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Pilot Results Briefing

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BT Movio
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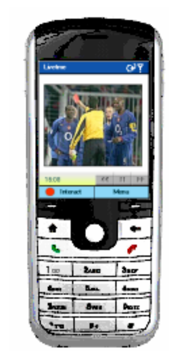
Who is BT Movio?

- A business unit within BT Wholesale
- A wholesale proposition
  - Source channels and services
  - Broadcast platform and capacity
  - Wholesale service and pricing

Produce content → Assemble content and manage platform → Broadcast → Device & client → Mobile operator → Consume and interact



Launch Device

Comparative Technology

	3G/HSDPA	DAB-IP	T-DMB	S-DMB	DVB-H	MBMS	TDtv	MediaFLO	WiMAX
Description	Unicast streaming over 3G	IP based broadcast over DAB	Proprietary broadcast over DAB	Satellite broadcast of DMB	IP based broadcast over DVB	Pseudo broadcast over 3G	Broadcast over 3G-TDD range	Proprietary broadcast technology	IP based unicast
Status	Launched by many operators; limited success	Virgin Mobile launch in Jul-06; support stated in other markets	Launched in Korea; trials in several markets	Launched in Korea; promoted elsewhere by Alcatel	20+ trials in US and Europe; spectrum issues	Availability slated for 2007; promoted by infra vendors	Trialing by Orange; promoted by IP Wireless	Supported by CDMA networks and Qualcomm	WiMAX deployments expected 2007/8
Handset situation	Wide availability of 3G devices; HSDPA in 2006/7	HTC launch device; Chinese vendors now interested	Samsung and LG are main suppliers	Samsung and LG; Motorola in 2006	All top tier suppliers	Compatible with all existing 3G devices	PC card available now; devices in 2007/8	Qualcomm based CDMA devices for US market in 2007	No known plans yet
Advantages	Uses existing network; wide device support	Flexible, available now, includes radio, low cost and risk	Good handset availability now	Quick to get outdoor coverage	Wide support and high video capacity	Leverages existing 3G network	Makes use of existing infrastructure sites and spectrum	Good quality and capacity for CDMA operators	IP based solution good for PC applications
Disadvantages	Quality, capacity and cost to consumer	Limited capacity in some markets	Inflexible codec and non-IP base	Terrestrial infill required for in-building support. CA hacked	Spectrum availability, cost, no radio and maturity	Cost of operation	Untested and cost of operation	Qualcomm proprietary solution in limited markets	High cost of integrated mobile devices
Conclusions	Good way to trial demand; longer term for video-on-demand	Best starting point for mobile broadcast services	Good for demos but no long term solution	Cost and limited support make it unlikely candidate	Some markets will start here; others will be dual mode with DAB-IP	Route for operators who want to retain 100% control	May be longer term solution for some operators	Likely to be driven out of US	Limited coverage and late to market

- DRM protected IP streams over available bearers gives the most flexible technology approach

But what about the consumer?

The winning customer experience,

rather than a winning technology

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Pilot Overview

First ever European Pilot of DAB-IP Mobile Broadcast TV

Key Pilot Objectives:

- Proving the technology and quality of service
- Understanding consumer thirst for mobile broadcast entertainment
- Desired content and usage behaviours
- Propensity to pay

Pilot Structure and Details

- Pilot ran from June to December 2005
- 1000 pilot users within the M25 using an enhanced DAB network
- Fully encrypted broadcast video (TV) channels
- Access to ~50 DAB radio stations
- Interactive “Red Button” functionality
- 7 day rolling Electronic Programme Guide

Key BT Movio Pilot Findings

- Two-thirds of pilot users indicated they would pay up to £8 per month for the service on their current network
- Over a third of pilot users would be willing to leave their current network to get the service
- During the pilot
  - TV was watched for an average of 66 minutes per week
  - Radio was listening to for an average of 95 minutes per week
- *In total, TV and Radio services were consumed for an average of 2 hours 41 minutes*
- 54% would buy a mobile phone which supported the service
- 59% of respondents rated the service as appealing or very appealing
- 63% would recommend to family and friends
- Results were consistent across demographics (age/gender/mobile phone spend/contract type)

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Other published trial results

	Finland	UK	Spain	France
Positive response to mobile TV	58% believe mobile TV services would be popular	83% are satisfied with the service	75% would recommend the service	73% were satisfied with the service
Willingness to pay for mobile TV	41%	76%	55%	68%
Acceptable monthly fee for mobile TV	€ 10	-	€ 5	€ 7
Average daily viewing	5-30 minutes of mobile TV per day on average	23 minutes per session with 1 to 2 sessions per day	16 minutes	20 minutes
Peak viewing times	-	Mornings/lunchtime/ early evenings	While commuting and between 7 and 8 pm	Mornings (9-10), midday (1-2) and evening (8-10)
Popular content	Local programs available through Finnish national TV and sporting events	News, soaps, music, documentaries and sports	News, series and music	News, music, entertainment, sport, documentaries, films

Source: Nokia press release

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Arqiva/O2 Pilot results

Other Feedback

High Satisfaction Levels

- 83% satisfied or better with the service

Satisfaction Drivers

- Choice of channels
- High Picture and Sound Quality
- Electronic Services Guide (ESG)

High Take-up Intentions

•76% of triallists would take up service wi
months at an acceptable price

•This demonstrates that the majority of tri
prepared to pay for a service

arqiva

Other Feedback

Consumers also interested in:

- Digital radio channels
- PVR type functionality
- Interactive services
- Web links to broadcaster/other content

Number of Channels

•16 channels is felt to be adequate choice

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RAJAR Platform Survey Q4-05

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

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TV Findings

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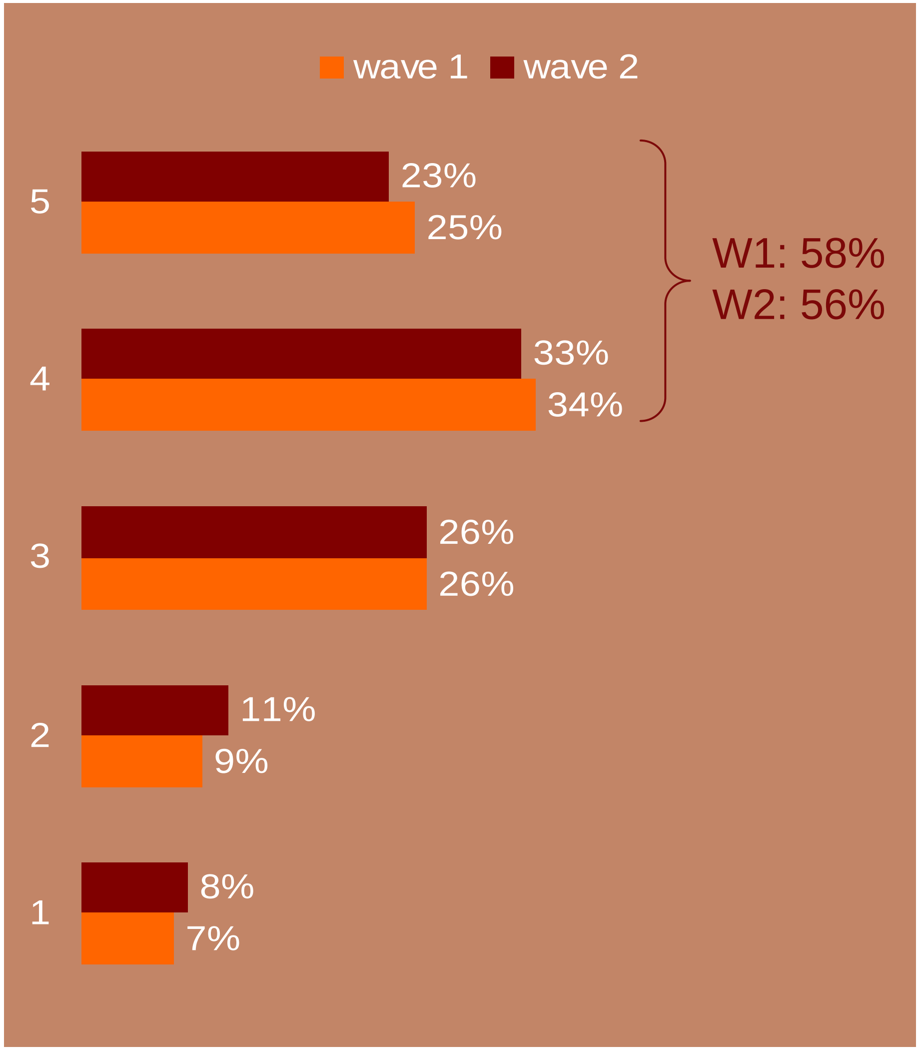
Appeal of TV service



Gender	
Male	58%
Female	54%

Age	
16 – 24	58%
25 – 34	57%
35 – 50	50%

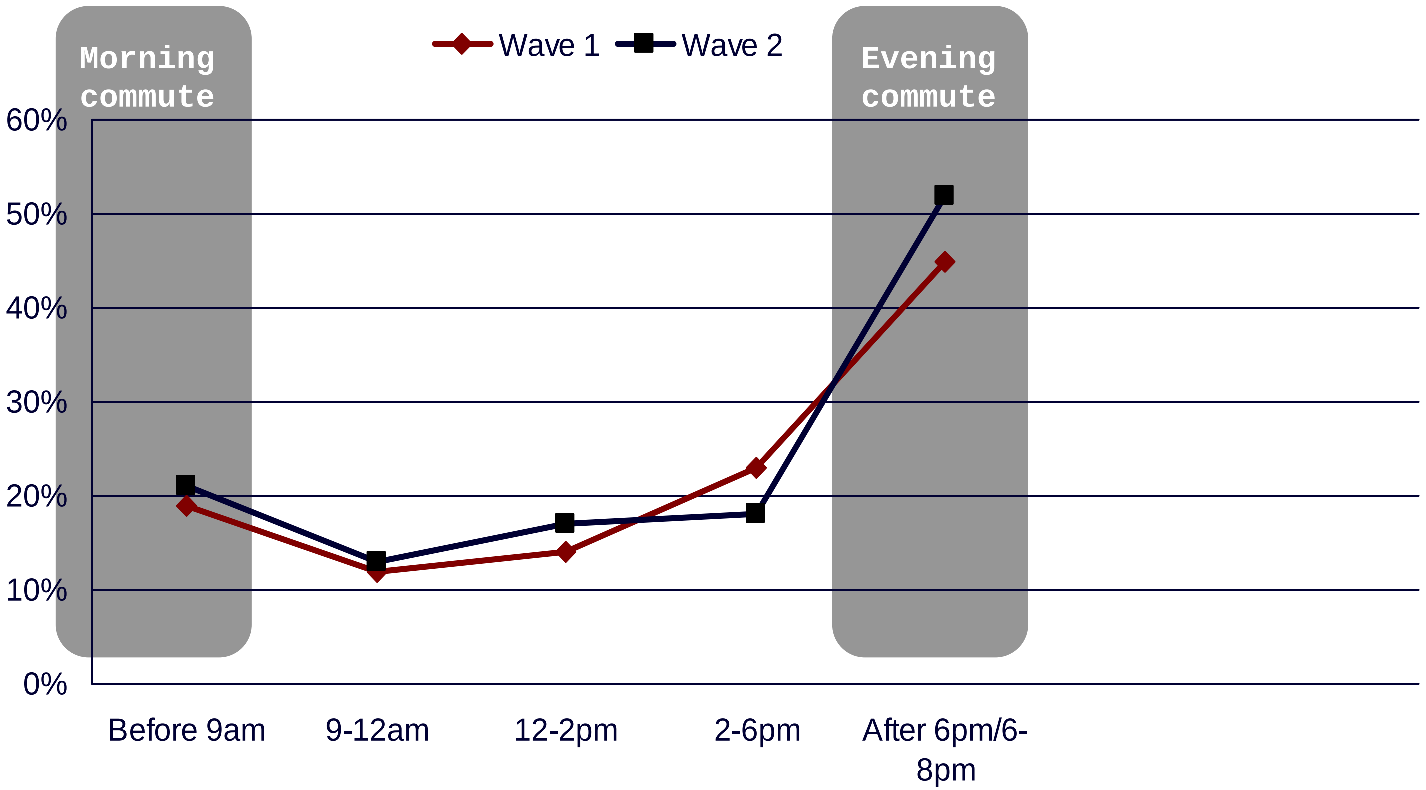
Type	
Contract	56%
PAYG	56%

Spend	
£10-20	53%
£21-30	47%
£31-40	58%
£41+	68%

No other differences in appeal by other subgroups in sample

*Q. Thinking about the overall **TV service** available on your pilot phone, how appealing is it on a scale of 1 to 5 where 1 is not very appealing and 5 is very appealing?*

When Users Accessed Mobile TV



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Radio Findings

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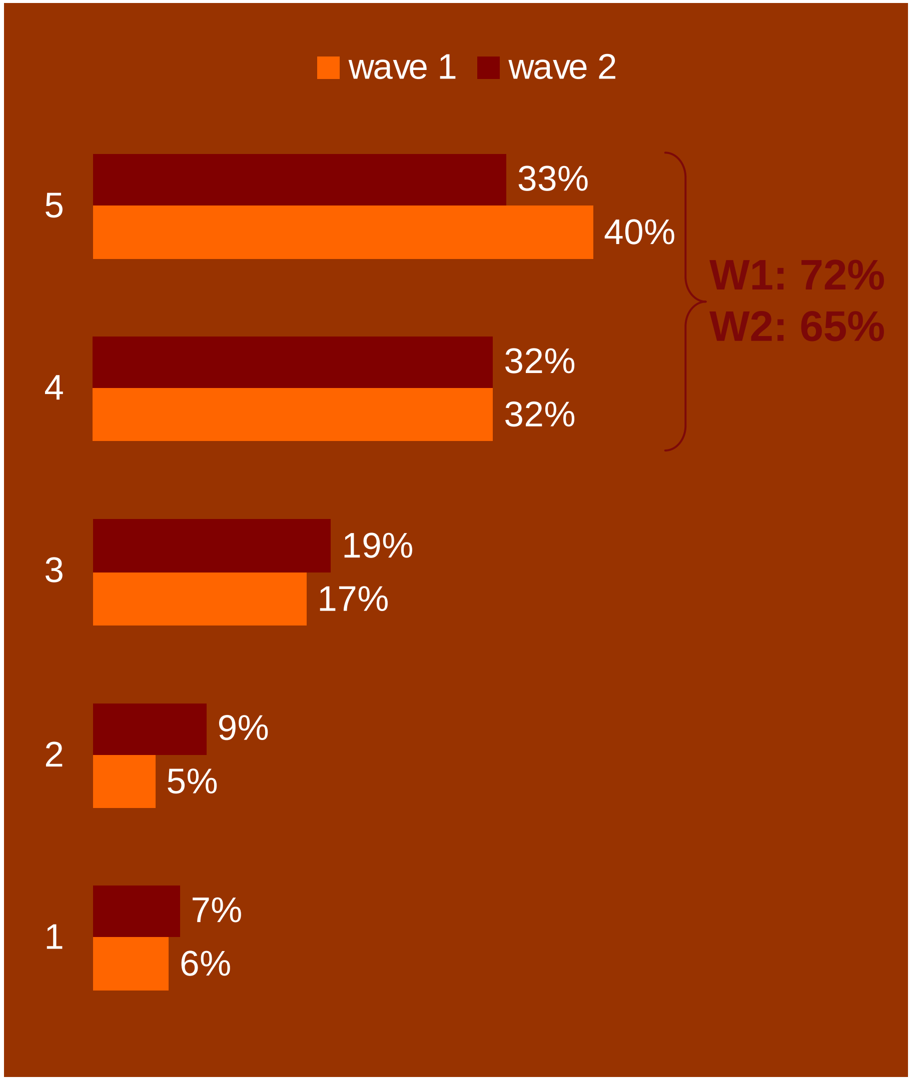
Reactions to Digital (DAB) Radio

Overall very positive feedback to DAB digital radio

- Compared with FM radio, there is more choice and is easier to access
- Digital radio provides information that traditional radio doesn't
- Improved sound quality
- Overwhelming appeal of converging DAB Digital Radio into a mobile phone
- More occasions for use than TV

Appeal of radio service



Gender	
Male	59%
Female	71%

Age	
16 – 24	67%
25 – 34	64%
35 – 50	64%

Type	
Contract	66%
PAYG	65%

Spend	
£10-20	64%
£21-30	63%
£31-40	64%
£41+	69%

*Q. Thinking about the overall **radio service**, how appealing is it overall on a scale of 1 to 5 where 1 is not very appealing and 5 is very appealing*

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Interactive Services

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Interactive Feature

- Genuine scope for developing Value Added Services via Red Button interaction
  - When there was a call to action (SMS text) – over 1000 hits on Competition website in 5 days
  - Important to tailor content to suit the mobile channel

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Conclusions

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Conclusions

- At a conceptual level, TV on mobile appealing and natural progression of mobile technology
- Consumers attracted by mobile TV but use DAB digital radio more
  - Combined package seems to be the winning combination
- Uptake is the really positive finding … based on experience with the pilot service, two thirds of users are likely to pay £8 per month for the service
- This was borne out by experiences with the actual pilot service
  - More than half found the service appealing or very appealing
  - And only a very small minority (8%) found the service “not very appealing”
  - Encouragingly, the pilot service appealed across a broad cross section of demographic groups
- Simple, familiar, integrated 7 day listing guide key to service discovery
- Interactivity had high take up rates when there was a clear call to action

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Thank you