

# Hybrid's Technical Challenges

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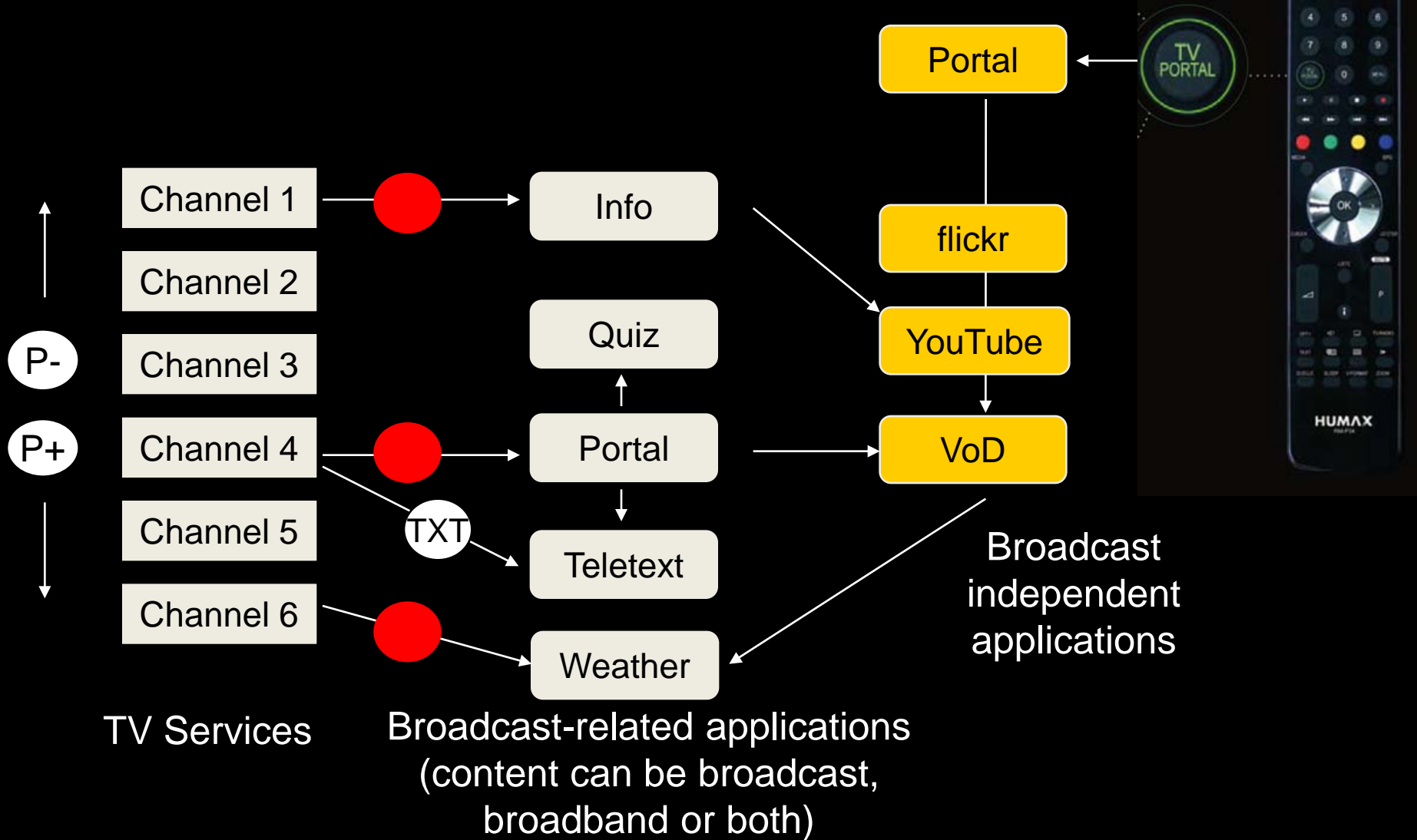
# Motivation

- The broadcast industry has talked about “interactive TV” for many years, with little success on free-to-air TV outside UK
- Only now is the “ideal” return channel of Internet becoming feasible in a domestic receiver
- Broadcasters have very successful online services – synergies between the two media are obvious ....

Brings together the mass appeal of broadcast TV  
with the convenience of the Internet on a  
domestic TV



# Using HBB Services



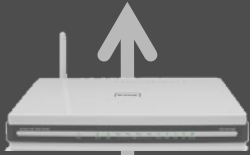
# Background: 3 Worlds:

Internet  
Content  
Provider

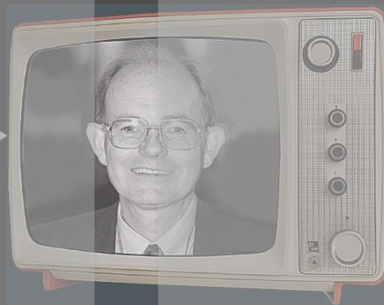
Broadcaster



2. Broadband World  
Home Gateway



Hybrid Consumer Equipment



DVD player and  
Home Cinema



2. Broadband World

3. Hybrid World

Home Media



# 3 main types of “HBB”

## 1. Vendor driven “Connected TVs”

- Samsung Apps (Yahoo)
- Panasonic VieraCast

## 2. Broadcast centric with signalling

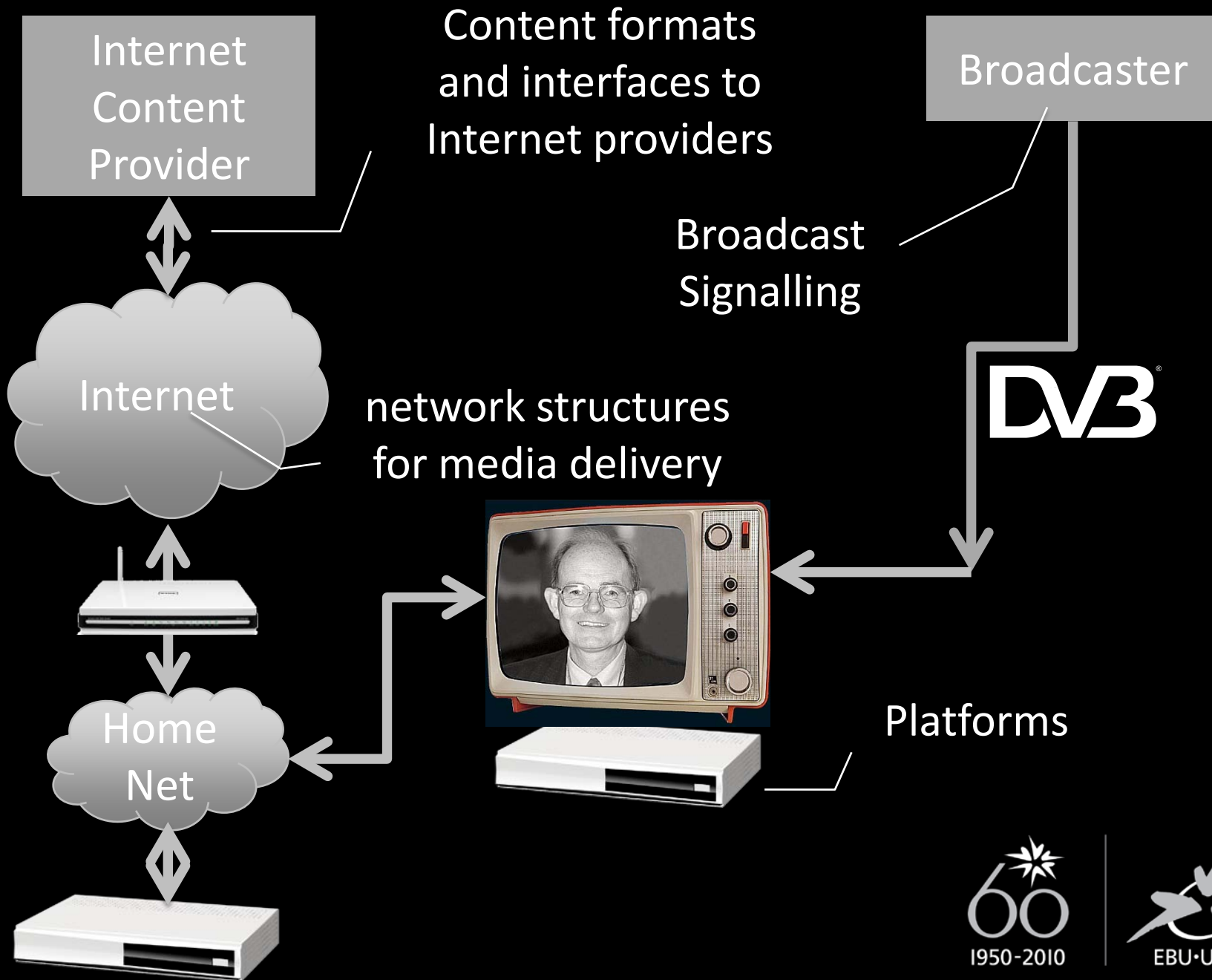
- MHP (Italy)
- HbbTV (France/Germany)

## 3. Managed HBB

- UK Canvas (now called YouView)
- GoogleTV

# 3 main applications

1. Digital Teletext
2. Catch-up TV
3. Chat based around broadcasting event
4. (Weather)





# Technical Challenges

- Much of the debate focuses on technical platforms, but this is only part of the story
- Platforms result from different market requirements
- There are many common elements we'll need to address
- And at a basic level, many of the core applications will be the same.

# Background: FTA Digital Television

Country	Dominant FTA Plat.	Consumer proposition	Owner	iTV Tech	Hybrid Technology	Hybrid Consumer Proposition
FR	Terrestrial	TNT	HD Forum	none	HbbTV	TNT 2.0 *
DE	Satellite	none		none	HbbTV	HbbTV
ES	Terrestrial	TDT	Abertis	none	none	TDTi *
IT	Terrestrial	DTT	DGTVi	MHP	MHP-IP	
UK	Terrestrial	Freeview	DTG	MHEG-5	MHEG-5 IC	FreeviewHD

\* Proposition name not confirmed as services have yet to be launched.

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