The Home Networked Consumer

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BBC New Media

Also chair Business Models WG
TV-Anytime Forum
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Baby steps towards residential gateways...

BBC perspective - content delivered to what’s already in the home and what ‘will’ be connected to these in the future
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But first - What will really drive mass Home Network penetration? A little background...

- BBC delivers digital linear and iTV services to over 8 million households (Dsat/Cable/TT)
- BBC (co.uk) is the most used content web site in Europe
- BBC is delivering services via aDSL to TV and PC
- BBC New Media is personalisable on mobile/PDA
- BBC regarded world-wide as the provider of the highest quality content
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The BBC networked viewer

(NB: the images are metaphors for the services!)
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**KEY THEMES**

- Technical advances Vs business models
- Content provider (BBC?) aspirations
- Consumer adoption & use of digital devices
- Consumer use of digital networks - sDistribution
  - Standards used in home networks. TV-Anytime personal networks, super distribution.
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The TV-Anytime Environment

INTEGRATED TV
or TV/PC COMPONENTS

PDR
(local storage device)

NDR (Network)
(remote personal storage)

Multiple Networks
‘push & pull’ content

Portable Viewer
Docking capture
device eg: ‘airpad’, webpad

Online mobile device
‘real time wireless
view & control’

Home ‘Hub’
Gateway

Removable media
Eg: DVDr

INSIDE THE HOME

Screens
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Technical advances Vs business models

What will really drive mass Home Network penetration?
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Integrated Devices - PVR or ‘Trojan servers

STB’s become ‘entertainment’ stores (aka PVRs)

• Nov 2000. TiVo becomes first UK PVR
• Aug 2001. USA. Microsoft Ultimate TV - PDR
• Sep 2001. Sky launch Sky+, 1st digital PDR
• Sep 2001. USA SONICblue's ReplayTV 4000, 320 hours of tv or other media, video clips around home
• May 2002. UK. Nokia Media Terminal
• Many other devices from most stb manufacturers...
• The future as X-box becomes HomeStation and Playstation 3 has storage and receives TV
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Sep 2001. Rumour or truth. HomeStation. PC-Xbox hybrid running Windows, will also contain a hard drive to act as local media storage and digital VCR. Microsoft will build .NET servers to supply HomeStations with content via integral Broadband. The box itself will use 802.11 and/or HomeRF to pump movies and audio to remote playback devices around the home.
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Content provider aspirations

Content providers are ‘shoe-horning’ diverse content to discrete devices...
By 2005, 625 million people will subscribe to interactive television services.

Strategy Analytics
What will really drive mass Home Network penetration? - again

- 66% of all UK homes can receive Ceefax/Teletext (source BBC News/Nations 1998)
- It has 23% daily reach, 55% weekly reach, 60% monthly reach
- Only 38% of UK adults (not kids) have used the internet in the last month (source BMRB Access, June 2001)
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BBC Interactive Services to Television

- DSat - 5.3m subscribers
- DCable - 1.5m subscribers
- DTT - 1.1m subscribers
- Broadband to TV - 26k subscribers
- Games consoles - 6.5m
- Web on TV - 3.2m

- There will be more people using the web via TV than PC in 2003
- Half of all UK households will be connected to the Internet through their TV's by 2005
- BBC is committed to facilitating the conversation of the BBC public

BBC New Media © Gary Hayes, Interactive Development Manager 18/9/01
Weather Regional 24 Hour Forecast

The North Wednesday 12:00

Temp °C
Carlisle 8
Hull 9
Isle of Man 7
Leeds 9
Liverpool 8
Newcastle 8

From the BBC Weather Centre
in association with the Met Office

Page 1 of 9
Press RIGHT for next region

BBC SHORTCUTS CHANGE TV BACK MENU
Club Statistics

Goals/Shots Ratio: 43%

Shooting Accuracy: 29%

Cross Completion: 73%

Tackles Won: 54%

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FT D2 Swansea 3 (Toshack) Wolverhampton 0
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The way people are using iTV based services

- 19 million users per week of 'Teletext' Services
- In UK WebTV trials 44% of audience actually click through to more info (BBC News, TOTP and Eastenders the top 3)
- 46% use the 'personalisation' function - 44% play live GAMES
- Top three iTV service areas -
  1 Email/Web, 2 Educational and 3 VOD
- Top three content areas of Interactive Services -
  1 Games, 2 Entertainment, 3 Sports
- 57% would pay for educational content as part of interactive services
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What will really drive mass Home Network penetration?

- **Interactive TV - iWimbledon** - Total of 4.2m used it - 38% of all live Wimbledon viewers
- On average, 0.9m viewers watched daily
- They used it 7.2 times a week, with 54% of people claiming to have used it at least once a day
### Leaderboard

Use the UP & DOWN arrow keys to see full leaderboard

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Hole 18 Press RED for Full screen
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How viewers will consume BBC content

- Data and vision and audio to separate devices
- Personalised content from one home ‘server’ to personal devices
- Inter and extra communities - virtual communities
- Multiple, combination av streams around the home
- Synchronicity on discrete connected devices
- Creative applications – vision/audio editing, mixing
- Home network games
- Segmented content - clips (PDA), cross links
- Targeted promotions to individuals on discrete devices
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Consumer adoption & use of digital devices
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Home network ‘components’ confusion

• The average number of TV per UK household was 1.74, this is expected to rise to 1.85 by 2010
• Unit sales of digital cameras will grow from over 4 million in 2001 to 19.8 million in 2006
• In Europe, 15% households will have wireless networks by 2005
• Chip manufacturers are producing single chip multi decode – NEC up to 4 streams by 2003
• 36% of homes will have multiple PCs, 9% broadband Internet, and 4% wired networks. Strategy Analytics Jul 99
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Ubiquitous services

Service available on All platforms Public and commercial

Information
Chat & Community
Audio & Video on Demand
Viewer Content
Linear Content
Games
Non-existent Services
Personalisation
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Consumer use of digital networks - sDistribution

• Four new, peer to peer, file-sharing systems -- FastTrack, Audiogalaxy, iMesh and Gnutella -- were used to download 3.05 billion files during August 2001

• That's more copyrighted material than was ever shared using Napster
  - Sharing/communities. BBC facilitates Britain's conversation (even sharing content) and content creation and collaboration?
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TV-Anytime Benchmark Document
- a) Local TV-Anytime Implementation
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TVAnytime - Benchmark Document
Hybrid TV-Anytime Implementation

Service Provider(s)
NDR
PDR
User Interface
HOME
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Standards used in home networks. TV-Anytime personal networks, super distribution.
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- The TV-Anytime Forum is a non-profit association of organisations which seeks to develop specifications to enable audio-visual services based on persistent local storage.
- Membership is open to all who sign the Memorandum of Understanding and attend meetings.

Full information at:
http://www.tv-anytime.org
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Low-cost mass storage

• Disk drives enabling local storage, retrieval and manipulation of audio, video and data are increasing in capacity and falling in price

• Future projections vary only as to the rate for these trends

Hours of video for $100

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Local Storage (Personal TV - eg: TiVo, Sky+)

• 95% of content in US will be viewed from off-line devices 2005 (*In USA in 1999 over 1.9 mill DVD players sold in 2000 4.2 million. In Japan - DVD's now outselling VHS tapes*)

• by end 2001 900,000 people will be using PDR's

• by 2004 there will be 4 million

• by 2008 80% of the world's media consuming population will be using Personal Storage systems - whether PC or set top based
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Thank you

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