

Enabling or Disabling Technologies?

PART TWO

‘ooh my head hurts!’

Gary Hayes

Senior Development Producer

BBC New Media - Interactive

Enabling or Disabling Technologies?

MAIN TECHNOLOGY THEMES

- **Even More Channels & Choice & Dilution & Information**
- **Personal Filtering, Capture & Life Tools**
- **ANYTHING is on Demand**
- **Consumers Are Mobile & Always Connected (to each other)**
- **Everything becomes faster, smaller, 'bigger' and cheaper**
- **Integrated Devices & Home Networks**
- **All of the Above (Humans do Change, Respond, Adapt!)**



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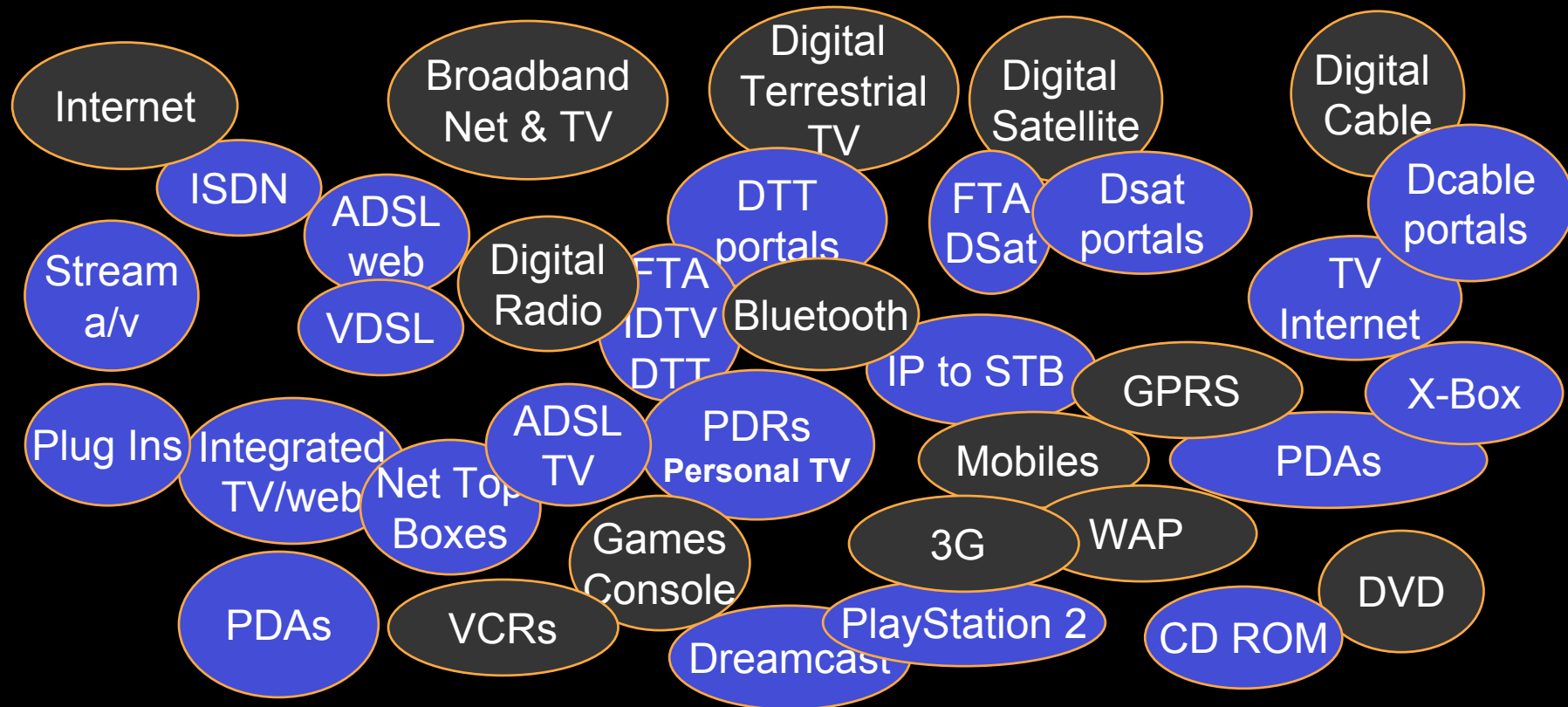
MAIN TECHNOLOGY PROBLEMS FOR BBC

- Each platform has a different API
- Very limited control over platform carriage & development
- Distribution 'pipes' are varied (bandwidth)
- Distribution 'pipes' are vertical, un-connected
- Device capabilities are extremely varied (free to v.expensive)
- There's always something newer around the corner
- **BECAUSE** of the above the audience is segmented



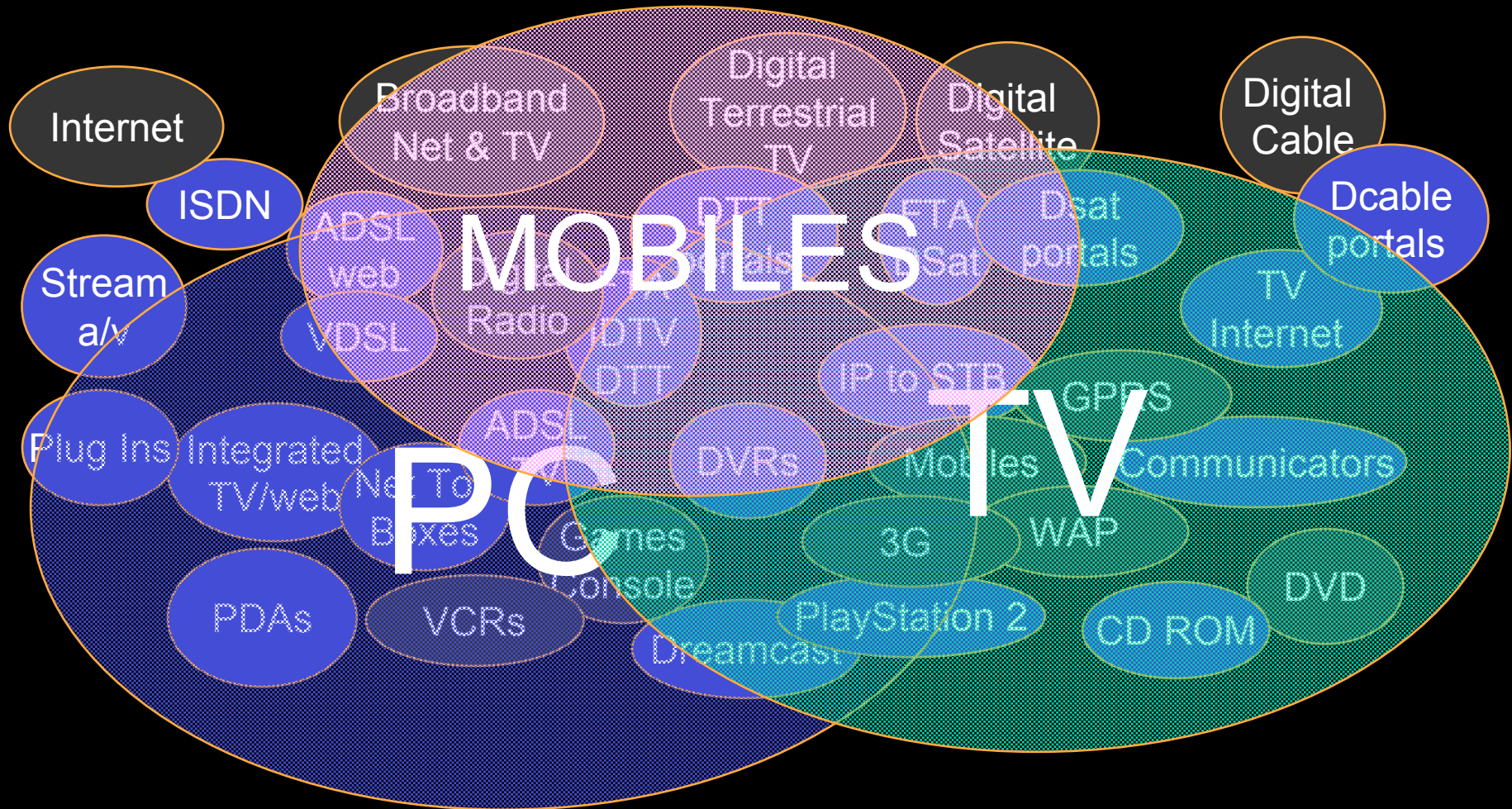
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The UK platform diversity 'headache' for producers



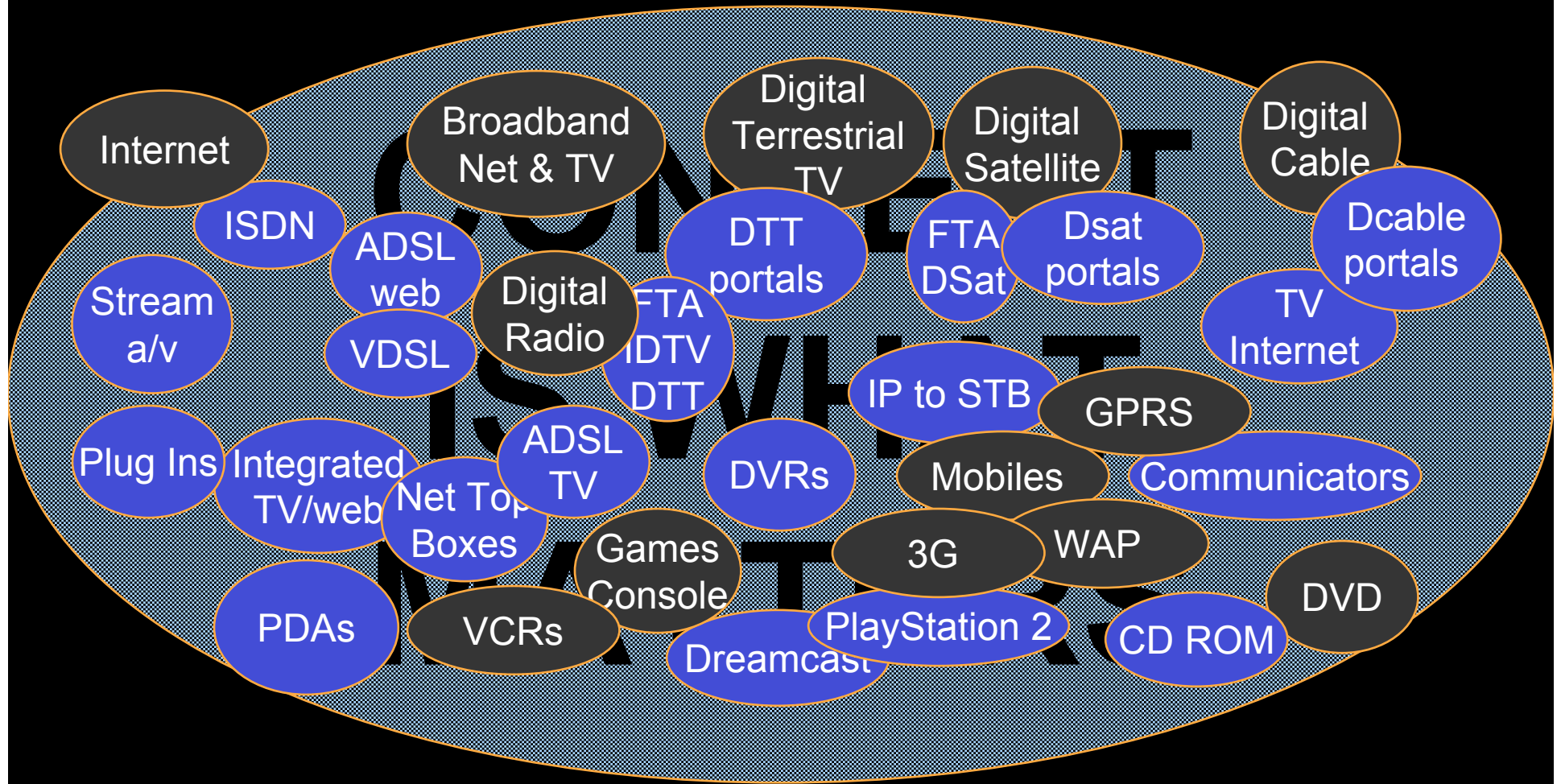
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The UK screen 'headache' for producers



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At the end of the day...



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Even More Channels & Choice & Dilution & Information - near DTT (*MHEG5*, Email, Shopping, Web)

- June 2000 - 774 000 viewers
- June 2001 - 1.6 mill

Dsat (*OpenTV*, Email, Shopping, nVOD)

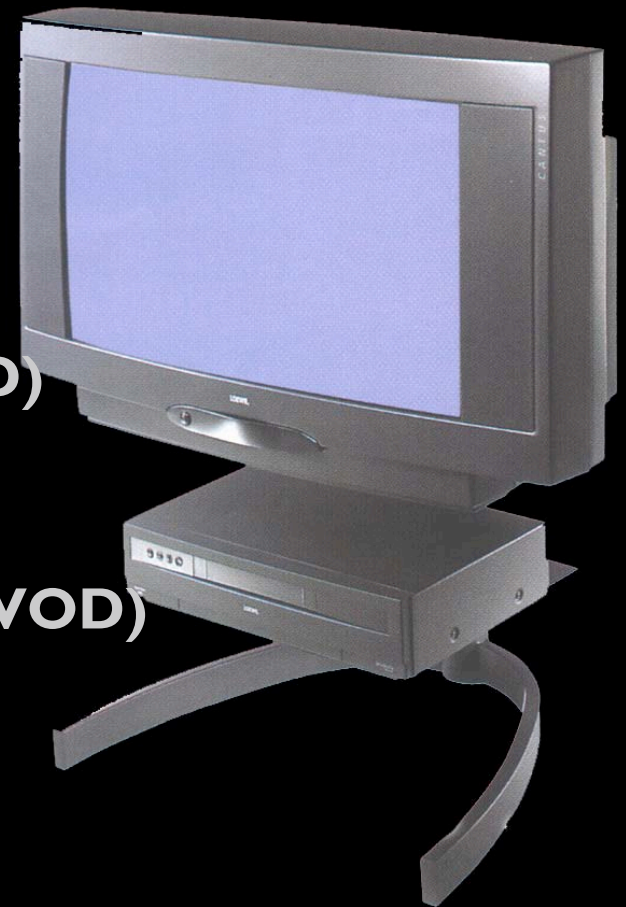
- Nov 2000 - 4.95 mill viewers
- Nov 2001 - 6.5 mill

Dcable (*HTML*, Email, Shopping, Web, VOD)

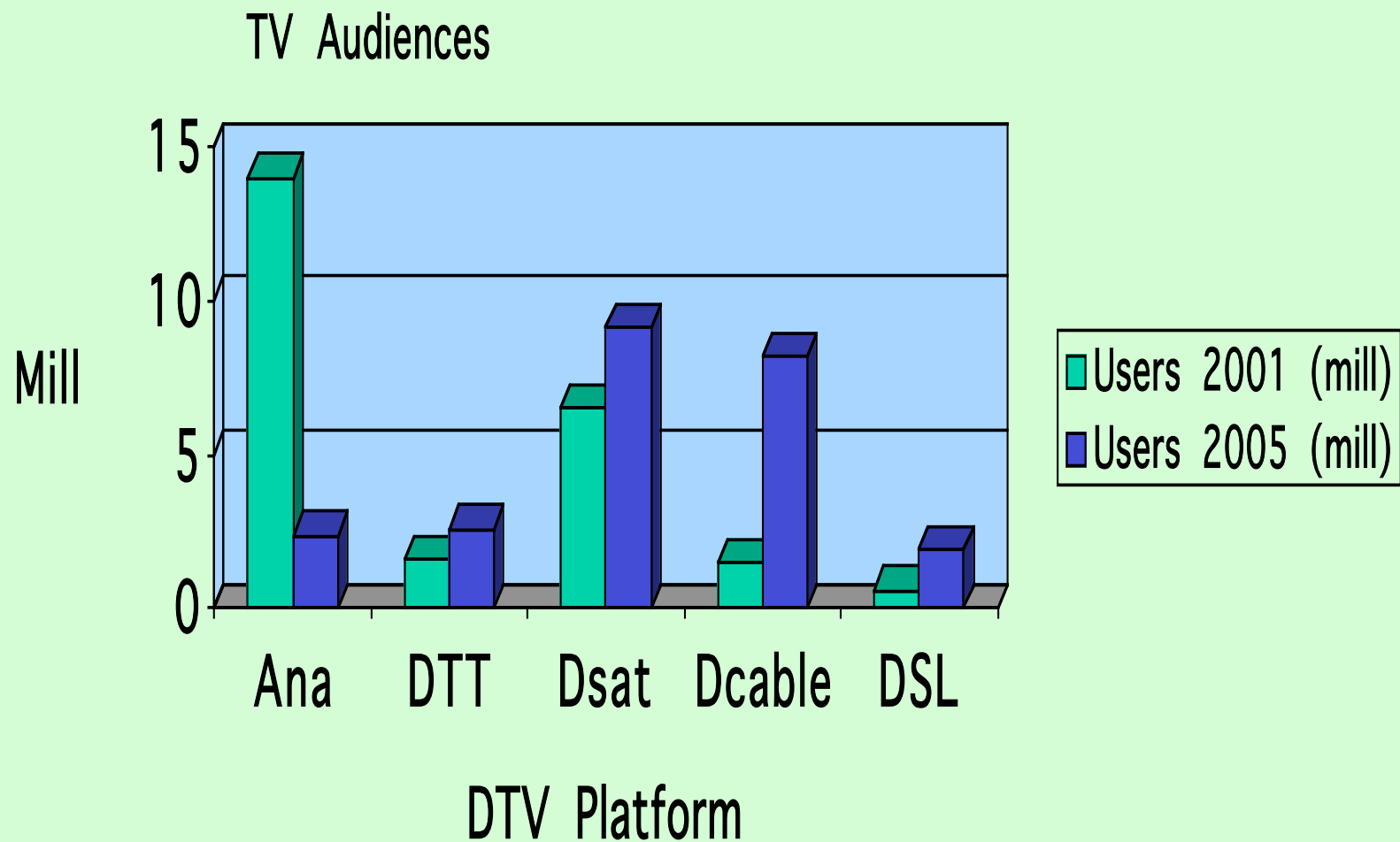
- Jun 2000 - 453,000 viewers
- Sep 2001 - 1.5 mill

DSL to TV (*HTML*, Email, Shopping, Web, VOD)

- Nov 2000 - 100 000 viewers
- Nov 2001 - 600 000



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DTV TECHNICAL ISSUES

Digital Terrestrial (DTT)

- Very limited broadcast bandwidth, under-powered boxes, open API (MHEG5), few resources

Digital Satellite (Dsat)

- Tightly controlled, mixed box capability, closed API (Open TV), loads of bandwidth

Digital Cable

- Friendly API, Walled Garden Portal, naturally 2Way, mixed boxes, segmented providers (Telewest, CWC & NTL)

DSL

- Networks not evident, low contention, expensive infrastructure, another API per provider

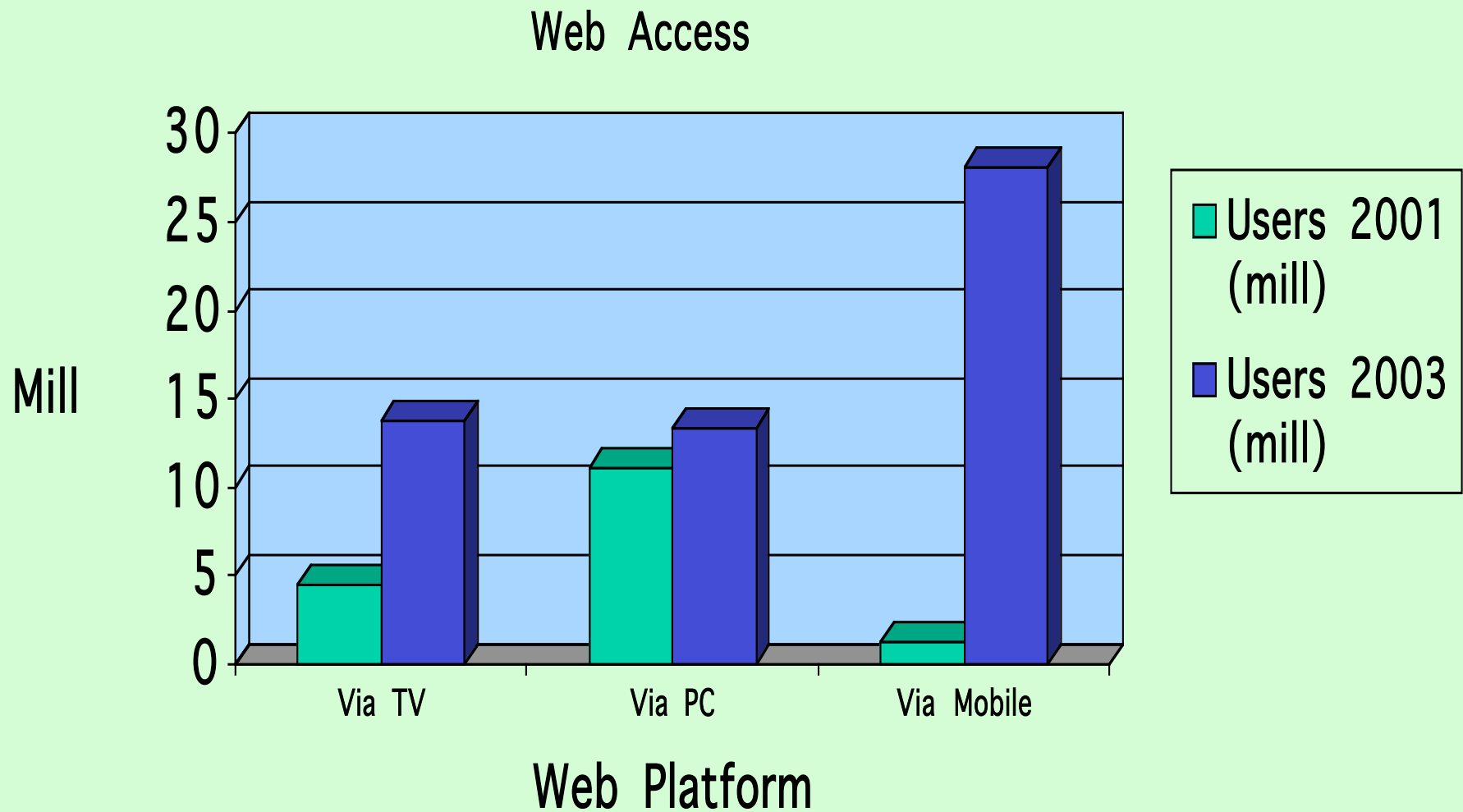
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Consumers Are Mobile

- UK phone owners 30.6 million half of UK (Jul 00)
- SMS & WAP & mMail fastest 'technology' service uptake ever
- 500 000 net phones now - can't buy non-internet phone by end of 2001
- Mobile penetration will be 80% in 2005 - 70% of these mobile internet
- GPRS, UMTS, Bluetooth will mean AV to mobile by 2002
- Already in market mobiles that store via personalised TV

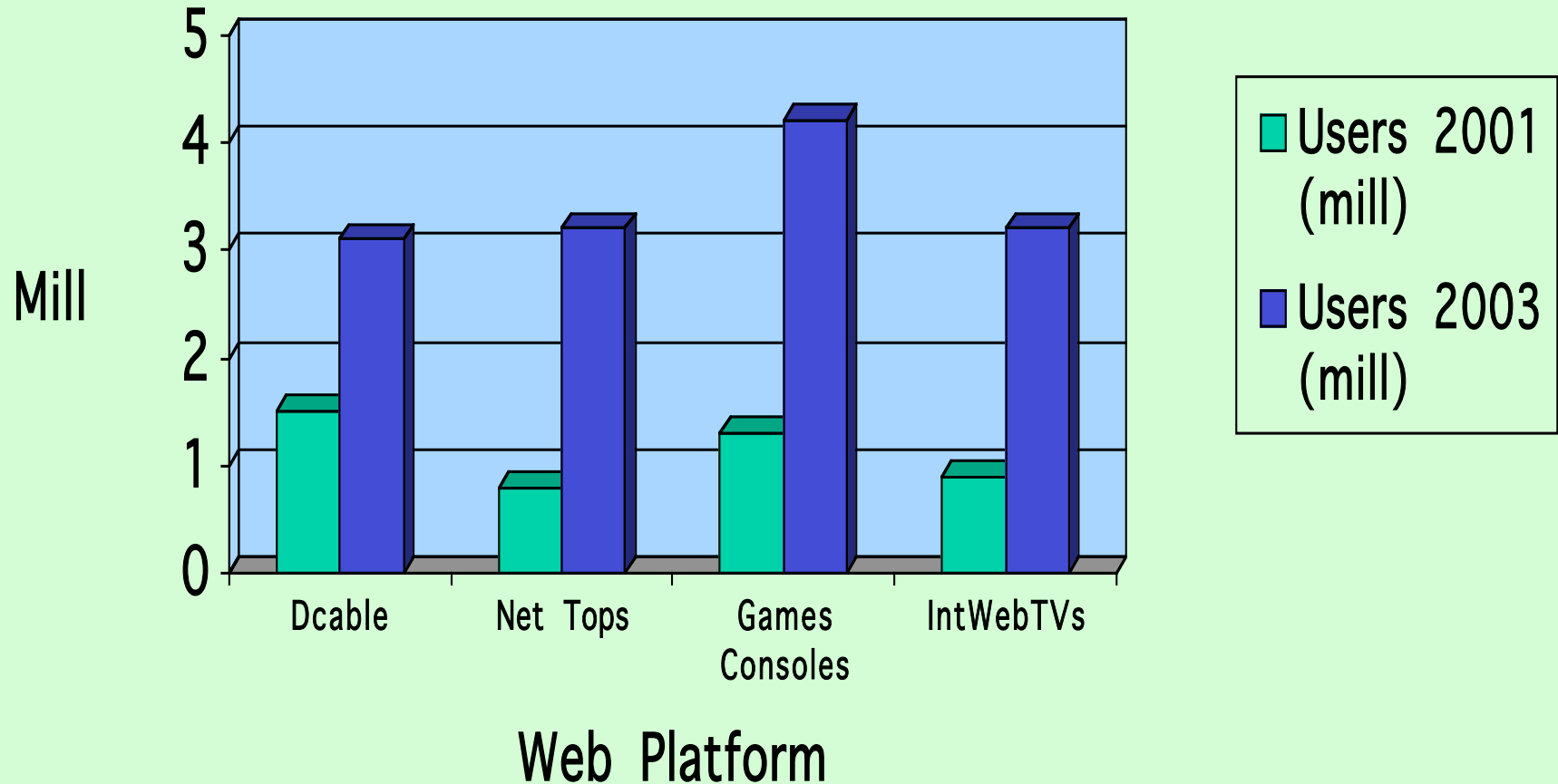


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Web Access via TV Screens



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ANYTHING is on Demand

- 18% of Europe receive broadband PC on-demand services by 2005
- Dcable, DSL to TV, PDR's - More than half of UK population prefer pay per use (choice) rather than subscription model

Replicated media

US yr. 2000

- CD ROM - 2130 mill
- CD Audio - 1840 mill
- VHS - 1000 mill
- DVD - 286 mill

In USA in 1999 over 1.9 mill DVD players sold in 2000 4.2 million

Japan - DVD's now outselling VHS tapes



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Integrated Devices & Home Networks

- PACE supplying 350,000 units in the US next year
- The Pace box will enable more than 150 channels of analog and digital television, as well as digital interactive television services such as video on demand.

Nokia Media Terminal (& others)

- DVD + DTV + VOD local storage + Communication + Fast Internet + Mobile Docking + Digi Camera

Consumer 'life' devices begin to integrate with 'entertainment' systems

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Personal Filtering & Capture & Life Tools & Offline

Personal Storage (Personal TV Systems - eg: TiVo, MySky)

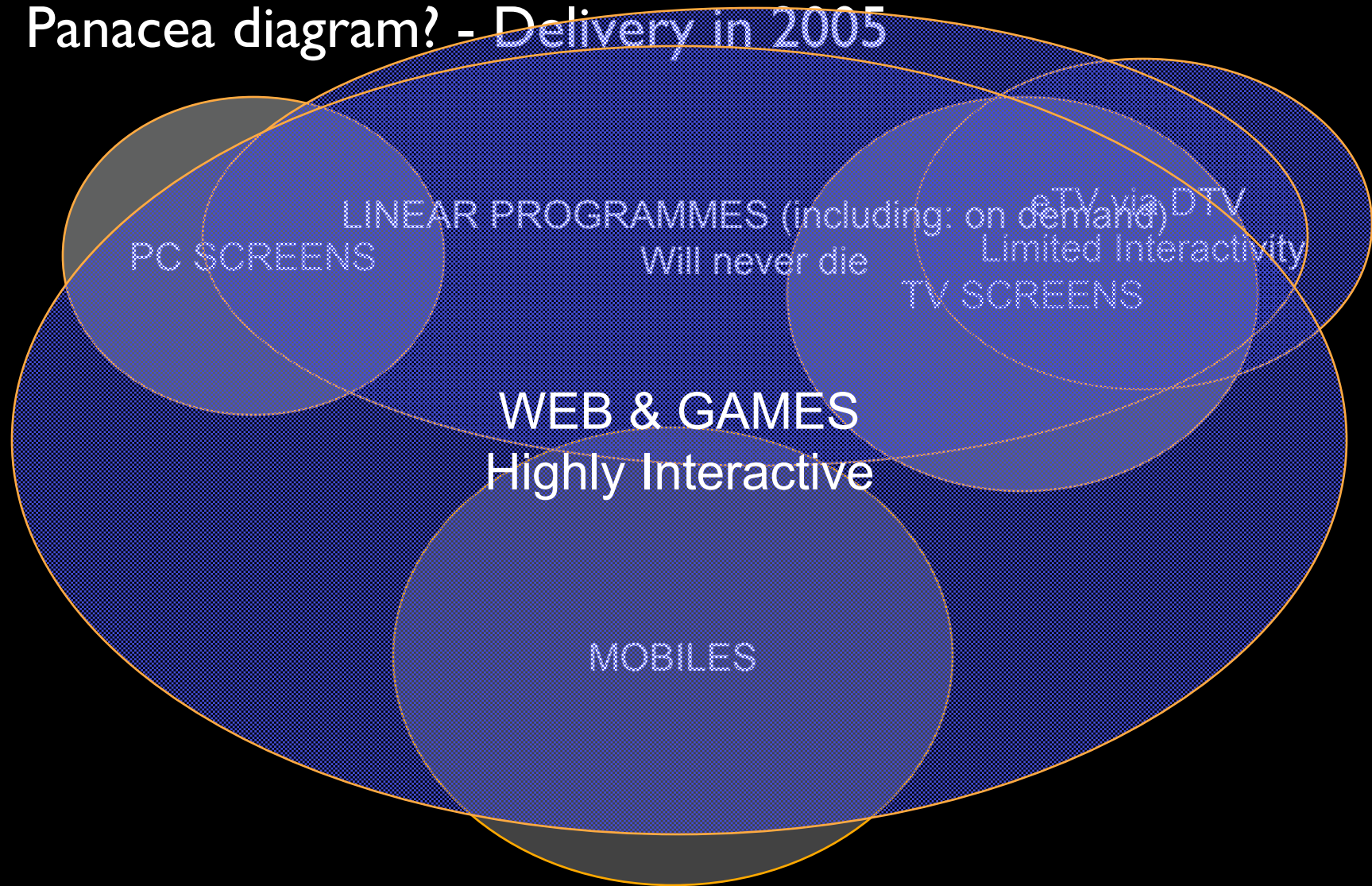
- by end 2001 900,000 people will be using PDR's
- by 2004 there will be 4 million
- by 2009 80% of the world's media consuming population will be using Personal Storage systems - whether PC or set top based

Price Waterhouse

- 95% of content in US will be viewed from off-line devices 2005
- Further see SIMON'S PRESENTATION!

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Panacea diagram? - Delivery in 2005



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END OF PART TWO
'Hope you enjoyed the show'

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