

mobile instinct



WIM TV
(Web – Internet – Mobile)

***An MPEG Exploration for a
Convergent TV Application
Infrastructure***

 **streammezzo**
rich media technologies

TV Experience is More than Just the AV Data

Live TV

“same content for everyone at the same time”

Examples

- Streaming live TV service over 3G network
- Broadcast mobile TV
- IP TV

On-demand (video) services

“specific content for me on demand”

Examples:

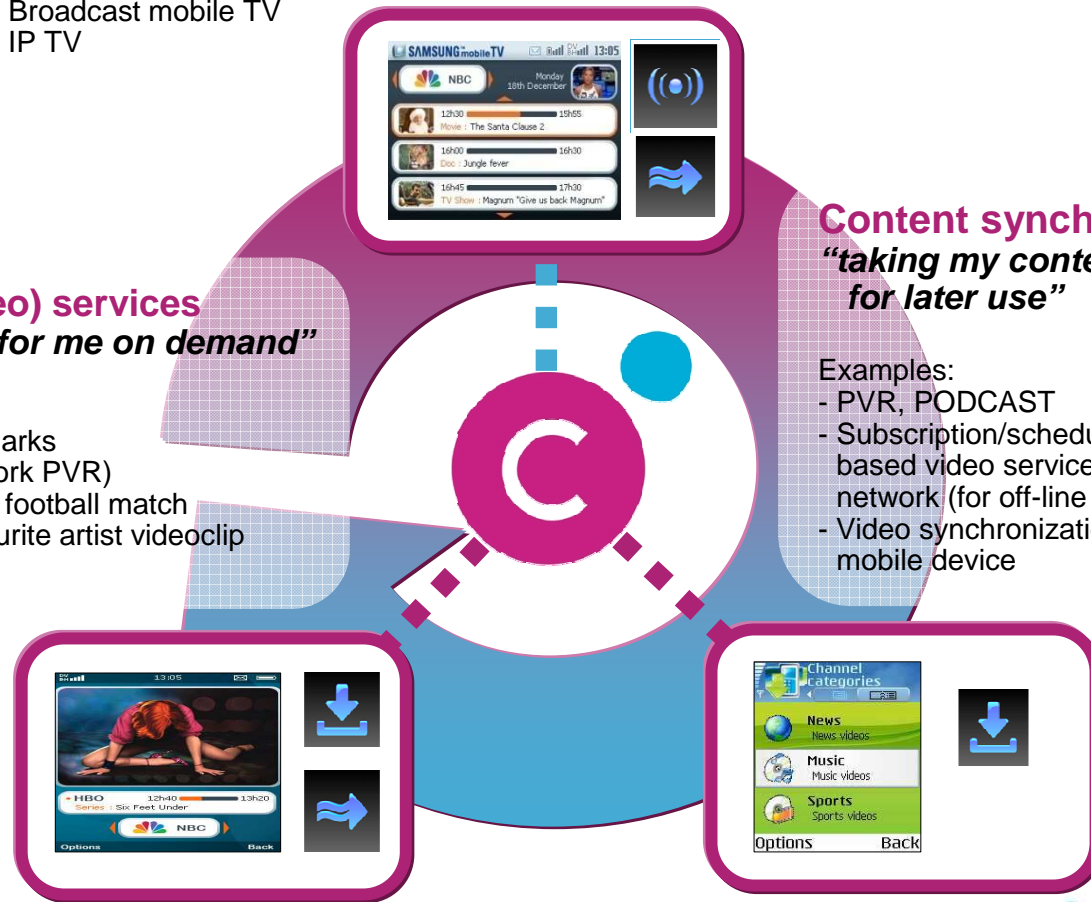
- My Records / Bookmarks
- “Catch-up TV” (network PVR)
- Goal Replay during a football match
- Download of my favourite artist videoclip played on MTV

Content synchronization

“taking my content with me for later use”

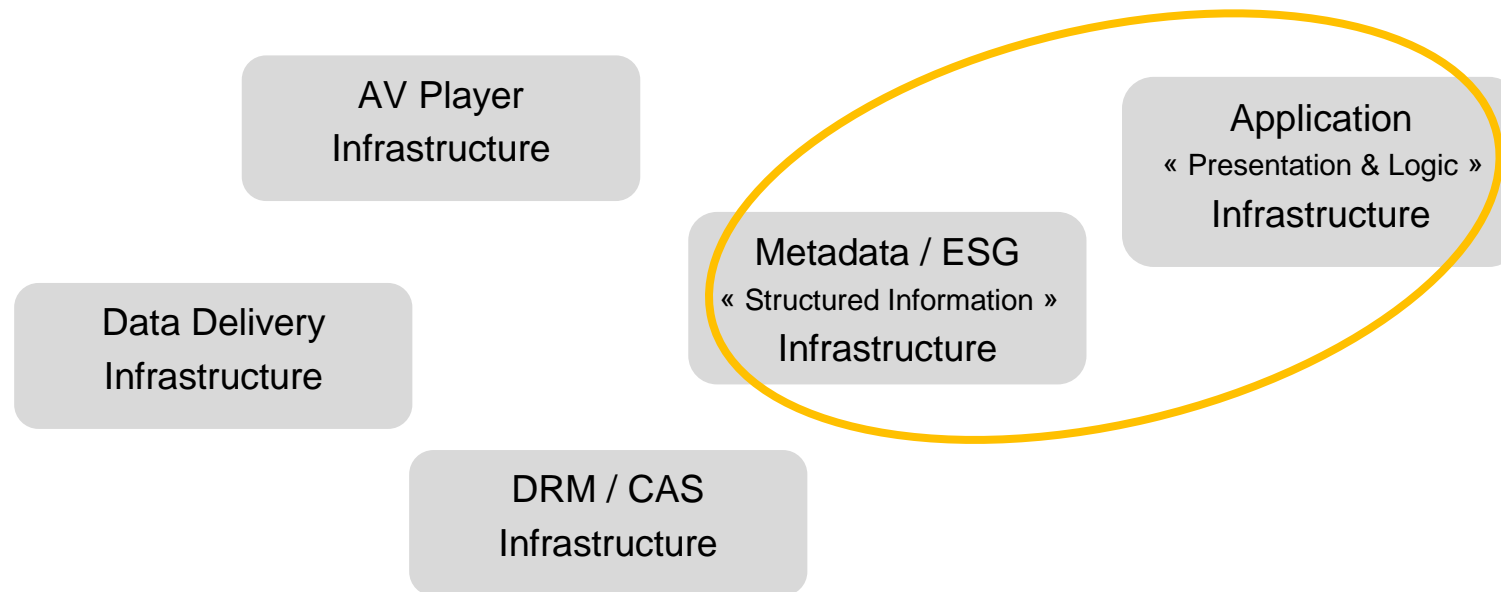
Examples:

- PVR, PODCAST
- Subscription/scheduled download based video services over cellular network (for off-line use)
- Video synchronization from PC to mobile device





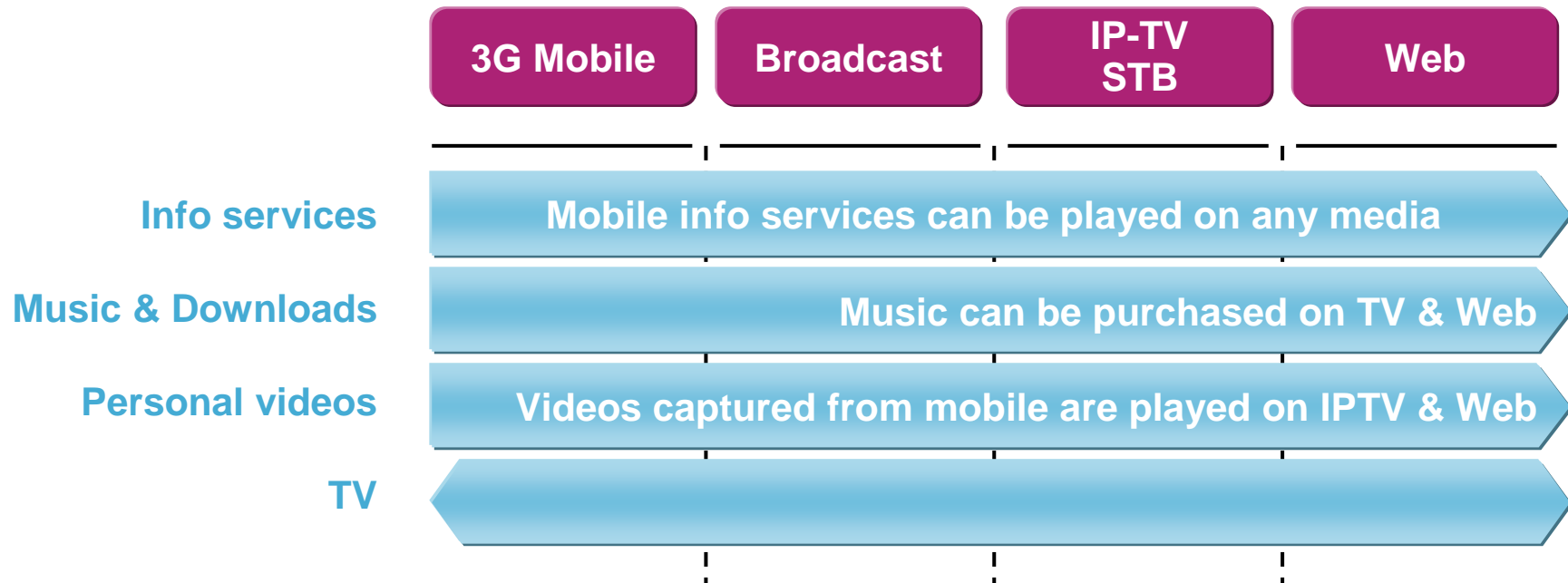
Areas of Convergence and Standardization





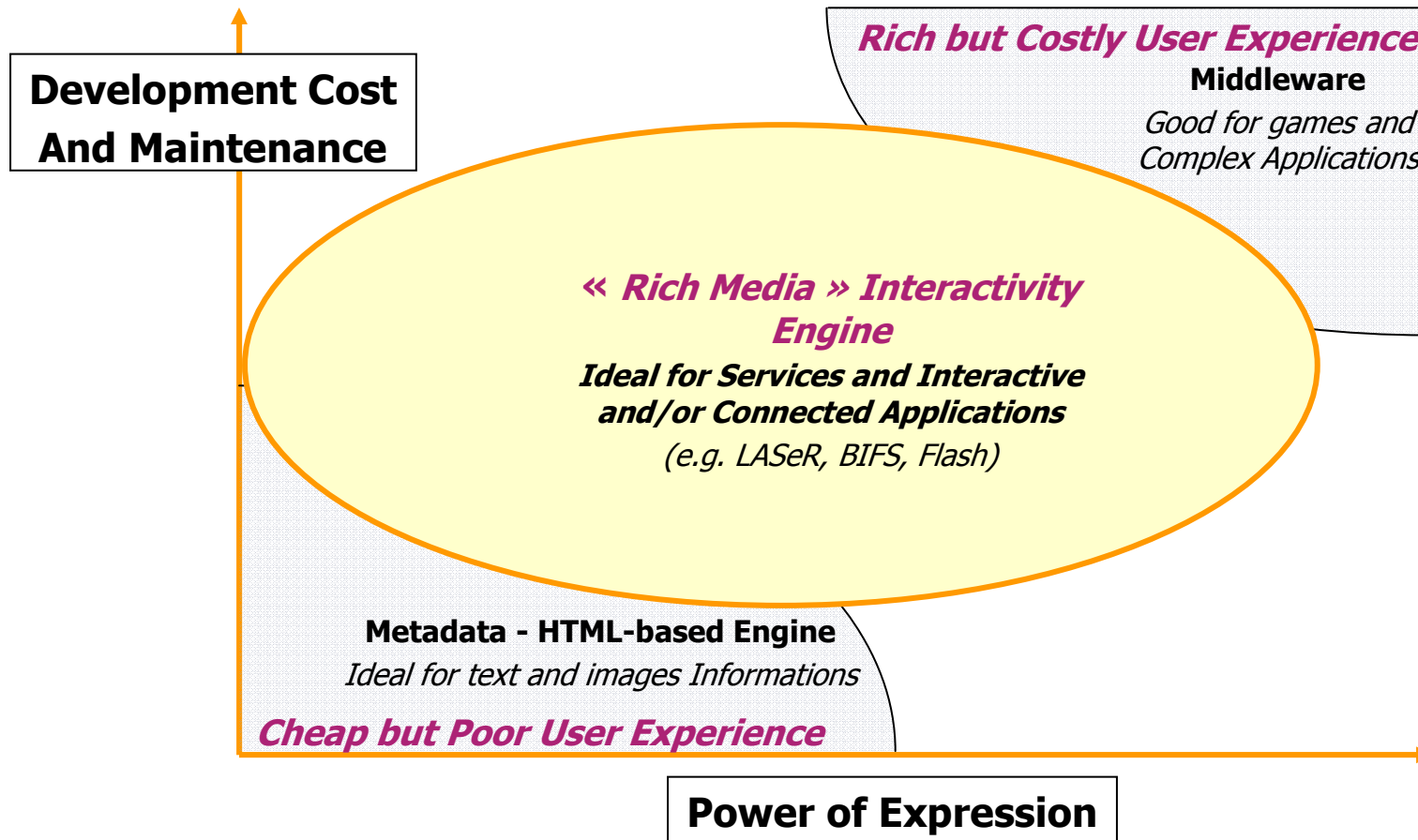
Merits for Standard Application Infrastructure

- A standard client across the various platforms
- Unified back-end systems to address all the various networks
- Creation of an Ecosystems of application developers





Paradigms for Application Infrastructure





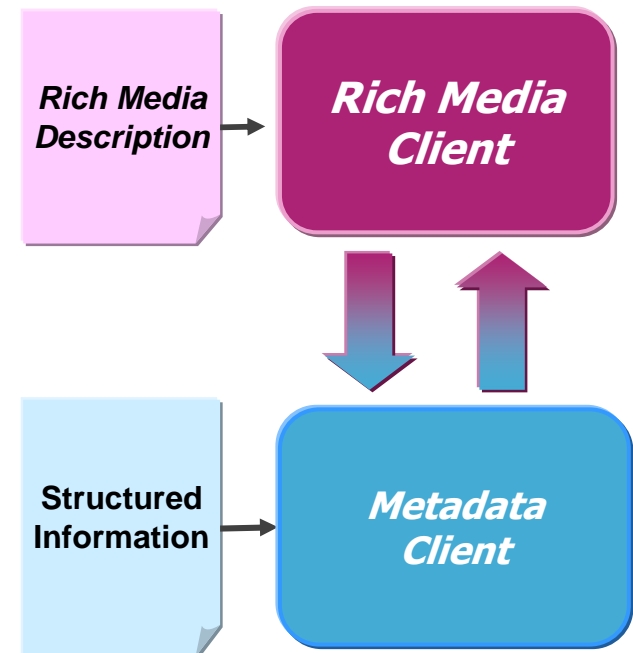
Resolving the Presentation Data / Metadata Paradigm

● Rich Media scene description format

- Only the « How » is specified (presentation).
No semantic layer. Deterministic rendering
 - How Local Interactions are handled
 - How Graphic Elements behave
 - How Structured Information are presented
 - How Interactive Elements can be inserted into the main UI
 - How and when Rich Media Interactive Resources can be retrieve
- E.g. : MPEG-LASER / MPEG-BIFS / 3GPP-DIMS / OMA-RME

● Metadata

- XML Data representing information from the Electronic Service Guide. Minimal EPG
- Only the « What » is specified (semantic).
No presentation layer.
- E.g. : MPEG-21 DID - DVB/IPDC – OMA/BCAST





WIM Exploration in MPEG

● **Format Issues**

- The ability to identify an entry level Presentation Information for presenting the Structured Information
- The ability to integrate Presentation Information in the Structured Information
- The ability to reference Presentation Information from the Structured Information

● **Interworking Between Presentation Data / Metadata**

- The ability for the Presentation Information to represent the spatial-temporal relationship as well as the audio-visual appearance of elements of Structured Information
- The ability for the Presentation Information to represent the processing relationship of elements of the Structured Information (e.g. sequential, parallel, ...)

● **Technical Approach**

- Develop a generic systems applicable to various formats
- Apply to latest MPEG technology to build complete systems
 - MPEG-21 DID
 - MPEG LAsER

WIM TV : An Enabler for Rich TV Services Across all Delivery Infrastructure

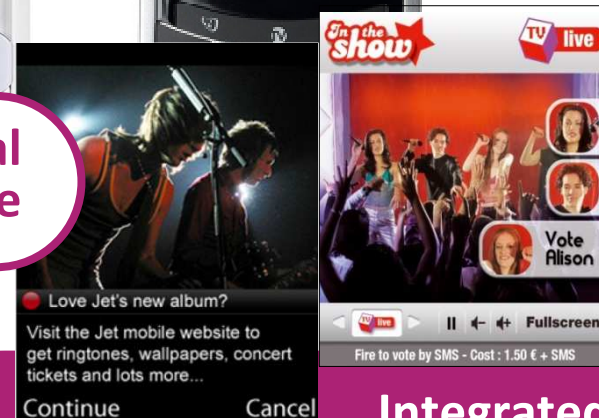
Unified Mobile TV (Broadcast – Mobile - IPTV)



Similar User Experience across all Devices



Fully Integrated & Graphical User Experience



Integrated Interactive Services