



The Future of Television

Nick North (GfK NOP Media)

„The future is already here. It's just not very evenly distributed.“

William Gibson



„The future is already here. It's just not very evenly distributed.“



- 1 Hardware
 - **Digital**
 - **Digital Video Recorders**
 - **IPTV**
 - **Convergence**
 - **Mobile**
 - **High Definition Television**
 - **3D TV**

Choice – Control – Convergence – Quality

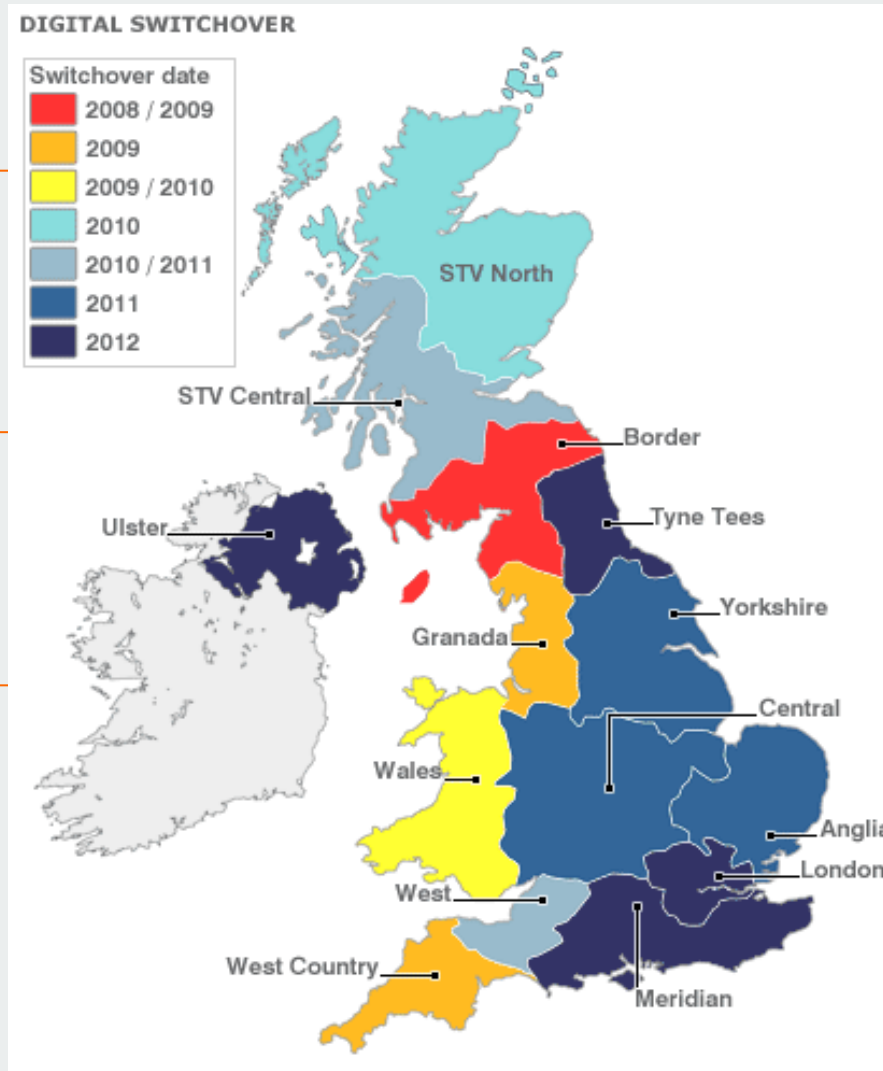
Digital Switchover

UK Switchover to be completed by 2012

2008: digital reception (DTT, DSAT, cable) available on at least one set in 85% of households.

We expect switchover to be 95% complete through consumer choice by end 2010

Freeview (DTT) gaining greatest share of new digital uptake. Satellite take-up driven by PVR. New digital converts likely to experiment with new channel choices.



PVRs - DVRs - Hard Disk Recorders

Pause, rewind and fast-forward live TV.
Never miss an episode again with series record.
Strong consumer advocacy, falling prices. Strong growth predicted.

Penetration

- 15% of UK households as of end 2007, and growing rapidly:
- Sky+ 3.1 million households
- Virgin Media: 80,000 households
- BT Vision: 150,000 households
- DTT DVRs

Forecast:

- 45% of households by 2010 (12.5 million homes)



Playback TV

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Viewing Behaviour

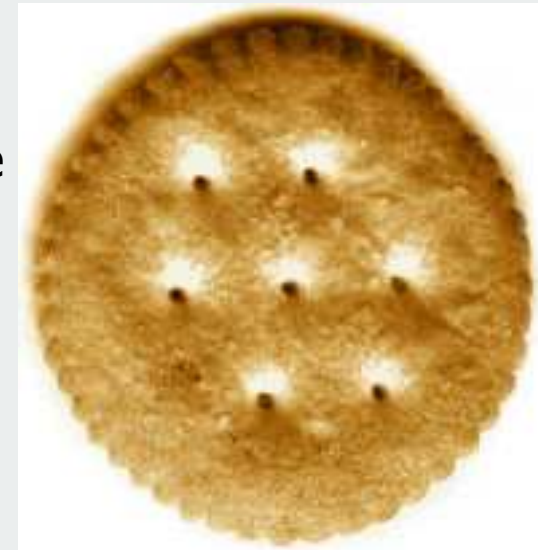
- 15% of all viewing in Sky+ households is non-live (much higher for some genres and audiences).
- Of this, around 50% is VOSDAL (viewing on the same day as live)
- Predominantly viewing of 'favourite' shows in prime time: drama (44% of all playback), serials, entertainment

Potential risk to TV advertising revenues:

- only 35% of playback tv breaks (around those favourite shows) are viewed at normal speed
- Or is advertising impact more effective at 6 x normal speed?

"NBC Universal measured the effectiveness of TV ads that viewers skipped through. Viewers still recalled the ads despite watching at up to six times normal viewing speed." WSJ Feb 08

Subliminal advertising?



IPTV - Telco TV

Q: What is IPTV?

A: Broadcast and on-demand services to set top boxes connected to TV screens sourced by the same network operator that owns or directly controls the "Final Mile" to the household

This control over delivery enables:

- a guaranteed quality of service
- an enhanced user experience, including advanced EPG, interactive services, on demand content (in the UK including catch-up TV content from BBC, 4OD, Sky)

Penetration: currently 12.5 million households

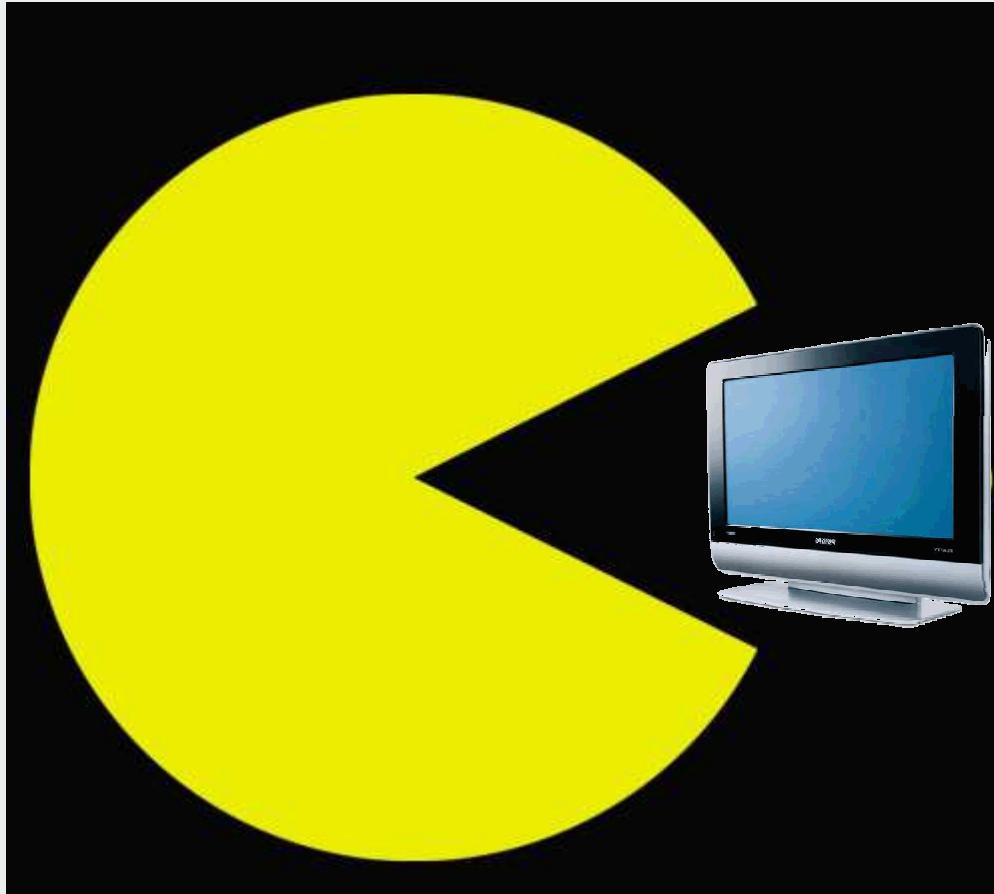
Forecast: up to 16 million hhs by 2010





Advertising funding: Will the Internet Eat TV?

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In 3 years in the UK, online advertising's share has passed cinema, radio, press classified, magazines and direct mail

Online has had biggest impact on classifieds, and halted growth of radio, print

Online is growing dramatically across Europe. TV advertising revenues show slow growth

Online's phenomenal rise driven by search...

...search driven by brands...

...and brands are built on TV

IPTV Based Personalised Advertising Delivery Promises to...

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...Engage

- Schedule ads targeted at differing lifestyles or locations to air simultaneously during the same commercial break

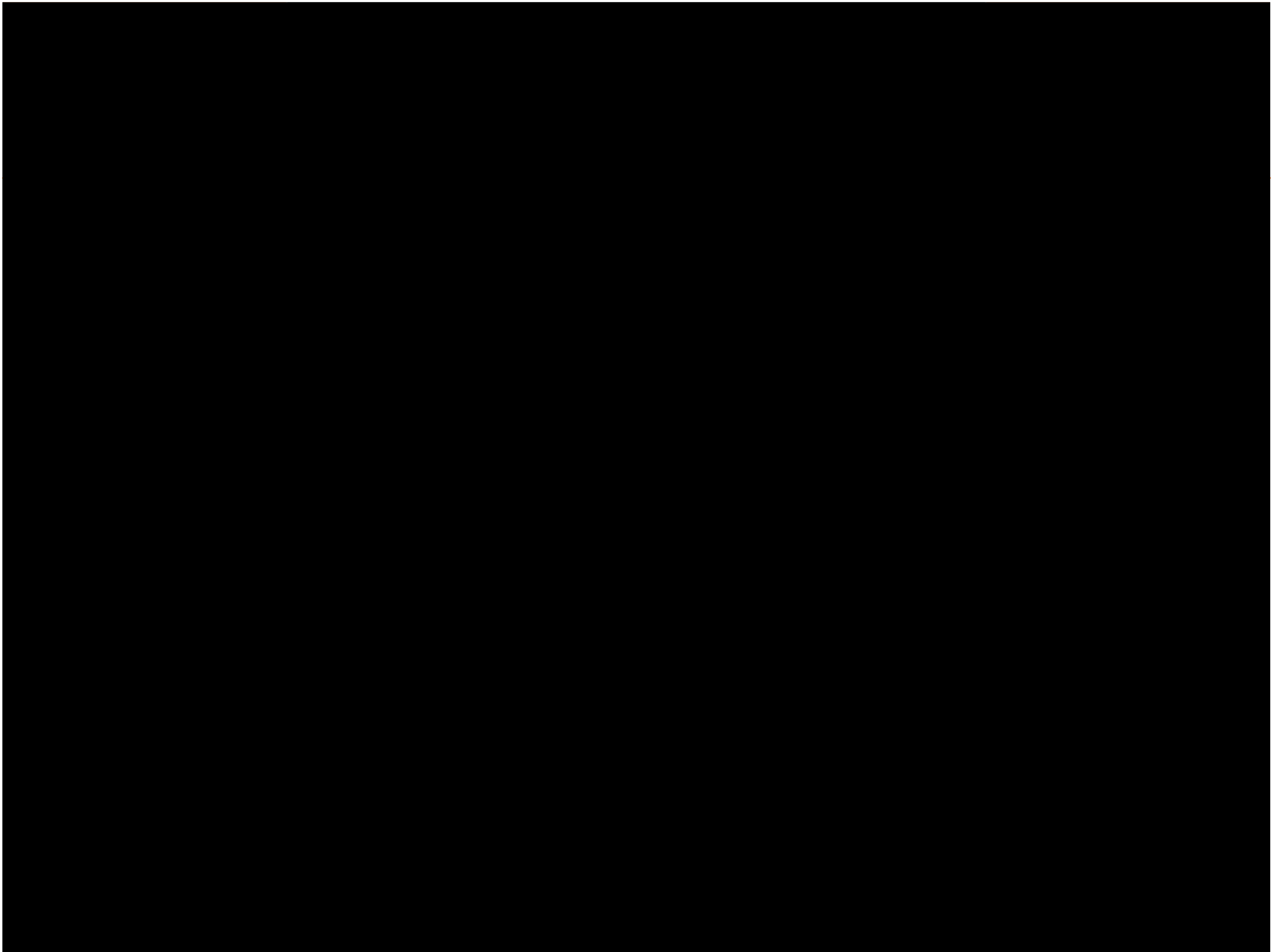
...Deliver

- The accountability and interactivity of internet advertising to television
- Enable advertisers to micro-segment television viewing audiences

...Return

- Significant uplift in advertising airtime value
- Monetize multiple different audiences simultaneously within the same ad break
- Develop new business from niche and local advertisers
- Improve audience measurement data for second-by-second analysis of ad break performance

<http://www.packetvision.com/images/stories/video/english/launchswf.html>





Convergence and Platform Neutrality

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- Wireless networks in the home will link PC, TV and handheld devices

- Devices to enable video content stored on a PC to be viewed on a TV or handheld

- Access content from the internet, using all the benefits of advanced online search functions, to view on a TV

- Televisions of the future will connect to the internet as standard.



Mobile TV – will it ever happen?

Slowly, slowly, mobile TV is growing

- EU backs DVB-H as standard for mobile TV in Europe
- Orange and T-Mobile now plan London TV pilot using 'TDtv' technology (optimised UMTS/3G technology)
- Mobile internet growing; mobile video will follow
- Apple i-phone pre-loaded with Youtube viewer
- Handheld video consumption growing with transportability of internet tv content
- ITV announces new mobile production deals; mobile developing as digital revenue stream

GfK NOP field trials of DVB-H indicate consumption of as much as 25 minutes per day – at least 60% of which is additional to existing TV consumption



HDTV in the UK

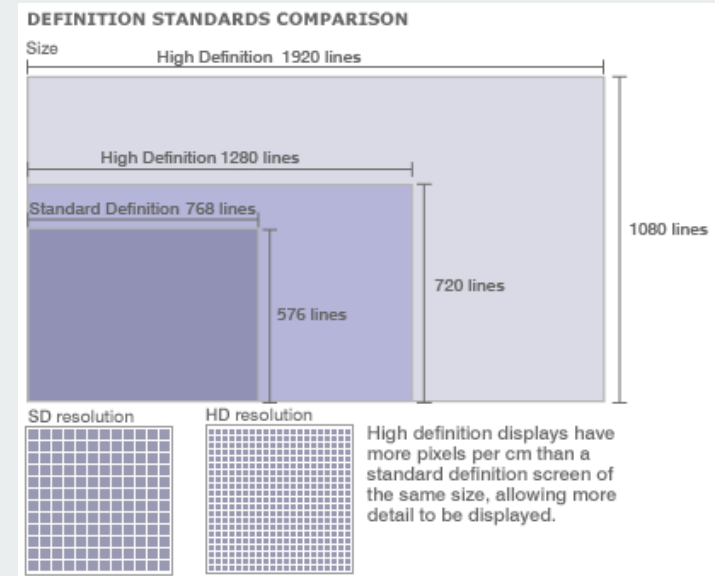
HD ready households growing rapidly.
2.7 million HD ready sets sold in 2006.
Sky, Channel Four, Discovery and BBC HD channels available

sky 4.55pm Thu 31 Jan
guide HD CHANNELS

	Sunday 8.30pm	9.00pm	9.30pm
140 Channel 4 HD	Wife Swap	Million Dollar Baby	
143 BBC HD	Around the World in 80 G..		
175 Sky One HD	Simpsons	Lost	
268 Sky Arts HD	Priva..	Sean Penn On J..	
286 Luxe TV HD	The Gallery	The Gallery	
311 SkyMovies HD1	Picture Pe..	Hot Fuzz	
313 SkyMovies HD2	The Good Shepherd		
408 Sky Sports HD1	NFL – Ame..	NFL – America's Game	
409 Sky Sports HD2	Golf Night		
536 Discovery HD	Wide Op..	Great Savannah Race	

■ Page Up ■ Page Down ■ +24 Hours ■ -24 Hours
 Press **SELECT** to set reminder or **R** to record

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Service Penetration is low:

- Sky HD 266,000 subs
- Virgin Media 150,000 subs

Forecast:

- 7% service penetration by 2010

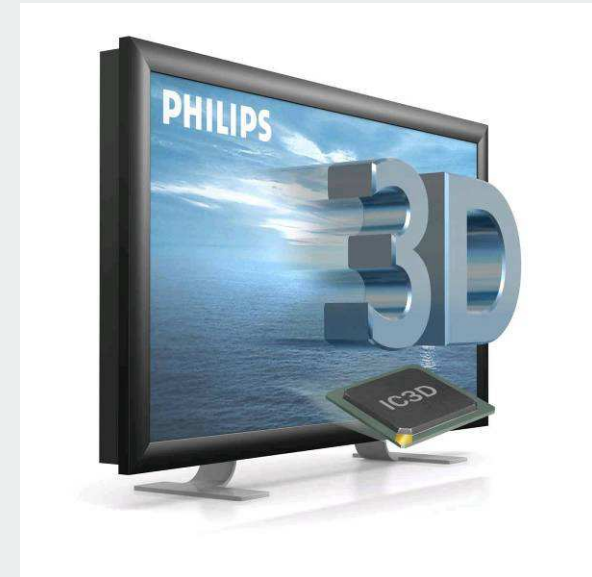
3D Television

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Stereoscopic 3D TV

A method of displaying an image that gives the impression of depth.

The display uses a depth map to create different "views" of the 2D image corresponding to the parallax that would be perceived by human eyes. In all, nine different images are displayed simultaneously. The screen is covered by a series of very thin lenses that diffract the light so that the eyes of an observer will see two different images that create the percept



3D Flat Screen TV

Samsung promoted the first 3D plasma screen at the Consumer Electronics Show 2008, Las Vegas, for which you need 3D goggles.

Two people can watch different content on the same screen at the same time.

The GfK logo, consisting of the letters 'GfK' in white on an orange square background.

3D Holographic Television

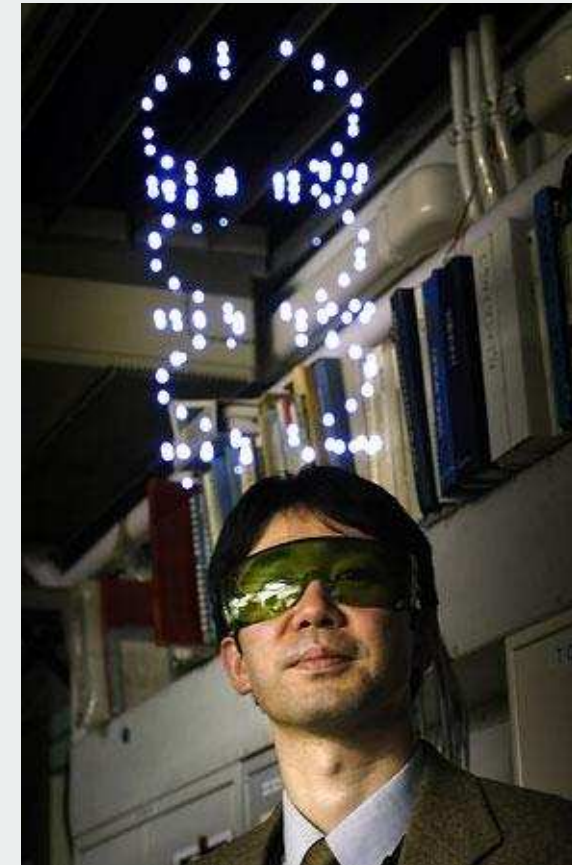
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Japan's National Institute of Advanced Industrial Science and Technology ([AIST](http://www.aist.go.jp)) has developed a device that uses lasers to project real three-dimensional images in mid-air.

A consumer version is "ten years away" according to the European Commission funded 3DTV research consortium

<http://www.youtube.com/watch?v=oBaiKsYUdvg>



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Software

- **Play**

 - Internet TV, VOD, Catch Up TV**

- **Share**

 - Creative Archive, User Generated Content**

- **Find**

 - Search, Recommendation and Personalisation**

Control – Content – Collaboration – Community

Internet TV or Broadband Video

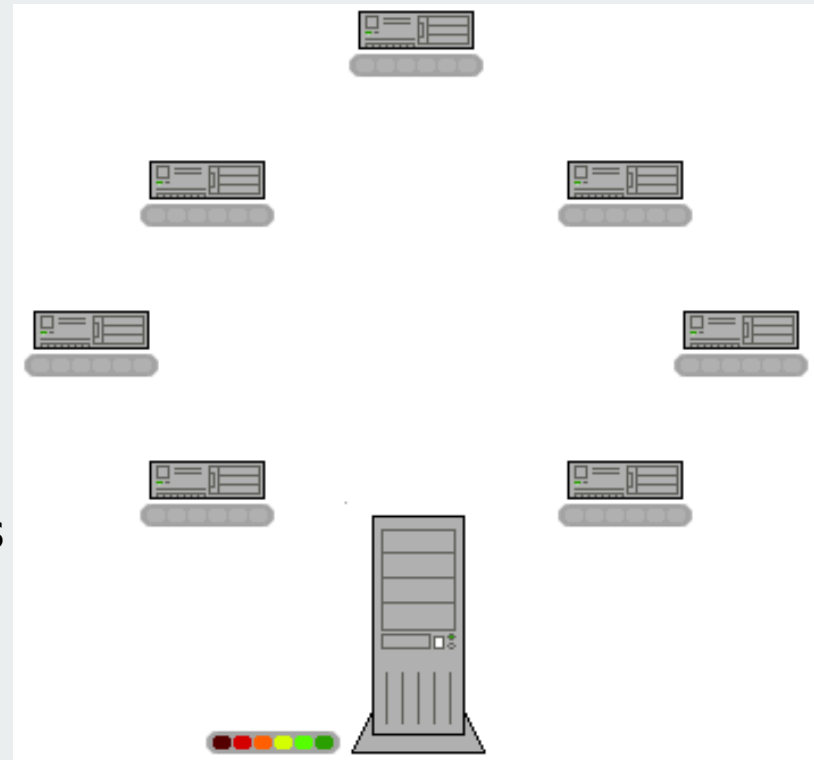
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In contrast to IPTV, "Internet TV" generally refers to transport streams sent over IP networks (normally the Internet) from outside the network that connects to the users premises.

Content is downloaded or streamed to a PC.

Typically, social software tools will be integrated into the service to enable viewers to communicate with others that enjoy a particular programme or genre.

EU commitment to new internet tv protocol, "P2P Next" using Tribler technology (like BitTorrent p2p file sharing protocol)



Internet TV or Broadband Video

UK Internet TV Market:

Media owner controlled services:

- Catchup TV services (BBC i-player, itv.com, 4OD, Five, Sky Anytime on PC)

Video Aggregators:

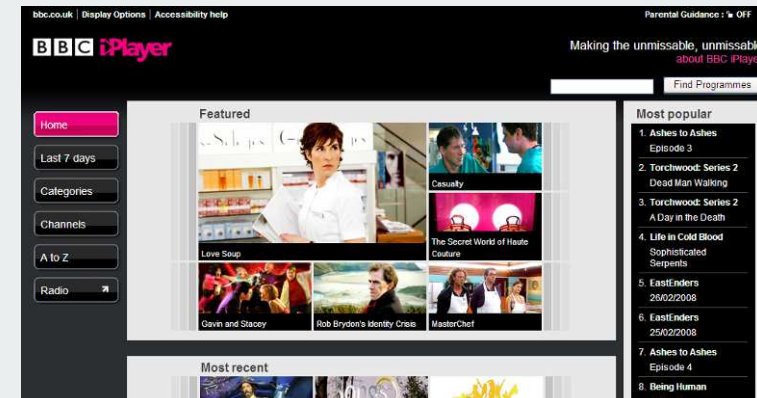
- Youtube, Joost, JumpTV, Limewire, etc. etc.

Penetration: all broadband households – 60% of all UK households.

80% of online population claim to have viewed a video stream.

Forecast: 70% penetration by 2010.

BBC has forecast the i-player will account for 12% of BBC viewing.



Internet TV

BBC i-player – 2.2 million people viewed 11 million programmes in January 2008, of which 9.7 million programmes streamed, 1.3 million downloaded. Far greater volumes than any other UK broadcaster. Increased reach of bbc.co.uk to 20 million.

Sounds like a lot!

Volume of viewing equal to one episode of EastEnders: 136 million BBC programmes are 'viewed' in a single day on TV.

And yet...

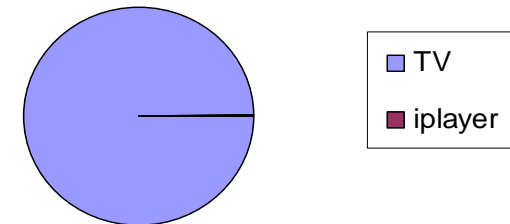
Online TV Blamed For Choking Broadband Networks

News Tiscali claims that both the *streaming* and download versions of the BBC's iPlayer can create problems on its network. Specifically, the recent surge of interest in the BBC's iPlayer *online*, on-demand TV service raised this issue following a massive...

[January 29, 2008, 8:34]

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Delivery System of BBC Television Programmes viewed in January 2008



i-player accounts for 0.27% of all viewing of BBC content

Accessing the Archive

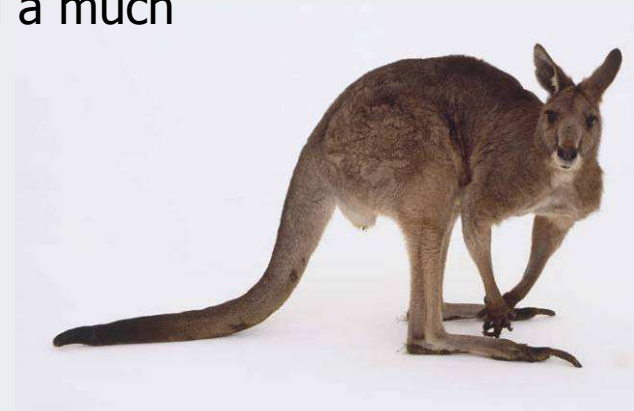
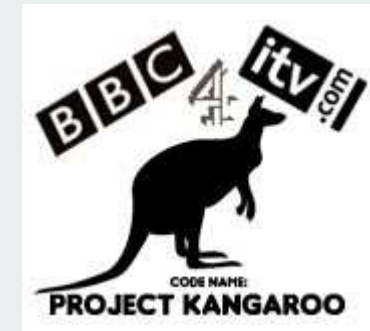
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2007: BBC experiment to open the creative archive to broadband users

Project Kangaroo – launching in 2008 to offer archive and catch-up TV from BBC Worldwide, ITV and Channel Four:

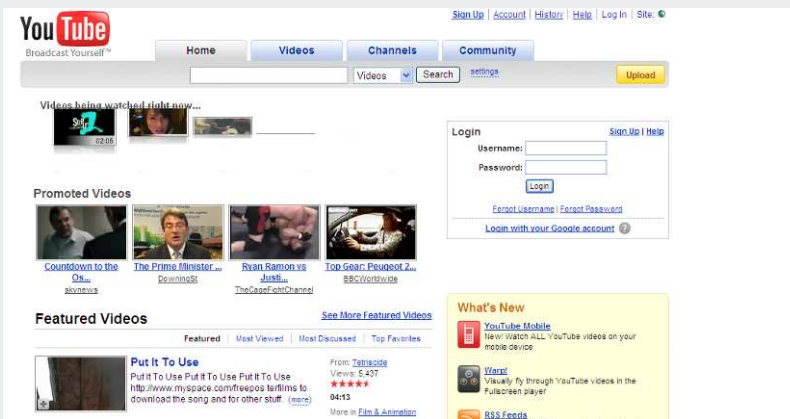
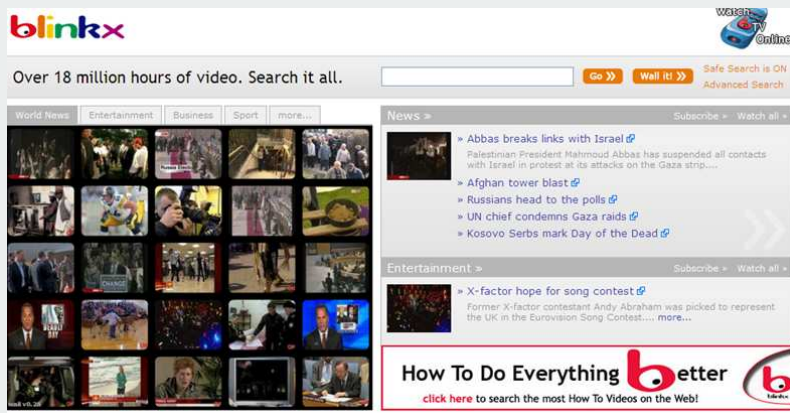
An aggregator of joint venture partners and third-party content (after expiry of 7 day window on i-player, etc.)

Huge potential exploitation of the TV kangaroo's long tail – classic comedies, dramas, documentaries, and a much broader range than available on DVD

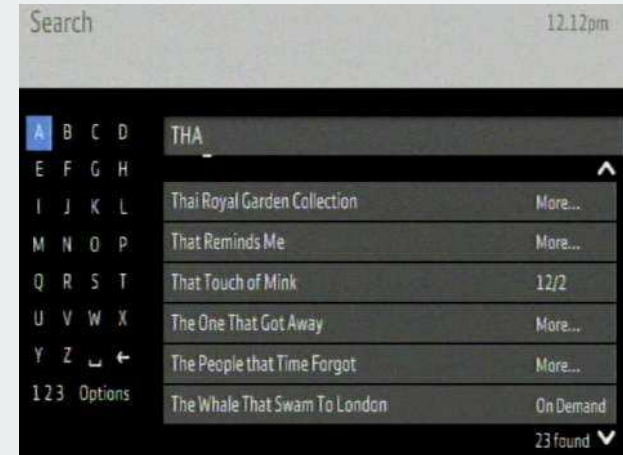


TV Search in its infancy

Compare these services, integrating tens of millions of hours of TV and UGC...



... to these



Recommendation, Preference Engines and Collaborative Filtering

Recommendation Engines maximise exploitation of the long tail:

More than 90% of Netflix's 50,000 movie-catalogue is rented each month

More than 90% of Rhapsody.com's 1 million song catalogue is played each month

It is claimed that the long tail delivers half of Amazon's book sales and 2/3 of its profit

In 2006, only 6% of UK's largest commercial channel's revenues were from rights exploitation



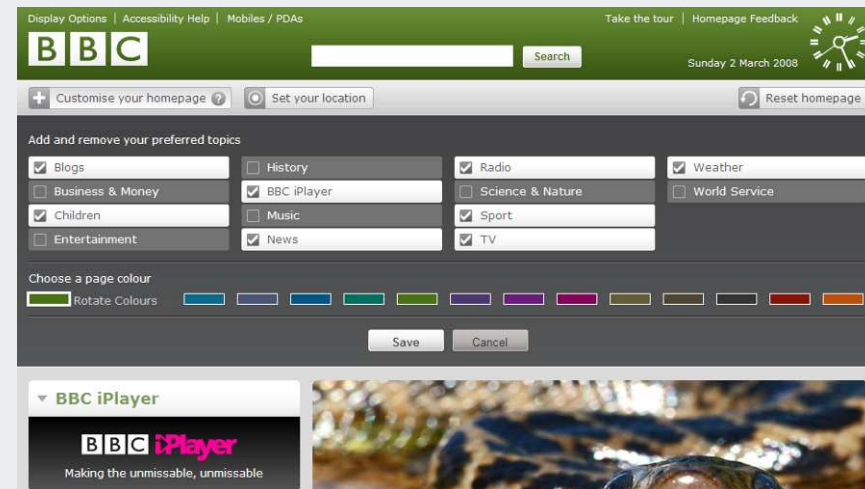
Personalisation of TV Programme Delivery – Enabling Choice

A personalised EPG offering a selection of live and archive content based on:

- my stated preferences (channels, genres, talent)
- previous viewing behaviour of me and others like me
- recommendations from people like me

And a new form of search based on:

- speech-to-text technology
- advanced video analytics
- analysis of embedded data
- automatic hyper-linking of related content



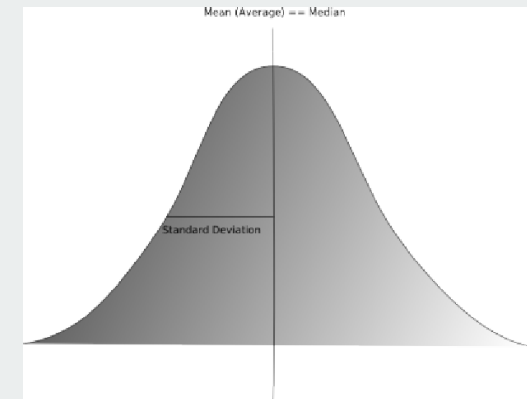
- Bringing the drivers of success of social media to television
- Recommendation and preference vital to the successful exploitation of the long tail. TV WOM no longer retrospective, influences future behaviour.
- No personalisation without measurement

So what's the future of TV?

The wisdom of crowds: an average estimate is normally better than a single person's opinion. So...

Four scenarios:

- 1 The triumph of Internet TV. Catch-up and archive services take off. Capacity issues overcome. Playback grows in line with PVR uptake.
- 2 Playback TV grows. Internet TV remains a niche. Live TV delivers $\frac{3}{4}$ of all viewing.
- 3 New 'Find' tools enable TV based Catch-Up and the Creative Archive to grow. Transportability of content drives mobile consumption. Internet TV a niche. Live TV drops most significantly.
- 4 The TV Exec's Prediction (50% of TV will be live)



We assume that out of home viewing remains constant, and that total time spent watching in-home TV increases 4.5% in next two years

So what is the future of TV?

VOTE NOW!

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			1	2	3	4
Service		Today	2010			
Content Owner to Consumer (via PC)	Catch-Up TV		6%	1%	1%	6%
	Archive TV		6%	1%	1%	6%
Aggregator to consumer	"Youtube"		3%	1%	1%	3%
Content Owner to Consumer (via TV)	Live TV	86%	65%	76%	65%	53%
	Mobile TV		2%	1%	4%	4%
	Playback TV	2%	10%	12%	15%	15%
	Out of home TV	12%	6%	6%	6%	6%
	Catch-Up TV		6%	6%	14%	14%
		100%	104%	104%	107%	107%
Minutes		216	226	226	231	231

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Audience Measurement

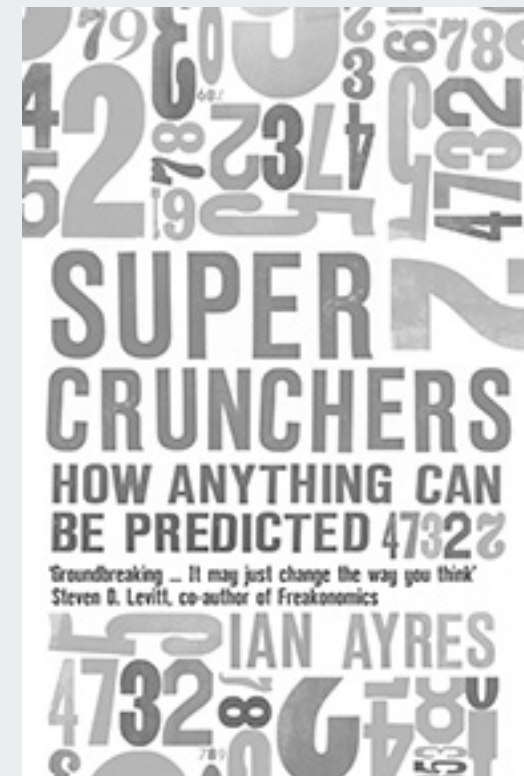
- **Measuring Television's Long Tail**
- **Return Path Data and Super Crunching**
- **Following the content**

Return Path Data and Super Crunching

TV audience measurement in future will incorporate return path data within the currency systems

Beyond an audience measurement tool, RPD from a large enough sample can become a predictive tool:

Data mining – together with personalisation – enables a media owner to be 'consumer centric', **individualising the process of maximising value delivered and revenue generated per customer**



Follow the Content

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“Is this substitutional or additive? We don’t know!”

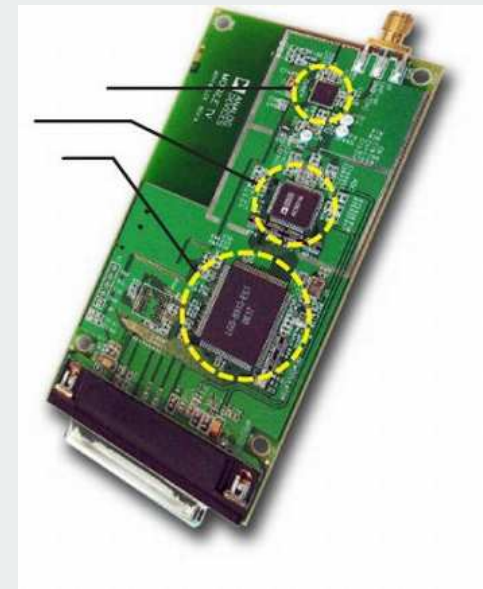
Ashley Highfield, BBC director of future media

Importance of Measurement of cross-media reach

As content delivery becomes ‘platform neutral’, so must the measurement system track an *individual’s* exposure to content across TV, PVR, PC and handheld, within an integrated system

New UK initiative backed by mobile operators to establish a ‘BARB for mobile internet’, including mobile media consumption

Mobile RPD and / or handset application?





Thank you!