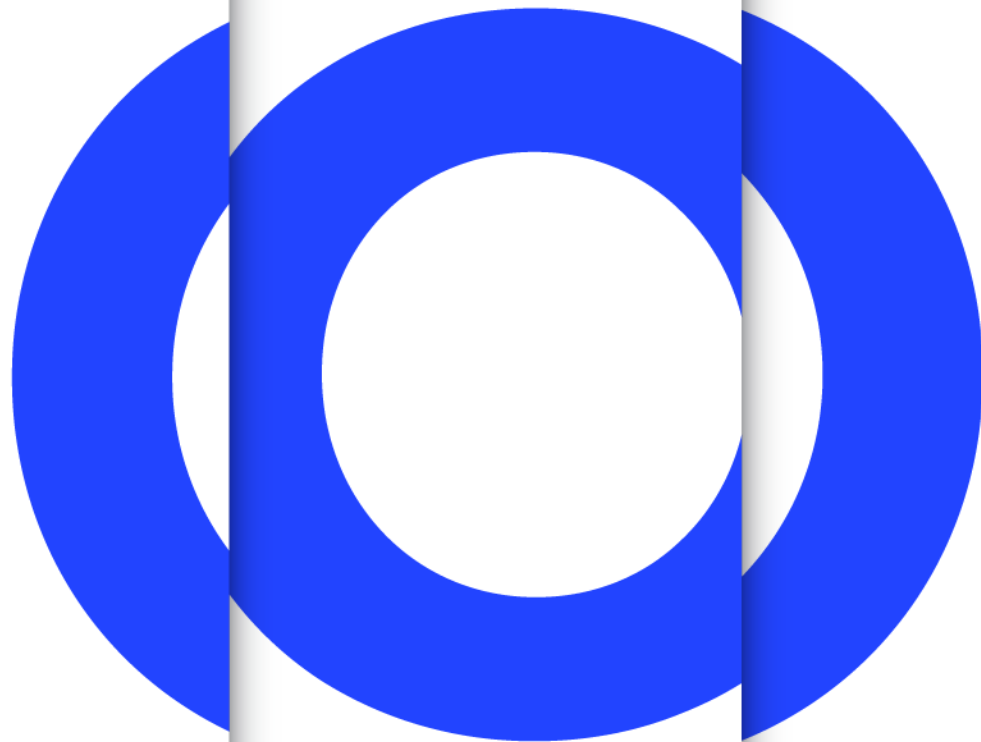


# EBU

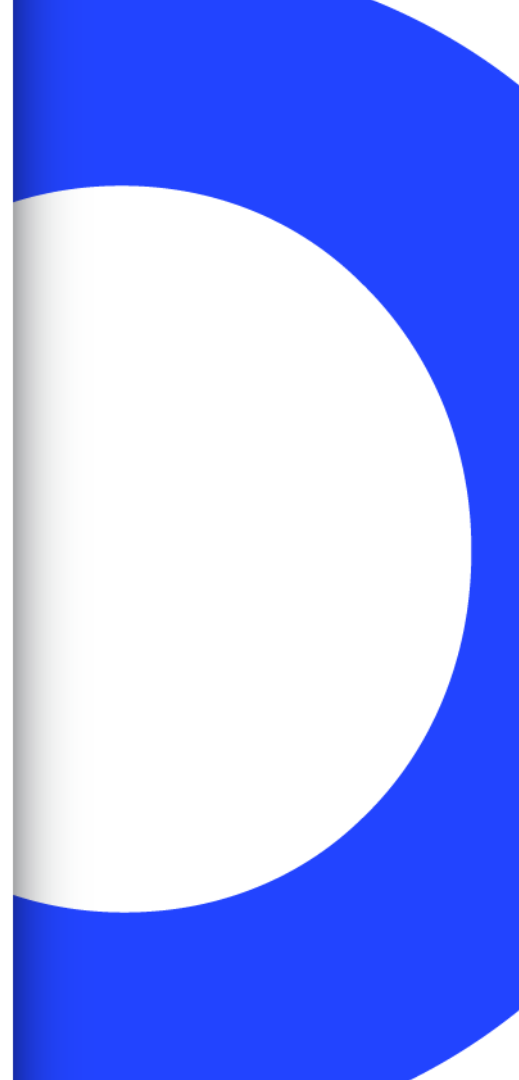
OPERATING EUROVISION AND EURORADIO



# **BIG DATA**

# **A BROADCAST PERSPECTIVE**

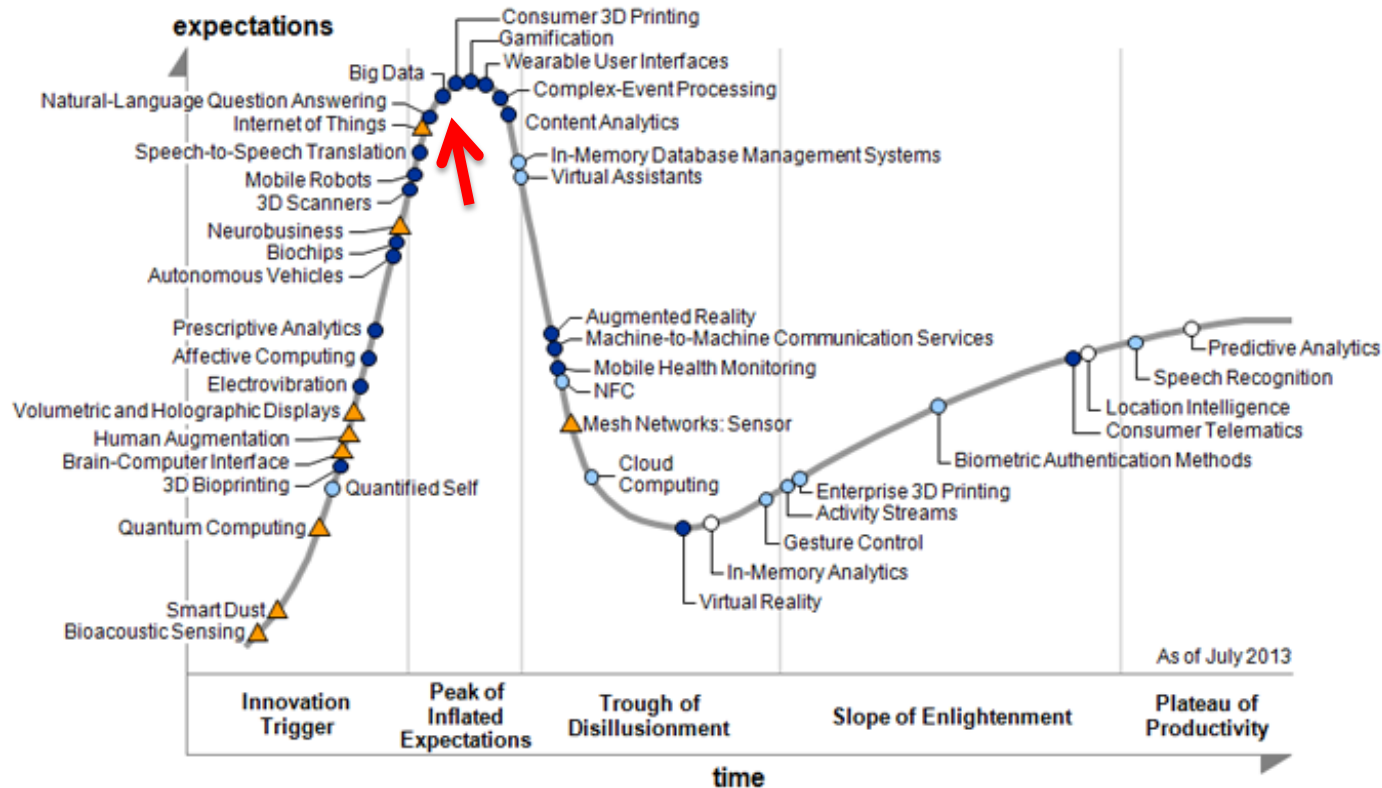
MDN WORKSHOP  
10 JUNE 2015



# **AIMS FOR TODAY'S PRESENTATION**

- 1 BIG DATA TREND OR HYPE**
- 2 LEARNING MORE ABOUT YOURSELF VIA YOUR AUDIENCES**
- 3 DATA ANALYSIS AS JOURNALISTIC INPUT**
- 4 RECOMMENDATION ENGINES**
- 5 EBU WORK**

# GARTNER HYPE CYCLE 2013



# GARTNER HYPE CYCLE 2014



As of July 2014

Plateau will be reached in:

○ less than 2 years

○ 2 to 5 years

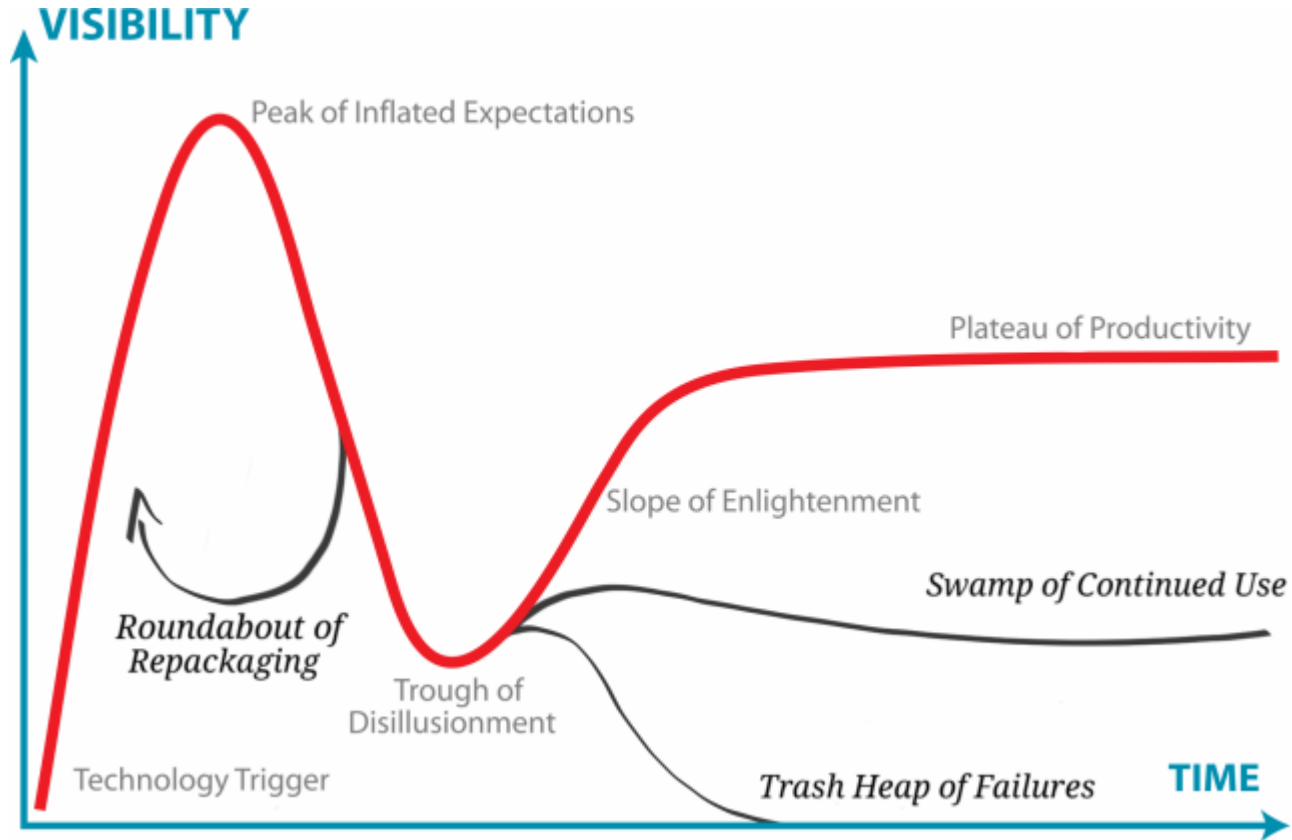
● 5 to 10 years

▲ more than 10 years

○ obsolete

⊗ before plateau

# REPACKAGING TO DATA MINING AGAIN OR .....



## TREND OR HYPE: BIG DATA MOTIVATORS

- Internet services are a gold mine of information
- Online usage is growing and therefore the available data sets
- Combination of different data sources are possible
- The viewing context (device, time, network etc.) can be identified
- Internal usage data and external sources can be used for business intelligence
- Data analysis can be used as editorial input for example in journalism
- Authentication allows personalised services and storage of profiles
- Recommendations can be provided based on actual usage of different users

# LEARNING MORE ABOUT YOURSELF VIA YOUR AUDIENCES

Business intelligence use case:

Audience data tells what content is popular and even why:

- Content access: time of day, viewing time, content-item, access network, device (streaming server statistics)
- How much is specific content being discussed (access via embedded players and or social media references)
- The answer to why can be deduced by relating viewing profiles to descriptive content: **Metadata is key!**

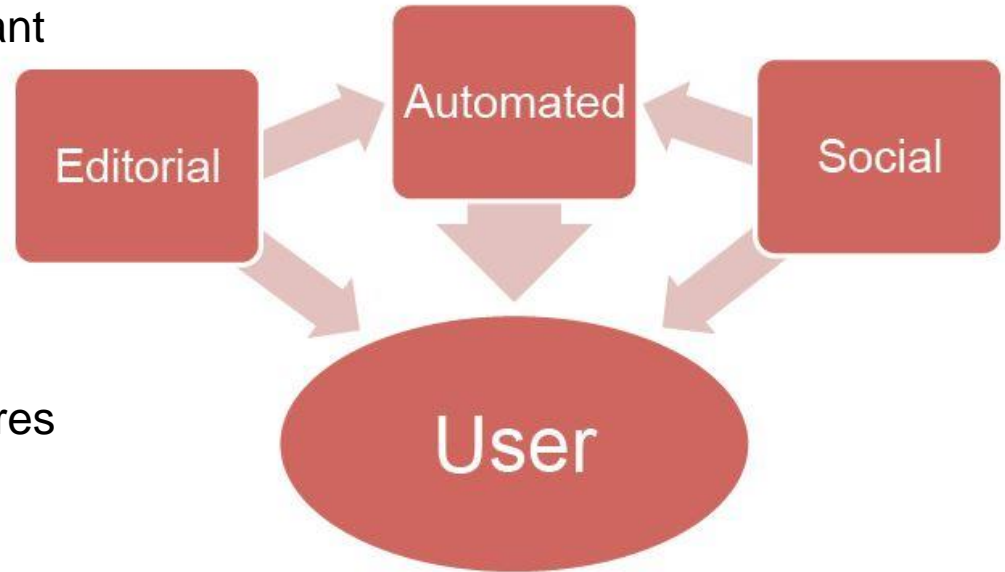


# DATA ANALYSIS FOR JOURNALISTIC INPUT

- Data-driven journalism
- Social media data mining
- Trending topic analysis
- Opinion collection
- Automatic fact gathering
- Data visualisation

# RECOMMENDATION ENGINES

- Recommendations based on usage profiles
- Implicit and explicit data models
- Context of view is highly relevant
- Metadata is essential

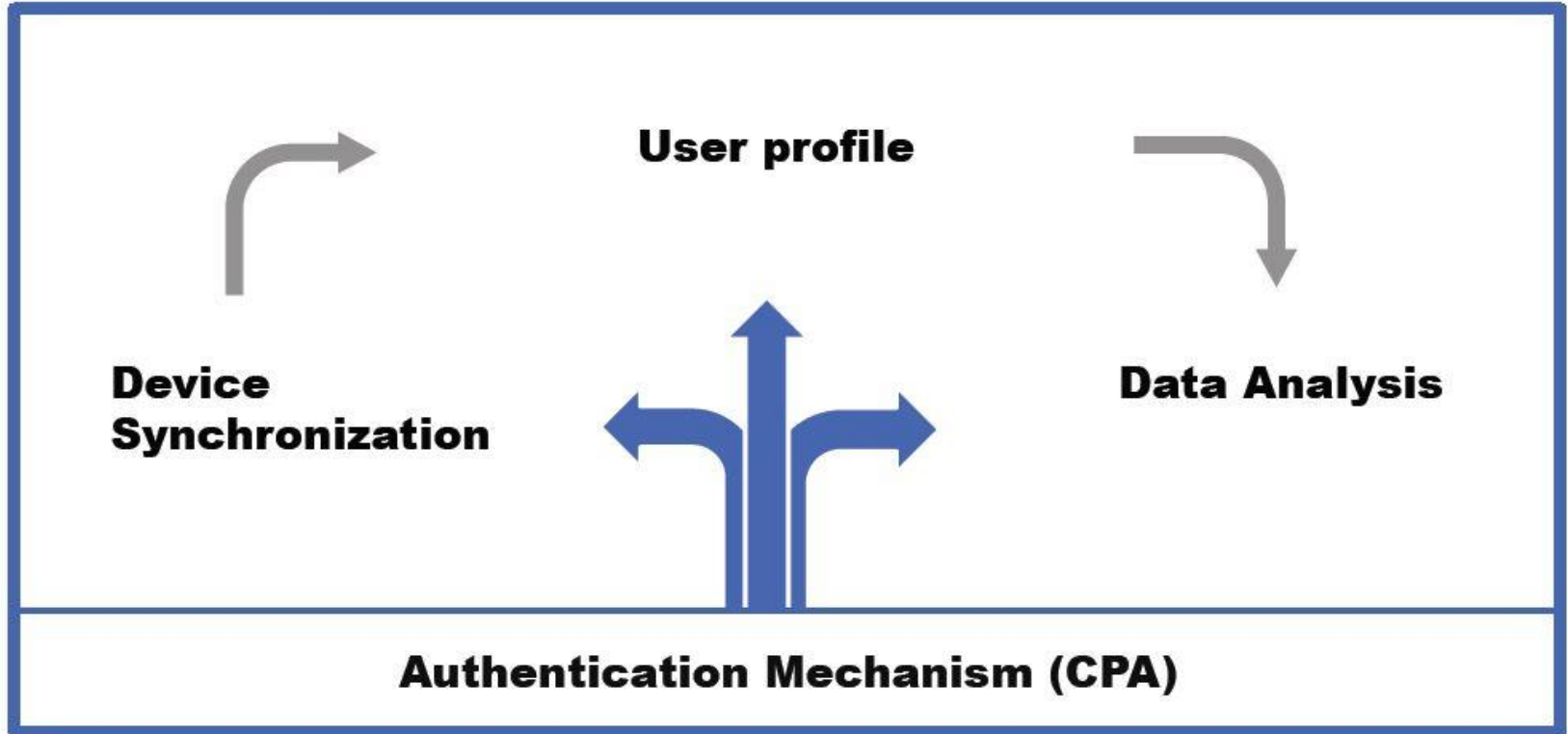


Privacy is of great concern!

- pseudo-anonymous architectures
- Opt-in/out
- Right to be forgotten

# WORK OF THE EBU

## AUTHENTICATION IS THE BASIS FOR CLOUD-BASED FEATURES



## WORK OF EBU

### EBU CROSS-PLATFORM AUTHENTICATION

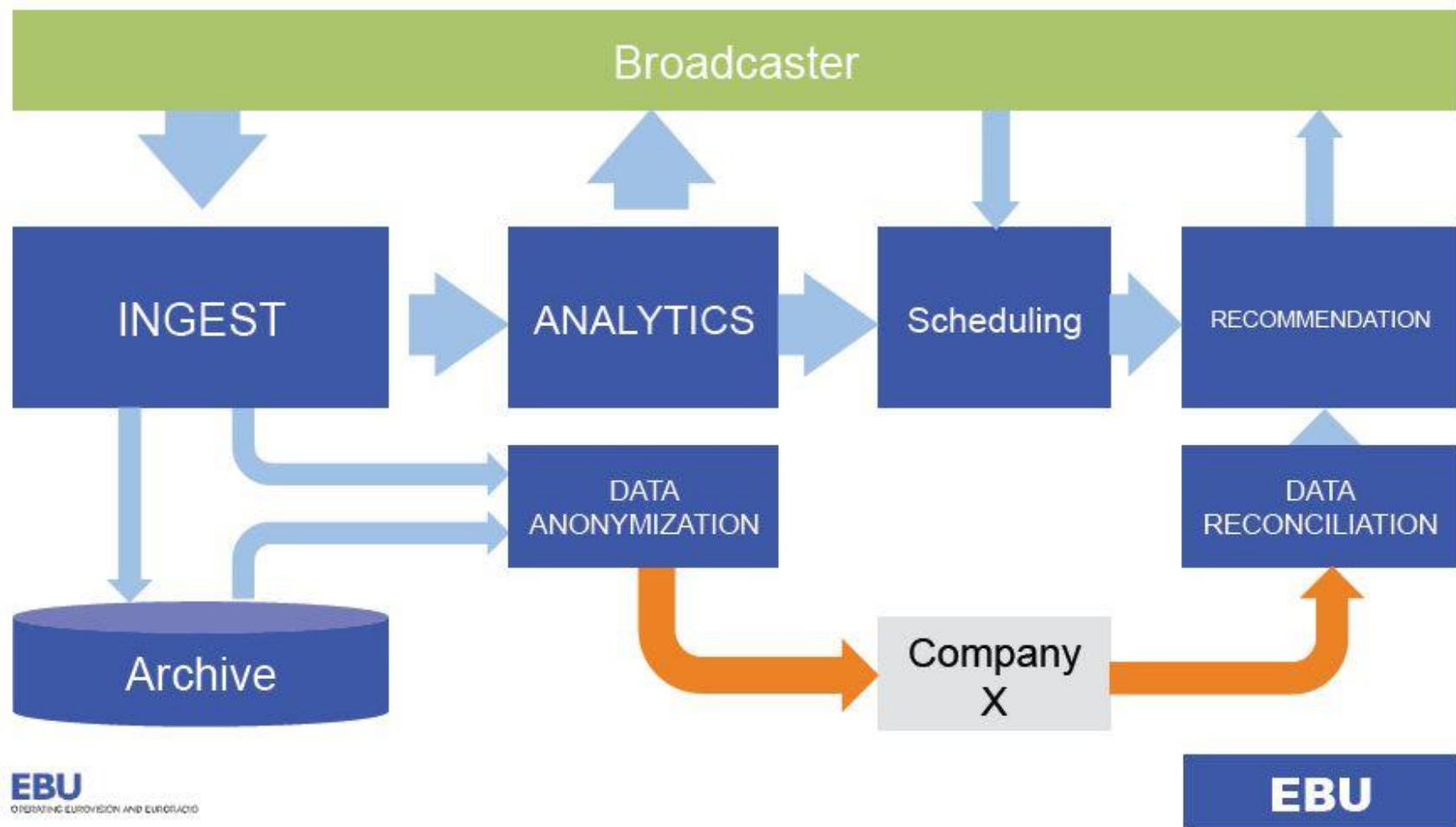
- Open Standard to associate an online identity with media devices  
**Tech3366: The Cross-Platform Authentication Protocol**
- International collaboration  
BBC (UK), VRT (BE),  
RTS (SRG, CH), TVP (PL),  
Global Radio (UK),  
Frontier Silicon (UK)
- Goal: ETSI Standard (Q4 2015)



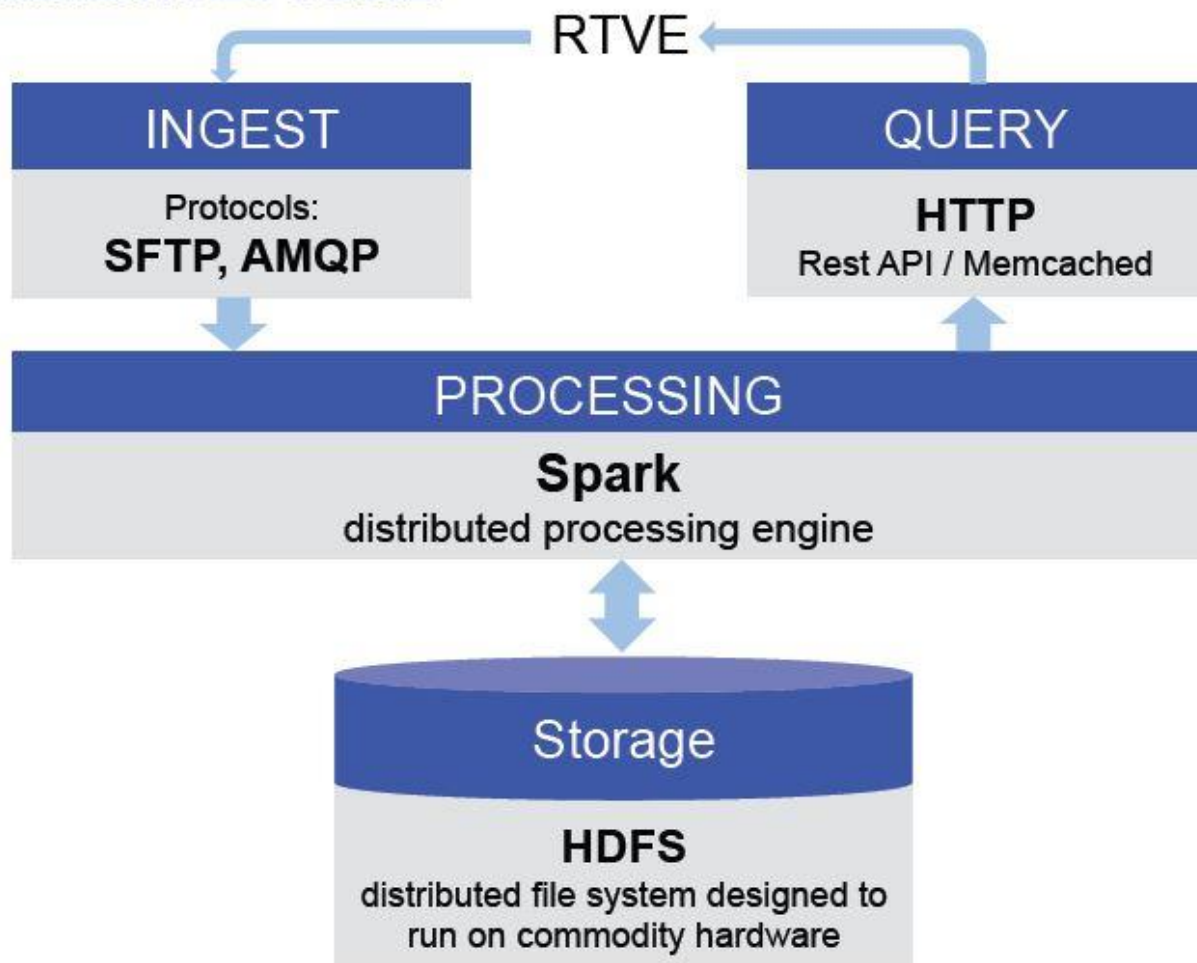
## WORK OF EBU: DATA PIPELINE

- Phase 0: Experimental infrastructure (Open Source)
- Phase 1: Basic recommendation algorithms
  - Batch and online ingest
  - Basic algorithm (Collaborative filtering, global statistics)
- Phase 2: Content-based recommendation
  - Leverage categorization and metadata of the content
- Phase 3: Context-based recommendation
  - Provide a UI to schedule algorithms.

# EBU PIPE - PHASE X



# RTVE PILOT ARCHITECTURE





## Big Data Workshop



### DETAILS

EBU, Geneva  
08 Oct 2015

[Download Programme](#)

### REGISTRATION

Registration is mandatory. Please follow the [link](#).

### VENUE

EBU Headquarters  
L'Ancienne Route 17A  
1218 Grand-Saconnex



# THANK YOU

BRAM TULLEMANS  
EBU TECHNOLOGY & INNOVATION DEPARTMENT

