The Rocky Road to Digital v. 5.0

David B. Liroff, VP & CTO WGBH Boston





 Those who tell you that they know how the transition to digital media will turn out, don't know what they're talking about.





Three months from now, these will be the old days, technologically speaking.



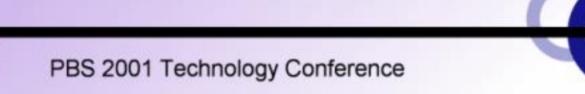


If aspects of the transition to broadcast DTV don't make sense to you . . .





If aspects of the transition to broadcast DTV don't make sense to you . . . it could be because they simply don't make sense



What We're Going to Talk About

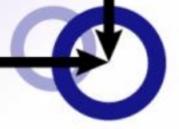
- What's really going on in the marketplace?
- What should we do while waiting for broadcast DTV to reach critical mass in the consumer marketplace?
- The "unified field theory"



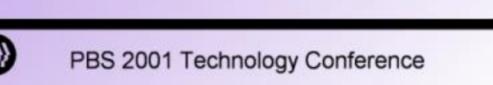


The transition to broadcast DTV is stalled - certainly in the consumer marketplace





DTV has enormous public service potential - we need to continue the buildout . . .



remain our principal distribution platform for the next 5-10 years





- read the ads in the Sunday papers - primary research
- go to the local consumer electronics stores





- eavesdrop on conversations between customers and sales people, and between customers
- don't be a know-it-all; it will ruin your "research" results





- take a look at the analog displays
 - they're beautiful, and inexpensive
- take a look at all the other "good enough technologies" available to consumers

DVDs

- •20,000,000 players by end of 2001
- · "broadband in a box"
- driving sales of digital displays (along with DBS)



- 250,000,000 analog sets in USTVHH's
- 35-50,000 (?) (that's thousand)
 DTV receivers in USTVHH's





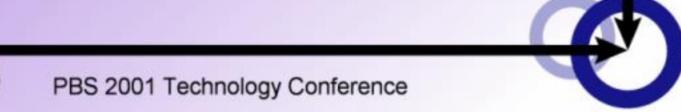
- 27,000,000 analog sets will be sold this year
- Every analog set purchased now is a DTV receiver which won't be purchased in the next few years





- Even Gary Shapiro said that he anticipates only 30% DTV set penetration by 2006
- And when Gary Shapiro says "DTV sets", he doesn't mean "DTV receivers"

Cable carriage is essential to expediting the rollout of broadcast DTV in the consumer marketplace.





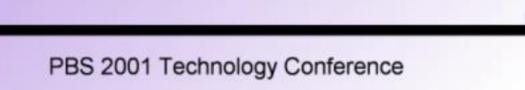
What should we do while waiting for broadcast DTV to reach critical mass in the consumer marketplace?





While waiting for DTV...

Use the time to design and implement more efficient means to distribute programs to and among stations, and to our viewers





Efficient program distribution

Beware of speeding into the future with our eyes fixed firmly on the rear view mirror

We need to design for the future, not the past





Efficient program distribution

What proportion of the programs in our stations' broadcast schedules need to be delivered to us in real time?

(Especially if we know about them eight or more weeks in advance)



If real time delivery is not required, think of alternatives to full bandwidth delivery





Alternatives to real-time delivery

- Ralph's pretty good bicycle (with DVDs or successor media sent by mail)
- Downloading files from a central storage facility, caching them for local playout



Or, consider alternatives to each station building a fully-independent master control facility





Alternative models

- Commercial station groups are moving toward clustered master control configurations
- PTV projects in NYC, Denver,
 Philadelphia, New Orleans





Alternative models

- ADDE (Advanced Digital Distribution Entity)
- (session today at 2:15PM)
- NPR Content Depot





While waiting for DTV...

Use the time to learn the language of emerging interactive media.





Bill Hendler from Chyron

"You don't have to wait for digital broadcasting to start playing with interactive television."





While waiting for DTV...

Use the time to develop other distribution platforms.





Other distribution platforms

- DVDs
- streaming
- broadband
- interactive and enhanced television





While waiting for DTV...

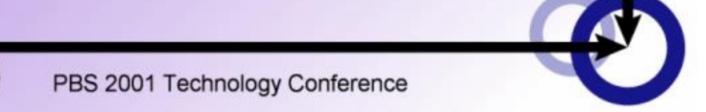
Use the time to demonstrate how DTV can be used for education.

- datacasting to school-based servers
- experiment with PC tuner cards



While waiting for DTV...

Use the time to develop and implement system-wide asset management standards





Every PTV station - to survive - will be morphing into a platform-agnostic digital library





The key to our success going forward will be organizing our editorial assets so that they can be easily retrieved and packaged in a manner appropriate to the distribution platform and the needs of the end users.

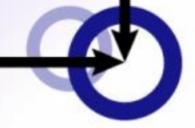


We must become passionately platform agnostic, and passionate about asset management





Ed Caleca's "public broadcasting anytime, anywhere, 24/7"





To survive for the long-term, content must be nomadic

We run the risk of developing 175

libraries, each with its own version of the Dewey Decimal System



Metcalfe's Law - The value of a network increases with the square of the number of computers attached to it.





The CPB "asset management working group"





The "Unified Field Theory"

- the next interconnection system
- the master control of the future
- the DTV ATP project
- asset management





What We've Talked About

- What's really going on in the marketplace?
- What we should do while waiting for broadcast DTV to reach critical mass
- The "unified field theory" of interconnection, master control, the DTV-ATP project, and asset management



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