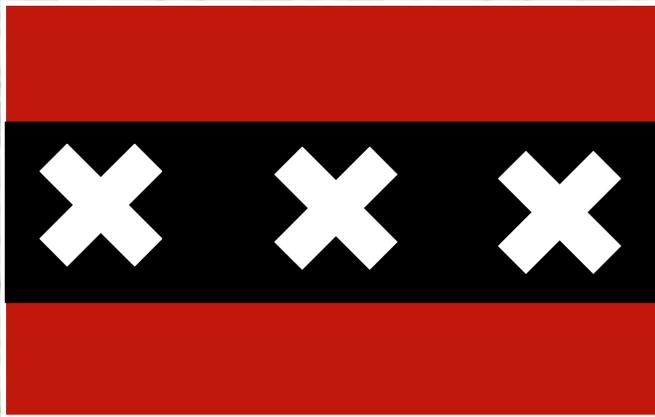


Is there a link between an  
armorial and semantic ?



# IBC 08 - Amsterdam

## Damned ... no semantic at all!

www.ibc.org is updated daily to provide the latest Conference information

Your key to a successful Conference: **C** Creative - For content creators **B** Business - For future business planners **T** Technical - For the industry's technical environment

Thursday 11 September

### Content access via the web: Quality of delivery, selection of content and evolution of services

New devices are now being used to deliver content to consumers. Although designed primarily for games, the high-powered graphics and video playback capabilities of games consoles, combined with internet connections, make them ideal devices for IPTV delivery. By showcasing the Microsoft Xbox, including a live demonstration we can answer questions such as: how will the television chain and traditional linear broadcaster react to this new era of TV? And what will be the role of IP in delivering IPTV to broadcast TV?

In considering the quality issues in IP systems delivering TV and other multimedia services, the sessions will question the impact of quality of service issues on the viewing experience and users' perception of the quality of delivery. Access to content via video portals is one thing, but new services allow users to take that content, personalise it and share it with third parties.

- 09:30 - 11:00 **New delivery techniques**  
Participants: Dave Brown, Manager, Service Provider Routing and Switching, Cisco Systems, United States  
**T** **FREE**
- 09:30 - 11:00 **Quality issues in IPTV, part one (in association with IEEE ITSS)**  
THEME: Content access via the web  
Chaired by: Yvan Wu, Principal Research Scientist, Communications Research Centre, Canada  
**T** **FREE**
- 10:00 - 13:00 **The transition to a new television experience - hosted by MPEG Industry Forum**  
**B** **FREE**
- 11:30 - 13:00 **Quality issues in IPTV, part two (in association with IEEE ITSS)**  
THEME: Content access via the web  
Chaired by: Yvan Wu, Principal Research Scientist, Communications Research Centre, Canada  
**T** **FREE**
- 11:30 - 13:00 **Reliability and quality of service**  
Chaired by: Paul Ertelmeier, Chief Technologist - Intellectual Property, Pace Pl, UK  
**T** **FREE**
- 14:00 - 15:30 **Content over the web - case studies**  
THEME: Content access via the web  
Chaired by: Paul Ertelmeier, Chief Technologist - Intellectual Property, Pace Pl, UK  
**B** **FREE**
- 14:00 - 17:30 **The transition to a new television experience - hosted by MPEG Industry Forum**  
**B** **FREE**
- 14:00 - 15:45 **IPTV and the networked home, part one**  
Chaired by: Dietrich Westerkamp, Director, Standards Co-ordination Research & Innovation, Thomson, Germany  
**T** **FREE**
- 16:00 - 17:30 **The future outlook for content over the web**  
THEME: Content access via the web  
Chaired by: Andrew Burke, CEO, Arino Communications Ltd, UK  
**B** **FREE**
- 16:00 - 17:45 **IPTV and the networked home, part two**  
Chaired by: Dietrich Westerkamp, Director, Standards Co-ordination Research & Innovation, Thomson, Germany  
**T** **FREE**

### IBC Business Briefings

Conceived to complement the peer-reviewed IBC Conference, the Business Briefings provide a unique opportunity for exhibiting companies to share their insights and experience in three of the fastest evolving fields covered by IBC: Mobile, IPTV and Digital Signage. These free-admission sessions attract IBC visitors with a need to understand how new distribution technologies are impacting the world of content creation, management and delivery.

The 2008 Business Briefing programme will open on Friday 12th September with Digital Signage - the use of IP-networked flat screens to distribute information, advertising, multimedia and TV content in retail environments, transport hubs and streets. To introduce this important new topic, Miya Knights, Editor of Retail Technology, will present an overview of the market before exploring some of the opportunities and practical challenges in a panel discussion with a leader in outdoor advertising and an expert in digital signage software. Other participants in the Digital Signage Business Briefings currently

Friday 12 September

### Future broadcast business: Shaping the product environment

The investment in today's technology follows a detailed study of everything from commercial strategy to audience attention, revenue streams to environmental awareness. Engineers are expected to deliver high quality service to broadcast channels for a high quality of experience, in new media channels.

As well as discussing the regulation's influence on the product environment, the day will also examine how the global product environment is influenced by the two most rapidly expanding economies, India and China. Both have experienced a huge growth of media economies through widely distributed consumer technologies and rapidly growing internal media consumption. The Olympics, Bollywood and expanding broadcast services have created further prospects for world suppliers, at the same time, products and services from both regions now successfully influence the world market.

A panel of experts will discuss and debate the media landscape, the marketplace in India and China and the issues directly affecting the IBC exhibitors.

- 09:30 - 11:00 **Technology and engineering: master or slave?**  
THEME: Future broadcast business  
Chaired by: Michael McEwen, Director, Media Asset Capital, Canada  
**T** **FREE**
- 09:30 - 11:00 **Business briefings - digital signage**  
**B** **FREE**
- 09:30 - 11:00 **Entertaining the mobile audience and rich media content, production & distribution to an interactive audience of one**  
Participants: Ken Blakeslee, Chairman, Webmobility Ventures, USA  
**T** **FREE**
- 11:30 - 13:00 **IBC conference keynote 2008**  
THEME: Future broadcast business  
**T** **FREE**
- 11:30 - 13:00 **Business briefings - digital signage**  
**B** **FREE**
- 11:30 - 13:00 **Who has who is a spy: social media networking and the democratisation of broadcasting**  
Chaired by: Andy Davy, Controller, Portfolio Management, Future Media and Technology, SBC  
**T** **FREE**
- 14:00 - 15:30 **Rapidly emerging economies - India**  
THEME: Future broadcast business  
Chaired by: Farook Balsara, Partner, Ernst & Young PwL Ltd, India  
**B** **FREE**
- 14:00 - 15:30 **Business briefings - digital signage**  
**B** **FREE**
- 14:00 - 15:45 **News and sport**  
Chaired by: Tiffany Hall, BBC  
**T** **FREE**
- 16:00 - 17:30 **Rapidly emerging economies - China**  
THEME: Future broadcast business  
Chaired by: John Lee, Consultant and Technologist, Hitech, UK  
**B** **FREE**
- 16:00 - 17:30 **Business briefings - digital signage**  
**B** **FREE**
- 16:00 - 17:30 **Radio**  
Chaired by: Edward De Bono, Freelance Audio Specialist, UK  
**T** **FREE**

Include Sony and Panasonic.

On Saturday, the Business Briefings focus switches to IPTV and will include updates on standards developments from the Open IPTV Forum as well as insights from Edgeware and Minibev Interactive. Dolby will discuss the importance of audio quality to this new distribution channel.

Qualcomm MediaFlo and Nagravision will explore business models for broadcast TV and video distribution to mobiles on Sunday 14th September.

For the latest updates on the Business Briefing programme, visit:

www.ibc.org



Saturday 13 September

### The digital dividend: HD, mobile, broadband or new media?

As the process of shaping the future of media for the next 50 years begins: content providers, regulators and all those who care about our society need to understand the options and the technologies available as well as the human dimensions. We have come along way from an age where technology limits what we can do, where we must decide what kind of world we need and want to live in. How will the fate of terrestrial spectrum affect the future of the media world?

Do we want wireless broadband or broadcast? HD, standard definition, digital radio or mobile? What other new concepts are on the horizon? How far will today's broadcasters be willing to go to dominate media in the face of wireless internet? And what is the world market's adaptation to digital dividend?

IBC's theme day will probe all these questions, issues faced by digital dividend through business, technology and content sessions.

- 08:30 - 09:15 **The beginner's (read manager's) guide to spectrum management**  
THEME: The digital dividend  
Chaired by: Mark Thomas, Director, European Radiocommunications Office, Denmark  
**T** **FREE**
- 09:30 - 11:00 **The great spectrum land rush**  
**T** **FREE**
- 09:30 - 11:00 **Business briefings**  
**B** **FREE**
- 10:00 - 11:00 **What caught my eye: low cost capture and media transmission**  
Chaired by: David Dawson-Pick, DDP, UK  
**T** **FREE**
- 11:30 - 13:00 **Which services will we want enough to be willing to pay for?**  
THEME: The digital dividend  
Chaired by: Jonathan Nikrakis, Critical Distance, Netherlands  
**T** **FREE**
- 11:30 - 13:00 **Business briefings**  
**B** **FREE**
- 11:30 - 13:00 **Masterclass - Out on the dynamic range - why hasn't digital killed off film yet?**  
Chaired by: George Jarrett, Journalist, Writer & Consultant  
**C** **FREE**
- 14:00 - 15:30 **Great ideas for the digital dividend - but how are we going to pay for it?**  
THEME: The digital dividend  
Chaired by: Greg Benetrop, OFCOM, UK  
**T** **FREE**
- 14:00 - 15:30 **Business briefings**  
**B** **FREE**
- 16:00 - 17:30 **Production matters: onwards and upwards**  
Chaired by: Konstantin Glasman, Head of Video Systems Department, St.Petersburg State University of Film and Television, Russia  
**T** **FREE**
- 16:00 - 17:30 **Content mania: who will feed the digital dividend with programmes?**  
THEME: The digital dividend  
Chaired by: David Wood, Head of Emerging Media, EBU, Switzerland  
**T** **FREE**
- 16:00 - 17:30 **Business briefings**  
**B** **FREE**
- 16:00 - 17:45 **Assets and workflows**  
Chaired by: Gerhard Stoll, IRT  
**T** **FREE**

Sunday 14 September

### Content production: Technology, creativity and business in an era of headlong change

The broadcast production industry is experiencing a rapid transformation in most of its areas with new technologies and various new methods affecting the entire transition. By concentrating on those areas where the impact of change is so heightened, the real-world issues and spotlight proven strategies, not just for coping with change but for exploiting it will be highlighted.

The theme day will also examine the image of broadcast engineering and IT technologies at odds with each other, the issues surrounding the availability of new delivery platforms and how broadcasters can further administer and exploit the divergent opportunities of a world. Which puts together on-demand with live content, mobile delivery with HD, questioning where this leaves the business of content production.

- 09:30 - 11:00 **Creativity in the digital age**  
THEME: Content production  
Chaired by: Gavin Schultz, Aztec, USA  
**T** **FREE**
- 09:30 - 11:00 **Business briefings**  
**B** **FREE**
- 10:00 - 11:00 **What caught my eye: TV, internet, mobile - the real impact**  
Chaired by: David Dawson-Pick, DDP, UK  
**T** **FREE**
- 11:30 - 13:00 **Tagless infrastructures**  
THEME: Content production  
Chaired by: Rob Ten Siethoff  
**T** **FREE**
- 11:30 - 13:00 **Business briefings**  
**B** **FREE**
- 11:30 - 13:00 **Masterclass: a production Language of 3D**  
Chaired by: George Jarrett, Journalist, Writer & Consultant  
**C** **FREE**
- 14:00 - 15:30 **Are we live?**  
THEME: Content production  
Chaired by: John Lee, Consultant and Technologist, Hitech, UK  
**T** **FREE**
- 14:00 - 15:30 **Hollywood meets Bollywood**  
Participants: Patrick Von Sychowski, Adlabs Digital Cinema And Anil Gupta, Prime Focus Crest  
**B** **FREE**
- 14:00 - 15:30 **Business briefings**  
**B** **FREE**
- 14:00 - 15:45 **The cutting edge, part one**  
Chaired by: Nicolas Lodge, Chief Executive, ProVision Communications, UK  
**T** **FREE**
- 16:00 - 17:30 **Fast forward to the future**  
THEME: Content production  
Chaired by: Adrian Scott, Pro-Bel, UK  
**T** **FREE**
- 16:00 - 16:00 **Digital cinema post production workshop (in association with EDC/SMPTE)**  
Chaired by: David Monk, EDC, UK  
**T** **FREE**
- 16:00 - 17:30 **The cutting edge, part two**  
Chaired by: Nicolas Lodge, Chief Executive, ProVision Communications, UK  
**T** **FREE**

Monday 15 September

### New dimensions for the big screen

By focusing on stereoscopic 3D movie making and presentations, you can learn more about the new digital technologies in cameras, post-production and projection systems making it possible for stereo 3D to become the new dimension to the cinema experience.

The first Digital 3D movies earned high revenues at the box office introducing important commercial opportunities for the movie industry. With a panel of successful innovators and leaders to the industry, the IBC Big Screen Cinema environment will publicise their experiences and philosophies in a 'show and tell' where they will face a panel of questions on whether or not the new systems can deliver the projected returns and if they can widen themselves from animated productions to further enhance mainstream storytelling.

- 09:30 - 11:00 **Open standards, Technology & Implementation (in association with DVB)**  
Chaired by: Walter Weigel, Director-General, ETSI, France  
**T** **FREE**
- 09:30 - 11:00 **Back to the future: archiving and restoration (in association with FIAT)**  
Chaired by: Sara Madsen, FIAT, UK  
**T** **FREE**
- 09:30 - 11:00 **Capturing and creating stereoscopic 3D content**  
THEME: New dimensions for the big screen  
Chaired by: Howard Lutz, Vice President, Technology, The Walt Disney Company, USA  
**C** **FREE**
- 10:00 - 11:00 **What caught my eye: workflow revolutions**  
Chaired by: David Dawson-Pick, DDP, UK  
**C** **FREE**
- 11:30 - 13:00 **Putting it all together**  
THEME: New dimensions for the big screen  
Chaired by: Wendy Aylworth, Warner Bros & Chairman DC28, SMPTE, USA  
**T** **FREE**
- 11:30 - 13:00 **Open standards, Technology & Implementation (in association with DVB)**  
Chaired by: Walter Weigel, Director-General, ETSI, France  
**T** **FREE**
- 11:30 - 13:00 **Digital delivery: getting content to the consumer - IET tutorial in association with WorldDMB**  
Chaired by: Leonardo Changlione, Chief Executive Officer, CEDEO srl, Italy  
**T** **FREE**
- 12:00 - 13:00 **Personalisation in a broadband world - advertising you want to watch**  
Participants: Craig Dwyer, temin.co.uk  
**C** **FREE**
- 14:00 - 15:30 **The presentation alternatives, and considerations for exhibitors**  
THEME: New dimensions for the big screen  
Chaired by: Nico Simon, CEO, Utopia Group, Luxembourg  
**B** **FREE**
- 14:00 - 16:00 **Images of tomorrow - will the world demand more than HD?**  
Chaired by: David Wood, Head of Emerging Media, EBU, Switzerland  
**T** **FREE**
- 14:00 - 17:00 **Challenges for cable in the broadband era**  
Chaired by: Axel Verbeke, Managing Director, CAI Westland, The Netherlands  
**T** **FREE**
- 14:00 - 15:45 **Environmentally friendly or the enemy in disguise?**  
**B** **FREE**
- 16:00 - 17:30 **Unique to cinema - but for how long?**  
THEME: New dimensions for the big screen  
Chaired by: Bill Foster, Senior Technology Consultant, Futuresource Consulting, UK  
**B** **FREE**
- 16:00 - 17:30 **Middle East & North Africa - the growing market**  
**B** **FREE**

Tuesday 16 September

- 10:00 - 13:00 **EDCF open meeting**  
**B** **FREE**  
Chaired by: Peter Miller, HDCC





# INTEROPERABILITY

## **PERSISTENCE** (Interoperability in time)

The ability of a technology system to ensure to the **citizen of today** that the **citizen of tomorrow** will be capable of **enjoying** the current cultural, sociological ... **assets**.

Abdelaziz Habid (*Memory of the World*) UNESCO

## **INTERCHANGE** (Interoperability in space)

The ability of a technology system to ensure to the **citizen of here** that the **citizen of there** will be capable of **enjoying** the current cultural, sociological ... **assets**.

[*derived from the definition of the 'PERSISTENCE' by Abdelaziz Habid (Memory of the World) UNESCO*]

# EMWRT III : the factory is SEMANTIC !!!

1. Asset Management & Wrapping
2. An acquisition wrapping example
3. In search of interoperability and semantics standards "State of Play » through four categories of players
  - DAM (Digital Asset Management) vendors
  - Broadcasters, archives or press agencies (developping bespoke DAM applications)
  - Aggregators (file transfer services providers or software vendors)
  - Metadata integrators ("plumbers")
4. A global view from the semantic architecture side
5. Description of a user case
6. Annexe

# EMWRT III : the factory is SEMANTIC !!!

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## 2. An acquisition wrapping example

## 3. In search of interoperability and semantics standards "State of Play » through four categories of players

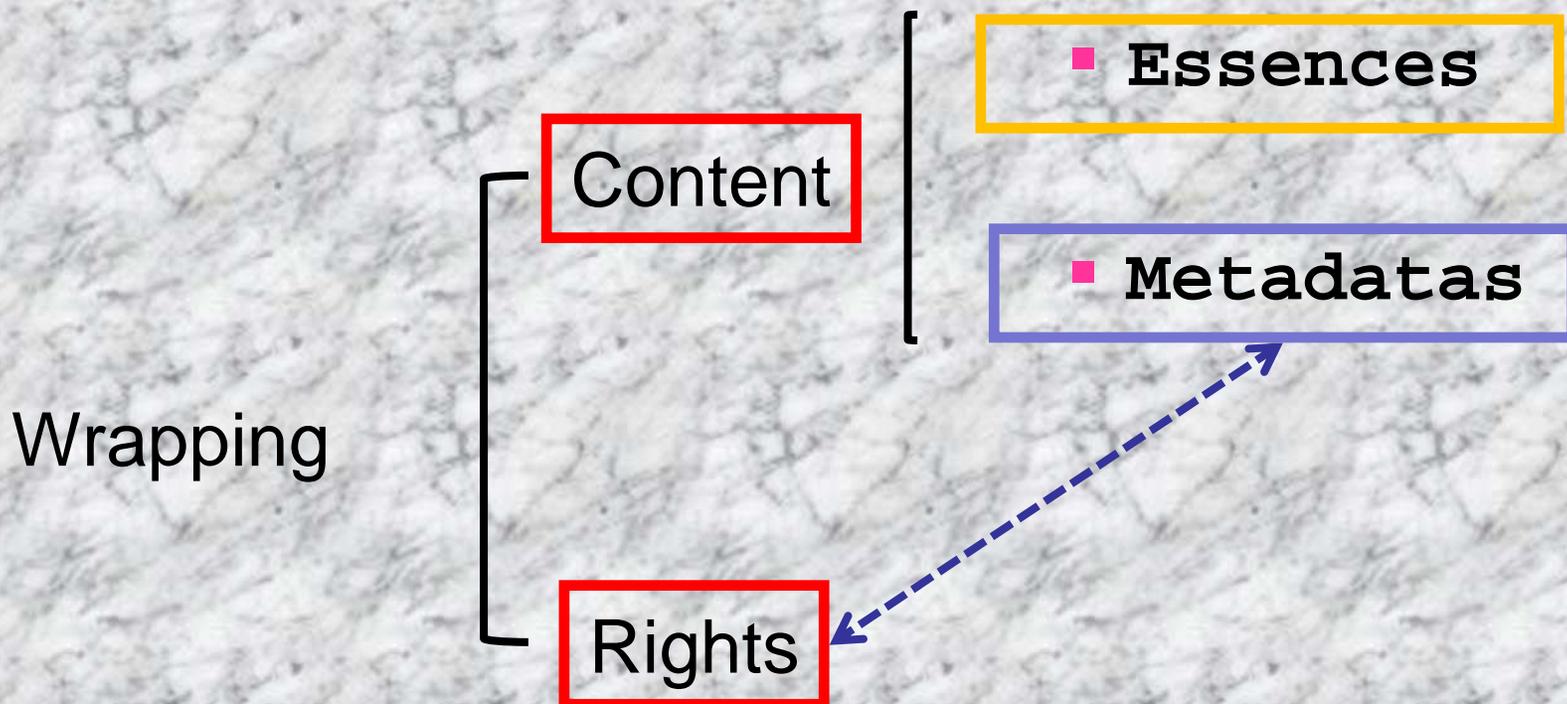
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# Global Digital Asset Management : Content (Essences+ Metadata and Rights)



# Concret models for descriptive information



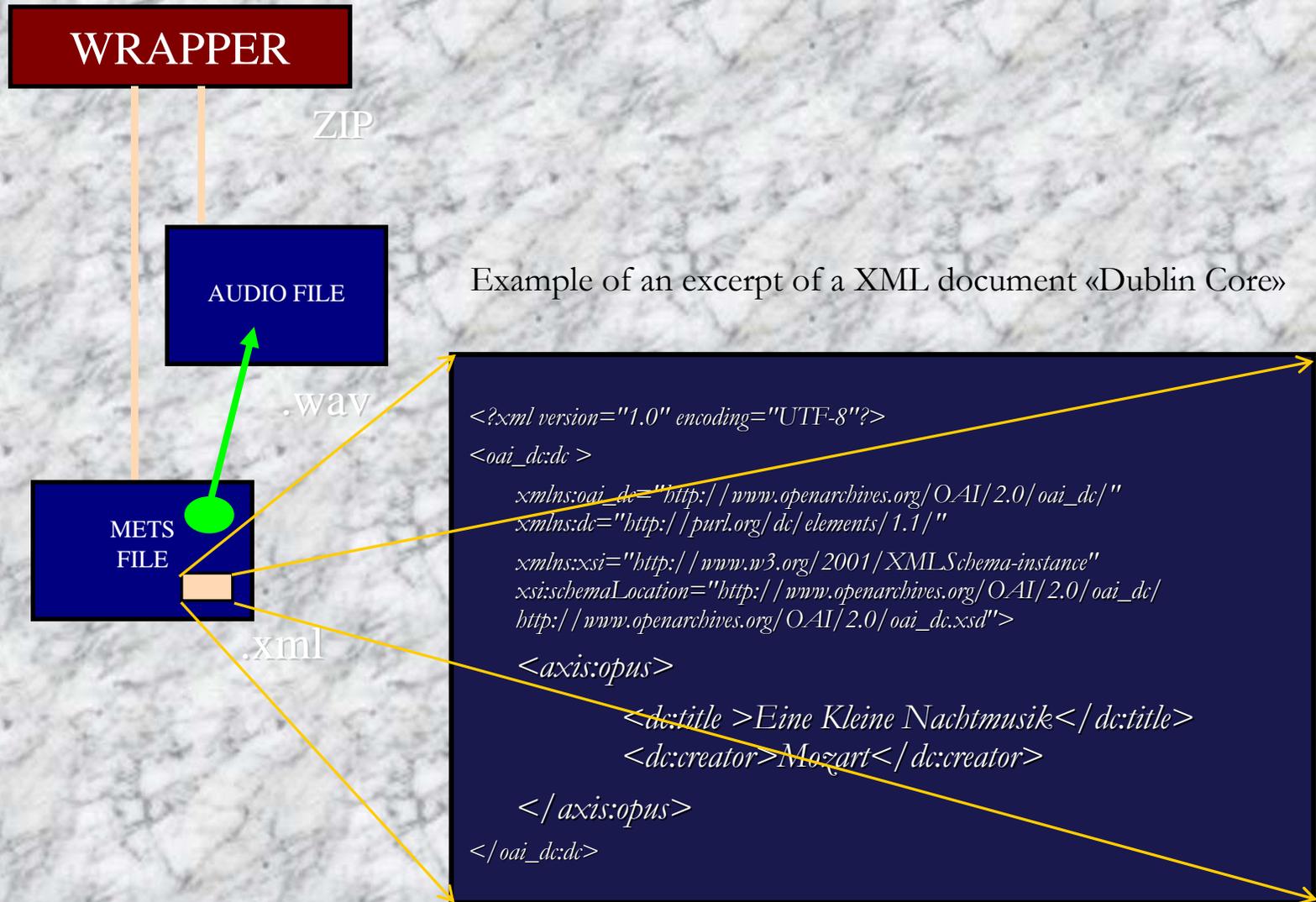
: [www.prestospace.org](http://www.prestospace.org)

1. **Ontology and Semantic : FRBR (Functional Requirements for Bibliographic Records – IFLA)**
2. **Actual Solutions : AAF / MXF / SMPTE / P-Meta ... (pragmatic but ..)**
3. **Solutions for the representation of metadata, structure and synchronisation : XML / XSD / DTD / SMIL (Synchronized Multimedia Integration Language) / ...**
4. **Specific models : SMEF (BBC) / RAI / FARAO (ORF) / INA / IMMIX (Netherlands) / DR-M / MPEG-7/ MPEG 21 (www.enthrone.org), ...**
5. **Wrappers : MXF / METS / PK-ZIP / SPK-ZIP / PDF/A**
6. **Ontology : Dublin Core Metadata Initiative (DCMI) / RDF / MARC (Machine-Readable Cataloging),**

**AXIS : Acquisition, eXchange, Indexation, Structuration (based on OAIS)**

Prestospace aims to prepare the way for preservation factories providing affordable services to all kinds of collection custodians in order to manage and to allow access to their assets

# The usual "Flat model" approach: one level wrapping



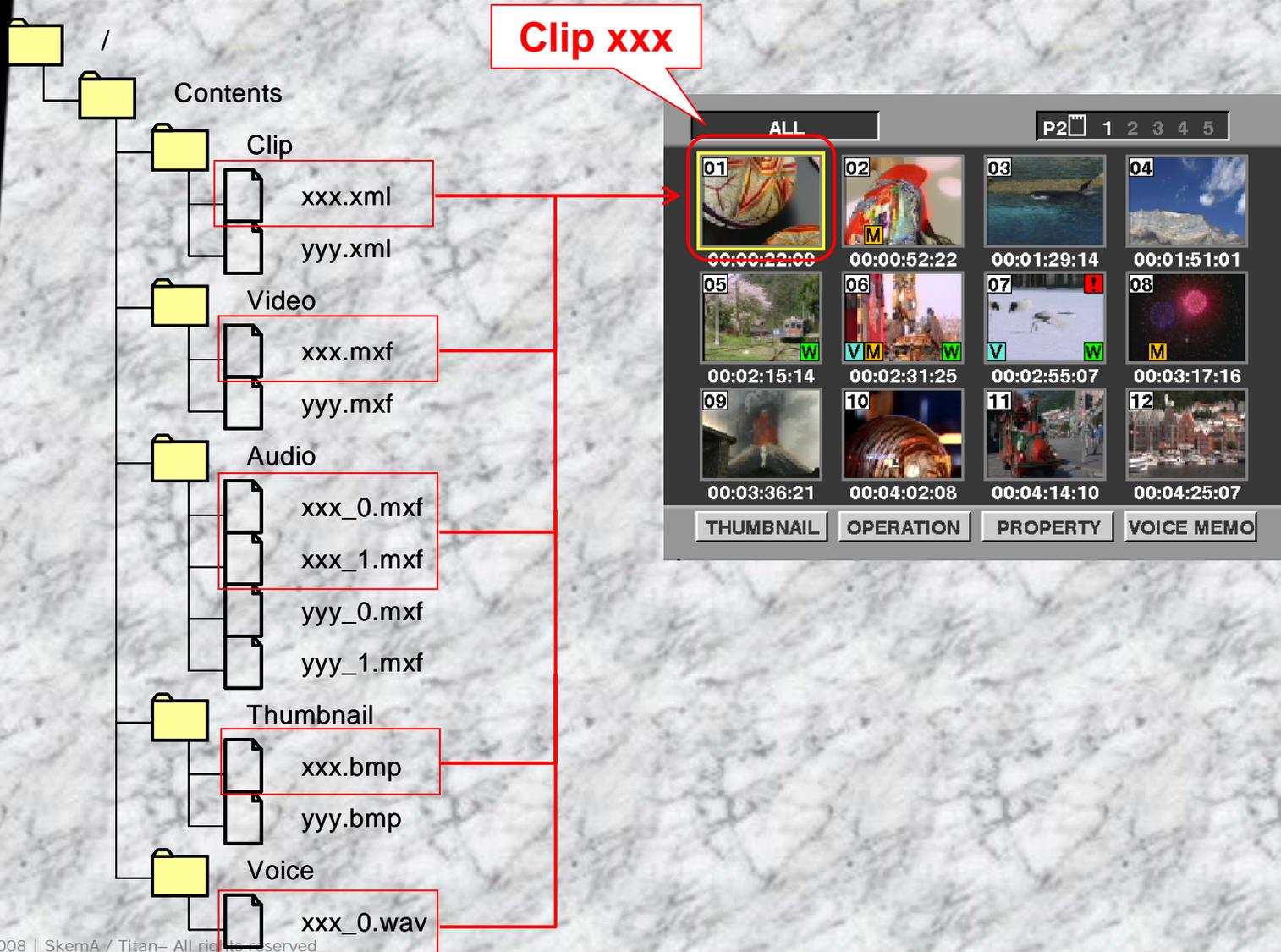
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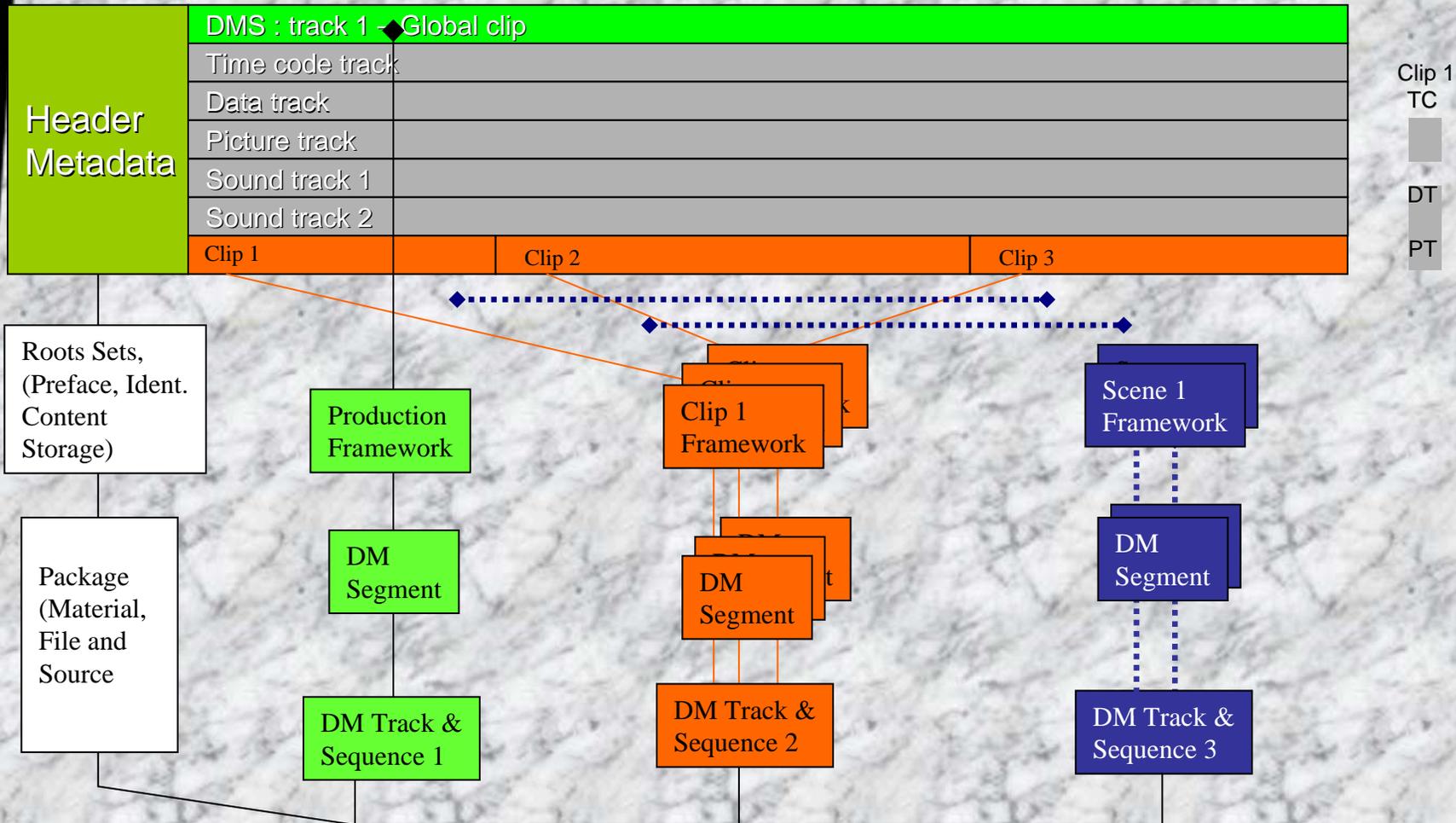


# Basic File Structure for the P2 Format

< Example >



# MXF - DMS 1 : Descriptive Metadata Framework and their relationship with an MXF file body



This figure illustrates the structure of the Descriptive Metadata frameworks contained in the header metadata and how it relates to the content of the MXF file body.

# P2 Panasonic MXF Metadata workflow :



1) Preparation of metadata  
by P2 viewer / CMS / other application



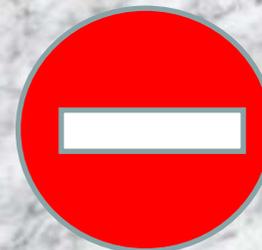
2) Metadata upload



3) Shooting



4) Editing



BMS - DAM - MAM - WMS - CMS - RMI ....

# SEMANTIC

BMS (Business Applications) : Resource Management (ERP), Traffic systems (OTA) , Billing, Accounting, Reconciliation, Marketing, Inventory management, NRCS, DRM, ...

# DAM

CMS (Content Management System)  
Manipulation of essences & Metadata)

WMS (Workflow Management System) : a system that defines and executes workflow process control using application and infrastructure

# MAM

Device control (RMI)  
Near real-time resource managements

Import/Export  
Ingest

Audio/Video devices

Editing ONL/OFL

Graphics ...

Digital library HSM, ...

Ferme de calcul

Automation

# Exploitation

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# Objective of a future benchmark study « Interoperability State of Play »

- In search of interoperability (interchange and persistence): through synchronization languages and protocols
  - Among 4 categories of players
- To estimate level of interoperability in the video industry?
- To identify breakthrough of interoperability among users and key success factors?
- To identify successful leverage on vendors

*Work in progress*

# VERY LIMITED LEVEL OF INTEROPERABILITY

- PROPRIETARY PRACTICES ARE DOMINANT

	Critical interoperability resources	MAM vendors	Broadcasters	Press Agencies	Archives	Agregators	Glue services
PROPRIETARY	Active X version	Producers for NRCS and editing app.	Users	Users	Users		Producers for NRCS and editing app.
	Documented/supported API	Producer	Users	Users	Users		Users
	Export mechanism on database	Producer	Users	Users	Users		Users
	Import mechanism on database	Producer	Users	Users	Users		Users
	Proprietary exchange protocol	Producer	Users	Producer	Users	Producer	Producer
NON PROPRIETARY	Exchange protocol (MOS)	Producer	Users				Producers
	Video and audio exchange format (MXF)	Users	Users	Users	Users	Users	Users
	Metadata exchange language (XML)	Producers	Producer/user	Producer/user	Producer/user	Producer/user	Producer
	Taxonomy and data dictionary		Producer	Producer	Producer	Producer	
	Thesaurus	SGT sell INA's thesaurus by default	User in news (3%)	Producer	Producer		
	Semantic exchange language (RDF)						
Ontology exchange language (OWL)							

	Frequent
	Bare
	Very bare
	Never

*Work in progress*

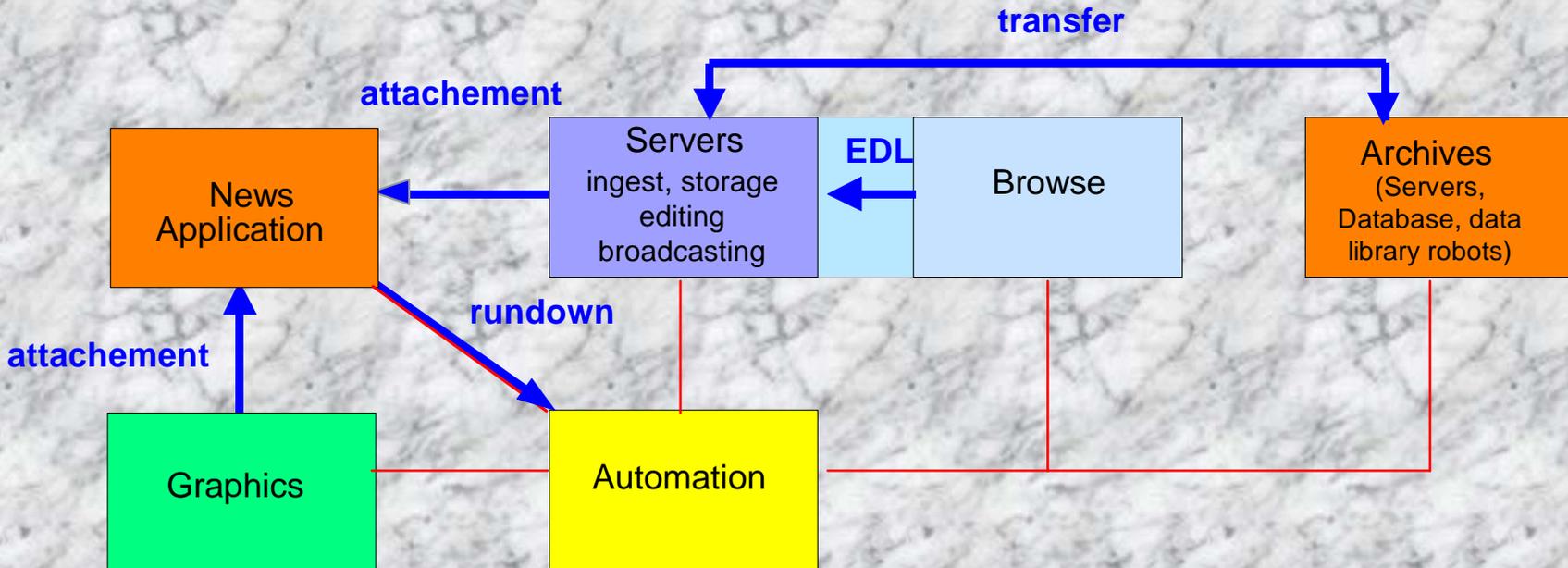
## DRIVING FORCES

- **BROADCASTERS LONG FOR INTERCHANGE BECAUSE PRODUCTION AND DISTRIBUTION CENTERS ARE HUGE MULTIVENDORS INTEGRATION PROJECTS**
  - No longer « one stop shop » vendor
  - Broadcasters « Best of Breed » strategies
  - + Real time interfaces needed

*Work in progress*

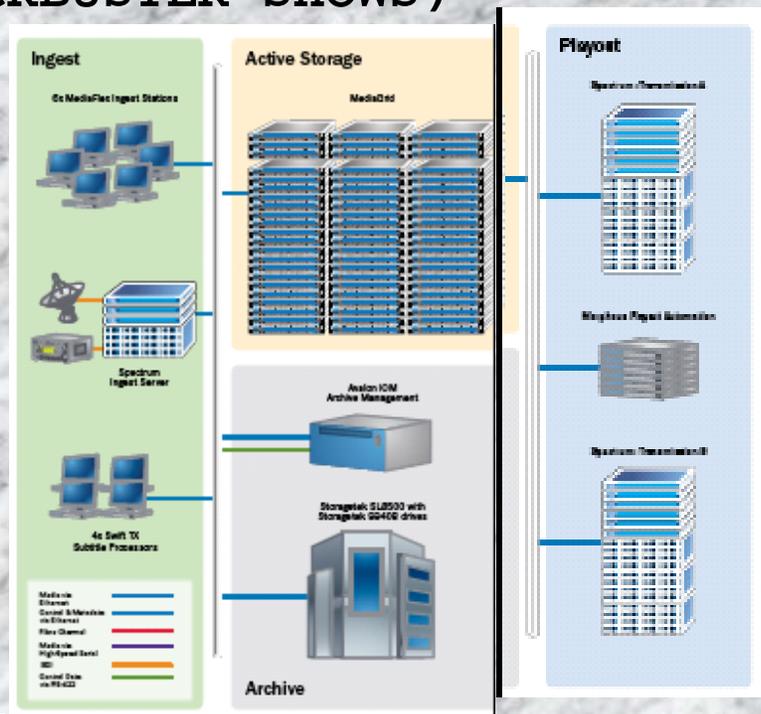
# DRIVING FORCES

## A TYPICAL NEWSROOM INSTALLATION : FROM 10 TO 20 VENDORS



# DRIVING FORCES

- **BROADCASTERS CARE LESS FOR PERSISTENCE, EVEN IF...**
  - INCREASE IN ARCHIVE REUTILIZATION
  - INCREASE IN STORAGE CAPACITY
  - SOME LONG LASTING CONTENT (OBITUARIES, BLOCKBUSTER SHOWS)



Turner 's new playout center in London

## DRIVING FORCES

- **ARCHIVES AND PRESS AGENCIES CARE FOR PERSISTENCE AND INTERCHANGE**
  - **ARCHIVE ARE LONG TERM (PRESENTLY 70 YEARS LEGACY FOR RADIO AND 50 YEARS FOR TV)**
  - **200 FOOTAGE COMPANIES IN THE WORLD SELLING ARCHIVE MATERIALS (B2B)**
    - Cinema (extracts)
    - TV (extracts + full programs)
    - Advertisement (extracts)
    - Museum and heritage center (extracts)
  - **INTERNET GIVES A SECOND CHANCE TO ARCHIVE PROFITABILITY WITH B2C**
  - **SUBSIDIES FOR AUDIOVISUAL HERITAGE**

## « NEIN SAGER » FORCES

- VENDORS ARE TRADITIONALLY RELUCTANT TO OPEN THEIR SOLUTIONS (TO SELL « THE BIG PICTURE » ?)
- VENDORS ARE MORE AND MORE SHORT TERM ORIENTED IN A SITUATION WHERE DEVELOPMENT COSTS INCREASE (SOFTWARE)
- SOME INSIDE BROADCASTERS PREFER TO PUT ALL POSSIBLE MONEY IN FRESH NEW PROGRAMS

# INTEROPERABILITY BREAKTHROUGHS

- To identify breakthroughs in interoperability among users and key success factors?
  - Examples : CNN/Turner precising MXF
    - Which key success factor ? SMPTE? Clyde Smith?  
Existence of tools such as XML & MXF
  - Among other ources: partnership between broadcasters and archive service providers working on metadata

Work in progress

Work in progress

## LEVERAGE ON VENDORS

- To identify successful leverage on vendors
- Example1: SVT forced in 2001 AVID to develop a « after-editing media browse version » (with Marquis's help)
  - Condition for buying 11 installations (Stockholm + 10 regions)
- Example2: All software are born somewhere. Partnerships between broadcasters and vendors
  - Inews at CNN, AP-ENPS at BBC, S4M at RTL+, ...
- Even if the broadcast market has lost a lot of its attraction power toward vendors
  - Yesterday: Broadcast market → Broadcast product → Consumer market
  - Nowadays: Consumer market → components → Broadcast product

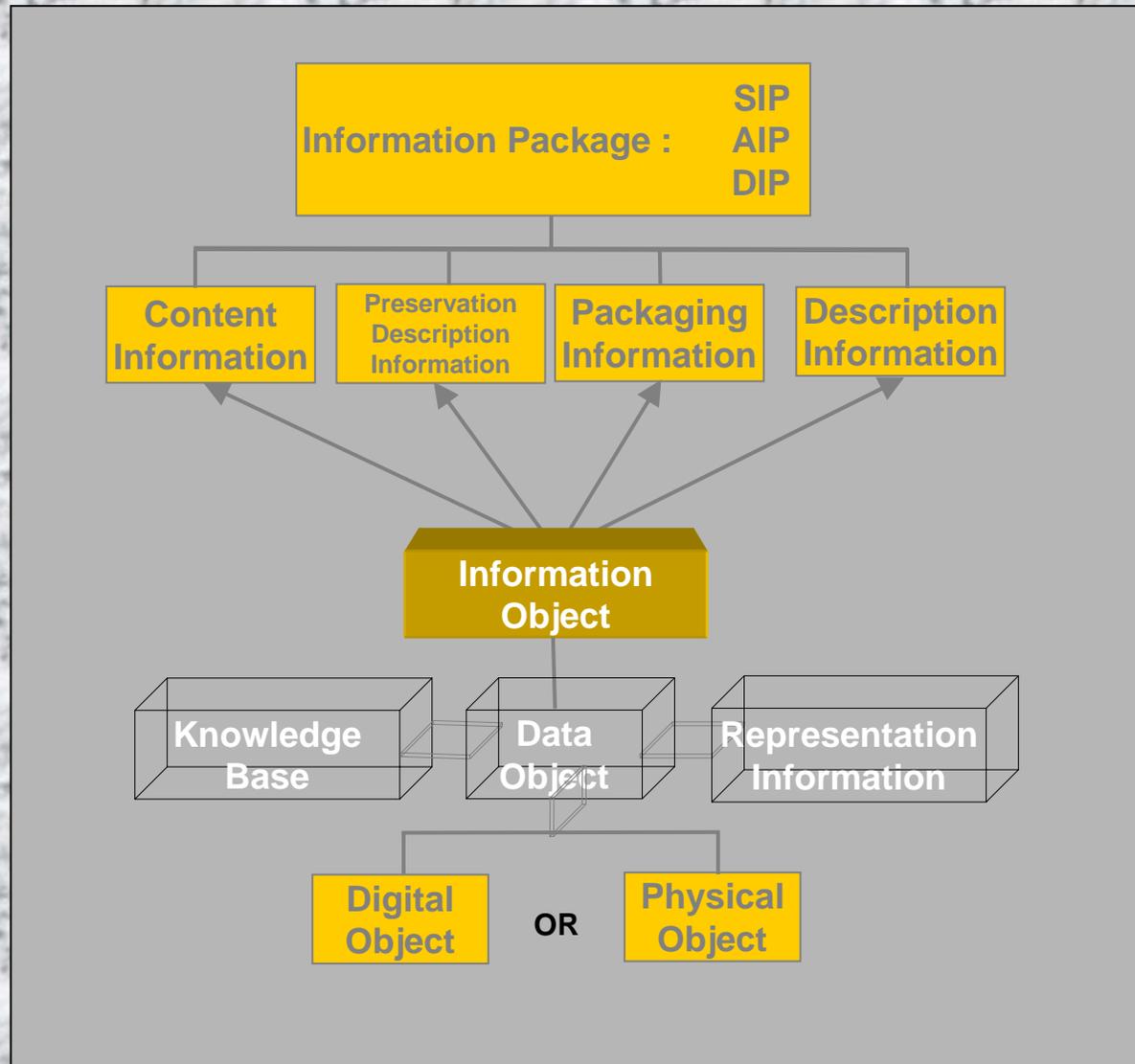
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# Limitations of Current Knowledge Management Technologies

- **Searching information:** *keyword-based search engines*
- **Extracting information :** human involvement necessary for browsing, retrieving, interpreting, combining, ...
- **Maintaining information :** inconsistencies in terminology, outdated information.
- **Viewing information :** impossible to define views on Web knowledge

# OAIS: Data reference model (ISO-14721)



- PDI:**
- Reference
  - Context
  - Provenance
  - Fixity

# The information object : the relation between datas and semantic

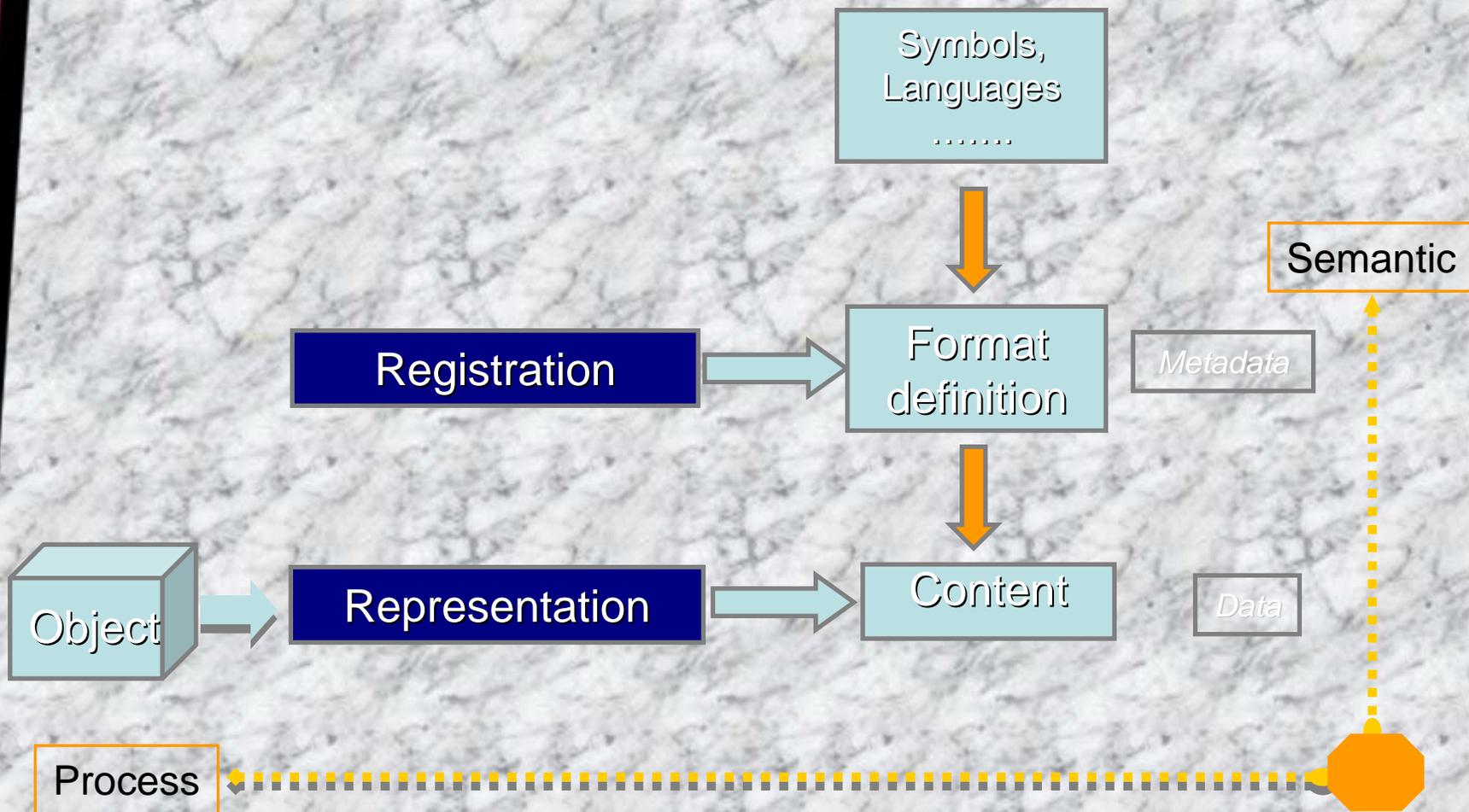
**Ontology**

**Semantic**

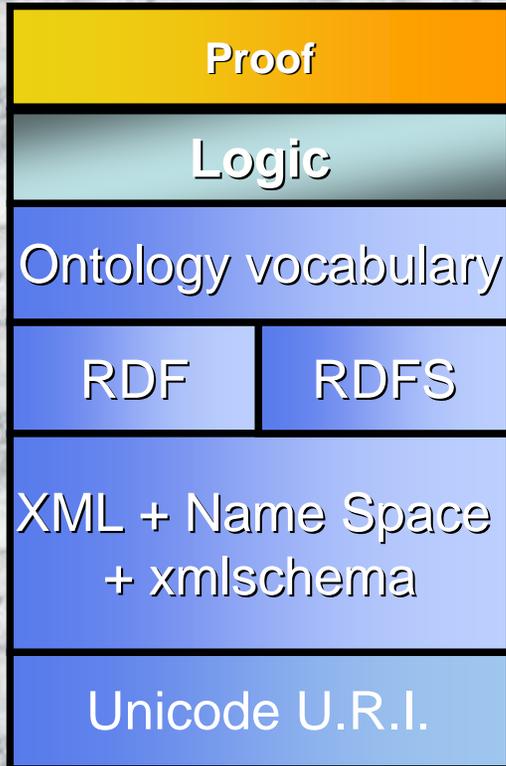
**Metadata**

111001101110101001100110101011010101010110101010100110101001100110011011010101010111101010101000100101110  
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01011101010101010101011010101010111011010110101101010101010110111011000011010101010101011010

Modeling of the "Assets" and of their presentation  
such as to obtain their powerful representation =  
SEMANTIC

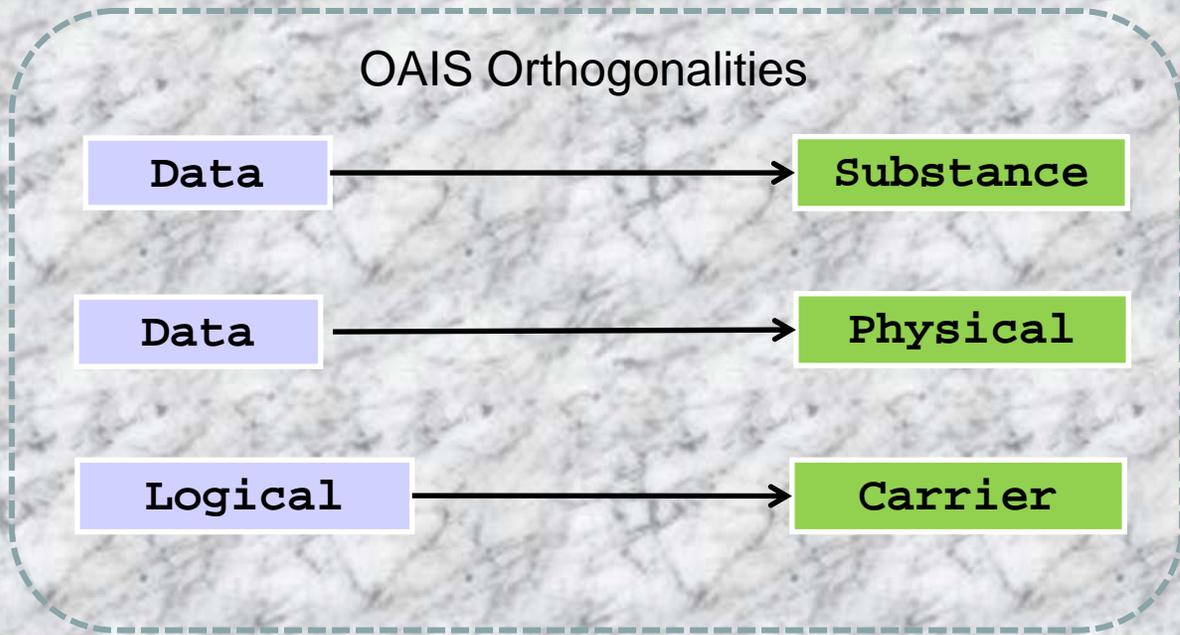
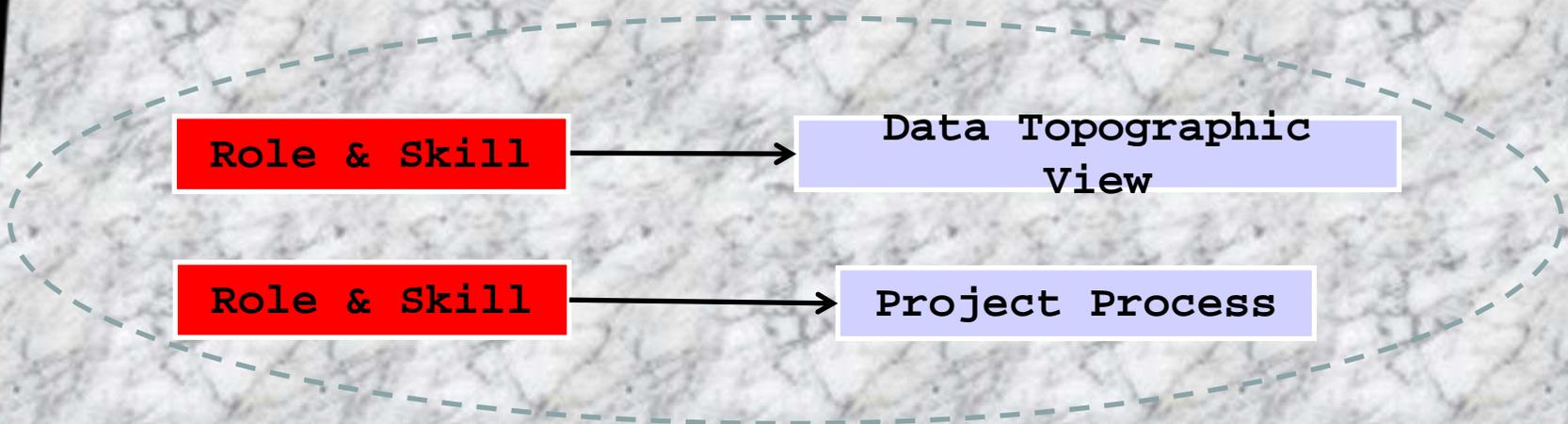


# Web Semantic Architecture

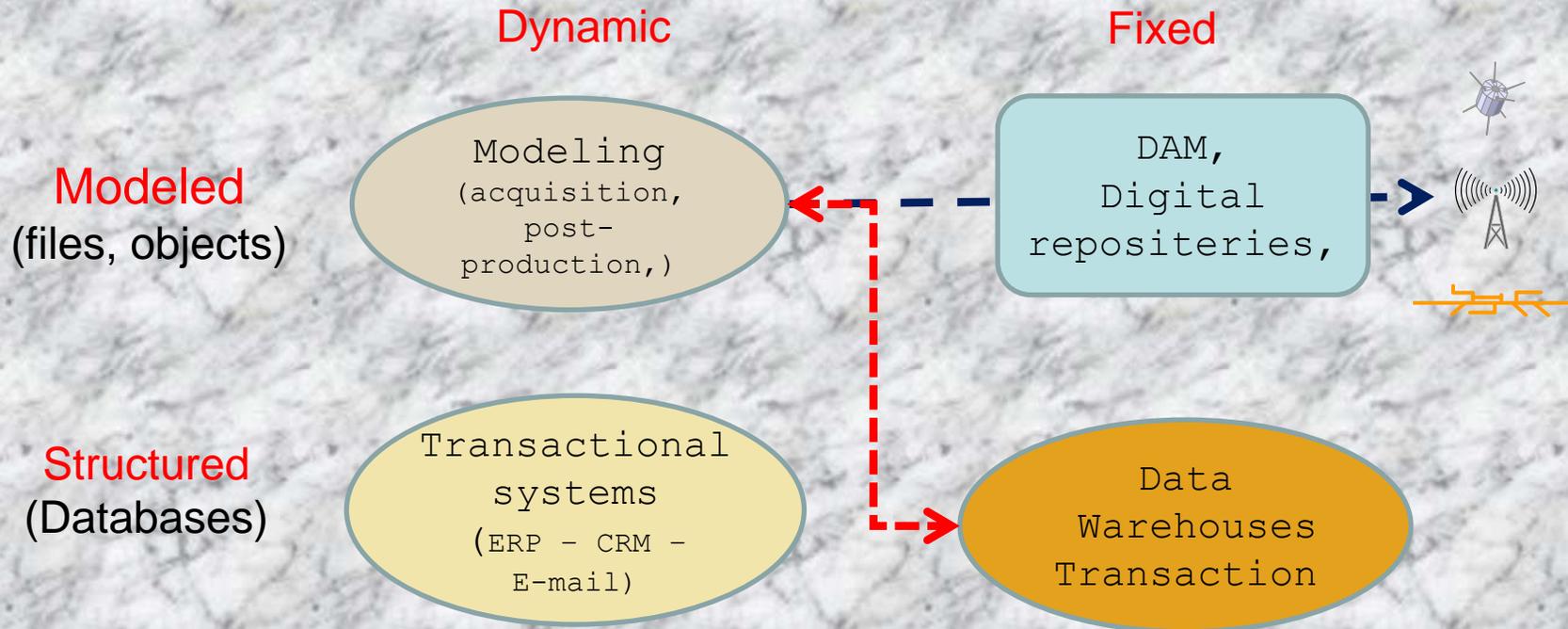


- Unicode : a comprehension of encoding on every computers.
- URI : Universal Resource Identifier (identify a resource)
- XML permits abstracts expressions, sharable between different computers in different locations.
- NS : Name Space and schemas which (define a set of vocabulary)
- RDF (Resource Description Framework) is a way to express a statement between a ressource and a property
- OWL allow us to declare some refined relationship between statement and properties (Inverse, equivalent, restrictions, ...)
- The process of asserting statements and rules, then starting a step of inducing and deducing new assertions
- In a context of web analysis, this is a way to prepare data for the future : AXIS is a proposal to do so

# A Semantic Entity Wrapper ?

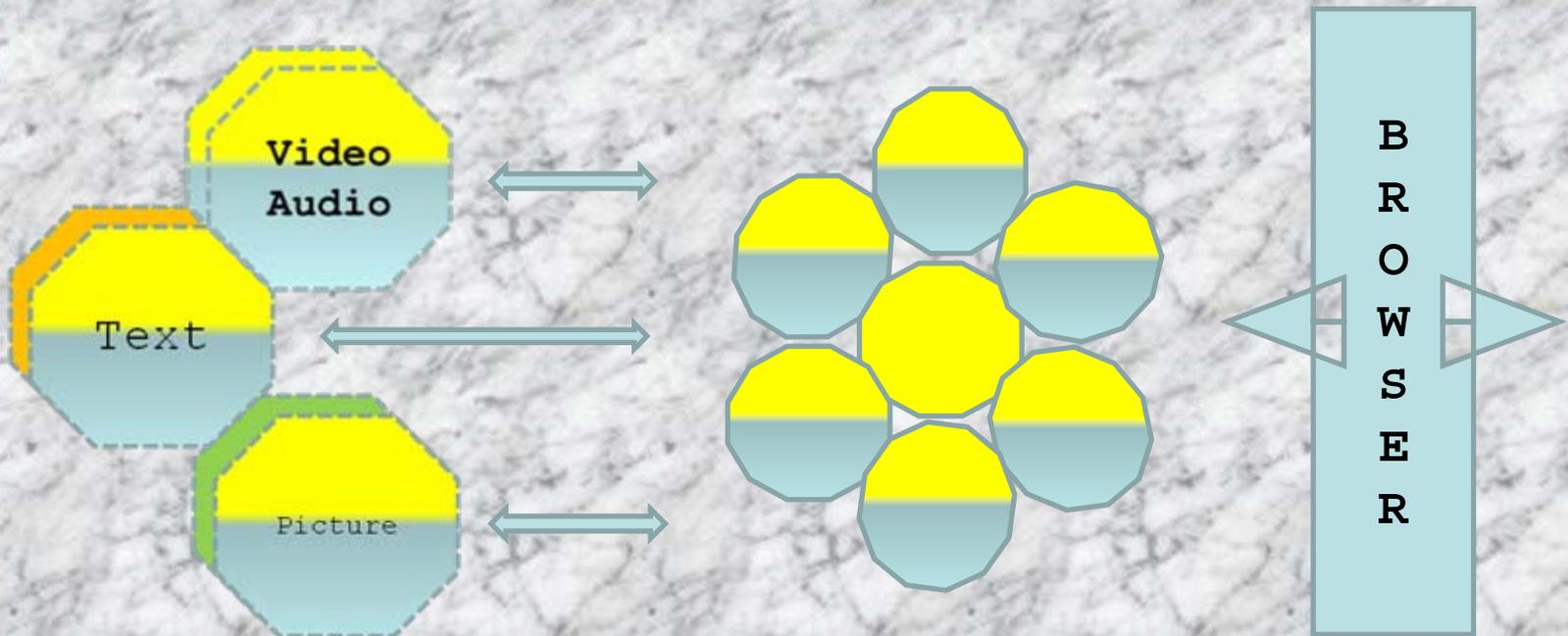


# Fixed Assets: Organizing operations and archives The SNIA model



Assets are of different nature and IT equipments and strategies have distinct requirements in each case !  
 The **horizontal axe** expresses the fact that a dynamic process is always involved in the lifecycle of the assets.  
 At some moment, most of them have to be fixed.  
 The **vertical axe** represents the fact that some of the assets could be generated and made accessible through a DBMS. Each asset is managed by independant semantic items !

# Serendipity Search & Interactivity

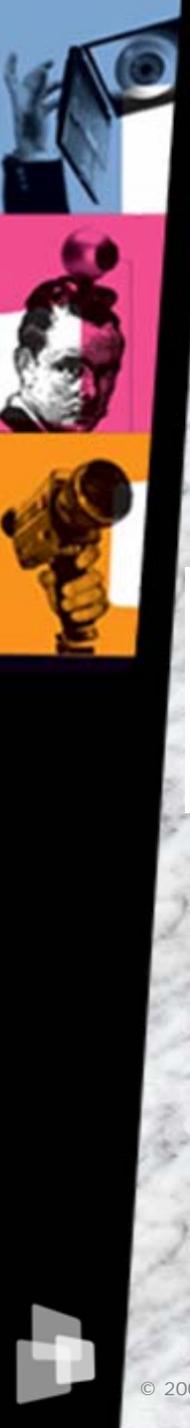


- Cross-lingual search
- Full-text analysis and snippeting
- Navigation through explicit metadatas
- Multi-media extraction
- Results related terms for refining by click

# EMWRT III : the factory is SEMANTIC !!!

1. Asset Management & Wrapping
2. An acquisition wrapping example
3. In search of interoperability and semantics standards "State of Play » through four categories of players
  - DAM (Digital Asset Management) vendors
  - Broadcasters, archives or press agencies (developping bespoke DAM applications)
  - Aggregators (file transfer services providers or software vendors)
  - Metadata integrators ("plumbers")
4. A global view from the semantic architecture side
5. Description of a user case
6. Annexe

# The broadcast reality : « live is life »



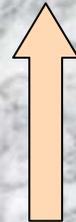
**Modeling**



**Presentation**



**Technologies  
&  
Standards**

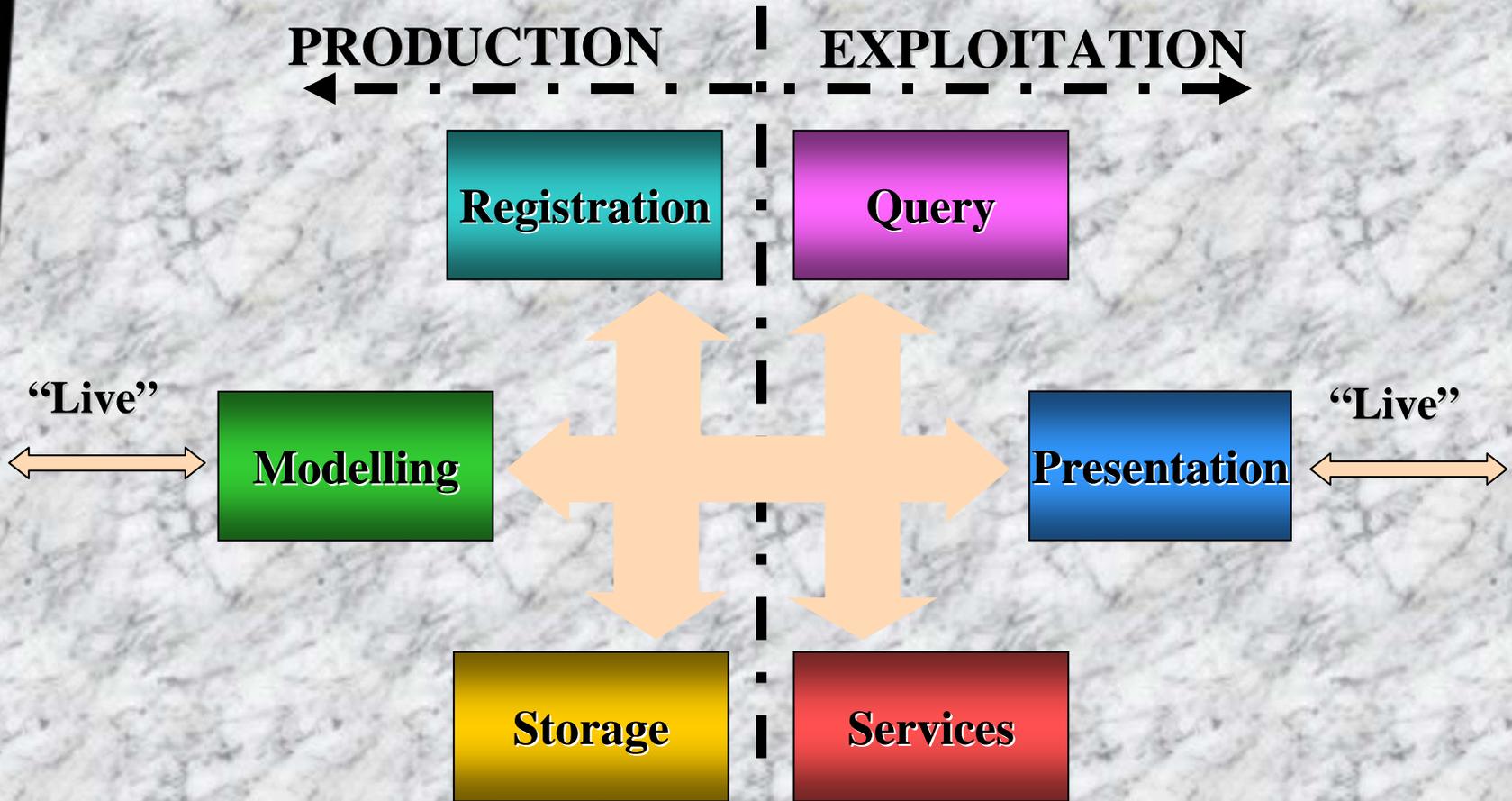


**Technologies  
&  
Standards**





# The broadcast reality : « live is life »



# A User Case



Otto Preminger

Nom Otto Ludwig Preminger

Naissance 5 décembre 1906  
Vienne  
Autriche

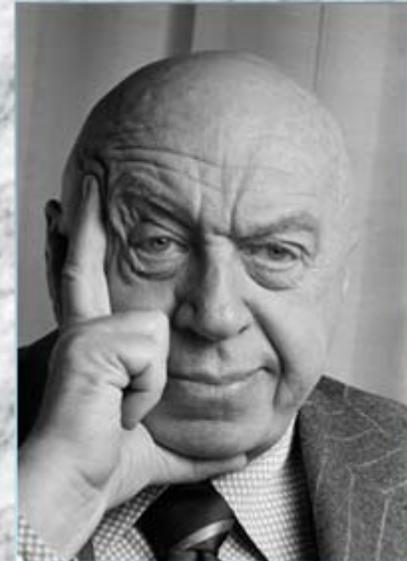
Nationalité Américain

Mort 23 avril 1986  
New York  
États-Unis

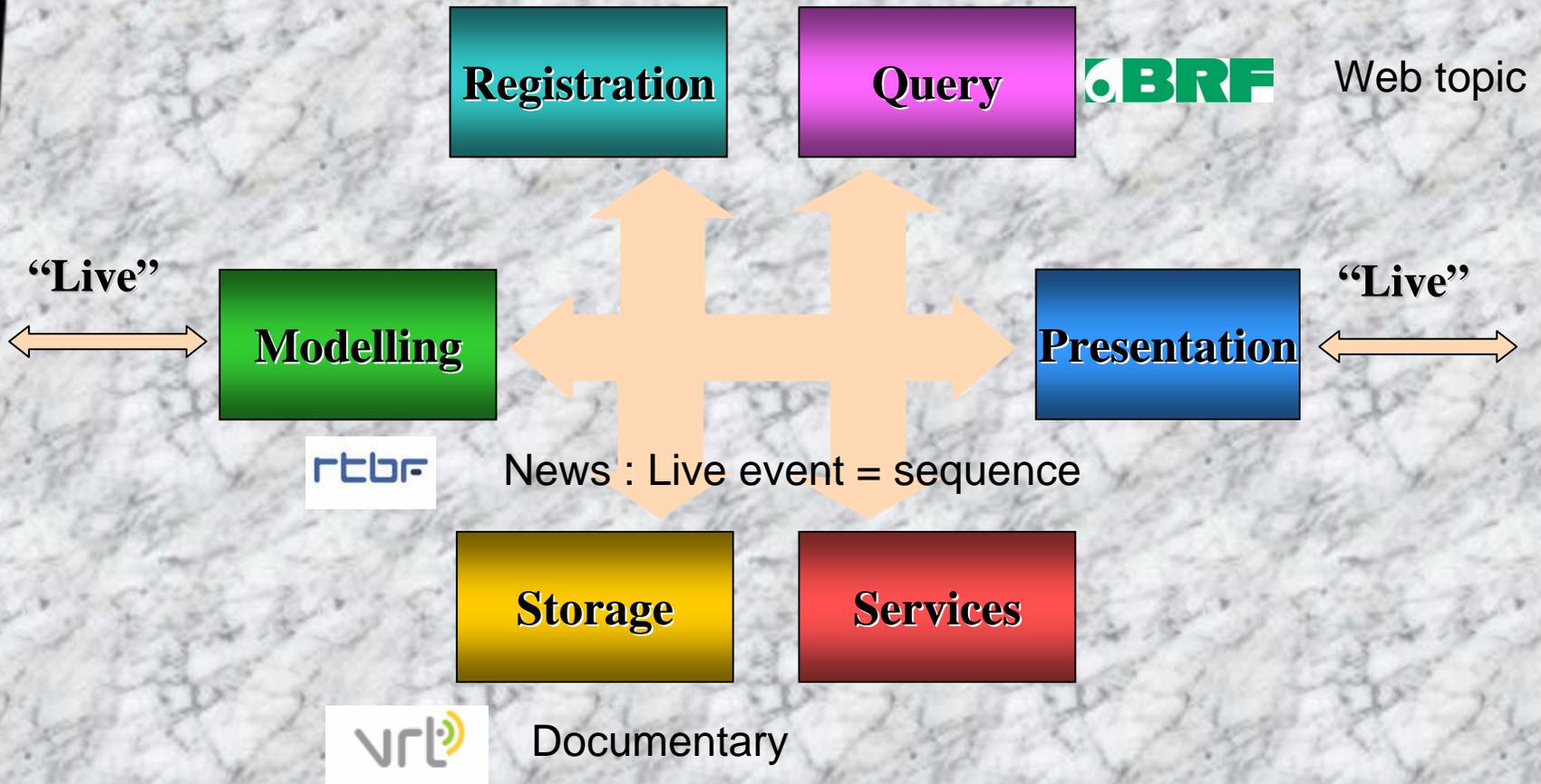
Profession(s) Réalisateur

Films notables *La Rivière sans retour,*  
*L'Homme au bras d'or,*  
*Exodus,*  
***Autopsie d'un meurtre***

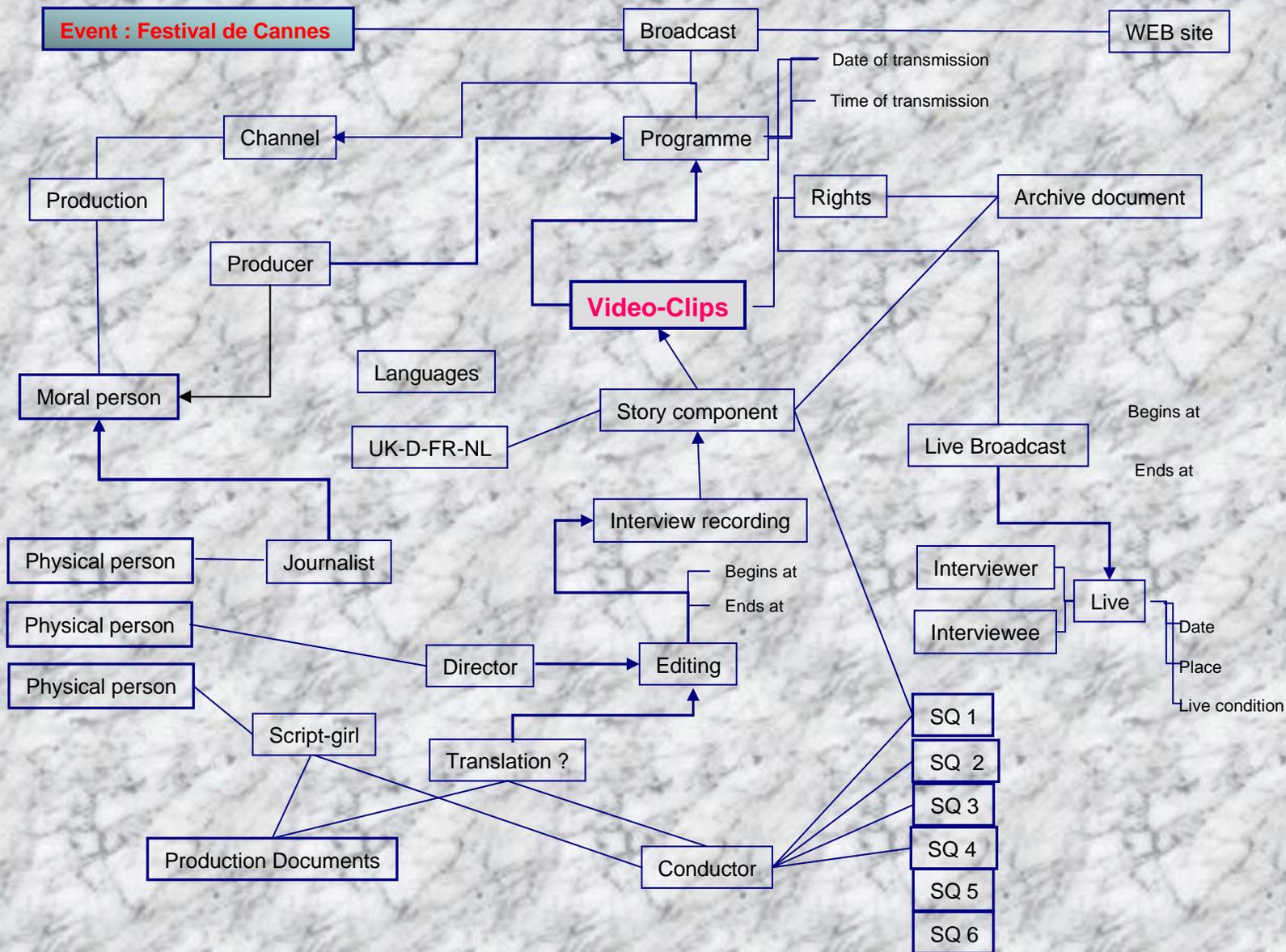
[Fiche IMDb](#)



# A User Case



# An audiovisual semantic container ?





Thank you for your  
on-line attention

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## Titan & Co Semantic acronym's :

- **AAE** Autonomous Assets Entity (AXIS)
- **ACE** Autonomous Content Entity (European project)
- **AIP** Archival Information Package (OAIS)
- **AXE** Autonomous eXchange Entity (AXIS)
- **AXIS** Acquisition eXchange Indexing, Structuration (Titan)
- **Container** Container are means to wrap a document in evidence in order to constitute one SIP, AIP or DIP
- **INDEX** The expression of a sequential link between items
- **DIP** Dissemination Information Package
- **IW** Interoperability Wicket
- **LIP** Labelling Information Package (IASA)
- **OPUS** A complete semantic item (AXIS)
- **OSB** Open Semantic Bus (MediaMap)
- **OWL** ontology Web language (W3C)
- **Package** An embodiment of information (AXIS)
- **Profile** By choosing a set of representation formats with a choice of parameters, it is possible to get the capacity to represent information for a class of applications.
- **RDF** Ressource Description Format
- **SIP** Submission Information Package (OAIS)
- **USE** Unique Semantic Entity (MediaMap)

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