AWS re:Invent

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MDS303

Build metadata-rich media libraries with machine learning

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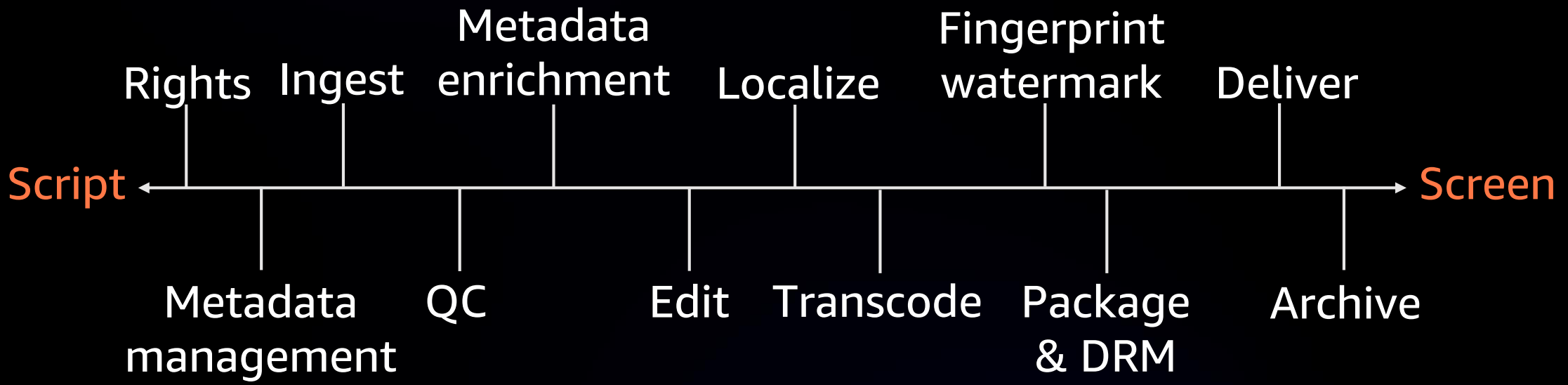
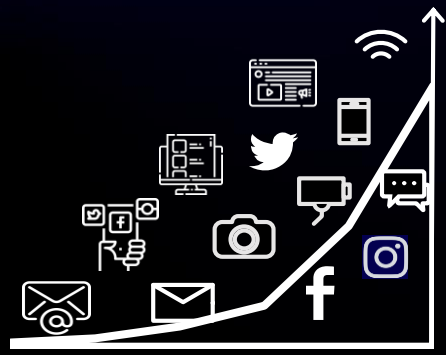
Cloud-based media supply chains

Cinematic/ episodic

Theaters & arenas

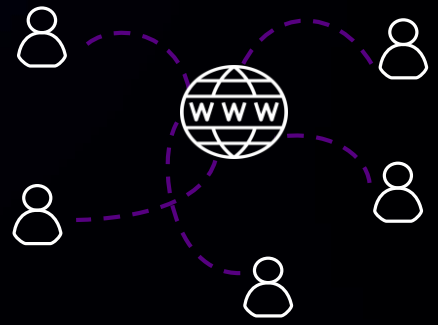


Media supply chain constraints and complexities



Explosion of content

- Increasing variety of formats and metadata
- Exponential growth in the amount of content produced



Distribution driving localization

- Lack of visibility to the status of multiple workflows
- Complex process to share media with outside vendors

Growing number of distribution platforms

- No industry-wide adoption of standard specifications
- Capacity and infrastructure limitations

aws

Getting started with metadata enrichment

1

Migrate video library to the cloud → Leverage AI/ML to automate & monetize

2

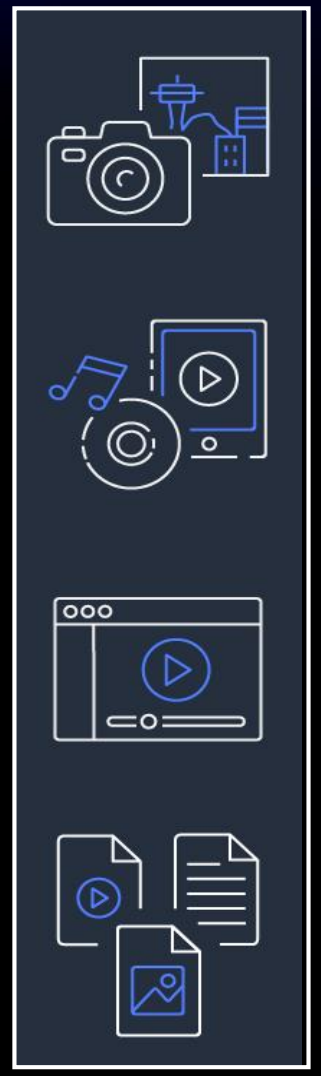
Connect, aggregate, analyze data → Data-driven processes & decisions

3

Intra-cloud file sharing vs. egress → Improve cost efficiencies

Introducing Media2Cloud v3

MEDIA2CLOUD NATIVELY INTEGRATES MACHINE LEARNING



Select machine learning services

Amazon Rekognition Video

Amazon Comprehend

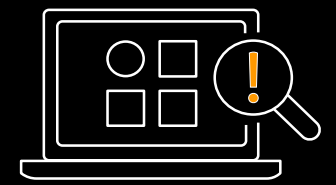
Amazon Textract

Amazon Rekognition Image

Amazon Translate

Amazon Transcribe

Media asset management



aws

AWS AI services for metadata extraction

Amazon Rekognition

Image and video analysis

Amazon Transcribe

Speech to text

Amazon Comprehend

Natural language processing

Amazon Rekognition

Object, scene, and activity

Custom labels

Content moderation

Text

PPE detection

Face detection and analysis

Face compare and search

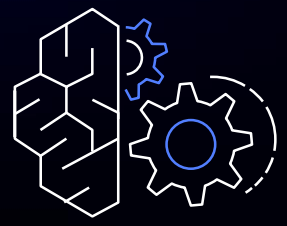
Celebrity recognition

Video segments

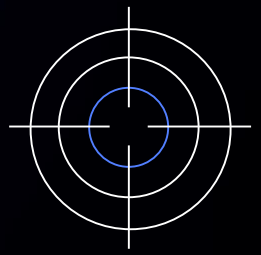
Live stream video

Pathing

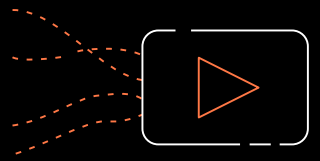
Amazon Transcribe: Speech-to-text service



Fully managed and continuously trained



Highly accurate, efficient, and scalable



Low latency for live streaming

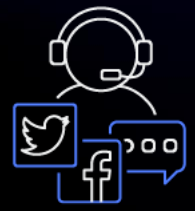
Key features

Enable content filtering and privacy with vocabulary filtering and content redaction

Customize transcription output with alternative transcriptions, custom vocabulary, and custom language models

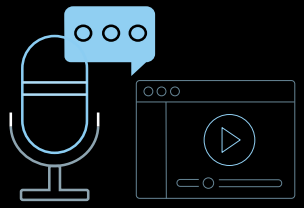
Language Identification | Word-level confidence scores | Word-level time stamps | Channel identification | Speaker labeling | Punctuation and capitalization

Amazon Comprehend: Natural language processing for metadata extraction



Social media
Chat forums, reviews

text



Media content
Broadcast media, talk radio, video content, and audio files

audio

Amazon Transcribe

text

Amazon Comprehend

- Entities + Custom entities
- Sentiment
- Key phrases
- Syntax
- PII (Personally identifiable information)
- Language
- Events
- Topics
- Document classification — Custom classifiers

Media2Cloud Version 3

AWS Cloud

Media2Cloud Ingest Test Dashboard (Used for setup and testing)

- Amazon Cognito
- Amazon DynamoDB
- AWS IOT Message Broker
- Amazon Elasticsearch

SOLUTION OUTPUT

Standardized Metadata & Proxies

- Archived content
- Original metadata
- UUID / MD5
- Proxies / thumbnails
- Inspection metadata
- Machine learning metadata

File Transfer Options

- AWS Storage Gateway
- Amazon DataSync
- AWS Snowball
- AWS Direct Connect

Customer Source Archive Video & Images

Master Asset + Filename + Barcode

Serverless Ingest Framework

- Amazon API Gateway
- AWS Step Functions
- Amazon SNS
- AWS Lambda

Proxy Generation

- AWS Elemental MediaConvert

Storage Management

- Amazon S3
- Amazon Glacier
- Amazon Deep Glacier

Asset Inspection

- UUID Registry
- Technical Metadata Extract
- MD5 Checksum

Machine Learning Services

- Amazon Rekognition
- Amazon Transcribe
- Amazon Textract
- Amazon Comprehend

Crowdsource Face Labeling

- Amazon SageMaker

SI Partners

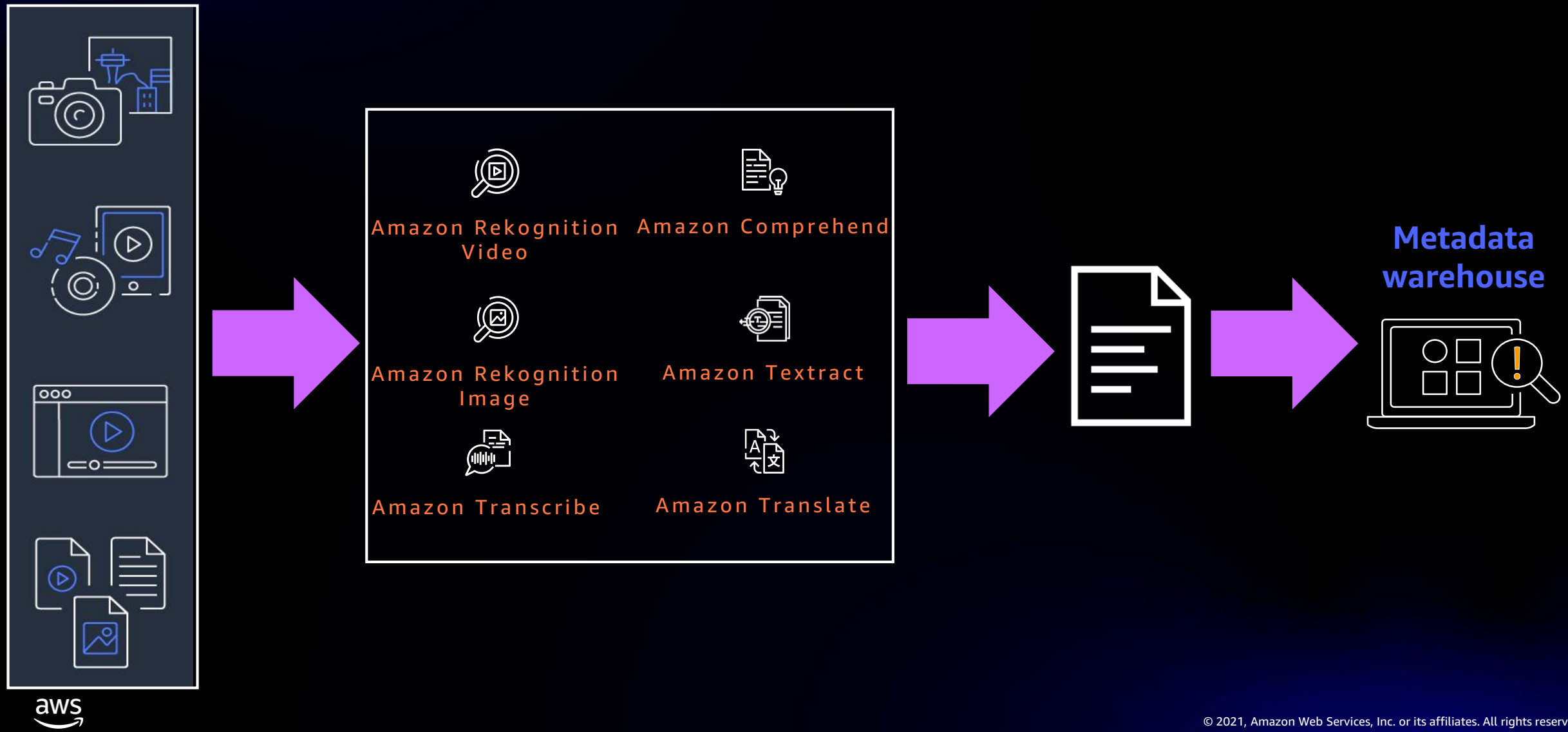
- Cloudfirst.io RapidMigrate
- Nomad CMS
- IMT / SoDA
- Starchive.io
- Trackit.io

MAM Partners

- Levels Beyond Reach Engine
- EditShare Flow
- eMAM
- Evertz Mediator

Media2Cloud solution

A UNIFORMED OUTPUT, EVERY TIME



Related sessions

Breakout Sessions

- AIM202 – Get started with AWS computer vision services
- AIM203 – Learn how Aon turned documents into insights with AWS AI services

Chalk Talks

- MDS303 – Build metadata-rich media libraries with machine learning
- MDS305 – Automate video clipping and highlight generation

Workshops

- SVS306-R1 – Serverless image processing workflows at scale
- GPS304 – Building enterprise AI applications: No ML expertise required (Media2Cloud)
- AIM316 – AI workflow automation for document processing
- AIM315 – Boost the value of your media content with ML-powered search (Content Analysis Solution)

Builder Sessions

- AIM314 – Build and deploy a custom computer vision model in 60 minutes
- ARC311 – Accelerate building media analysis workflows on AWS (Content Analysis Solution)

Thank you!