









Session 4 - Business Models for OTT

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Delhi, India

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Business Models for OTT

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Outline

- Where are you?
- What is IPTV?
- What is OTT?
- What is IBB?
- Why they are important today?
- How to navigate?













What are you? and Where are you?

- ATV
- DTV
- OTT
- IPTV





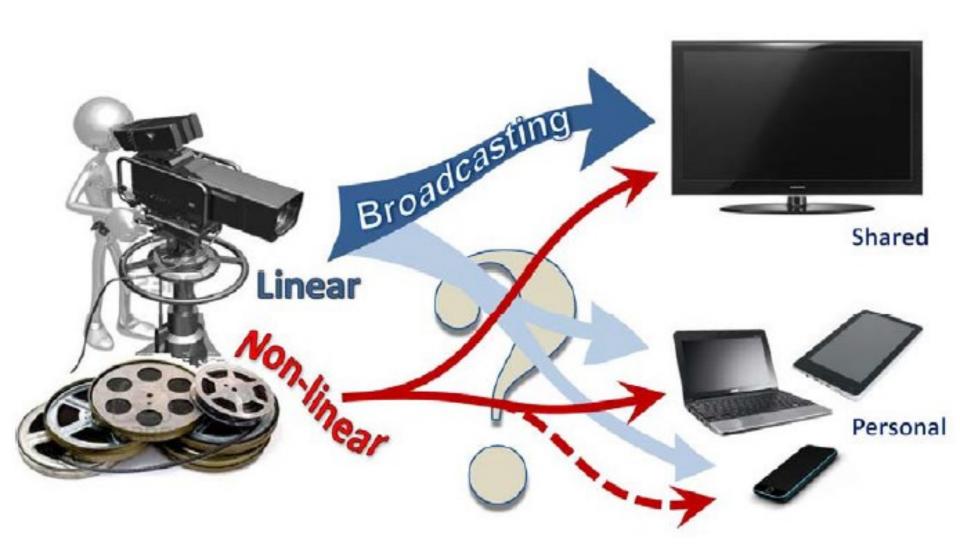








How to deliver linear & non-linear TV content







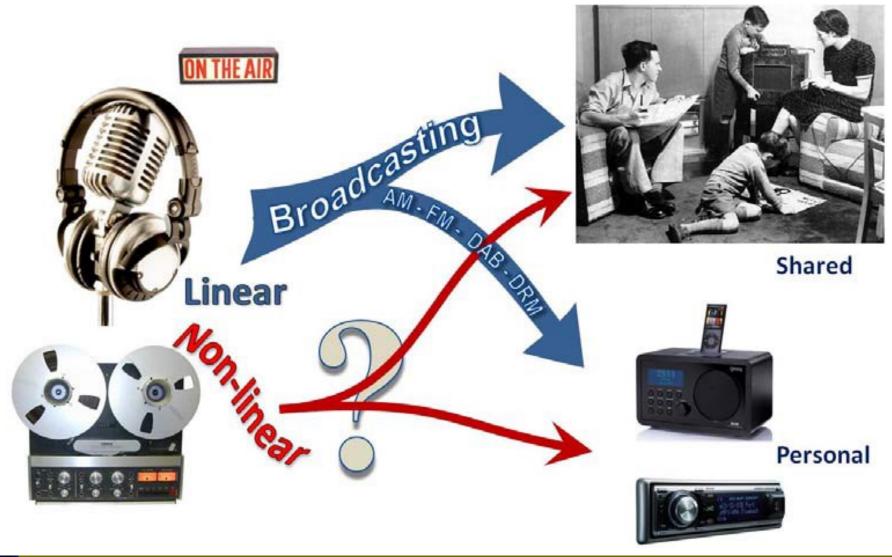








How to deliver linear & non-linear Radio content















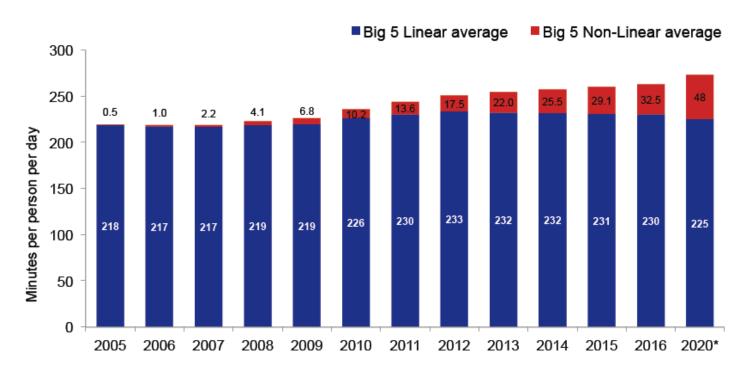
Linear TV audience

Linear TV audience is growing all around the world

[Source: IHS – ScreenDigest]

Cross-platform Television Viewing Time FY 2012

Note: Forecast from 2012 // * 2020 forecast by EBU. Non-Linear includes DVR







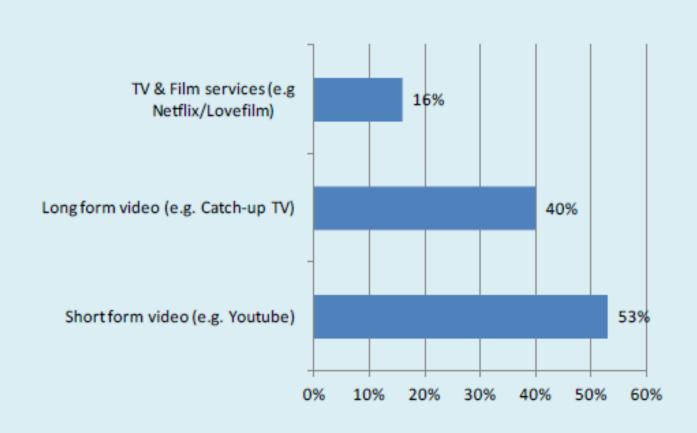








Type of VOD Services Consumed



Source: Ofcom, 2013 (adapted)













IPTV

 Multimedia services such as television, video, audio, text, graphics, and other data delivered over IP based networks managed to provide the required level of Quality of Service/Quality of Experience (QoS/QoE), security, interactivity and reliability [ITU]





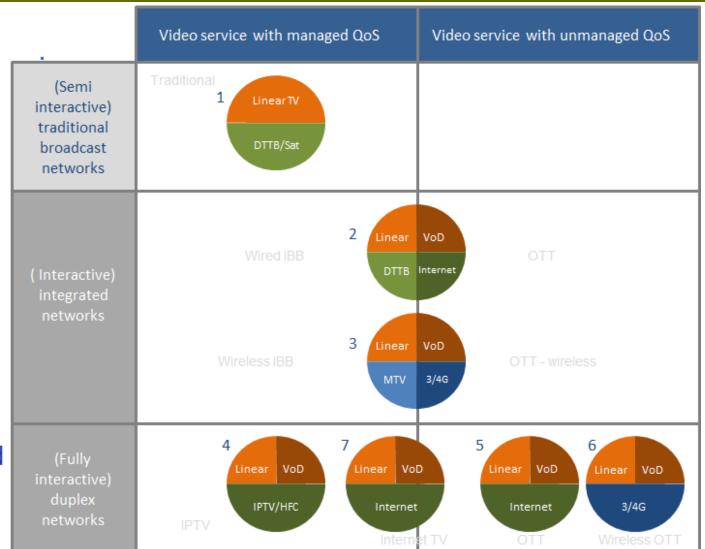








Classification



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What is OTT?

- Over the Top are the audio-visual services delivered over broadband and the Internet
- OTT are over unmanaged networks
- As there is a return channel, full interaction is possible.















What is Over the Top?

- OTT is delivered directly from provider to viewer using an open internet/broadband connection, independently of the viewer's ISP, without the need for carriage negotiations and without any infrastructure investment on the part of the provider
- It is a 'best effort', unmanaged method of content delivery via the Internet that suits providers who are primarily broadcasters rather than ISPs













Business Models for OTT

- Subscription
- Transaction PPV
- Advertising
- OTT can be either/both Live and On-demand
- sVoD
- TVoD
- AVOD
- Future will be Target advertising













IBB Integrated Broadcast Broadband

- With the availability of devices connected to broadband gives viewers option to access additional content
- Almost all the traditional broadcasters are currently offering their viewers to access some selected content as catch up or additional contents related to the lined up programmes via broadband networks
- There are number of systems that can operate in hybrid configuration
- The most of these systems have explored ICT-Information and Communication technologies to build such system













Therefore IBB

- IBB Integrated Broadcast-Broadband
- Recent advancement of broadband technologies enable
 - High speed delivery
 - Server side processing
 - Inter-device communication













tonton







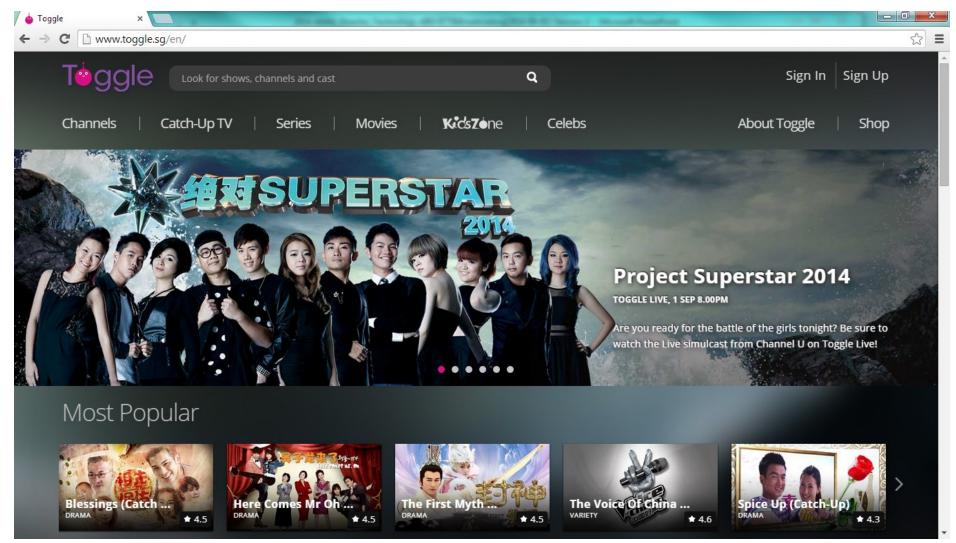








Toggle from MediaCorp Singapore







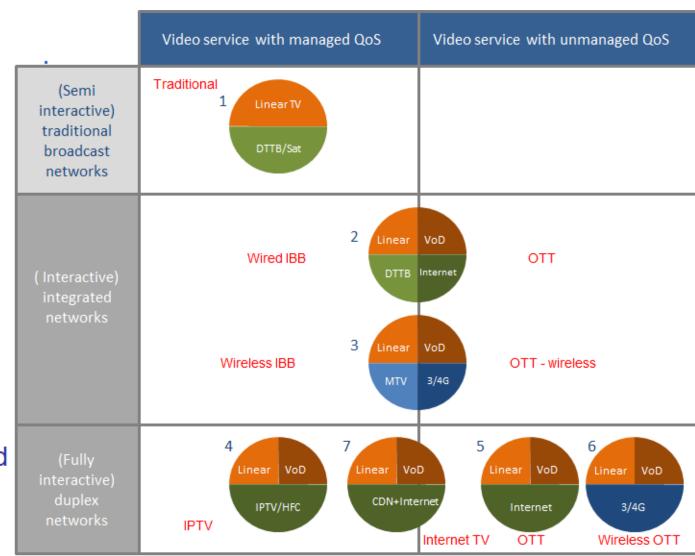








Classification



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Interactivity

- Robust App Runtime Environment with HTML5 support
- Based on HbbTV 2.0 with restrictions and extensions
 - HbbTV 2.0 was published 2018
 - 20+ extensions being documented, several based on ATSC: A/105 (aka "ATSC 2.0"), now in Candidate Standard phase
 - Changes being documented due to ATSC 3.0 IP delivery solution (HbbTV is based on MPEG-2 TS)













IBB DTV service

A service that simultaneously provides an integrated experience of broadcasting and interactivity relating to media content, data and applications from multiple sources, where the interactivity is sometimes associated with broadcasting programmes.

[Source: Definition in Recommendation ITU-T 1205]





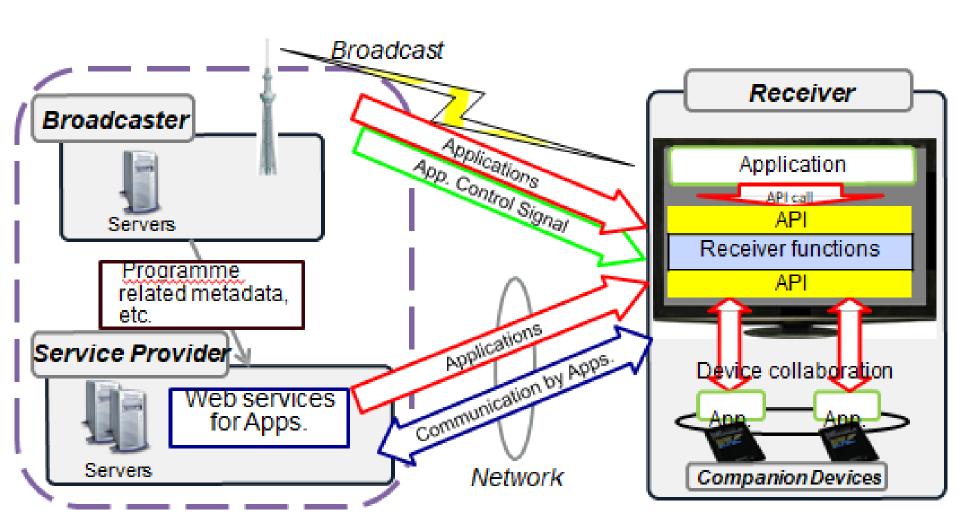








IBB Basic System Architecture















Difference between IBB and TV+Web

- Application life cycle
 - Some apps. start and stop automatically
 - The quiz app. launches automatically when the quiz programme starts
 - It is terminated automatically at the end of the programme
- Synchronization with progress of a TV programme
 - Presentation changes in accordance with progress of a TV programme
 - The app. receives and processes trigger signals over broadcast
 - Accurate cross-stream synchronization with broadcast signal
- Integrated user experience
 - Totally designed presentation with a TV programme













Service Associated IBB application

An application that is part of the integrated broadcast and broadband (IBB) DTV service tuned to by the user at a given time.

[Source: Definition in Recommendation ITU-T J.205]





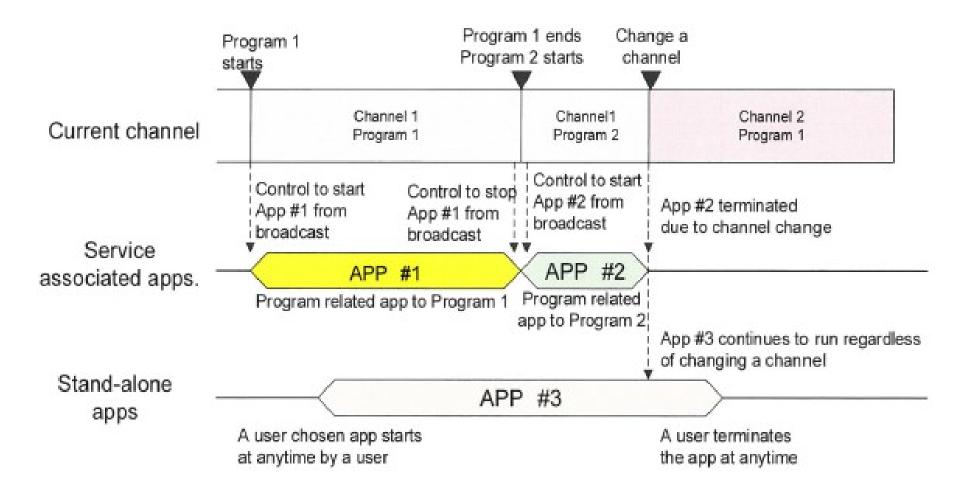








Life cycle and types of applications















ITU Recommendations related to IBB systems

	ITU-R	ITU-T
Requirements	Rec. BT.2037 Rec. BT.2053	Rec. J.205
Reference Architecture		Rec. J.206
System	Rec. BT.2075	DNR J.acf- spec
Information Doc.	Rep. BT.2267	













IBB systems in ITU Recommendations

ITU Text	Systems
Rec. BT.2075	 HbbTV 1.5 & 2.0 Hybridcast 2.0 (+ARIB STD-B62) HTML5 based smart TV platform
Rep. BT.2267	 HbbTV 1.5 & 2.0 Hybridcast 2.0 (+ARIB STD-B62) Enhanced BML for simple IBB HTML5 based smart TV platform Ginga













Countries Adopting HbbTV

- In Asia-Pacific Australia, New Zealand, FreeviewPlus
- Singapore
- Malaysia
- Vietnam
- Indonesia
- Myanmar
- Thailand
- •













Thank you for listening and for patience

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