, allow broadcasters to offer programming with better picture and sound quality and offer more programming choices, and allow for advanced wireless services for consumers.

For more information on the digital migration, go to the link to the government site listed at the end of this document.

Much of the bandwidth has already been auctioned off to telephone, cable, and communication companies to develop and provide a wide range of wireless services, including: mobileTV video offerings; enhanced news, information, and entertainment; crisis notification and management for campuses and communities.

It should be noted, that at the time of this writing (January 2009), President-elect Barack Obama is urging Congress to postpone the Feb. 17 switch... arguing that too many Americans who rely on analog TV sets to pick up over-the-air channels will not be ready.

The migration of television stations to digital can be credited with at least one challenge: The impact on existing wireless microphone systems (Read Glenn Fishering's piece on white space by clicking link below or going to Enliten's home page). With the anticipated changes of bandwidth frequency allocations, many, if not all of today's wireless systems are soon to be legacy as they may be subjected to unwelcome and uncontrollable interference challenges.

**So, what does digital and IP mean to those of us in the enterprise space?
Very simply: Nearly everything!**

As you know, IP (Internet Protocol) is the platform on which the Internet is based. IP, along with the enhanced compression technologies and digital media, can be credited with enabling the access of information and rich media via computers and devices in the home, at the office....whenever, wherever, and however you elect to receive it.

So, what happened in 2008? What did enterprise organizations do, start doing?

Organizations embraced the use of digital media for their internal communications and training applications. They upgraded to HD production capabilities...and invested in the IP-based infrastructure, to facilitate streaming and delivering on-demand content.

Organizations implemented new technologies and formats, such as MPEG-4 and DVB-S2, which vastly improve efficiencies and cost reductions related to the delivery of digital media.

Organizations sought out and/or implemented creative, new media to reach out to customers and communities to enhance their brand and increase revenues.

Organizations looked to efficiently extend the global reach of their communications.

Media and communication departments developed three to five year business roadmaps as key components to the enterprise communication strategy.

IT departments assumed/embraced a major role in the implementation and/or ongoing management of the organizations' distribution infrastructure for the video and digital media.

Organizations addressed change management challenges and workflow issues as a result of new applications and systems. They established guidelines and procedures to:

- Operate and best utilize the digital media tools and production systems;
- Manage and approve the influx of content from external and internal sources, other than that produced by the video and/or media departments;
- Understand and use the recently implemented delivery systems;
- Provide the governance for roles and responsibilities of individuals and departments regarding the successful operation of the systems and provision of services.

2008: Enliten Provides Guidance and Value

Although 2008 was a difficult time for most organizations, many found themselves in need of implementing change and new media implementations, based on: systems were outdated and near legacy; growth and global expansion opportunities; cost reduction requirement; and market/branding dynamics. As a result, 2008 was actually a very good year for Enliten as we provided guidance and support to many corporate and government organizations.

Enliten's involvement is very representative of the enhancements and activities taking place on the larger field of enterprise communications. For instance, in 2008, Enliten helped clients:

- Assess systems and infrastructure risks and capabilities;
- Develop **business models** and **roadmaps** for new or improved systems and services;
- Implement **webcasting solutions**: selection of vendors and integration of solutions;
- Implement, upgrade, or extend **satellite networks**;
- Upgrade **video production facilities** to HD;
- Upgrade and enhance **conference rooms** and **auditoriums** with HD and new media capabilities;
- Implement **learning management (LMS)** and **content management (LCMS)** systems;
- Develop **business justifications** for satellite networks and CATV system upgrades;
- Evaluate **videoconferencing** and **telepresence** systems and capabilities;
- Develop **guidelines** and **procedures** to operate and manage digital media and HD-based operations;
- Establish **workflow processes** as IT organizations assume integral roles in managing the communication infrastructure;
- Address **change management** issues and challenges presented by the introduction of new media.

In addition, Enliten conducted numerous executive briefing sessions and informational workshops on such topics as the *Impact of Digital Media and IP on the Enterprise*. The sessions helped organizations get associates from the diverse functional groups and internal clients on the same page regarding digital media for communications and training applications.

Bottom line, there is a wide selection of new digital media and IP-based solutions from which to select. Also, enterprise organizations are moving ahead to meet their business objectives and communication challenges. They are implementing new media, or at least researching how they can improve efficiencies or drive business.

Although 2009 promises to be another difficult year, Enliten believes that digital media and IP will enable, if not drive, a significant amount of upgrades and enhancement in the enterprise. Refer to the accompanying article: *2009: Forecast for another Difficult, but Progressive Year - Thoughts & Perspectives*.

Additional Information:

For detailed explanation of the Digital TV Transition, go to the government's site:
www.dtv.gov/index.html

Between a Rock and a White Space

Impact of the Re-allocation of Local Radio Frequency (RF) Spectrum

by Glenn Fishing, Enliten Associate

www.enliten.net/docs/BETWEEN_A_ROCK_AND_A_WHITE_SPACE_1-2009.pdf

Obama team urges delay in digital TV transition

http://nab365.bdmetrics.com/NST-2-50168198/story.aspx?utm_source=nab365&utm_medium=email&utm_campaign=enewsletter&ocuid=NDA2MTU0NQ==3BggJdVGVK8=&r=t