#### New media: Old objectives

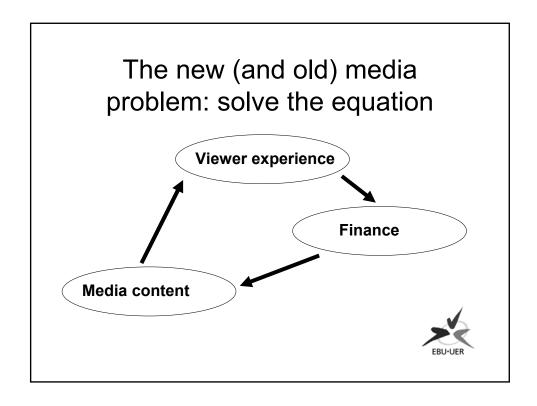
David Wood EBU



### Why is there continuous development of the media?



- The continual search for 'something better than we have now' drives technology forward...
- The complexity possible with 'chips' of a given size doubles every 18 months
- Over time it becomes more difficult to decide what we want, than how to make it....



### The Hand for 'New Media Poker'



- Broadcasters have been dealt a hand of new media 'cards'. They have to decide whether, and how, to play them.
- In the coming years, they will be dealt more hands of cards.
- Alas, there will be no moratorium on new technology.

## Four 'new media' cards in the broadcaster's hand today





- Today
- · Web services
- · Wired Broadband
- Enhanced Television
- · Mobile phones



### The cards they will be dealt..





- On the near horizon
- PVRs
- Broadcasting to 'handhelds'
- High Definition TV
- · Surround sound



### The cards they will be dealt..







- Over the horizon
- WiMax
- Cooperative networks
- Virtual reality and 3D broadcasting



#### Today's new media options

..a little more detail



#### 'conventional' web services

- Large capacity for pictures, audio, news, statistics, results, information
- Communities (is this giving back something technology has taken away?).
- Issues: 'regulation' site registration control, spam, virus, hacking, taste and decency.









#### Wired Broadband (DSL, FO)



- Broadband is growing faster than digital broadcasting
- Options: 'fast access web', 'Internet TV', or 'multimedia on demand'.
- Issues: Rights barriers to use of archives, if not already available, content costs can be high. May need large audience to justify costs.



#### **Enhanced Television**

- Capacity and capability depends on 'bearer' and 'API' (the multimedia language used).
- Highly successful if digital penetration high. If content not already available, content production can be expensive.
- Issues: multimedia languages (APIs) are a 'tower of Babel'.





### Handhelds (by digital mobile phone connection)

- 'GPRS' or '3G'
- Normally 'walled garden' Internet technology type service
- Download or streaming video
- Probably needs content that lends itself to viewing in bursts.
- **Issues include:** The economics.





# Some of tomorrow's new media options

In a little more detail



## Coming (very) soon: High Definition (HDTV)

- Low cost HDTV displays available.
- HD DVDs and HD home video soon
- Events like World Football Championship in 2006 to stimulate market.
- New broadcasters infrastructure needed.
- This is probably the biggest 'new media' in financial implications.
- Issues: Where will the money come from to fund the transition?





#### Broadcasting to handhelds

- New 'rugged' broadcast systems: DVB-H, DMB, Mediaflo.
- Pilots today
- Basic business plan: "the kids will pay 10
  Euros a month to watch
  TV anywhere anytime"
- Issues: frequency spectrum scarcity, which content?





#### The day after tomorrow?

- WiMax
- Internet available everywhere – somewhat like broadcast availability.
- Licensed frequency transmitter used to interconnect unlicensed frequency wi-fi hot spots.
- Issues: Payment for connection? Can broadcasters use it?





#### The day after tomorrow?

- Cooperative networks
- Connect different bearers to TV at same time.
- Use whichever needed for most efficient delivery.
- A 'total service'.

- Virtual reality
- A generation or two future set top box
- Creates virtual world equivalent of real sports event.
- Viewer can 'be there' on the field.



### Features of new media that may help provide 'public value'

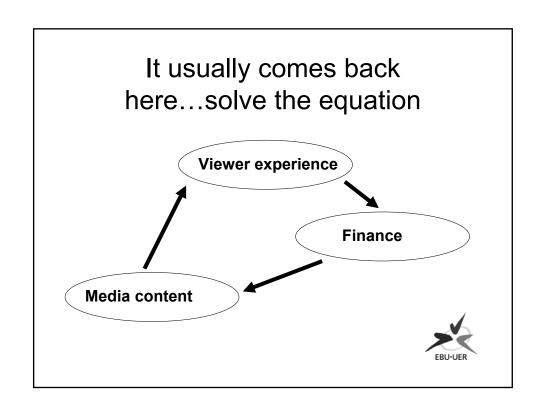
- Interactivity
- It can provide an infinite repository of information.
- It can create and sustain communities of users.
- It can create new shared experiences
- Multimedia can make 'boring' issues more palatable and interesting.
- It can better connect with young people



#### Trends and tendencies...

- The older we are, the less likely we are to use new media.
- New media tends to appeal, at least initially, more to socio-economic groups ABC1 (professional, high income) than to DEF.





### The Digital Divide of the developed world?

- If we look ahead ten years, do we see a 'digital divide' in Europe?
- Those who 'get' new technology, love it, and use it to streamline their lives and work.
- Those who do not, and who find it more and more difficult to find work, and who mostly watch multi-channel TV?
- If so, can we prevent this?



Don't ask me...I'm only the engineer.





# Thank you for listening wood@ebu.ch

