Tech Talk Live: Things Every Programmer Should Know

PTPA/Miami

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What we're going to talk about

- Nielsen Encoder issue
- News/trends for DVRs and VoD
- Broadcast DTV update; HDTV

Nielsen data-collection methods

- **(thanks to John Fuller/PBS Research, for review of Nielsen “basics”)**

Four Nielsen data-collection methods

- **National people meters (active/passive)**
- **Local people meters (active/passive)**
- **Local household meters (passive)**
- **Local diaries (active)**

  - **56 metered markets**
  - **154 diary markets**

National people meters (active/passive)

- meter = computer tied to phone line
- sample = 50 states, distributed according to population density
- respondent presses button to indicate if he/she is watching
- meter knows “it’s a male, age 47”, and knows what channel, program is being viewed
- approx. 5,000 households in national meter sample

Local people meters (active/passive)

- same features as national people meter
- Boston in ‘02; New York, LA, Chicago, SF in ‘04; Philadelphia, Detroit, DC, Atlanta, others by ‘06
- Nielsen folding local LPM sample into national sample(already done in NYC, LA, Chicago; SF 2/05)
- LPMs report smaller audiences for PTV (by as much as 20-30%); integration of LPM sample into national sample will depress national numbers

Local household meters (passive)

- sampled area: DMA
- records set usage: channel, times
- no viewer information
- viewer info merged from local diaries

Local diaries (active)

- **diary filled in by viewers**
- **sampled area: DMA**
- **respondent writes down viewing if 5+ minutes in quarter hour**
- **diary used for seven days, then returned by mail**

Local diaries (active)

- **diary survey period: 4 weeks**
- **total sample split into four parts**
- **diaries mailed to 1/4 of the sample each week**
- **all diaries in DMA combined; results averaged**

Changes ahead

- **PROBLEM: increasing number of channels (analog and digital, broadcast, cable and satellite), the use of digital circuitry in analog TV sets, and the growing use of DVRs is making it increasingly difficult for local and national Nielsen meters to identify which channels and which programs are being watched**
- **SOLUTION: every broadcaster and cable/satellite program service needs to purchase and install encoders so that new Nielsen "A/P" (Active/Passive) meters can identify channels and program titles by reading codes injected into the program stream.**

Changes ahead

- Encoders are called “NAVE”- Nielsen Audio Video Encoder
- NAVEs send signals which can be read by Nielsen A/P meters
- Cost to each station: $5800 per program stream

All PTV stations need to purchase and install encoders

- metered market stations for local overnights and national metered sample
- diary market stations, each of which is viewed by some households which are included in national metered sample

What if my station doesn’t purchase and install encoders?

- **Metered market stations: No individual program ratings reported; viewing in local DMA not counted in national PTV daypart and program ratings**
- **Diary market stations: viewing in local DMA not counted in national PTV daypart and program ratings**

What if my station doesn't purchase and install encoders?

- **If all PTV stations in metered markets have encoders, but no PTV stations in diary markets have encoders, Nielsen estimates that reported national PTV ratings for individual programs will decline by 40%, presenting "major challenge" to securing funding, underwriting for NPS programs.**
- **Viewing of non-encoded stations will be categorized as "All Other Tuning"**

Nielsen roll-out schedule

- http://www.nielsenmedia.com/forclients/
- April '05 - A/P meter installations begin in local metered markets, starting in DVR HH's which are now excluded by Nielsen
- September '05 - A/P meter installations in DVR homes in National People Meter sample and Local People Meter sample.
- Full deployment projected in 2005/2006
- Nielsen anticipates 10% DVR penetration by end of 2005

Overnight reporting

- Nielsen will continue to collect, process, and release "live" overnight data
- All DVR playback activity will be collected for the next seven full days
- Any kind of delayed or timeshifted viewing thru a DVR (even a two minute delay) will be reported seven days later in the "Live Plus" data
- After the seventh day, DVR playback data will be combined with "live" tuning to create "Live Plus Playback" estimates ("Live Plus").

Where can the NAVE units be ordered?

Norpak Corporation
10 Hearst Way
Kanata, Ontario
Canada K2L 2P4
613 592 4164

Will any additional equipment be required?

- **analog-to-digital interface devices may be required for stations operating an analog plant**
- **the Nielsen Universal Reader (NUR) which stations can use to check for proper encoding, available from Norpak for $795**
- **each NUR can monitor up to 4 program channels simultaneously**

Will there be a PTV system group buy?

- **Not certain at this time**
- **PBS Technology and Operations may request funding from CPB on behalf of stations for a group buy of encoders; no commitments received as of this date**

Digital Video Recorders, Video on Demand

- just the numbers
  - DVRs now in 4-5% of USTVHHs
  - Nielsen, others expect 10% penetration by end of 2005, with continuing growth
  - Ask anyone who has a TiVo/DVR how they like it, and they're almost certain to say, "It has changed my life", especially if they have kids
  - This is not a technology which is going away
  - Being incorporated into cable set-tops, already in several million DBS settop boxes

Digital Video Recorders, Video on Demand

- VoD in estimated 10% of all USTVHHs, on steady growth curve
- Cable systems finding that VoD slows "churn"
  - 20%-30% annual digital cable subscriber turnover rate reduced to single digits, advantage over DBS
  - Usage has hit an initial ceiling - many subs don't know they have VoD or how to use it
  - Watch for major changes in on-screen program guides, integrating VoD offerings with linear channels, which will significantly boost usage of VoD

- **Access to VoD distribution in each local market is increasingly critical to your viewers' ability to access your programming**
- **Comcast, other cable MSOs plan to offer tens of thousands of hours of free VoD**
- **Watch for rapid emergence of advertiser-supported VoD**
- **Comcast deal announced two weeks ago with Rentrack anticipates need/ability to track use of VoD**

Comcast spots

With most information technology innovations, we have consistently over-estimated the speed with which they will unfold and underestimated their eventual impact.

Bill Gates

What’s Really Going On?

- This is not only about VoD and DVRs
- This is about the ability of viewers to watch what they want, when and where they want it.
- Principal drivers
  - Moore’s Law
  - plummeting cost of storage
  - compression
  - shift to wireless (cell phones, PDAs)
  - increasing bandwidth to homes

Look at the evidence

- in addition to DVRs and VoD -
  - DVDs (in more than half of all USTV HHs)
  - iPODs/MP3 players (and soon, video iPODs)
  - video to cell phones, PDAs
  - Broadband emerging as video distribution platform
    - in 30% of all USTVHHs
    - “ABC News Now” 24/7 on Comcast.net, ABC DTV multicast, cell phones

Look at the evidence

- TheInternet meets Broadcast and Cable
- (Gotuit demo)

The inevitable consequences

- accelerating audience fragmentation
- collapse of our ability to track viewers' increasingly complex media use behaviors
- if the Nielsen numbers continue to decline (and they certainly will), does that necessarily mean that fewer viewers are watching our programs?
- Strategic inflection point - Fewer and fewer of the old rules apply; the new rules haven't been written yet

THE EFFECT OF INCREASED COMPETITION ON PTV VIEWING
(October 2002 data)

	Rtg	Penetration
Broadcast-only HHs	3.9	17%
Cable HHs	1.4	68%
Satellite HHs	0.9	17%
Average	1.7	100%

Note: Includes a small amount of overlap as some homes have both DBS and cable

Note: Satellite viewership tends to be lower due in part to limited carriage of local stations

Source: October 2002, Custom NTAR for DBS. DBS viewing includes both Schedule X and local station viewing.

	PTV Primetime AA RTG
03-04	1.6
02-03	1.7
01-02	1.7
00-01	1.9
99-00	2.0

Mandatory Reading

“The Long Tail” by Chris Anderson

<http://www.wired.com/wired/archive/12.10/tail.html>

- **Question: What percentage of the top 10,000 titles in any online media store (Amazon, NetFlix, etc) will rent or sell at least once a month?**
- **Most people will guess 20%, following the 80-20 rule**
- **Answer: 99% - there is demand for nearly every one of those top 10,000 tracks**

We are stuck in a "hits-driven" mindset

- **There's an audience for the "misses", too**
  - **In a bricks and mortar store (e.g. Wal-Mart), they have to sell at least 100,000 copies of a CD to cover its retail overhead; less than 1% of CDs do that kind of volume**
- **In the digital world, RealNetworks Rhapsody music service offers more than 725,000 tracks.**
  - **Each of their top 100,000 tracks is streamed at least once/month**
  - **same is true for their top 200,000, 300,000, top 400,000**
  - **Rhapsody streams more songs beyond its top 10,000 than it does its top 10,000**

This is “the long tail”

Our mindset lives in the physical world of scarcity, shelf space and geographic audiences

- But in the digital world of "the long tail", if you add up the non-hits you've got a market bigger than the hits.
- The average Barnes and Noble carries 130,000 titles, but more than half of Amazon's book sales come from outside its top 130,000.
- The average Blockbuster carries fewer than 3,000 DVDs, yet a fifth of Netflix rentals are outside its top 3,000 titles

- **Heresy: For how long should we continue to fool ourselves that the legacy audience measurement tools and metrics that we use, originally created in the 30's to report grocery store sales, are sufficient to evaluate our current and future business models?**
- **We are witnessing the rapid emergence of a new media marketplace, in which fewer and fewer of the old rules apply.**
- **There is a limit to how long we can go on trying to prove that the sun still rotates around the earth**

“The Long Tail” by Chris Anderson

<http://www.wired.com/wired/archive/12.10/tail.html>

Second mandatory reading

- **“It’s About Time” by Dennis Haarsager (scheduled to be published in next week’s Current)**
- **It's too good to miss.   It ties together a number of themes, including the NPS Research, "The Long Tail", iPods and podcasting, asset management and metadata, VoD, DVRs, broadband, etc.**
- **“It’s About Time” and “The Long Tail” <u>will</u> be on the final.**

Broadcast DTV update, HDTV

- **fewer than 1% of USTVHHs have equipment to receive and display an off-air DTV signal, and there's no evidence that a significant number of those who have the necessary equipment use it for that purpose**
- **10-12M USTVHHs have digital monitors**
- **approx. 15% of sets being sold are digital monitors**
- **perhaps 3M have HDTV displays and a source of HD programming (from cable, satellite, or broadcast)**
- **HD viewership is growing, but far more slowly than industry hype suggests**

- **There is a chance that we may be facing analog shutdown as soon as 2007, possibly 2009, but we're not likely to be using analog broadcasting beyond 2015. The clock is ticking, and there are too many players who lust after our spectrum.**
- **There are sharks in the water around this issue**
- **FCC and/or Congress may decide to require cable systems to carry single digital program service from each local broadcaster, allowing down-conversion to analog, so no viewer is left behind when analog stations shut down.**

- **Cable carriage is key to delivering DTV programming to viewers**
- **PTV has national deals with Time Warner, Cox, and Insight - approx 40M cable subs - and is in active conversations with other MSOs. Comcast has carriage deals with principal stations in its largest markets**
- **You should aggressively exploit cable carriage opportunities in your market**

- **securing VoD carriage should also be a primary objective of every PTV station**

- Each additional platform on which we distribute content will result in diminished Nielsen ratings.
- Get over it.
- Let’s develop additional tools/metrics to measure our success.

What we've talked about

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