HDTV: It's broadcasting Jim – but not as we know it!

David Wood - EBU





One of the basic human needs

- The apparently limitless search for 'something better' than we have now.
- The 'something better' can mean different things to different people in different cultures. It can be higher quality, faster, easier, cheaper etc.
- The search for 'something better' is part of our natural human instinct







One of the consequences - rising expectations

- We educate ourselves, generation after generation, to higher expectations.
- For example, what seemed 'good' quality 20 years ago, is now 'less good'.
- This rise in expectations may happen at different times in human experience in different parts of the world, but it is inevitable.

The check list for new technology

- Are the programmes worth the effort?
- Can I afford it?
- What does it look like as furniture?
- How easy is it to use?
- All need to be satisfied, especially the first





PSBs: the tension of 'yes' or 'no' to new media/technology

- The 'pathfinder' model. The PSB has a responsibility to dare, to bring the best to the nation - it alone has access to public funds or income obtained via a public mission.
- The 'responsible attitude' model. The PSB has a responsibility not to waste money - further, it must not serve only the rich few.
- Do both apply in different circumstances?
- Different models may apply depending on local circumstances.



Its a kind of see-saw?



How well did we do predicting the future in the past?

What about the Korda and Wells vision from 1934?









Introductions are complex..

- The future is determined by more than the instinct for something better.
- CONTEXT is a determinant. History matters, local culture, political environment, and so on.
- The media world has 'substitutes', 'complements', and many other interrelated elements which affect success or failure.
- There are 'innovation periods' and 'implementation periods' to contend with.



HD the last time....

- Ten years' ago, the 'risks' for broadcasters in starting HD were enormous.
- 1990 Hypothesis: a national broadcaster with one or two HD channels can drive a market for gigantic HD receivers which cost at least five times the cost of a normal TV set.
- The costs of HD production are very large – and no more income is likely.
- It just did not 'add up'.
- It cost the taxpayer about 500 million Euros





HD this time....

- The HD receiver market (WideXGA) is establishing itself.
 We don't have to do anything
- The receivers will be less obtrusive, and thus more attractive to viewers
- The market drivers will include HD packaged media
- The market drivers may also include consumer HD video
- Production in 'HD islands' is going to be cheap.
- By 2006/10 it may be 'adding up'.





The Flat panel world

- 42" plasma PDP WideVGA(480p)
- 50"plasma PDP WideXGA (768p)
- 17"- 36" LCD WideVGA and WideXGA
- 50"- 60" Plasma 1080p
- 50" DMD/Projectors
- Eventual dominance of WideXGA LCD?
- We MAY have an HD-ready label soon for displays









HD 'prosumer' equipment





- The JVC GR-HD1 camcorder
- The DVC format
- Costs about 4k Euros
- Records on miniDV using 25Mbit/s MPEG2
- Edit on PC with Adobe Premier
- "HD for the masses"
- When will holiday videos be better than our broadcasts?

When is it "reasonable" for PSBs to start HD?

- As soon as possible?
- When more than 20% of homes have HD displays?
- When the penetration of HD-DVDs reaches 10%?
- When there are 10 HD channels available by satellite?
- When the HD share of general household viewing exceeds 2%?
- A week after you have retired from the company?



The fundamental decisions

- what is the economic basis for the service – how will costs be met?
- what are the content arrangements what will be the programmes, and how will they be made?
- which technology should be used delivery platform, format, compression, audio, interactive system?

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The economic basis

- An HD studio or OB will cost about 20% more today.
- ...but an HD prosumer camcorder will cost less that the producers air-fare.
- 'parallel shooting' may or may not be needed
- advertising income may remain the same
- licence income may remain the same
- savings to pay for it may be possible because of the general use of IT programme production



The content basis

- HD has most impact on 'video' produced material.
- Celluloid movies are better but video is dramatically better.
- The content that is going to be the most improved by HD costs the most anyway – spectaculars, large canvas material.
- 'Events' make the best HD.



The three things that will most make HDTV popular?

- sports
- sports
- sports











Which delivery platform?

- Different delivery platforms have different data capacities, different coverage areas, different reception targets.
- Digital satellite delivery has few restrictions on capacity.
- Digital terrestrial delivery will have more restrictions on capacity. In some countries DTT band already occupied.
- New options such as broadband.



Some of the technical decisions to be made

- Which compression system? The choice is MPEG2, AVC, or Microsoft VC1.
- AVC is technically the best, but.....



 Which transmission format? The choice is 720p/50, or 1080i/50.



Conclusions

- HDTV is inevitable the issue is 'when' not 'if'.
- Pay TV services will begin in Europe next year.
- EBU Members must understand what is happening and make plans.
- It looks like the HD receiver market is taking care of itself, driven by form factor and packaged media.
- All EBU Members need to worry about is the deciding on the content, economics, and technology. No problem?



