HBBTV & OPERATORS:
LATEST UPDATES & INNOVATIONS

HbbTV Symposium 2016, Madrid

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AGENDA

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2016 TV & VIDEO UPDATES DEUTSCHE TELEKOM
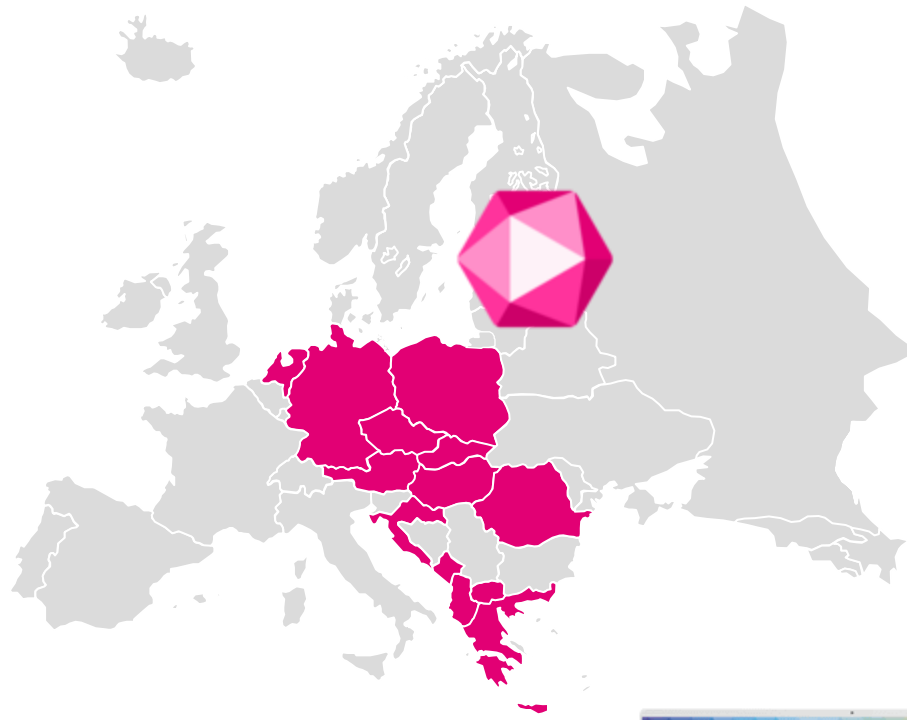
- **May 2016: Launch of new TV products in Germany and EU**
  - Germany launched „Entertain TV" in May, other countries to follow
- **HTML5-based User Interfaces** becomes standard for new STBs
- **7-day Replay:** Broadcaster Applications have been integrated as apps and throughout a „backwards EPG" feature
- **Instant-Restart:** allows to re-start a show during is lifetime
- **Cloud PVR: Store contents in the Cloud**
- **OTT applications** for iOS and Android use „Web views" integrating HTML5 technology

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A CRITICAL LOOK ONTO THE FUTURE RELEVANCE OF HBBTV

- Red button: no breakthrough; apps are more important
- More and more broadcasters provide apps for all kind of (OTT) platforms, including:
  - iOS and Android with Airplay and Google Cast Support
  - Amazon FireTV
  - Apple TV
  - Deutsche Telekom's Entertain TV ☺
- Mobile first use-case is winning
- **BUT: FINALLY BROADCASTERS ACCEPT FEATURES LIKE**
  - **BACKWARDS EPG**
  - **INSTANT RESTART**
  - **CLOUD PVR**
  - **→ HBBTV KILLER FEATURE IN COMBINATION WITH THE BROADCASTERS' CATCH-UP TV PORTALS**

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HBBTV OPERATOR APPS – WHAT HAS CHANGED IN 2016?

- **SIMPLICITY**
- It has been recognized that only **OTT technologies** can help to create the necessary momentum for a quick Go-To-Market of the Operator Apps specification
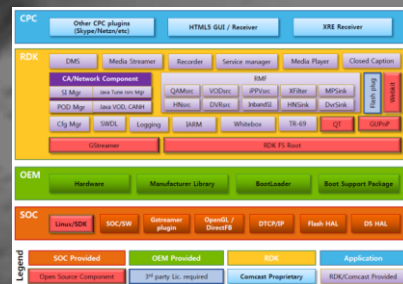
- **GO-TO-MARKET CRITERIA**
- Unicast delivery of Linear Content – no IP Multicast
- Usage of OTT DRMs as is (PlayReady, Widevine, Verimatrix in the case of DT)
- CEs have to accept customer journey for first time initialization of Connected TVs in IP-environments
  - Keyword: Service Provider Discovery
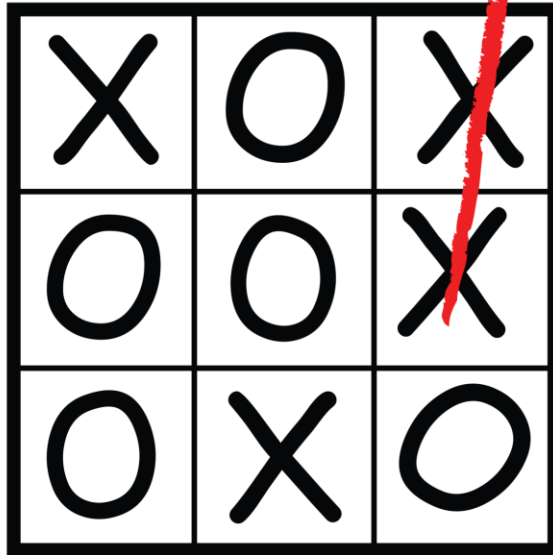
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STANDARDS UPDATE: OPERATOR FOCUS

- **HbbTV Operator Apps:** Prototypes in 2017; Go-To-Market in 2018 jointly with CE manufacturers!

- **W3C Web & TV Working Group vs HbbTV:** The W3C has finalized its TV Control API* specification. Should HbbTV adapt this specification....?

- **RDK** gains enormous momentum. Should HbbTV invest into a RDK-based reference implementation based on the RDK's WPE browser environment?

- If RDK fails it's all AndroidTV. More or less.

- The Cloud....

*https://www.w3.org/community/tvapi/

THINK OUTSIDE THE BOX: CLOUD HBBTV

Cloud

- Local application execution is highly depended on the quality of the local browser ecosystem
- In analogy to Cloud Gaming, also the execution of HTML-based apps and portals can be shifted to the Cloud
- W3C Cloud Browser Task Force[1] is defining a standards-based solution for a Cloud Browser
- Why not execute HbbTV apps in the Cloud?[2]
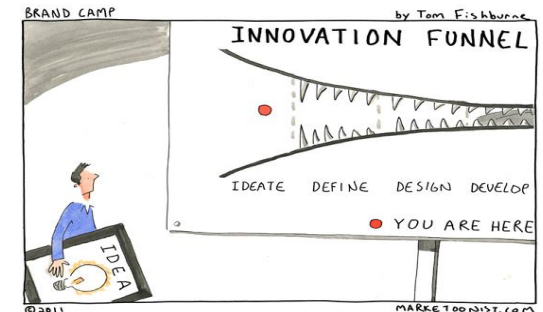- Have a look at the booth of SK Telecoms spin-off

  It's already a product...

W3C Cloud Browser Task Force

https://www.w3.org/2011/webtv/wiki/Main_Page/Cloud_Browser_TF

*2HbbTV goes Cloud: Decoupling Application Signaling and Application Execution in Hybrid TV:

http://dl.acm.org/citation.cfm?id=2755523&preflayout=tabs

KEY TAKE AWAYS

- HbbTV Operator Apps need a quick and simple Go-To-Market push with help of platform owners and CE manufacturers
- Broadcasters and platform owners have to work hand-in-hand to finally enable Instant Restart, Backwards EPG and Cloud PVR on large scale. A hybrid out of classical Linear TV and non-linear consumption
- RDK and Cloud HbbTV are worth a look

CONTACTS

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