

The background features a dark blue gradient with large, overlapping, semi-transparent shapes in shades of purple, pink, and orange, creating a modern, abstract design.

AWS re:Invent

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MAE305

Powering FAST channels using AI on AWS

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Agenda

01 Introduction to FAST

02 FAST channel on AWS

03 FAST flywheel

04 Integrating AI with FAST

05 Benefits of AI-backed FAST

06 Resources

Introduction to FAST



What is FAST?

- FAST stands for **free ad-supported streaming television**
- Generates revenue through **advertising**
- **Cost optimized** entertainment option
- **Diverse content** providing wide range of genres
- Delivered to **connected devices**
- Similar to traditional TV but with greater **choice** and **personalization**
- **Innovative opportunity** for advertisers, broadcasters, content owners to distribute content to audience globally

FAST channel on AWS



FAST solution on AWS



Partner solutions

Leverage rich partner ecosystem for the prebuilt FAST solution on AWS

AWS Elemental MediaLive

AWS-managed broadcast-grade live encoding service

MediaLive schedules for creating ad signals, graphics, and FAST schedules

AWS Elemental MediaTailor

Linear channel assembly and ad insertion service

Channel assembly – Zero live encoding, dynamic ad inserts, no SCTE, low-cost linear channel

FAST using AWS Elemental MediaLive

MediaLive channel

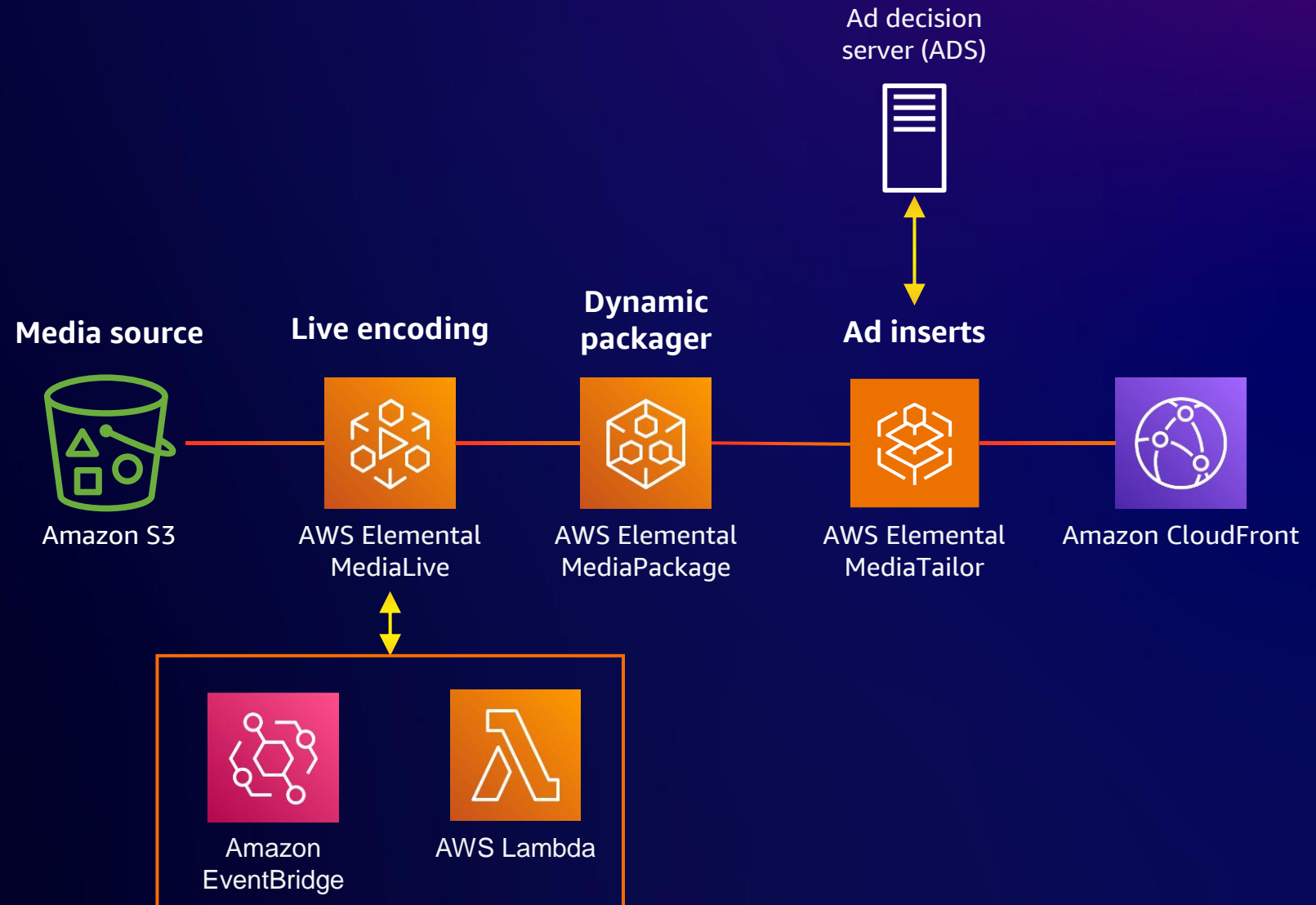
Create MediaLive channel and schedules (input switch, HTML graphics, and SCTE) for playlist

MediaLive output

Store MediaLive output to Amazon S3 or chain with AWS Elemental MediaPackage as origin

Chain with MediaTailor and Amazon CloudFront

MediaTailor for ad placements and CloudFront for global distribution



FAST using AWS Elemental MediaTailor channel assembly

Channel assembly channel

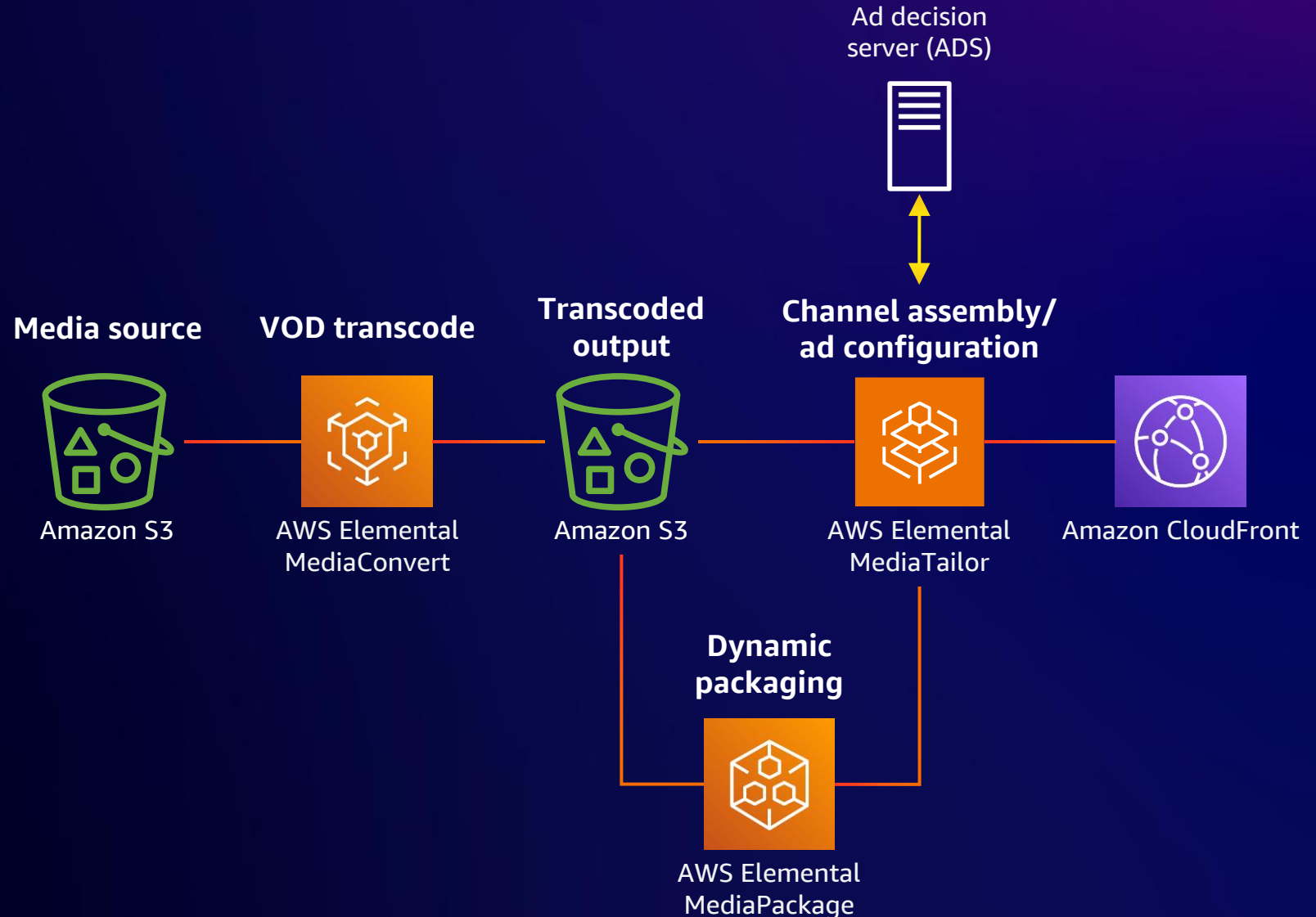
Create channel with schedule based on the playlist encoding, ad markers

MediaTailor ad configuration

Integrate ADS to monetize, personalize, target and context aware ads

CloudFront

Chain MediaTailor with CloudFront to reach global audiences



“Channel assembly is a **landmark development** in content delivery in that it allows anyone with a VOD library to get a live channel up and running **near instantly** in a **cost-efficient** way, and we’re excited to start using it to start deploying it via MediaTailor alongside our other AWS media services.”

Scott Favelle
Technology Director
Seven West Media



Core elements on monetization



Right content

Identifying the right content or plurality of content from media repository



Right time

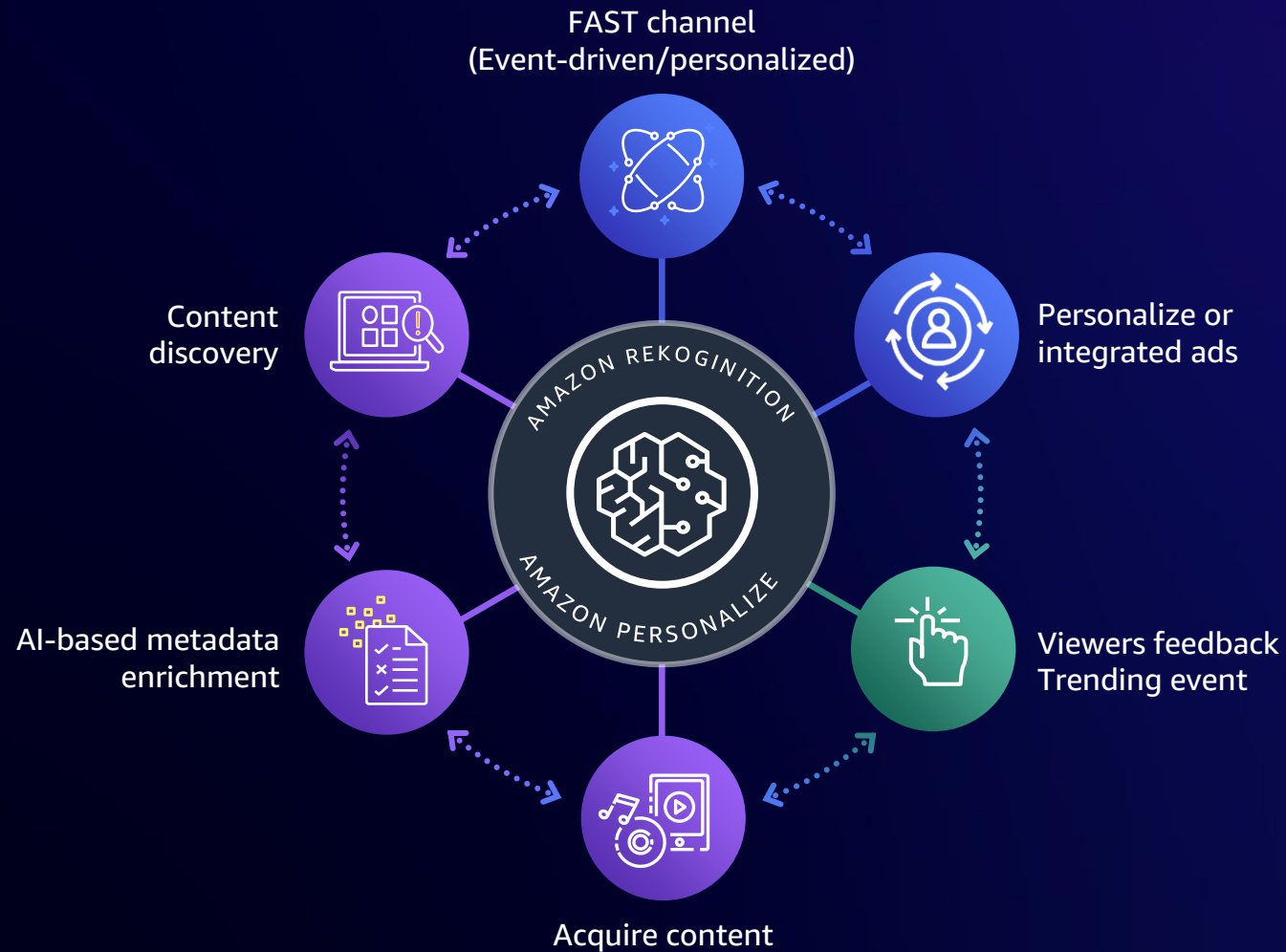
Event-driven or scheduled for showing the right content at right time



Right users

Appealing content to viewers, tailoring to their viewing behavior

Data-driven, smart FAST flywheel



Understanding the content archive

Easy discovery

Personalizing the FAST channel

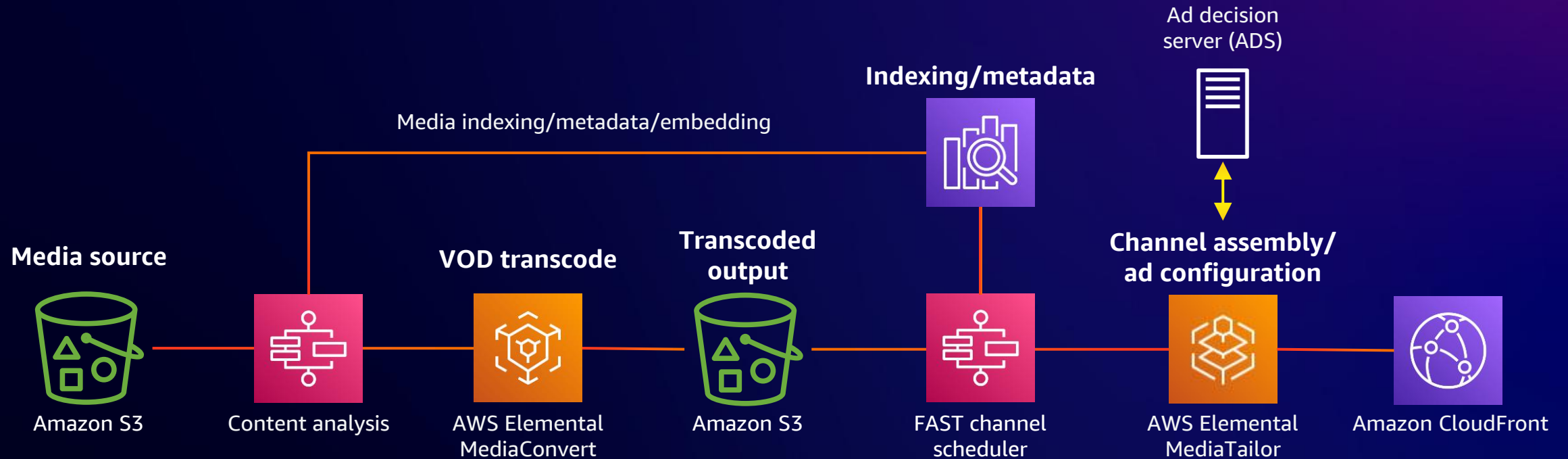
Personalized/integrated ads

Feedback loop

Integrating AI for FAST



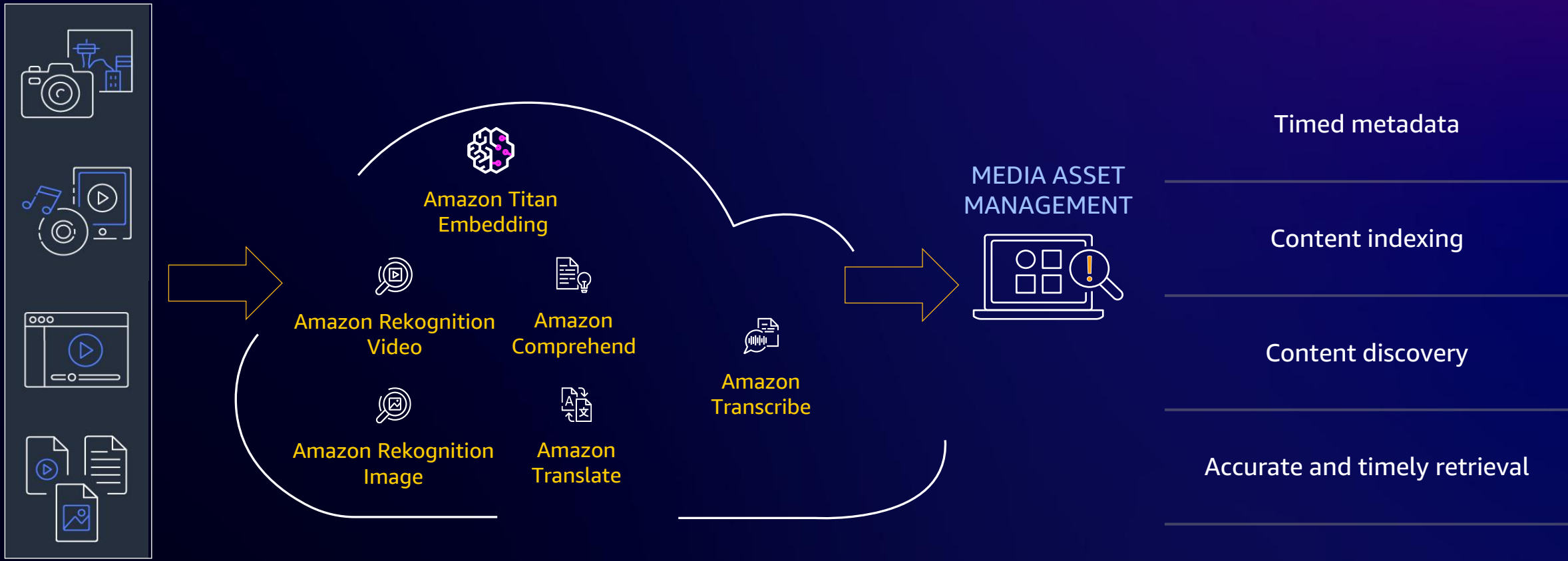
AI integration for FAST



Content analysis
AWS AI service - Zero ML expertise
Metadata extraction (real time/archival)

Content personalization
Audience segment (Geo, User Perf, viewers behavior, etc)
Personalized recommendation

Content analysis

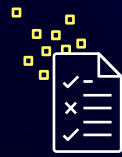


FAST personalization

User events/interactions
(views, signups,
conversions)



Item metadata
(details of articles,
movies, videos)



User metadata
(age, location)



Amazon Personalize

Thematic channels
(Topic or genre based channels)

Hyper local Channels
(Channel for regional interest)

Personalized Channels
(personalized EPG)

Ads
(personalized/integrated/
content aware)

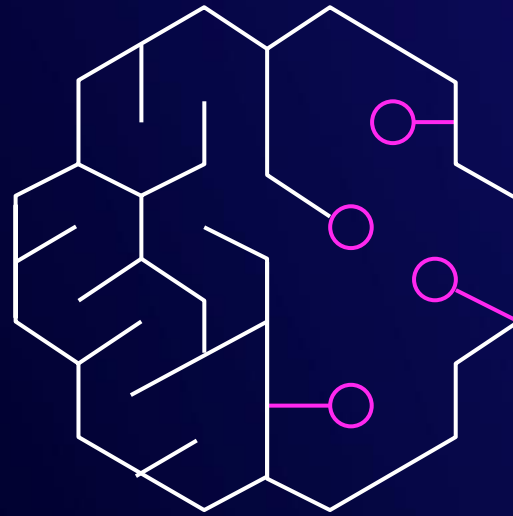
Generative AI

Title generation

Channel description

Poster creation

Interactivity

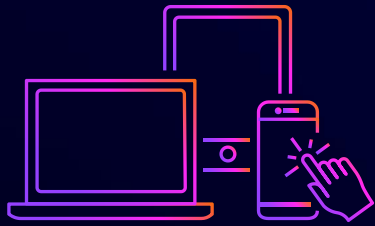


Amazon Bedrock
(AI21, Anthropic, Cohere,
Meta, Stability AI)

Benefits of AI-backed FAST



Benefits of AI-backed FAST



Content discovery

Quick and accurate discovery using metadata, enhanced schematic search



Relevant ads

Enhanced ad targeting
Contextual ads,
interactive ads



Viewer engagements

Insights into viewer behavior
Adjusting the content offering and ad strategies,
predictive analysis

Resources

Workshop

Step by step building FAST
channel on MediaTailor
Channel Assembly



Workshop

Step by step building FAST
channel on MediaLive



AI-powered innovation on AWS



Common use cases

Personalized Schedule / Channel

Thematic channels

Hyper local channels

Enriched Metadata

Personalized Ads

Content Discovery

Poster Generation

Title / Description generation

Media2Cloud V4

Automate ingest of media to cloud

Extract insights, metadata, and ad break opportunities



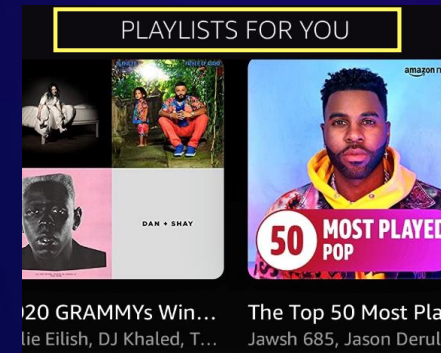
Amazon Personalize

CREATE INDIVIDUALLY TAILORED USER EXPERIENCES THROUGH RELEVANT RECOMMENDATIONS



User personalization

Recommendations tailored to a user's profile and interests



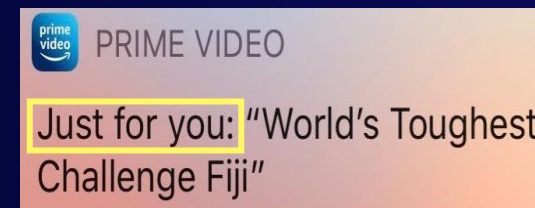
Personalized ranking

Items re-ranked in a category or search response based on user preference or history



Similar items

Recommend related items to encourage exploration and upsell



User segmentation

Target messaging and notifications to the users most interested in an item or category

Thank you!



Please complete the session survey in the mobile app