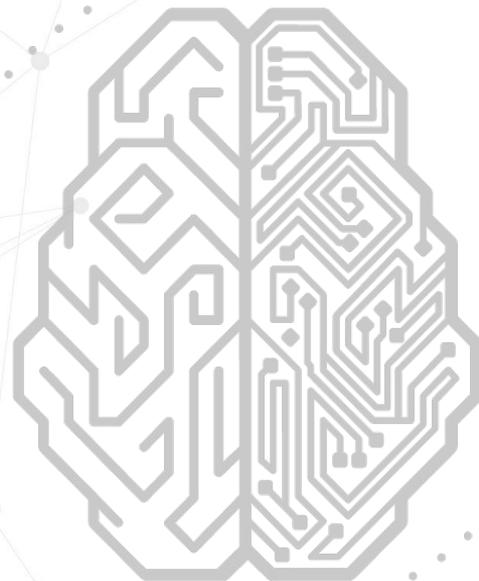


 Webinar

Finding Gold In Your Media Archives

Leveraging AI for Content Monetization



 **quantiphi**
Solving What Matters

 **aws**

 **dalet**

Speaking today.



PATRICK MURPHY
M & E Custom Partner,
Quantiphi



PAUL LASSERRE
AI/ ML Global
Solutions Lead, AWS



RAOUL COSPEN
Director of Product
Strategy, News, Dalet

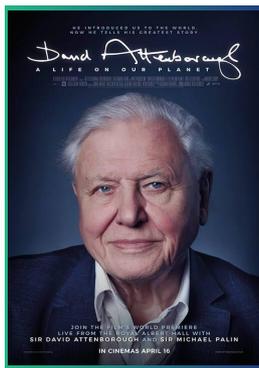
A Year Off-Script

2020 - What changed for Media & Sports Industry



2020 Brings archival content into focus.

- Archival content for documentary & sports stories.
- Innovation in content repurposing
- Fodder for personalized marketing & continuous engagement.



Audiences have changed too



Direct relationship with content.



Global Content Preferences.



Fragmented & niche content genres.

What makes the monetization of existing content challenging?



Poor searchability over valuable content. The tagging is contextual & effort-intensive



Lack of customized QC & compliance solutions for OTT & International distribution



End customers struggle to take AI into production & deliver business value.



Too much content, too little time - editorial pressure in fast-paced workflows



AI For Monetization

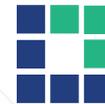
Building blocks of a Turn-key Solution



AI/ML capabilities in
the cloud



AI-powered Media
Asset Management



quantipi

Custom-built Video
Intelligence



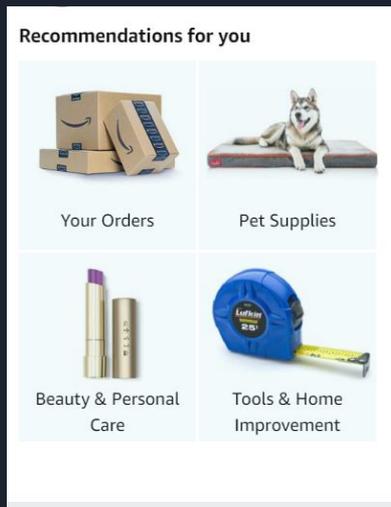
PAUL LASSERRE

AI/ ML Global
Solutions Lead, AWS

AI/ML capabilities in the cloud



Amazon's machine learning innovation at scale



4,000 products per minute sold on Amazon.com



1.6M packages every day



Billions of Alexa interactions each week



First Prime Air Delivery on **Dec. 7, 2016**

The AWS ML Stack

Broadest and most complete set of machine learning capabilities

AI SERVICES

HEALTH AI NEW Amazon HealthLake Amazon Transcribe Medical Amazon Comprehend Medical			INDUSTRIAL AI NEW AWS Panorama + Appliance NEW Amazon Monitron NEW Amazon Lookout for Equipment NEW Amazon Lookout for Vision			ANOMALY DETECTION NEW Amazon Lookout for Metrics	CODE AND DEVOPS NEW Amazon DevOps Guru Amazon CodeGuru				
VISION Amazon Rekognition		SPEECH Amazon Polly Amazon Transcribe + Medical		TEXT Amazon Comprehend + Medical Amazon Translate Amazon Textract		SEARCH Amazon Kendra	CHATBOTS Amazon Lex	PERSONALIZATION Amazon Personalize	FORECASTING Amazon Forecast	FRAUD Amazon Fraud Detector	CONTACT CENTERS Contact Lens Voice ID <small>For Amazon Connect</small>

ML SERVICES

Amazon SageMaker

SAGEMAKER STUDIO IDE

Label data	NEW Aggregate & prepare data	NEW Store & share features	Auto ML	Spark/R	NEW Detect bias	Visualize in notebooks	Pick algorithm	Train models	Tune parameters	NEW Debug & profile	Deploy in production	Manage & monitor	NEW CI/CD	Human review
------------	-------------------------------------	-----------------------------------	---------	---------	------------------------	------------------------	----------------	--------------	-----------------	----------------------------	----------------------	------------------	------------------	--------------

NEW: SageMaker JumpStart

NEW: Model management for edge devices

FRAMEWORKS & INFRASTRUCTURE

TensorFlow	mxnet	GLUON	Keras	Deep Learning AMIs & Containers	GPUs & CPUs	Elastic Inference	Trainium	Inferentia	FPGA
PyTorch	learn	DeepGraphLibrary							



Amazon Transcribe: Speech-to-Text AI service

Produce transcripts that are easy to read and review



**Speaker Labelling/
Channel Identification**

**Punctuation,
capitalization**



**Word-level
time stamps**



**Word-level
confidence
scores**



**Language
ID**



**Custom
vocabulary**



**Custom Language
Models (CLM)**



**Alternative
Transcriptions**



**Vocabulary
Filtering**



**PCI/PII content
redaction**

Amazon Transcribe: Speech-to-Text AI service

Customize transcripts to your domain and use case



Punctuation,
capitalization

Speaker Labelling/
Channel Identification



Word-level
time stamps



Word-level
confidence scores



Language
ID



**Custom
vocabulary**



**Custom Language
Models (CLM)**



**Alternative
Transcriptions**



Vocabulary
Filtering



PCI/PII content
redaction

Amazon Transcribe: Speech-to-Text AI service

Enables content filtering and privacy



Speaker Labelling/
Channel Identification



Word-level
time stamps



Word-level
confidence scores



Language
ID

Punctuation,
capitalization



Custom
vocabulary



Custom Language
Models (CLM)



Alternative
Transcriptions



**Vocabulary
Filtering**



**PCI/PII content
redaction**

Amazon Rekognition image and video



OBJECT, SCENE, AND ACTIVITY



CUSTOM LABELS



UPDATED! CONTENT MODERATION



TEXT



PPE DETECTION



FACE DETECTION AND ANALYSIS



FACE COMPARE & SEARCH



CELEBRITY RECOGNITION



VIDEO SEGMENTS



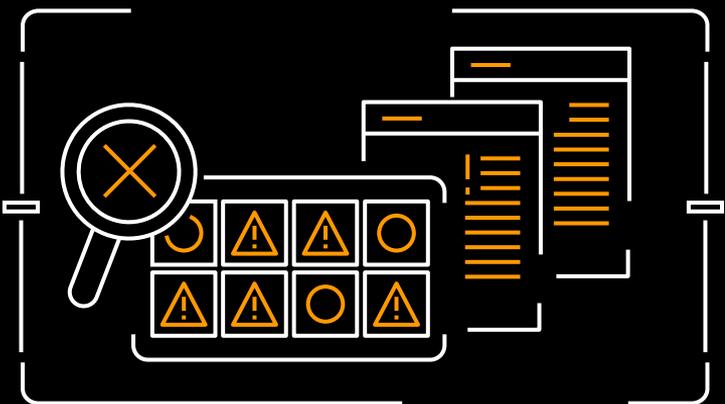
LIVE STREAM VIDEO



PATHING

Opportunities for accelerating AI/ML projects

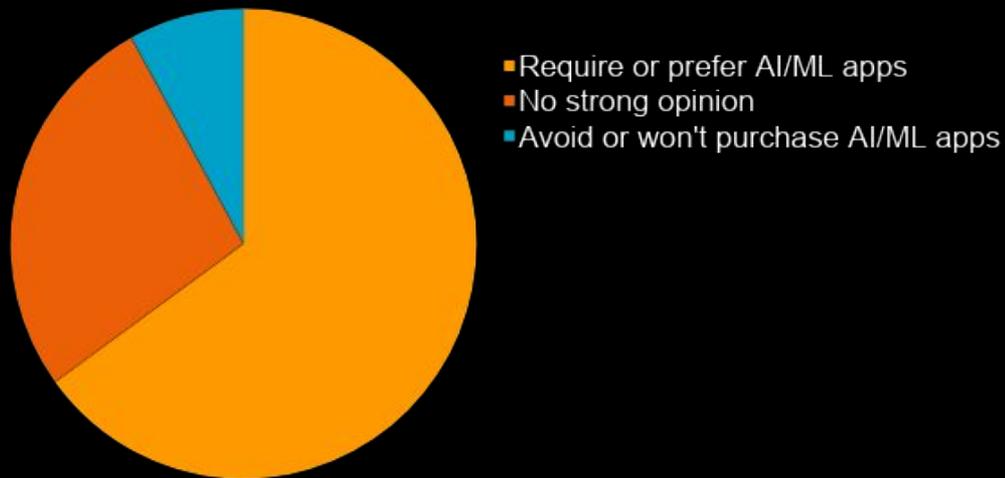
End customers struggle to get AI applications into production and deliver business value to stakeholders



Our customers increasingly want ready-made AI/ML solutions

What is your AI/ML preference when it comes to evaluating cloud-hosted/SaaS application providers?

65% **require or prefer** cloud applications with AI



IDC attribution

Hence the importance of AWS partners to deliver ML turnkey solutions



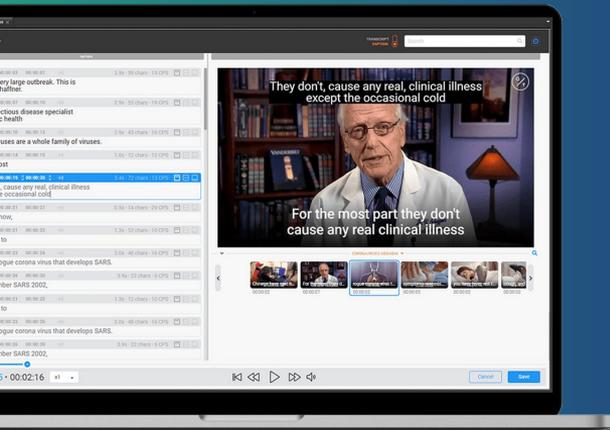
AWS Media Intelligence Solutions

Content Search and Discovery

Subtitling and Localization

Compliance and Moderation

Content Monetization



RAOUL COSPEN

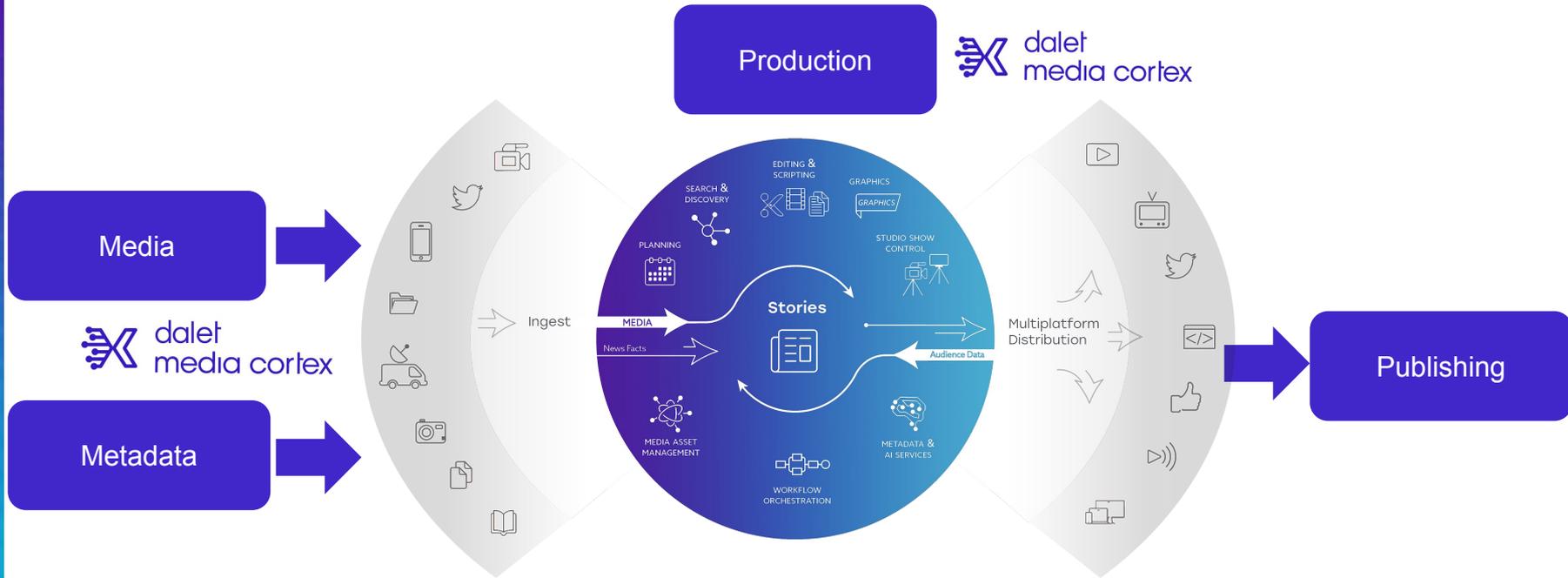
Director of Product
Strategy, News, Dalet



AI-powered production Asset Management



Leverage AI in your Production Asset Management





AI isn't just about collecting Metadata





A Sport Case Study

Samples of Editorial Needs



A News Journalist

wants to find the close ups of the key players of the game during their best actions

A Sports producer

needs the best actions of the season of a specific player

An Archivist

needs to automate the production of the game melt

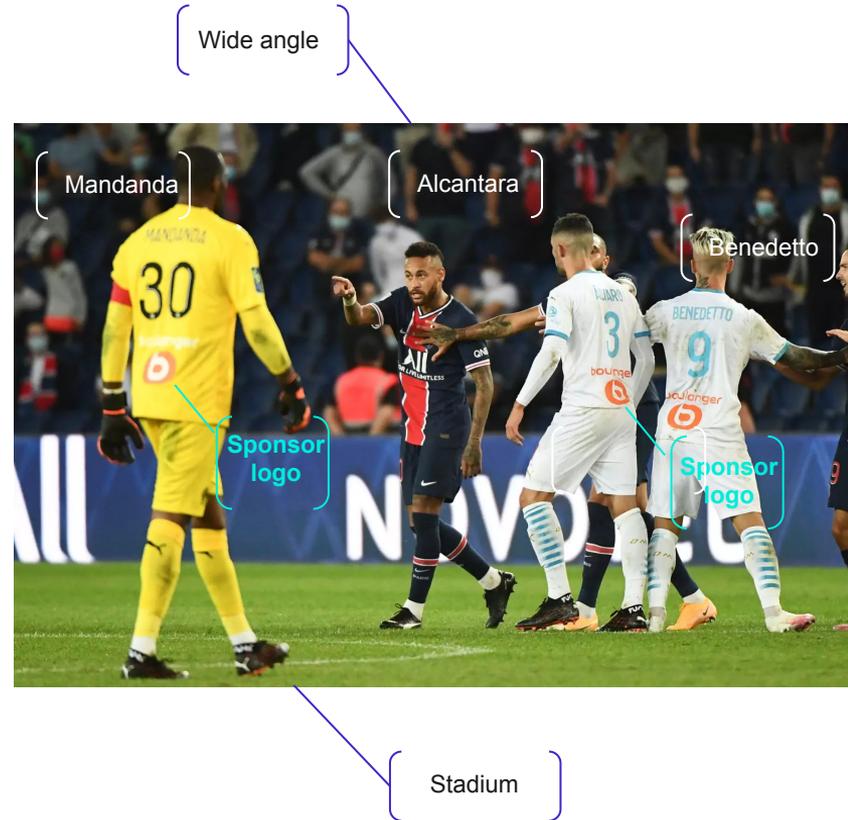
A Sponsor

Needs to measure the screen-time of his logo





1. Collecting Metadata



1. Collecting Metadata

From Traditional Metadata

Sports Statistics and Logs

- ✓ Actions (soccer example: goals, yellow/red cards, injuries, ...)
- ✓ Manual logs (sequences, named players, action ratings, ...)

To AI Based Metadata

Speech-to-text

- ✓ Transcripts and captions of comments and interviews
- ✓ Speaker diarization

Face / Player recognition

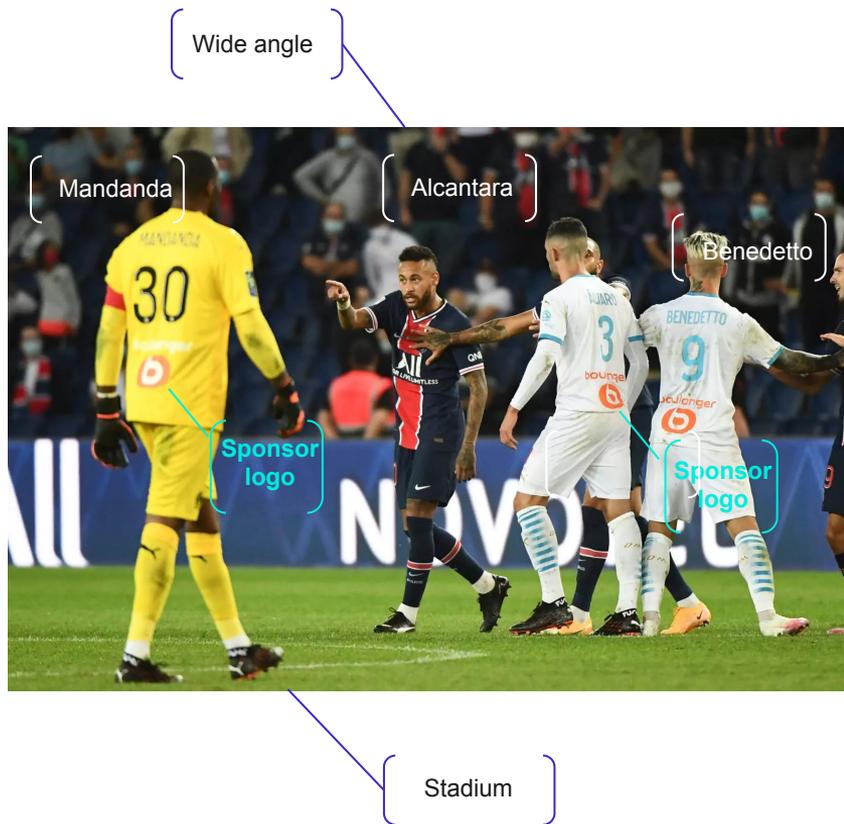
- ✓ Jersey numbers
- ✓ Face recognition

Logos / Objects

- ✓ Recognize logos
- ✓ Identify certain objects

Sequences

- ✓ Slo motion sequences
- ✓ Close-ups
- ✓ Wide plans
- ✓ Stadium shots
- ✓ Interviews



1. Collecting Metadata

From Traditional Metadata



Sports Statistics and Logs

- ✓ Actions (soccer example: goals, yellow/red cards, injuries, ...)
- ✓ Manual logs (sequences, named players, action ratings, ...)

To AI Based Metadata

Speech-to-text

- ✓ Transcripts and captions of comments and interviews
- ✓ Speaker diarization

Face / Player recognition

- ✓ Jersey numbers
- ✓ Face recognition

Logos / Objects

- ✓ Recognize logos
- ✓ Identify certain objects

Sequences

- ✓ Slo motion sequences
- ✓ Close-ups
- ✓ Wide plans
- ✓ Stadium shots
- ✓ Interviews

AI Powered Tools



AI Powered Search



Discovery Search



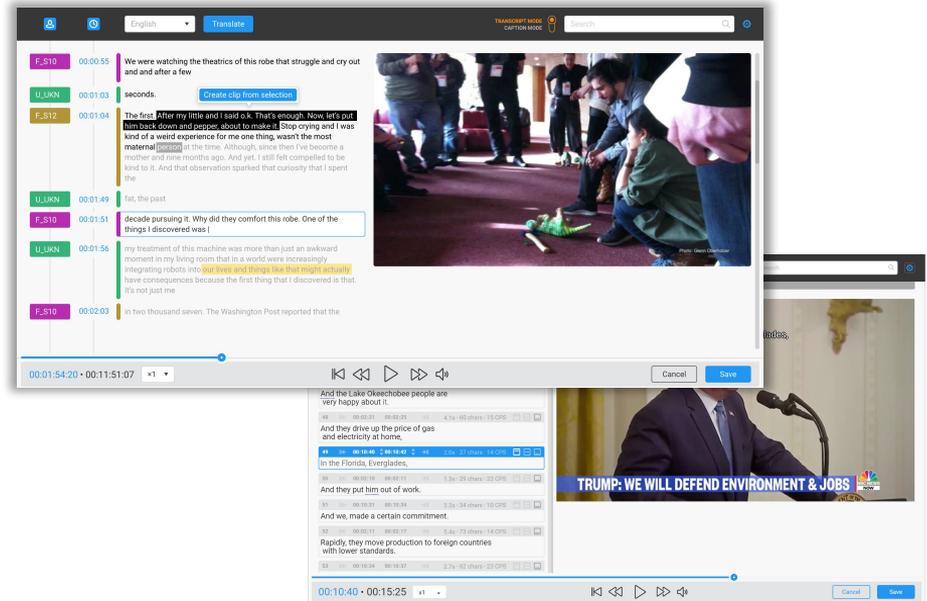
Highlight production



Use Case 2 - A News Case Study

Use Case 2: Productivity AI Powered Workflows

- Cut content at the speed of light
Half your production time by using the transcript – no need to watch the entire video



- Caption Workflows
Save up to 80% time spent creating captions



Discovery search

Discovery can contextually surface content amongst millions of assets in less than a second



Tangible Benefits

How Artificial Intelligence Can Help my Media Workflows?

Some Benefits:

- Reduce by 90% the need for manual indexing
- 80% time saved to create captions
- Cut content 2x faster
- Search across millions of assets in less than a second



Increase Productivity

Innovative Production Tools
leveraging AI data



Improve Quality

Surface relevant Content to
create more compelling Stories



Automate Time Consuming Tasks

Cognitive Services to help
Indexing, Captioning, Editing and
more



PATRICK MURPHY
M & E Custom Partner,
Quantiphi



quantiphi



Custom-built Video Intelligence

Custom-built Video Intelligence

Not all metadata is relevant.

Generated metadata must justify its business utility & meaningfully describe the content.



Time-based Information

- Scene level Information.
- Camera cuts/ transition

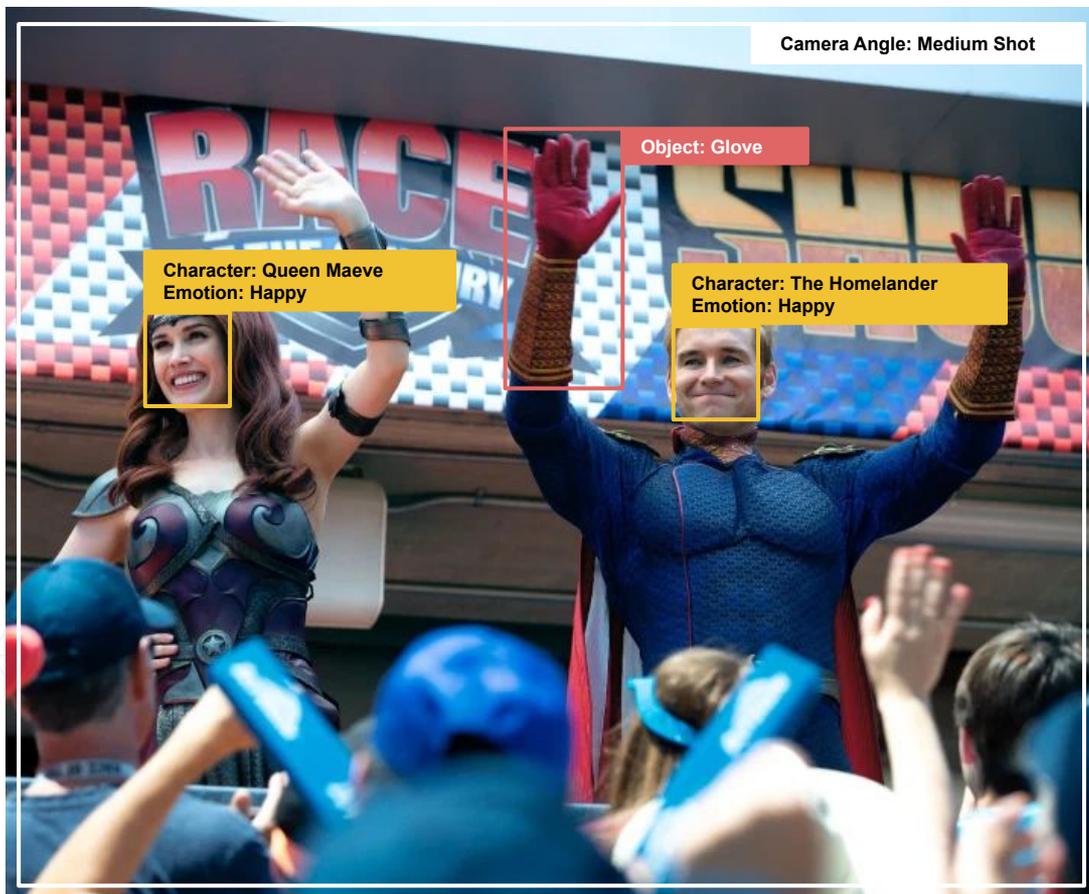
Characters & People

- Face/Characters
- Emotions
- Story Arcs

Background & Production Elements

- Objects/ Set Locale /Camera Angles.
- Overall Ambience/ Screen graphics

Customized AI for your content



Features



Character Identification



Emotion Detection



Object Detection & Tracking



Pose Detection & Estimation



Camera Angle Classification

Business Impact



Enable deep search and retrieval of monetizable micro moments

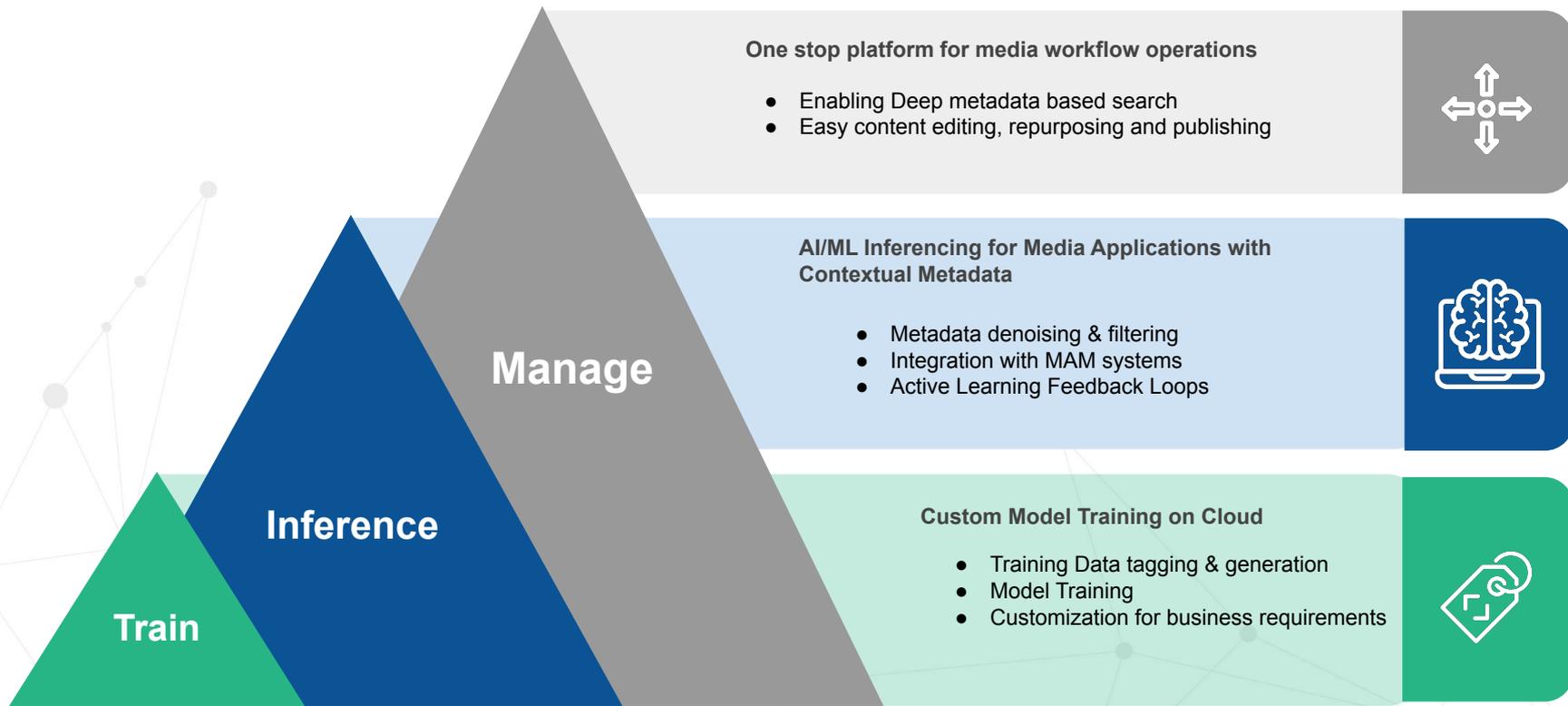


Repurpose archived content for mashups, promos, highlights & documentaries



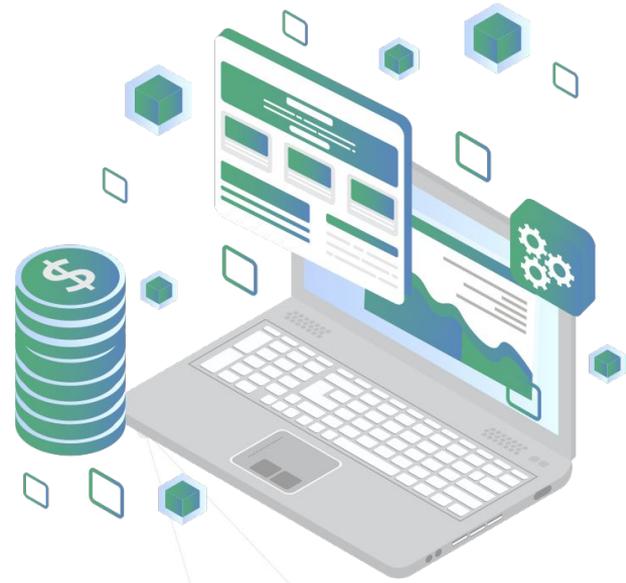
Enable contextual ad placement on OTT

Making Your Content Smarter



The Art of Start

Implementing AI for Monetization



Engagement Offer

CONTENT MONETIZATION

1 Sprint POC



Solution
Concept

1 Sprint



48 - Hours
Workshop



Identify 2 use
cases



Develop 2
Solution Concepts

Questions



A background network diagram consisting of numerous grey nodes connected by thin grey lines, forming a complex web of connections. The nodes vary in size and are distributed across the entire page.

THANK-YOU