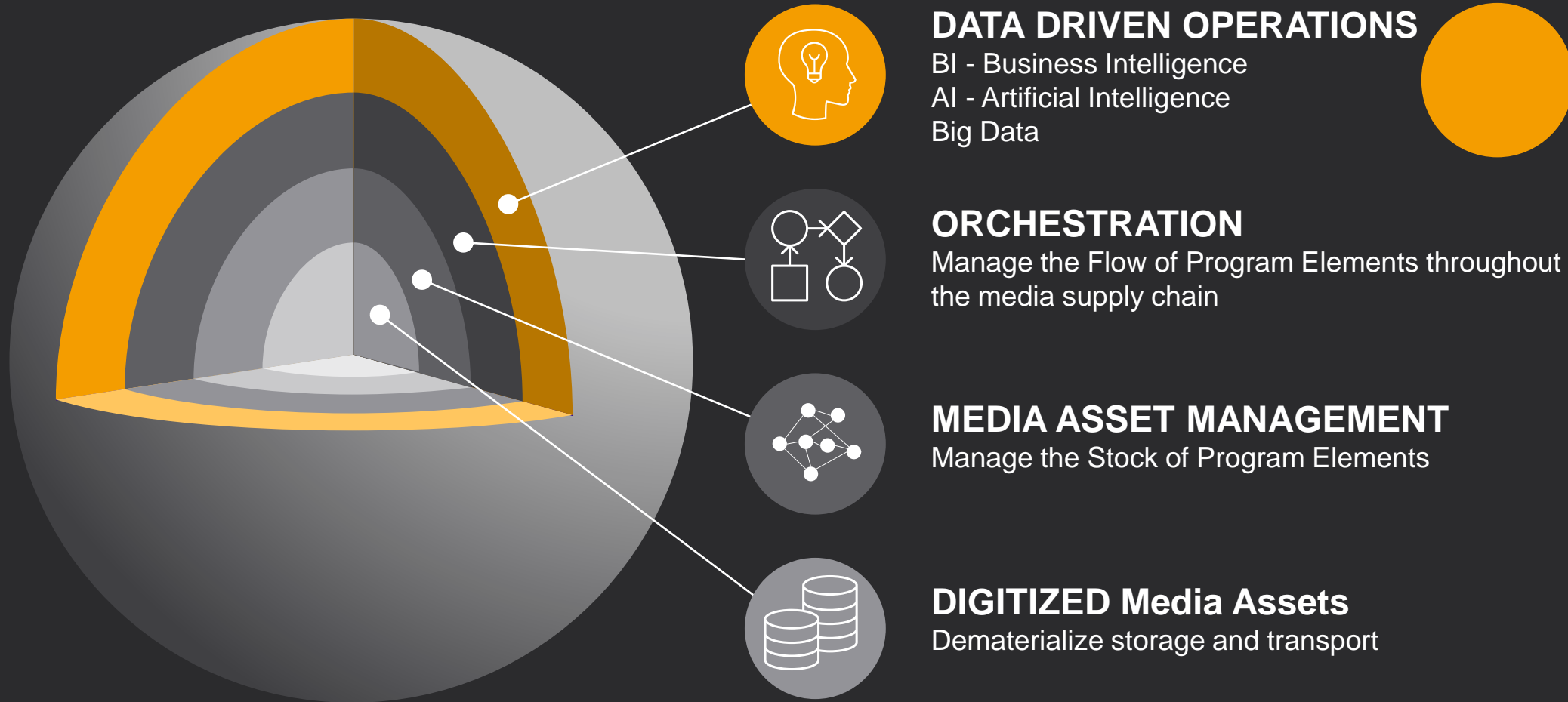


# Move Artificial Intelligence (AI) from Labs to practical applications for the professional Media Industry

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# ABSTRACTION LAYERS and VALUE CREATION



# DATA DRIVEN OPERATIONS

Business Intelligence

Big Data

Artificial Intelligence

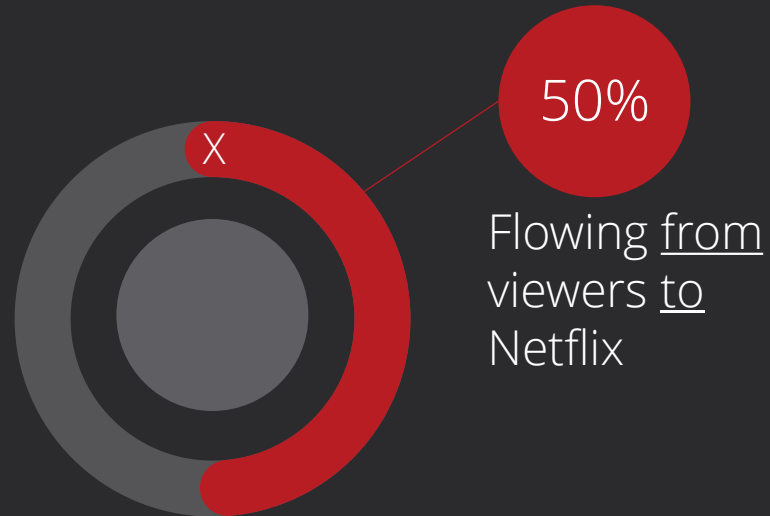
# NETFLIX

*"Netflix is a **BIG DATA** and Telemetry company, that as a **by-product** delivers streaming **VIDEO** to it's audience..."*

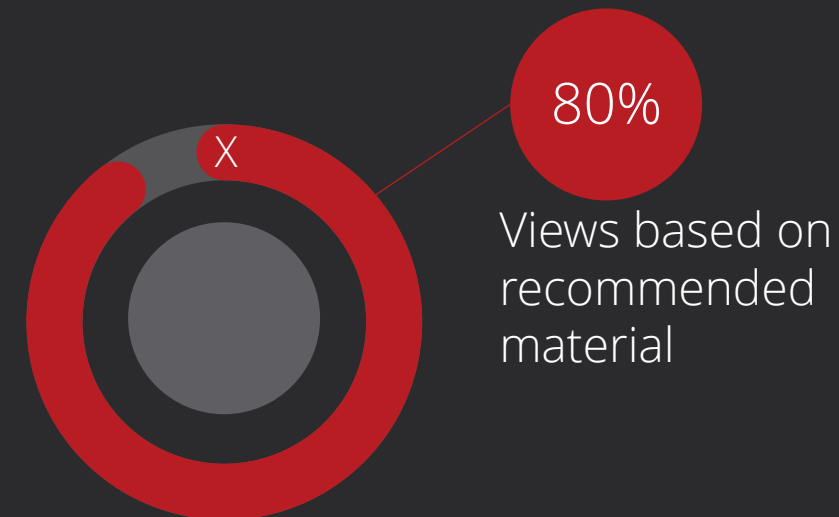
*Netflix Core  
Operations Manager*



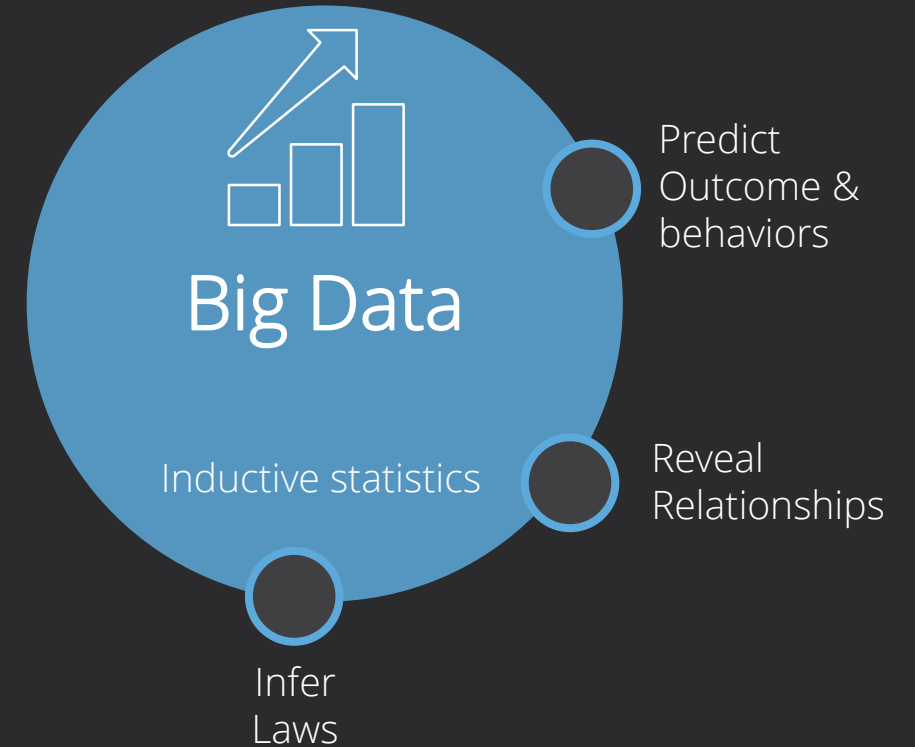
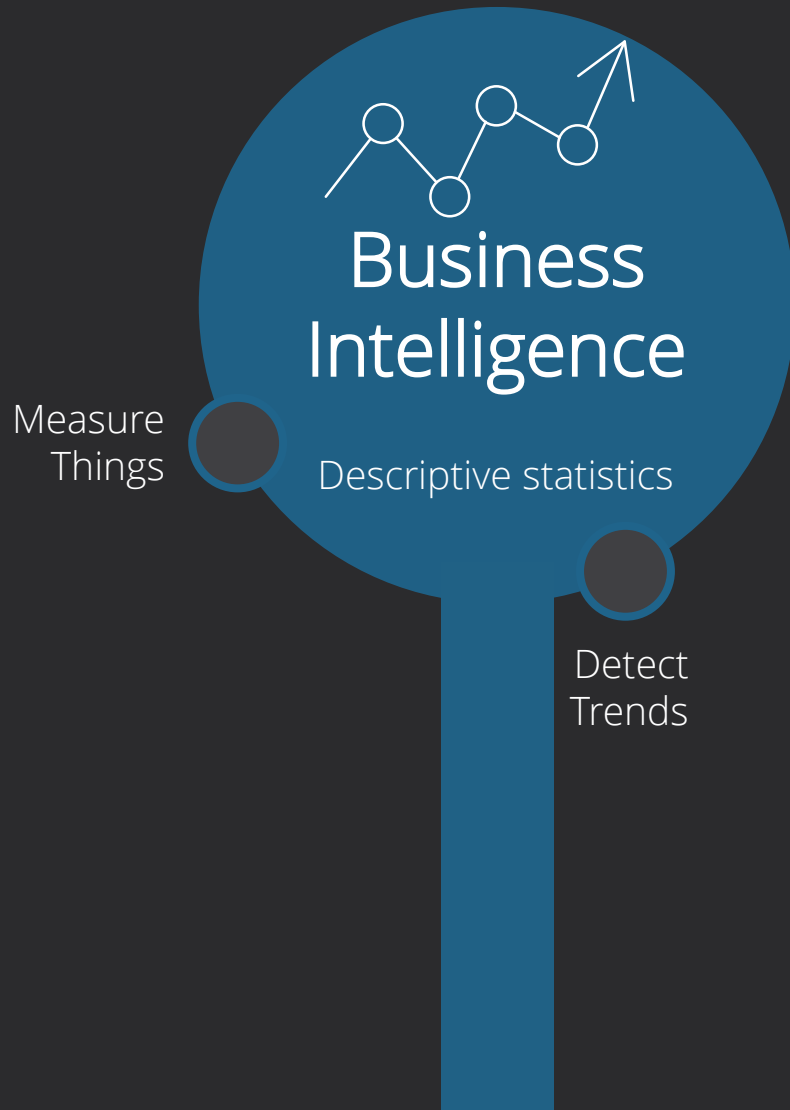
**Bandwidth of data between  
Netflix and the audience**



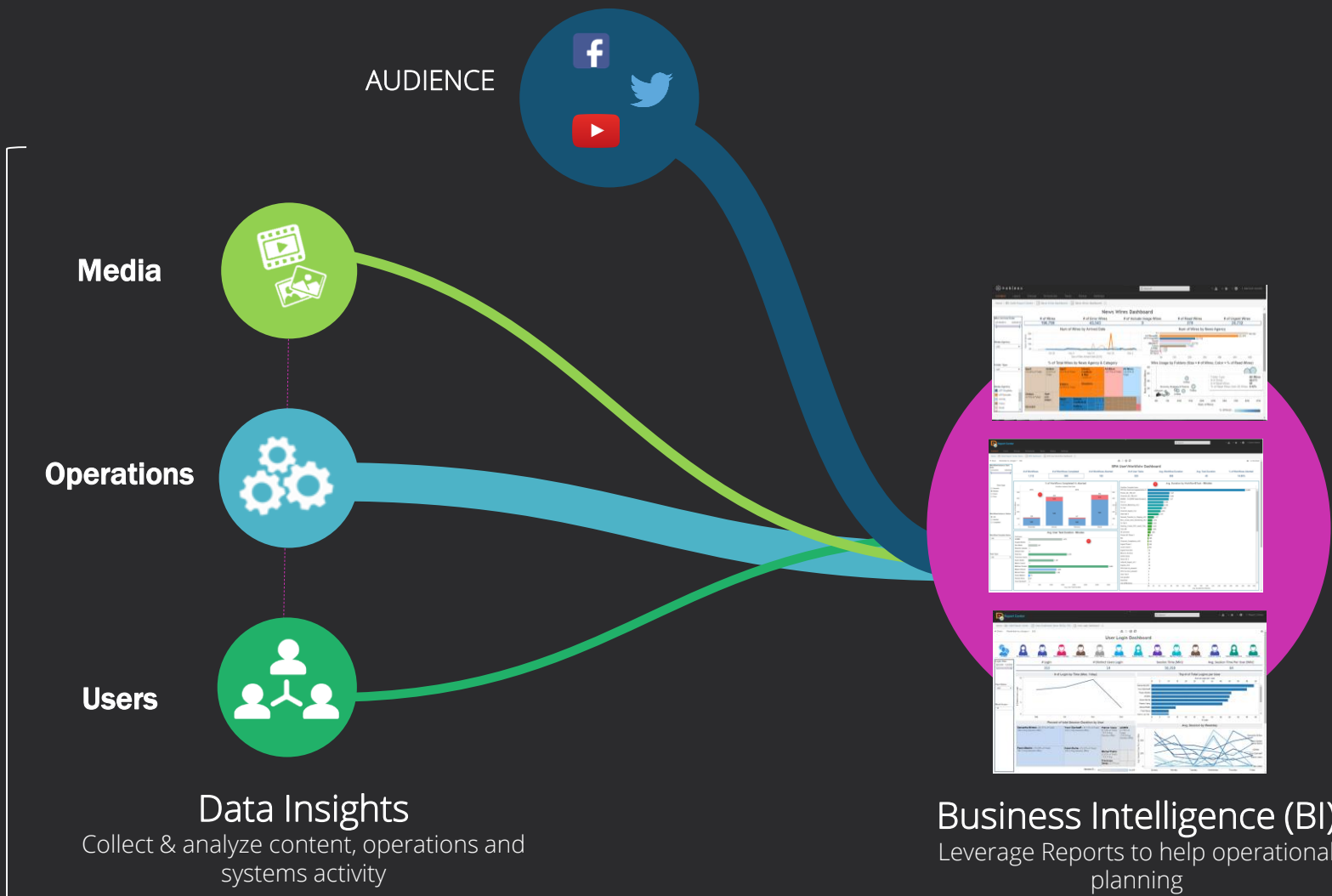
**Views based on recommendation  
engine**



# TOOLS & TECHNOLOGY



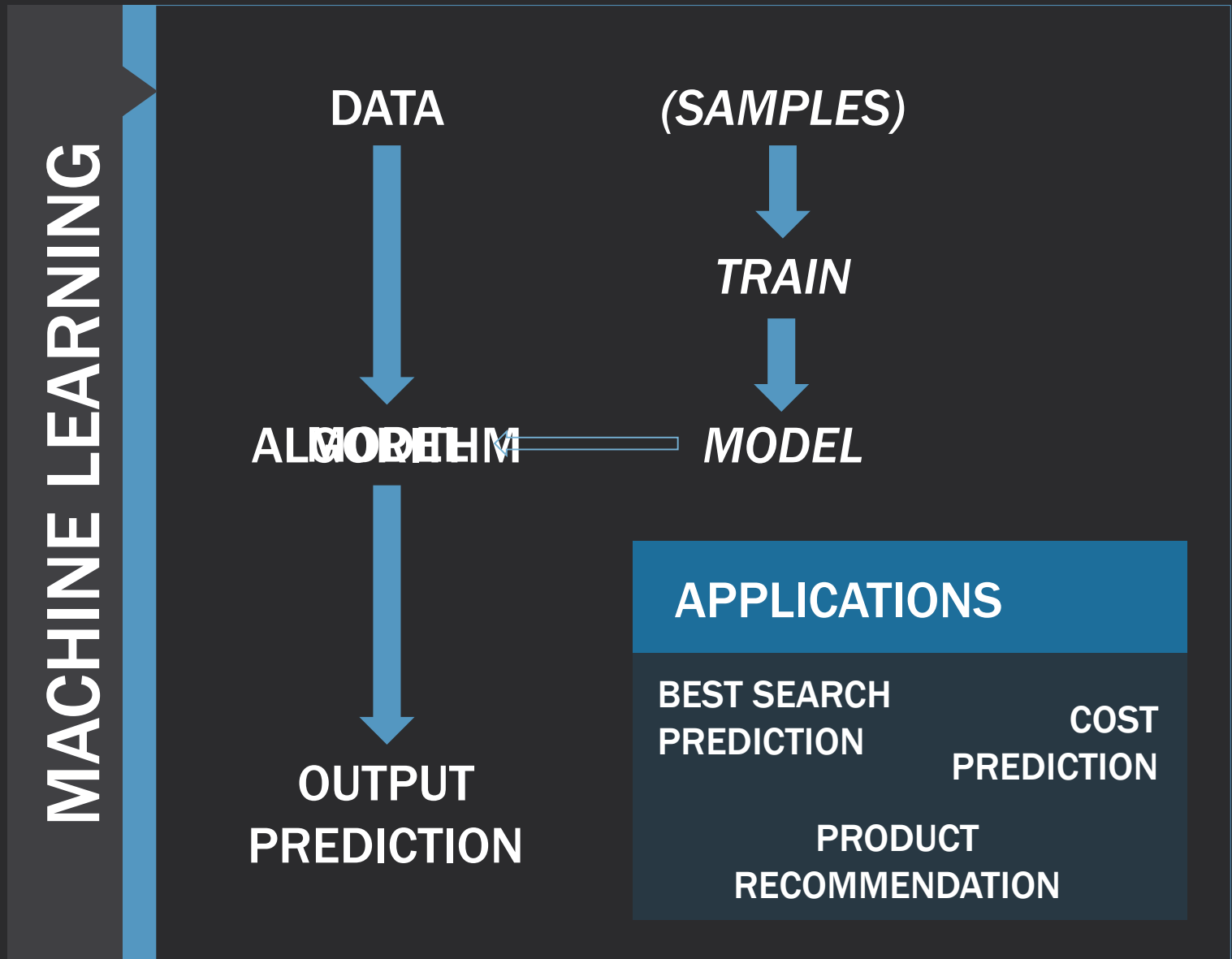




**Inform production decisions**



**Viewer Content Recommendation**





## MACHINE LEARNING

## DEEP LEARNING

### 2010's – A REVOLUTION



Cortana



Siri



Alexa



### MEDIA APPLICATIONS ...

OCR, FACE & LANGUAGE RECOGNITION

SPEECH-TO-TEXT  
TEXT-TO-SPEECH

OBJECT  
DETECTION

COLORI-  
SATION

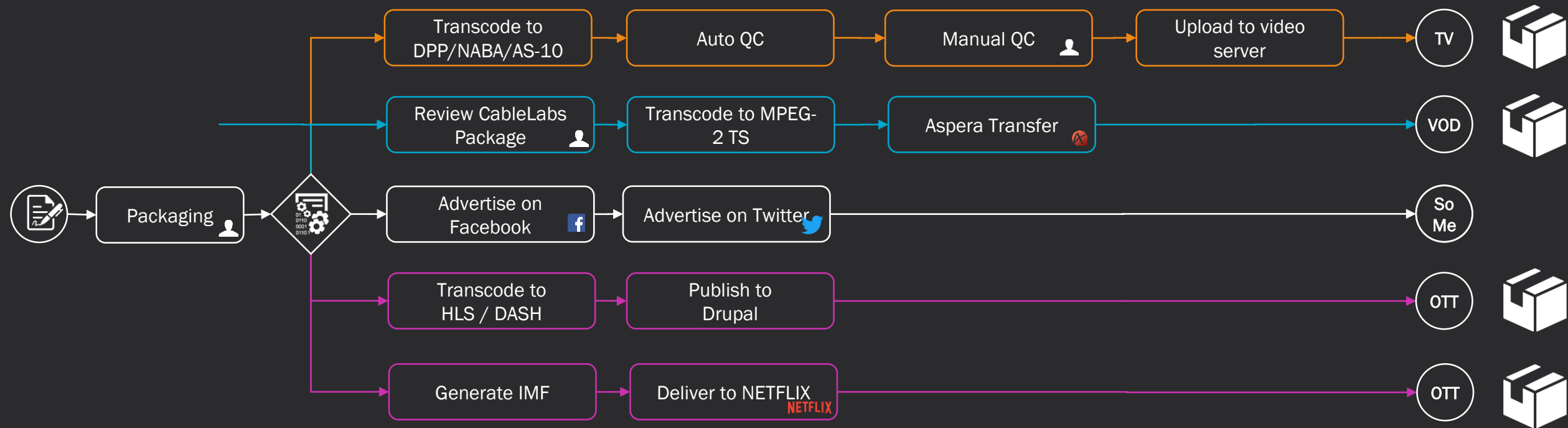


# PRACTICAL IMPLEMENTATIONS

Media  
Supply  
Chain

Rich Media  
Processing

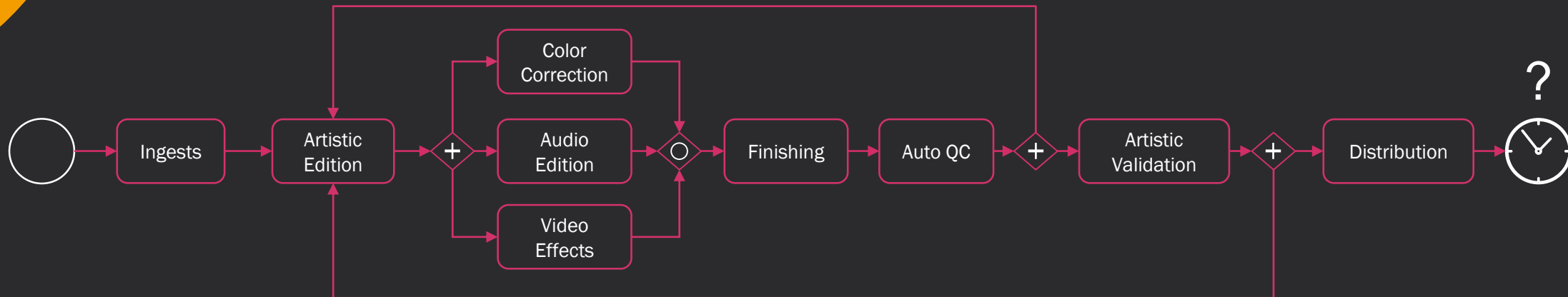
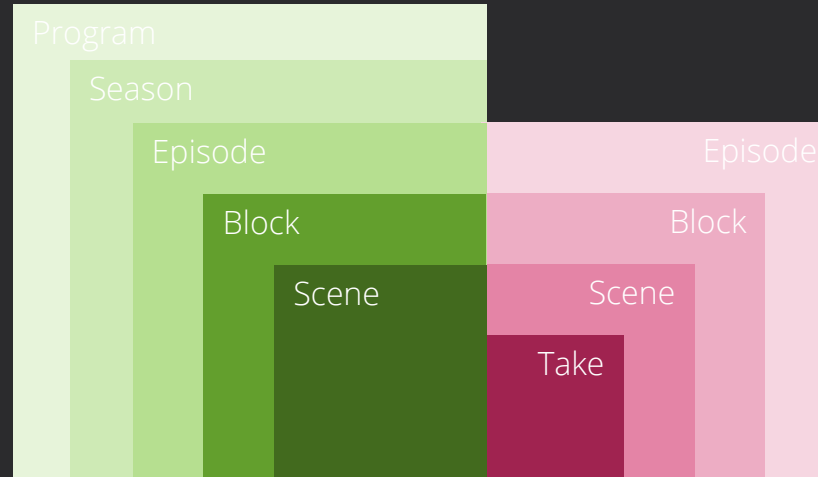
# MULTIPLATFORM DISTRIBUTION



**Leverage data-driven workflows to streamline complex processes**  
delivering visibility and agility for your business

# MEDIA SUPPLY CHAIN

"I produce a **daily** show.  
I have a **complicated**  
production process and a  
**tight deadline**. How can  
I make sure my product  
will be **ready on time**?  
What's the ETA?"



# MEDIA SUPPLY CHAIN OPTIMIZED

## MACHINE LEARNING



Predict ETA  
On-demand

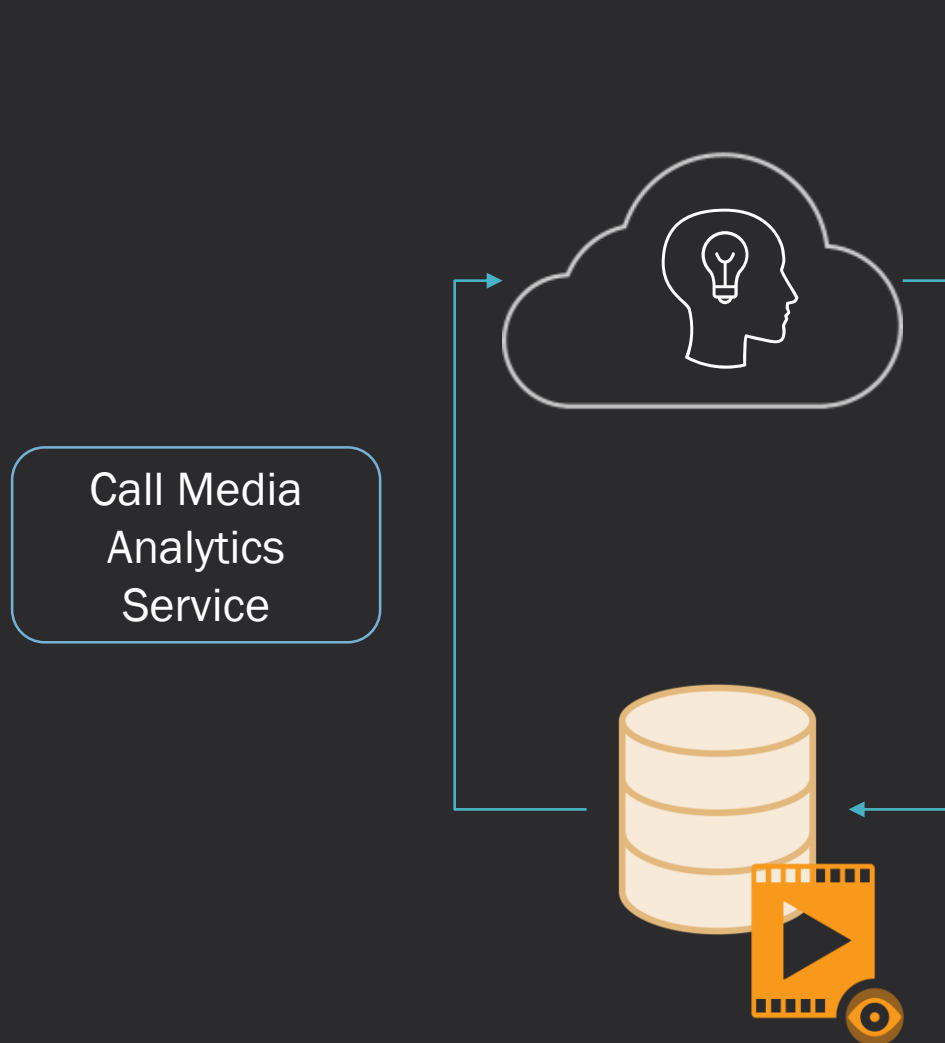


Alert on risk of missing  
deadline  
Contingency can be activated



Predictive capacity scaling  
Auto scale infrastructure & book new resources

# RICH MEDIA PROCESSING



Face recognition



Object recognition



Sentiment analysis



Speech to text



Language recognition

## ENRICH YOUR MEDIA



# INGEST HUB

## CENTRALIZED INGEST IN THE CLOUD

The screenshot displays the IngestHUB web interface. At the top, the logo 'IngestHUB' is visible alongside a 'BROWSE' button and a user profile for 'Hello, Kelly'. Below the header, a breadcrumb trail reads 'Company Name > Group XYZ > Team ABC > The Vikings of The Bloodstone'. The main content area features a video player for 'The Vikings of The Bloodstone (01:29:44)'. To the right of the video player, there are tabs for 'Info', 'Workflow', and 'Insights', with 'Insights' currently selected. Under the 'Insights' tab, there is a 'People' section showing a row of avatars, with 'Jane Robbins' highlighted. Below this is a 'Transcript' section with a timeline and a list of transcript entries. The left sidebar contains metadata for the video, including the publisher 'Armando del Pango', published date '20/03/2017', language 'English', and status 'Best Status'. At the bottom, there are 'BACK' and 'APPLY' buttons.

Company Name > Group XYZ > Team ABC > The Vikings of The Bloodstone

■ The Vikings of The Bloodstone (01:29:44)

Work Order: ID: 4563215 Due Date: 17/09/2018 Provider: Disney

Download QC PDF Launch Workflow Upload Media Download Delete

Info Workflow Insights

People

Jane Robbins

Transcript

All / OCR / Transcription

16:00 Welcome everyone. I would like to start

16:05 First let me tell you I am very happy we have started this great project together

17:00 I would like to interduce Jacob, who is a real chess grand-master and will help us understand the subject

17:30 Remember to write everything down

18:05 Dan, you will be in chrage of delivering all the assets back to Mallorie

19:00 In Monday eveything will be ready as a package

20:30 Samuel has recorded the video about the queen, it was great

16:00 Welcome everyone. I would like to start

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BACK APPLY

Prepare files for downstream processes:

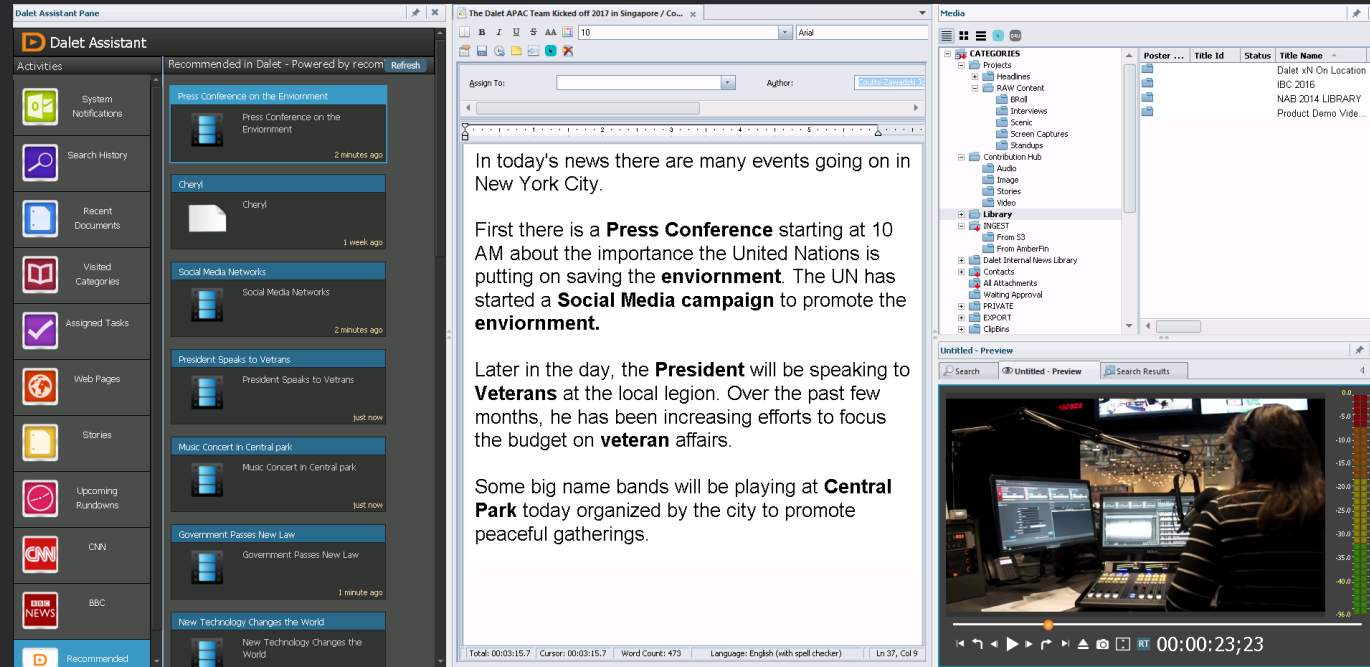
- Cleaned
- Enriched

Leverage Microsoft Azure Video Indexer for content enrichment:

- Keywords
- Speech-to-text
- OCR

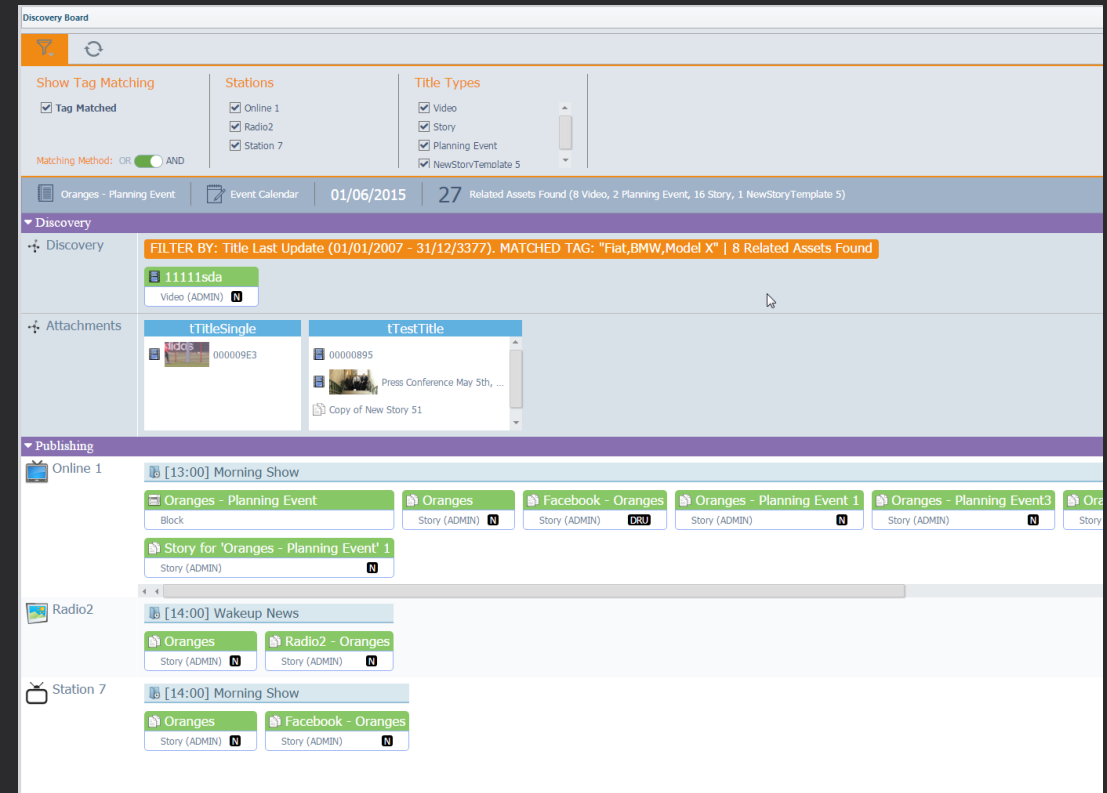


# Recommendation Engine

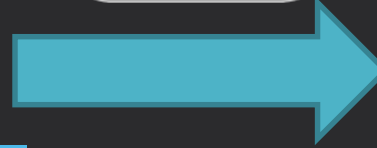
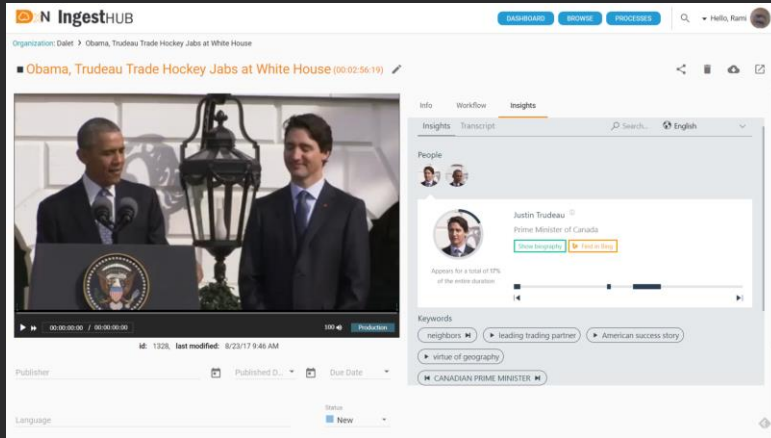


Recommendation engine to suggest **meaningful content** to journalists, based on:

- User actions and preferences
- Auto-generated metadata
- Asset links



# Auto-processing - CG



Face recognition



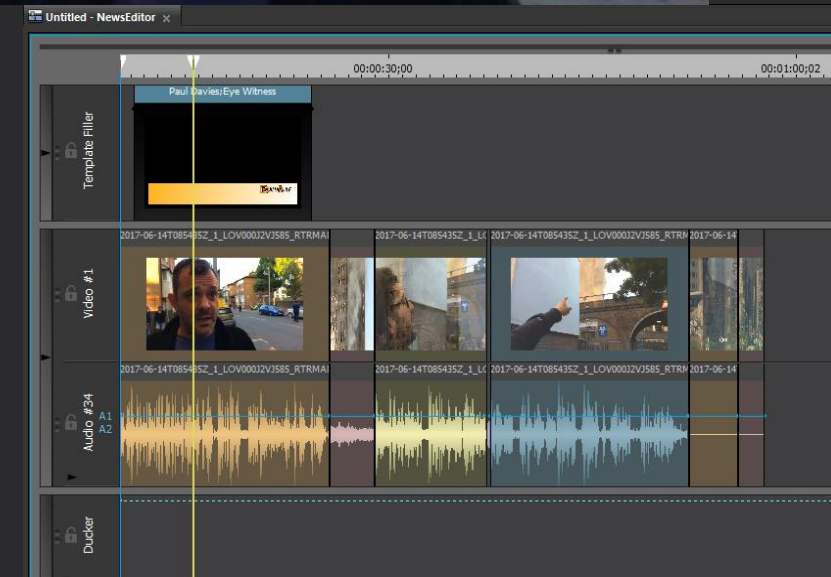
Sentiment analysis



Object recognition



Speech to text



Based on data analysis (Face recognition, Speech to text, etc) the system is capable to create automatically the graphics overlays (CG).



# ARTIFICIAL INTELLIGENCE OPERATIONS

A FOUNDATION FOR FUTURE MEDIA OPERATIONS



## THE FOUNDATION

MAM & ORCHESTRATION combined



## REMAINING CHALLENGES

DATASET, QUALITY

**THANK YOU**