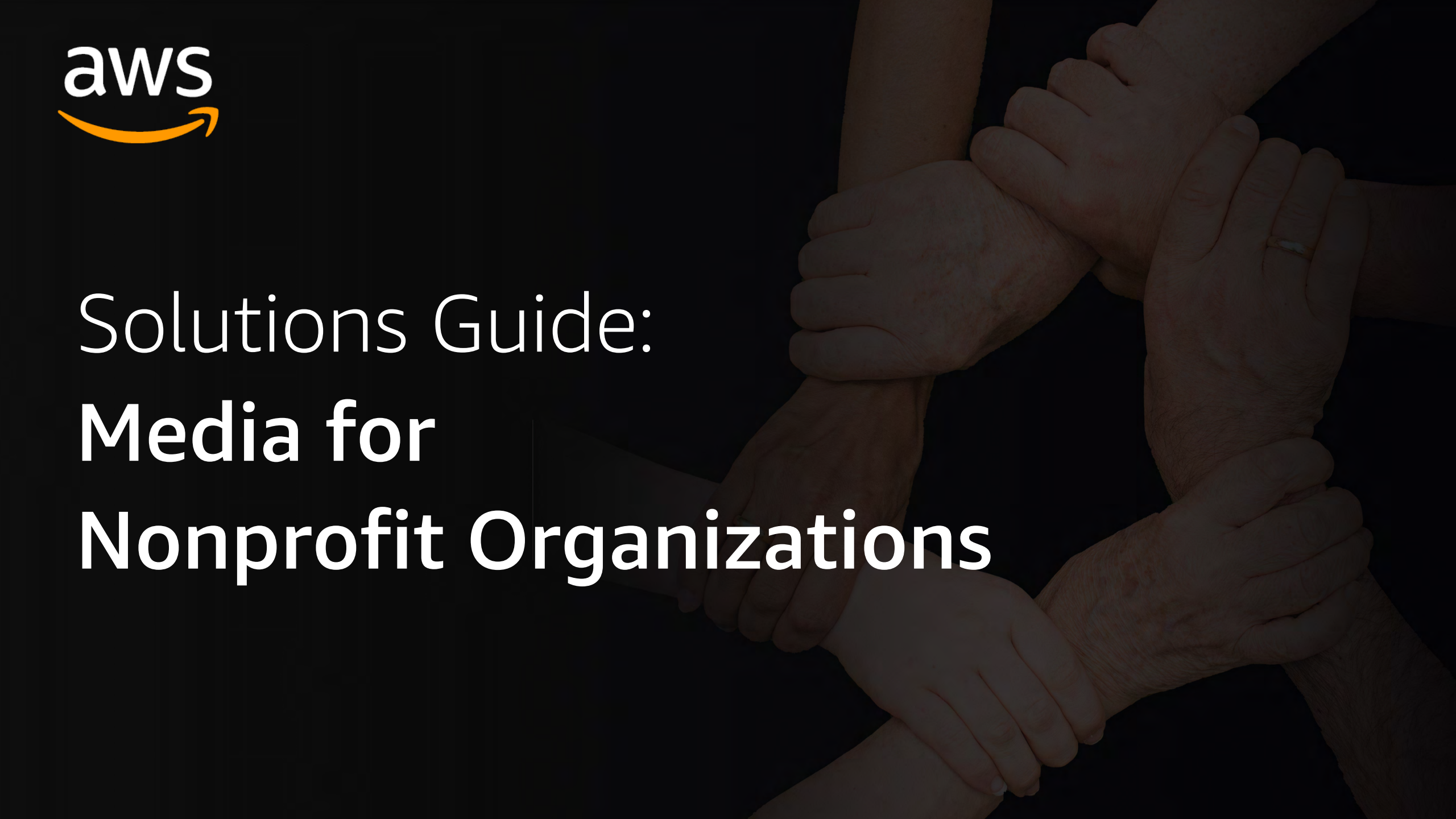

Solutions Guide:
Media for Nonprofit Organizations

About AWS Elemental

- World's leading cloud infrastructure
- Secure, elastic, scalable, cost effective
- Supports over 190 countries, 1M+ customers

- Deep video processing expertise
- Improve, monetize, deliver content
- Proven solutions with 850+ customers

Together AWS and AWS Elemental bring customers:

✓ Cost-effective and efficient scaling of video infrastructure

✓ Deeply integrated media-centric webservices on AWS

✓ Integrated solutions for "next-generation" deployment models

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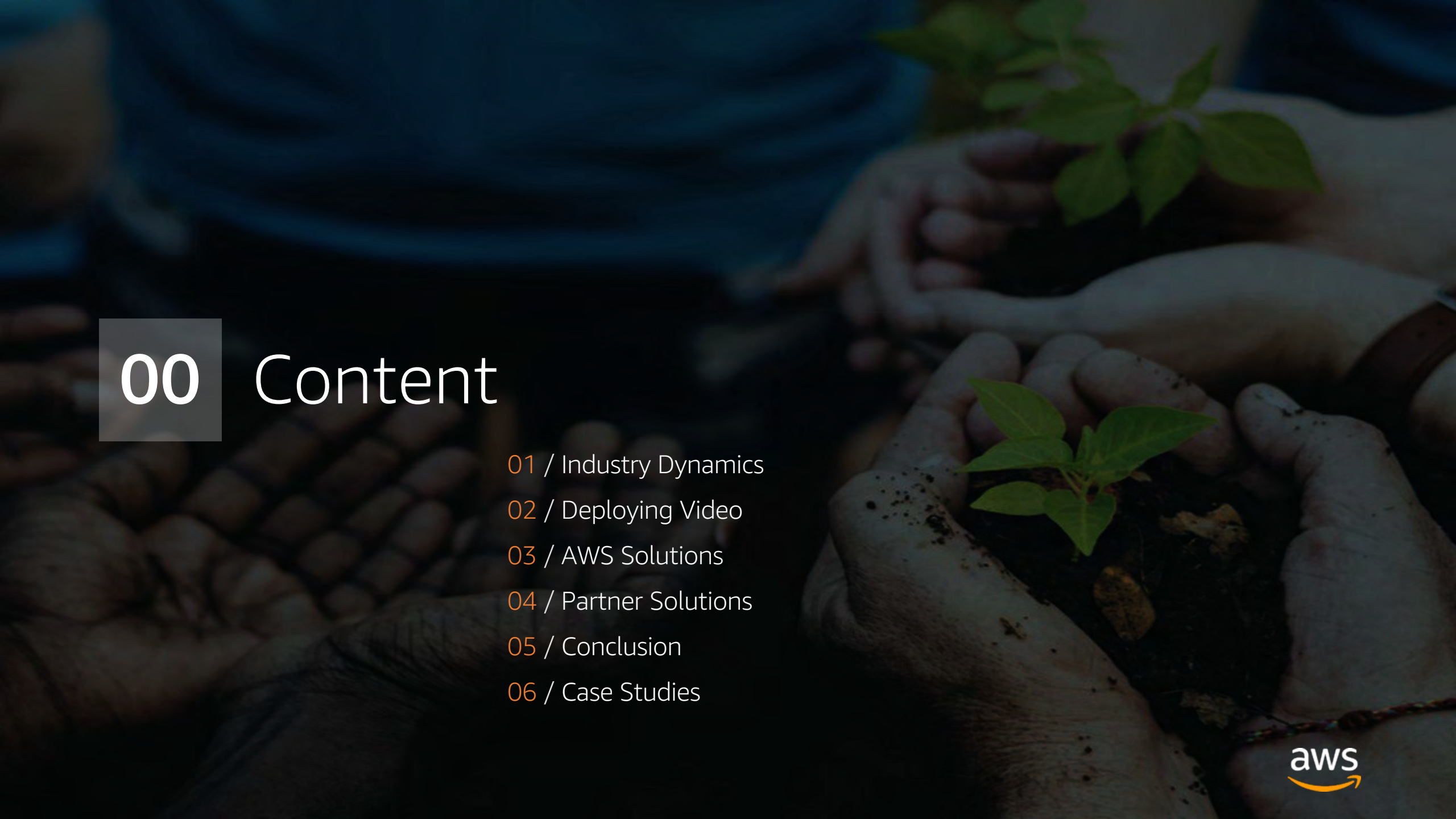

00 Content

01 / Industry Dynamics

02 / Deploying Video

03 / AWS Solutions

04 / Partner Solutions

05 / Conclusion

06 / Case Studies

01 Industry Dynamics

CHANGING DYNAMICS IN VIDEO FOR NONPROFITS

Decline in Charitable Giving

-72%

Decline in charitable giving to NPOs during COVID-19. [1] At 32%, online giving is the third most popular fundraising strategy.[2]

Service Disruption

78%

Nonprofits who experience a disruption of mission delivery and community impact. 23% of NPOs do not think they will survive. [3]

Perceptions of New Technology

89%

Nonprofits who would like to adopt new technology. 64% are budget constrained, 59% are either intimidated or are overwhelmed by technology. [2]

1 TheNonProfitTimes, “Survey: Donors Showing Some Signs Of Life During COVID”, June 2020, Source: https://www.thenonprofittimes.com/donors/survey-donors-showing-some-signs-of-life-during-covid/
2 NonProfitPRO, “4 Takeaways Nonprofit Leaders Need to Know”, Source: https://www.nonprofitpro.com/article/4-takeaways-nonprofit-leaders-need-to-know/
3 Globalnews, “Non-profit organizations struggling to make ends meet during COVID-19”, Source: https://globalnews.ca/video/6785550/non-profit-organizations-struggling-to-make-ends-meet-during-covid-19/

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SOLUTION REQUIREMENTS

Scalability

Rely on non-physical distribution channels to scale worldwide

Portability

Need for mobility in equipment

Resilience

Deliver high quality video reliably across devices and geographies

Affordability

Low cost physical and virtual expenditures

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TYPICAL USE CASES

Broadcast channel

Collaboration & communication

Lecture capture

Transcription & translation

Live events

Townhall & briefings

Charitable giving

User-generated content

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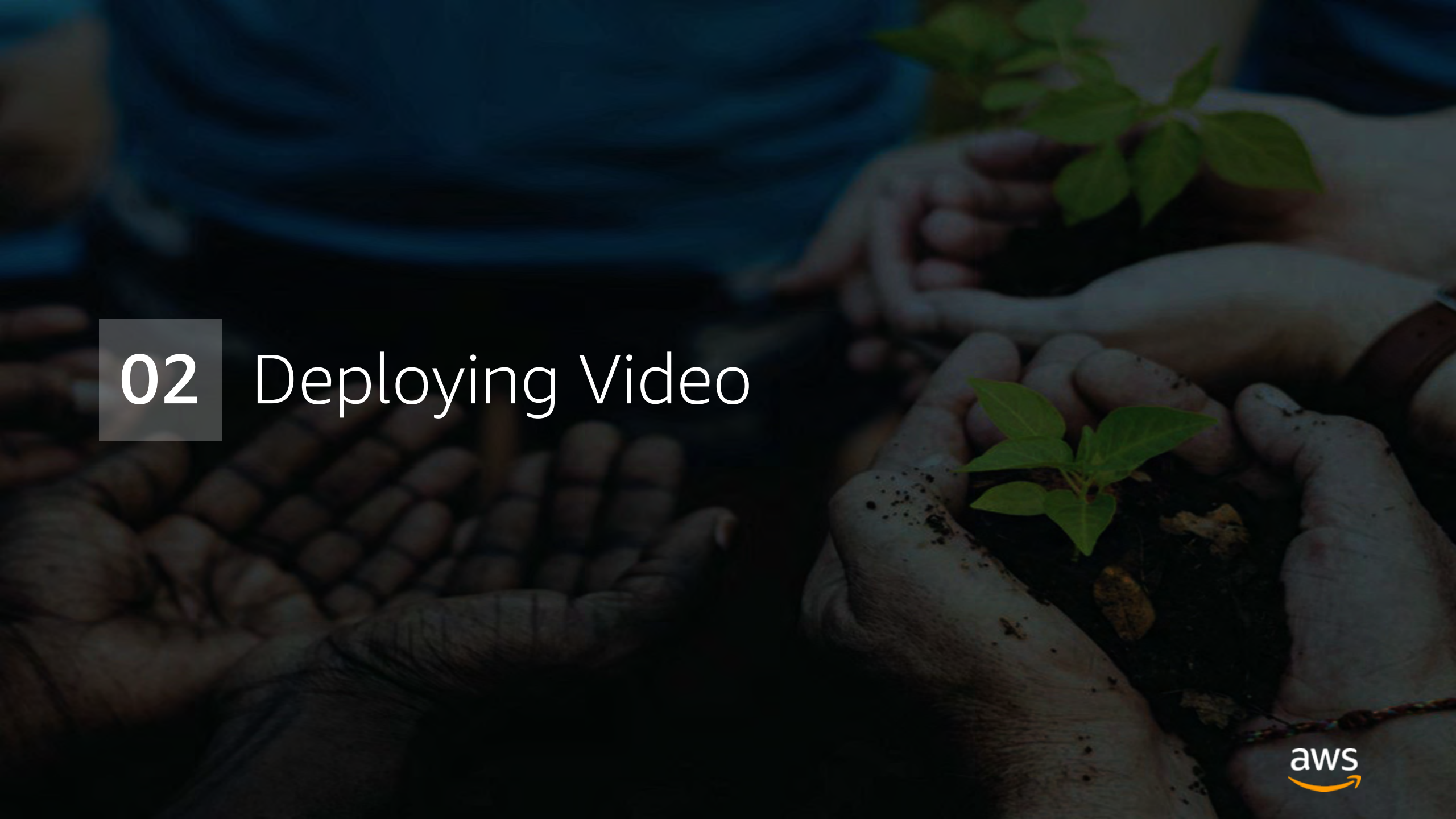
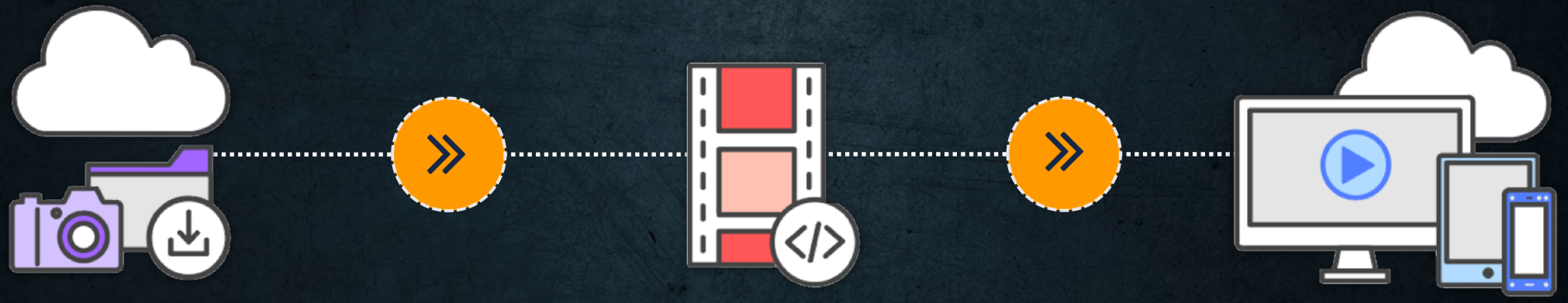


02 Deploying Video

Video At A Glance

In a simple video streaming workflow, a high-quality live camera feed or a pre-recorded video file is uploaded into the AWS cloud via a contribution encoder. That video is processed into renditions, packaged into the right formats, then stored in a CDN such as Amazon CloudFront for playout on all compatible devices and video players.

Depending on your needs, you may want to use digital rights management (DRM) or watermarking for content protection, or you may wish to extend the offering with user management systems or a content personalization capabilities. Regardless of the requirement, AWS or an AWS partner has a solution or service that fits the need.



Originate source content (live feed or VOD files)

Prep, process and protect (e.g. DRM, watermark) content using AWS Media Services

Deliver content via Amazon CloudFront

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Support for a variety of deployment models

Depending on your needs, you can build your media workflows on top of AWS using AWS media solutions and services, leverage our partner ecosystem, or create a bespoke offering.

BUILDING BLOCKS

Design your own media offerings with dedicated solutions for video transport, processing, packaging, delivery & distribution.

TECHNOLOGY PARTNERS

Choose commercially proven solutions for video delivery with help from an AWS technology partner.

SOLUTION STARTER KITS

Use reference architectures, implementation guides, templates, source code, and documentation to deploy production workflows.

CONSULTING PARTNERS

Work with AWS experts who design and maintain cloud video infrastructure tailored to specific customer requirements.

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Benefits of using the Solution Starter Kits

1. ONE-CLICK LAUNCH

The AWS media solutions are templatized workflows which you can deploy and get started with quickly with just one click, launching fully-tested solutions in your AWS account. This saves the resources of developing a solution from the beginning.

2. WELL-ARCHITECTED

AWS solutions are designed with best practices to ensure the solutions are deployed with application security, has monitoring capabilities, and can support multiple users at scale and with high resiliency.

3. EXPAND AND ADD

Use the framework and available guides to expand the solution starter kit based on your needs.

4. ACCELERATE MONETIZATION

The net result of launching a fully-tested, well-architected solution in one-click which can be expanded with complementary services such as personalization and ad insertion is that NPOs can experiment with varying business models to optimize the monetization potential of its content.

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Benefits of using Partner Solutions

1. BEST IN CLASS

Built on AWS, partner solutions are both well-architected and designed for specific NPO use cases, delivering innovative capabilities which fit your workflow.

2. FULLY-MANAGED

Partner solutions are managed by dedicated teams who monitor their solutions' performance and metrics to ensure its reliability and scalability, and are committed to your success.

3. FAST DEPLOYMENT

Built on the AWS cloud, partner solutions can be deployed very quickly, without the need to provision hardware and develop the end-to-end solution.

4. CUSTOMIZABLE & EXTENDABLE

With dedicated engineering and professional services teams to focus on customizing and extending the capabilities of partner solutions, you can be rest assured that the out-of-the box solutions can be customized for your workflows.

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03 AWS Solutions

Solution: AWS Elemental Link

Front

Back

AWS Elemental Link is a device that connects a live video source, like a camera or other video production equipment, to MediaLive

- Connect power, Ethernet, and video (HDMI or 3G-SDI)
- Link accepts a single video source and sends a single video output to AWS Elemental MediaLive

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Solution: AWS Elemental Link (cont)

https://aws.amazon.com/medialive/features/link

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Easy to set up, operate remotely, and take anywhere

Fast and easy setup

- AWS Elemental Link is shipped fully configured to your AWS Account
- Once connected, Link automatically starts sending thumbnail images to AWS, ready as a MediaLive source

Manage remotely

- Stop and start Link device from the MediaLive AWS Management Console
- Manage and monitor your live feed from a central point of control

Small and portable

- Weighing less than 1 lb. (450 g) Link travels wherever you need it to
- Silent operation and minimal heat generation make the device practical to use just about anywhere

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Cost efficient and adaptable to network issues

Cost efficient

- AWS Elemental Link offers broadcast-grade live video transfer to AWS at a fraction of the cost of traditional approaches
- Link is efficient to operate, with easy setup and remote management

High video quality

- Link uses efficient, advanced video compression to deliver high quality video
- To maximize the quality of video sent to the cloud over unpredictable networks, Link continuously adjusts bitrate based on conditions

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Solution: Backpack reference design

Optimal mobility

- AWS Elemental Link + LTE/WIFI/GPS router + battery is lightweight
- Silent operation and minimal heat generation is ideal for backpack design

Flexible configurations

- Connect to AWS SnowPack for disconnected edge video processing
- Configure as a MediaLive source feeding a partner video CMS
- Onboard integration with AWS IoT Greengrass enables AI/ML

High video quality

- Efficient, advanced video compression delivers high quality video
- Link continuously adjusts bitrate based on conditions

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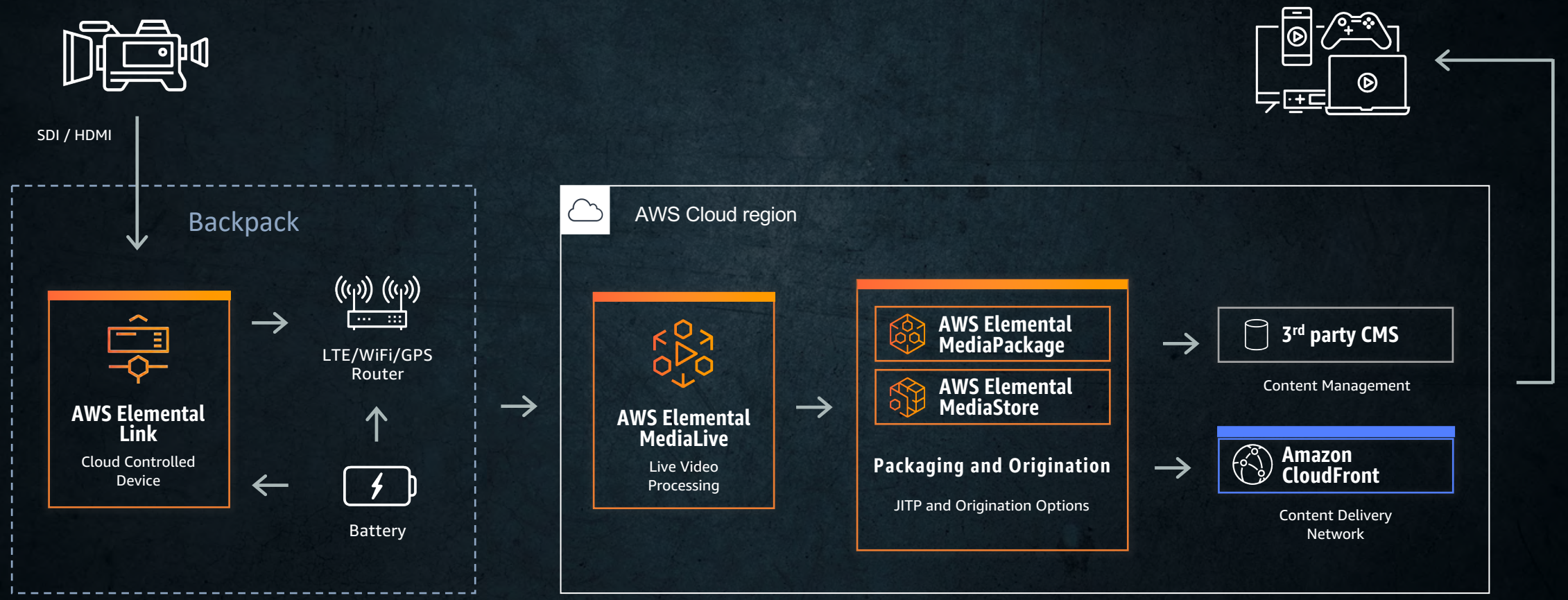
Solution: Backpack reference design (cont)



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Solution: Backpack reference design (cont)

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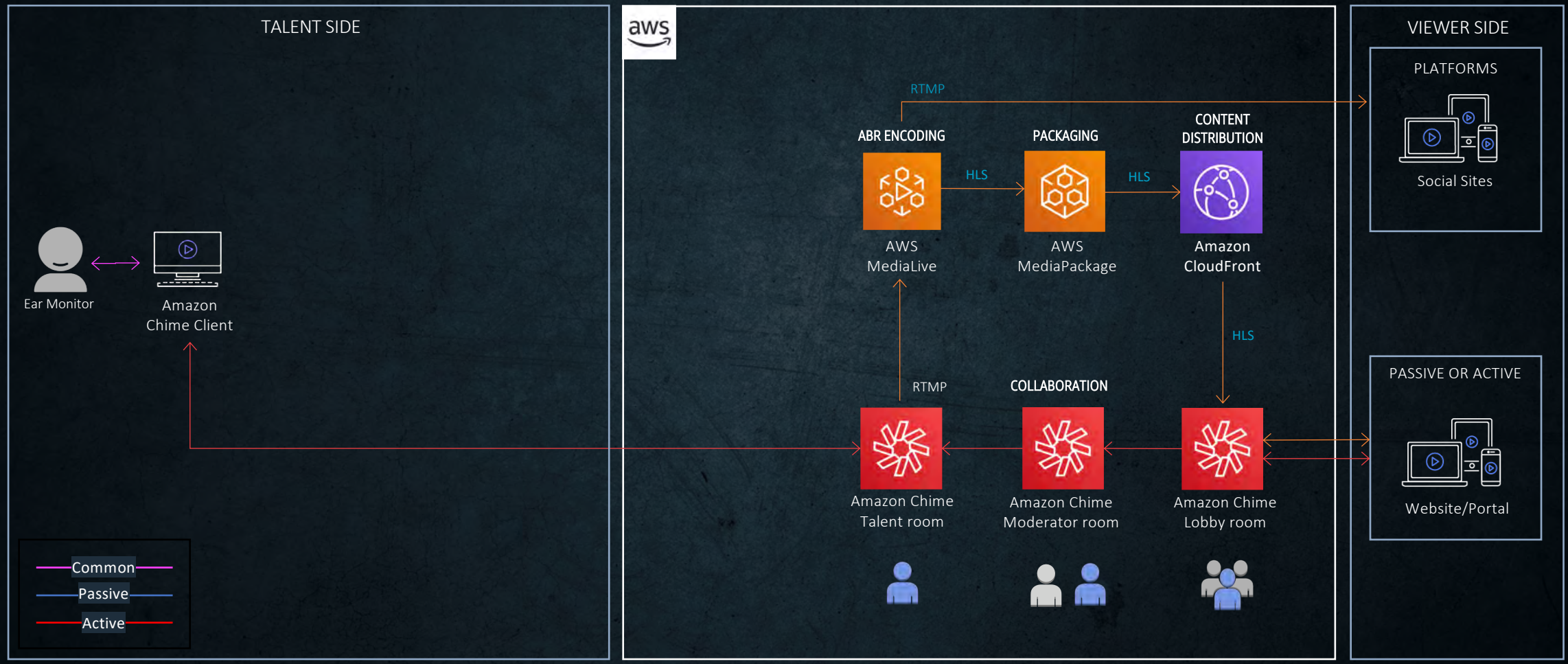
Solution: Collaborative Live Event Solution

- Create video virtual townhalls with broadcast reach
- Allows for real-time conversations between talent and participants while streaming to large audiences live
- End-to-End solution including web-based virtual meeting rooms
- Combines benefits of Chime SDK with AWS Media Services

For more information:
https://aws.amazon.com/blogs/media/collaborative-live-events-blend-real-time-engagement-with-broadcast-video-reach/

COLLABORATIVE LIVE EVENT (OPTION 1)



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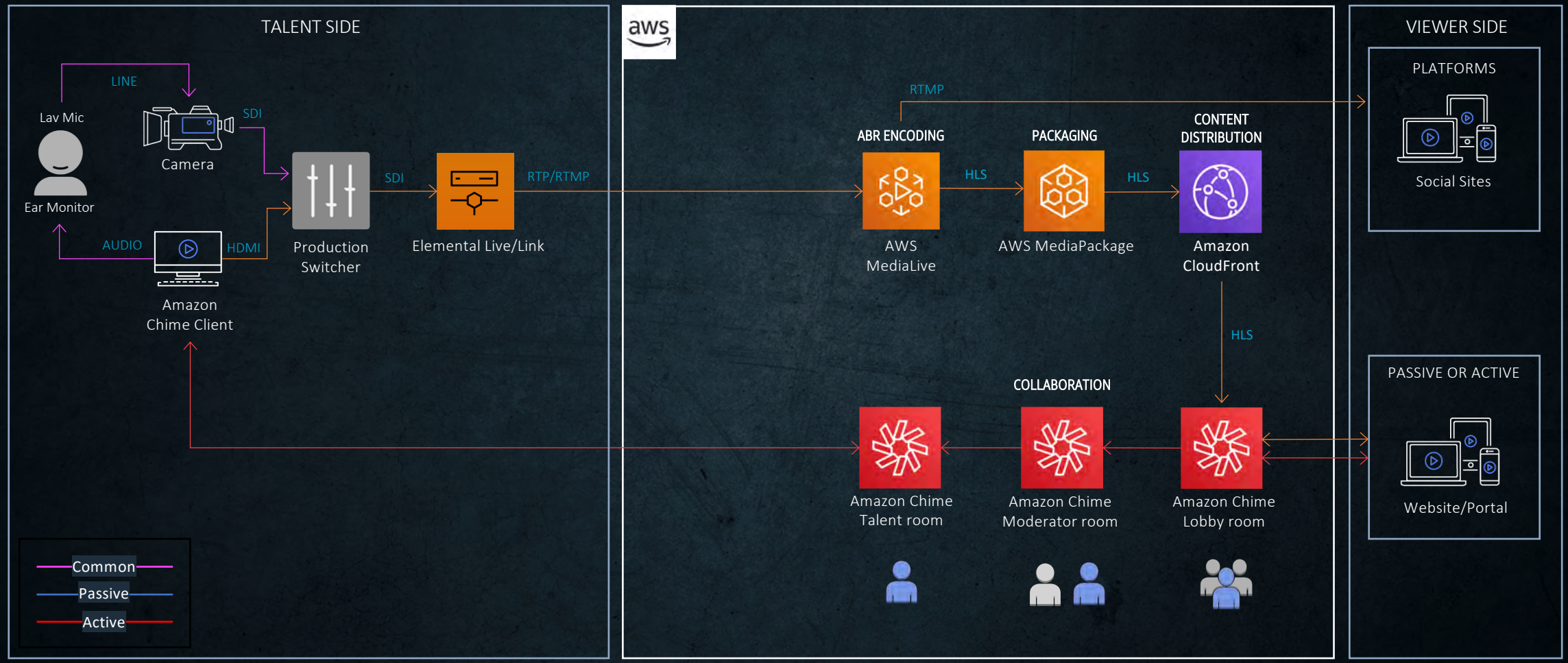
COLLABORATIVE LIVE EVENT (OPTION 2) – Added Switcher & Encoder



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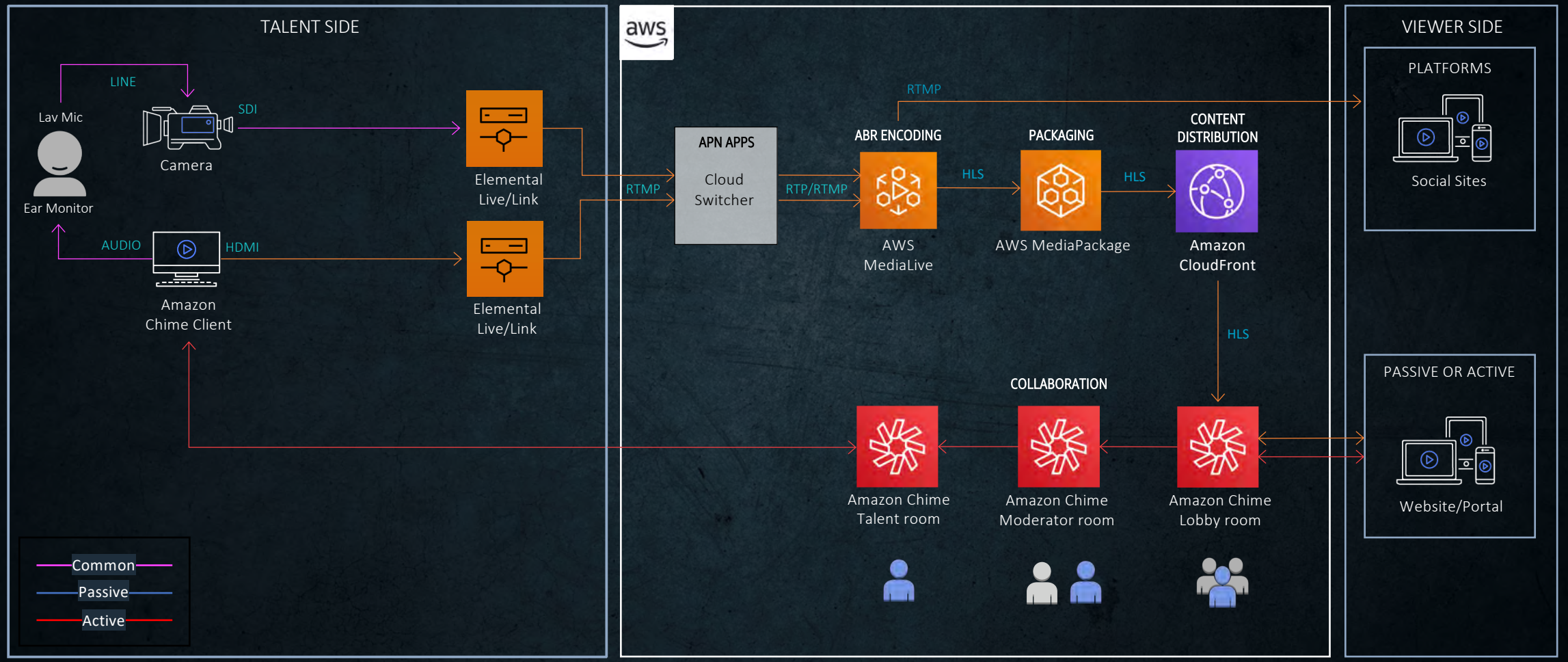
COLLABORATIVE LIVE EVENT (OPTION 3) – Added Cloud Switcher & Encoder



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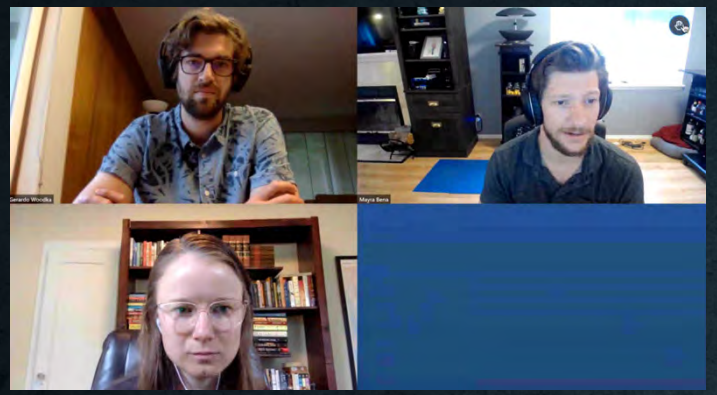
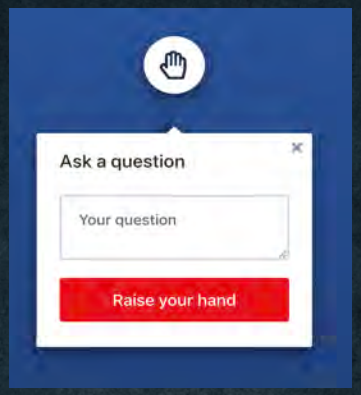
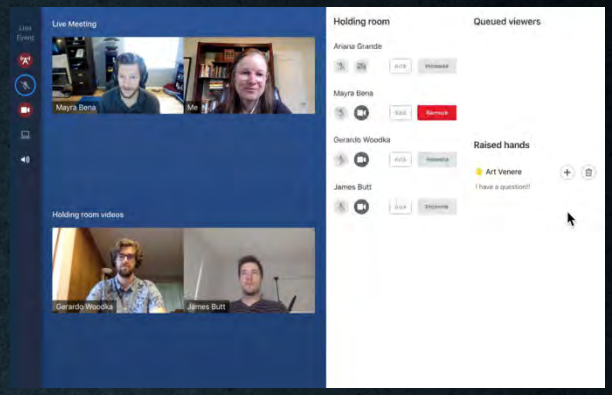
Solution: Collaborative Live Event Solution (cont)



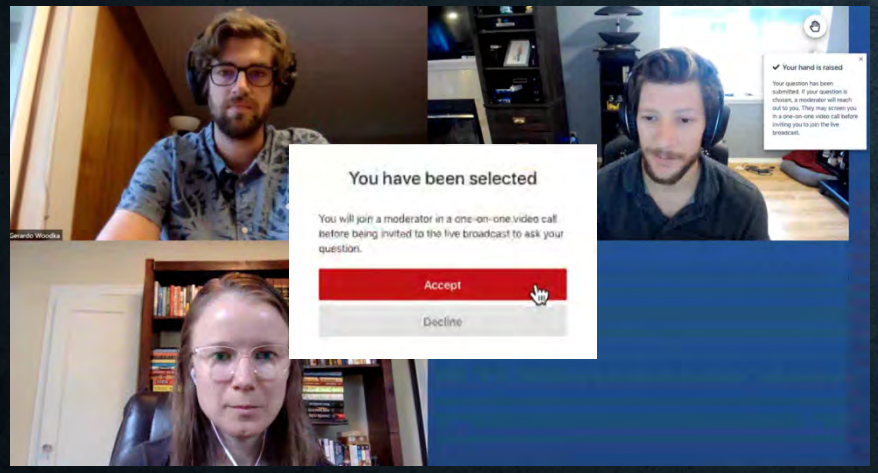
1 Watch live broadcast feed



2 Ask to join



3 Speak with moderator



4 Accept the invitation

5 Join live broadcast

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04 Partner Solutions: **Rivet Logic**

Overview

Rivet Logic is an award-winning consulting, design and systems integration firm that helps leading enterprises build riveting digital experiences, and the solutions to continually manage and optimize those experiences for customers, employees, and all stakeholders. With deep technology expertise in modern enterprise software, Rivet Logic crafts content-rich solutions that power personalized experiences across all digital channels.

At Rivet Logic, all our professionals have extensive experience developing, deploying and supporting enterprise solutions. In everything we do, we focus on adding value to our clients' businesses and organizational goals. We take pride in our extensive technical expertise, and we understand that it is only of value when we deliver bottom-line results to our clients.

Founded in 2005, we have served hundreds of clients that span a wide range of industries. Headquartered in Reston, VA, we have offices throughout the USA and a near-shore software development center in Costa Rica.

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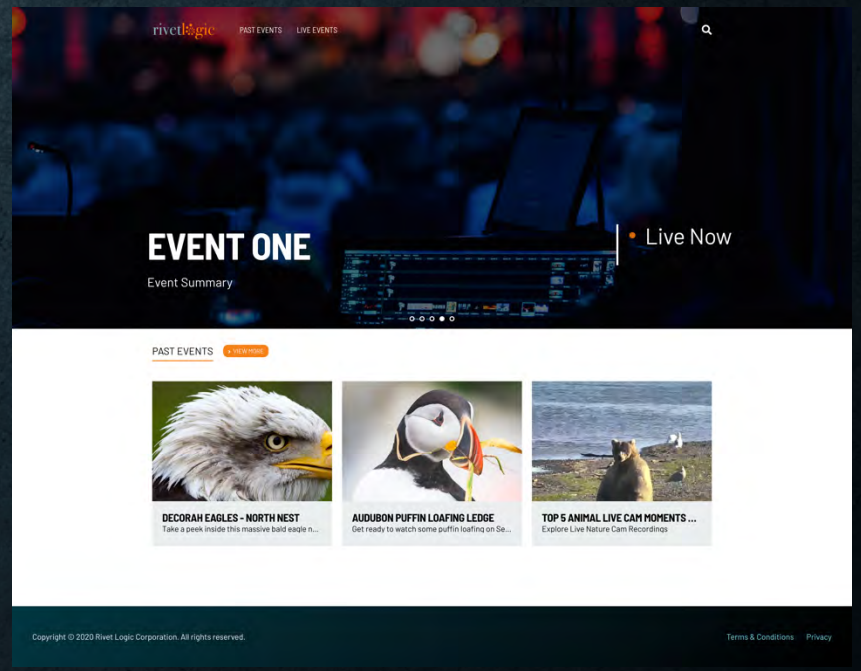
Live Streaming Video Fundraising Portal for NPOs

A tailored solution, such as Live Streaming Video Fundraising Portal for NPOs on AWS – which leverages Crafter CMS and AWS Media Services – offers a robust solution that is fully customizable to each organization's unique requirements. Technology is moving quickly, and your audience expects the highest quality, professional video content without interruptions.

Our cloud solution is configurable for crafting a unique experience for all types of events and use cases, while enabling a developer friendly platform and open APIs to build extensions and customizations.

This solution provides a customized solution that allows you to reap all the benefits of professionally executed video at a fraction of cost with open source, and cloud-based platforms.



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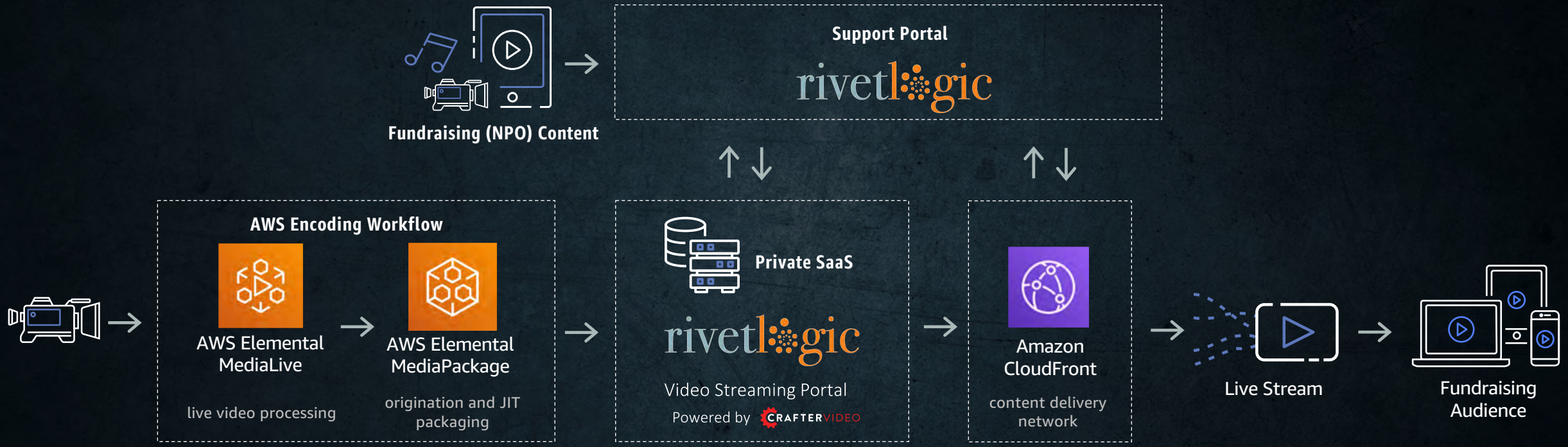
Workflow

rivetlogic



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Resources

Overview + Ask for a demo:
https://rivetlogic.com/services/solution-areas/video-communications

Case Study:
http://lp.rivetlogic.com/rs/194-BMR-552/images/crafter-video-center-aws-datasheet.pdf

Contact:
https://rivetlogic.com/about/contact-us
sales@rivetlogic.com

SOLUTION
Video Center on AWS

CRAFTER SOFTWARE
aws elemental

Does your organization deliver video at scale? Do you stream live or recorded updates from company leadership? Are you part of an enterprise that provides e-learning assets? If so, the shifting video landscape will change the way you create and deliver video.

A Shifting Video Landscape

Video is deeply embedded in today's connected experience. As video has become more and more prevalent, viewers' expectations around its accessibility, quality and relevance have increased. Audiences now expect to watch the content they want, when they want, on the device they choose, with the best possible picture quality. In addition, viewers increasingly anticipate that the content they engage with will be appropriately tailored to their particular needs, interests or tastes.

However, traditional approaches to video processing and delivery can't keep pace with the changing nature of video consumption and the rising expectations that follow from it.

Conventional video technologies fall short because they:

- Are capital intensive
- Require complex resource planning
- Require continuous upgrades
- Require significant operational expense
- Are slow to address new and emerging standards

Benefits of Moving Video Operations to the Cloud

Organizations who choose to migrate their streaming video infrastructure to a cloud-based architecture can tap into a number of opportunities to improve the performance, efficiency and costs of their video workflows.

- Ease of use
- Broadcast-grade capabilities
- Pay-as-you-go utility
- Automated, limitless scalability
- Flexible workflow options
- Built-in reliability
- Operational agility
- New paths to monetization
- Focus on what matters

Case Study: Executive Office for United States Attorneys (USAO)

NEED

- Training video content management systems
- Targeted video format for Bring Your Own Device (BYOD) delivery
- Highly secure, mobile, cost-effective and streaming and downloading
- Branded, consumer-oriented web interface
- Government-approved private cloud hosting

SOLUTION

- Deployed Video Center on AWS in private AWS FedRamp Cloud
- Leveraged Amazon S3, Elastic Transcoder, S3 and CloudFront
- Integrated with USAO Single Sign-On (SSO)

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04 Partner Solutions: **Nomad CMS**

Overview

NOMAD

Nomad is an asset management platform that helps you organize your existing media content, manage your new live video content, and help users discover the content in new and relevant ways.

Traditional human “metadata tagging” techniques are time-consuming and costly, so Nomad uses the AWS cloud and Artificial Intelligence (AI) to instantly uncover important relationships and details within your media. This metadata can even be combined with your existing business data to create more powerful and relevant searching capabilities.

Your content managers can quickly create content channels for your users, and users themselves can easily find the information they are looking for with our powerful search engine.

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Solution

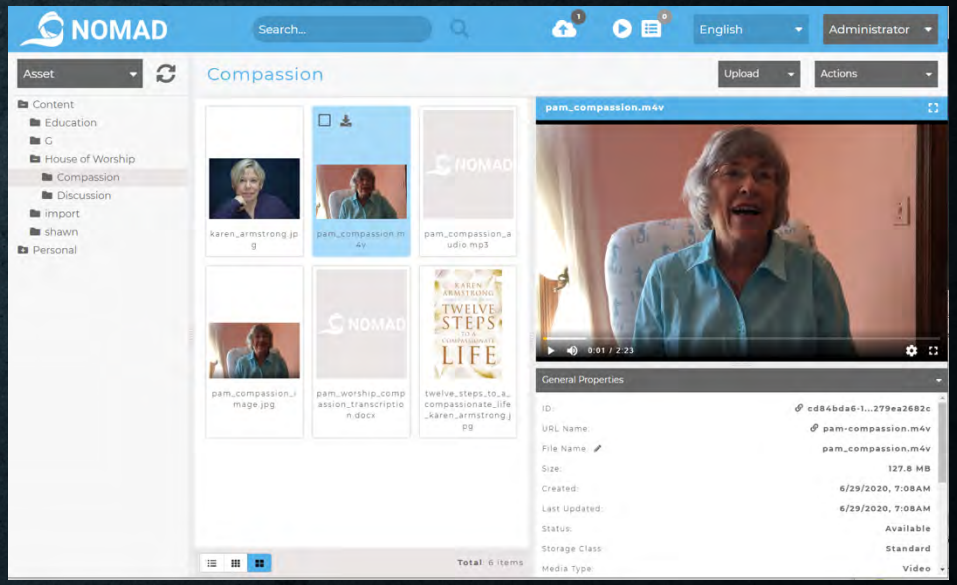
NOMAD

Nomad enables nonprofit organizations to easily upload, manage and share existing media content or new live video content. Automatically transcribe and translate your media, and generate subtitles with closed captions into 40+ languages.

Nomad identifies objects, people and places and then tags them for future use.

As your content grows, searching has never been easier. Nomad makes all files, pictures, and videos readily available giving both NPOs and their members a powerful media experience.

Your content is now secure, available to your audience, and saved for long-term storage and retrieval.



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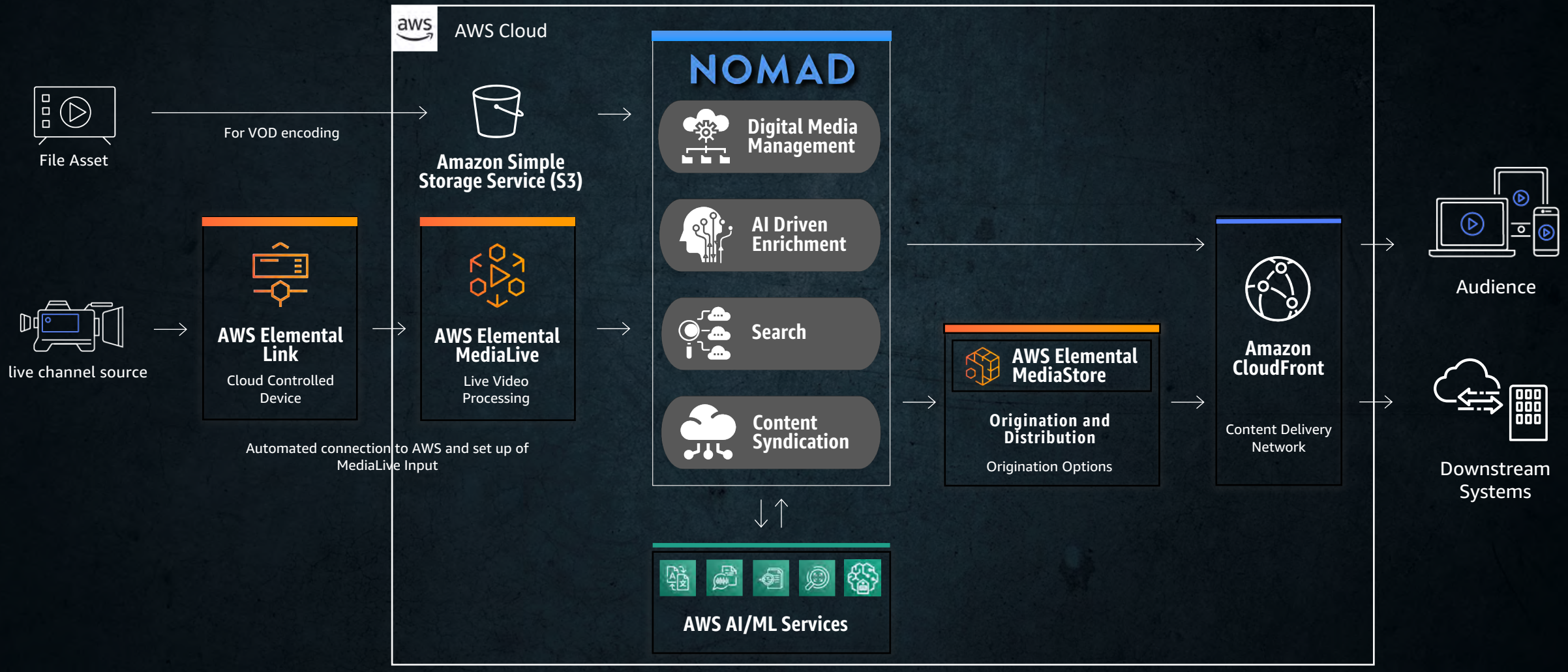
Workflow

NOMAD



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Resources

NOMAD

Overview
https://www.nomad-cms.com/

Solution: Nonprofit Organizations
https://nomad-cms.com/solutions

Case Study: Nonprofit Organizations
https://nomad-cms.com/case-studies

Contact:
https://www.nomad-cms.com
sales@nomad-cms.com

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04 Partner Solutions: **Kaltura**

Overview

Kaltura was founded in 2006 and today supports customers around the world. Our solutions are most highly rated in analyst reports prepared by Gartner, Forrester and others.

Our mission is to power any video experience, for any organization.

The leading video management platform, powering both live and on demand distribution of video across all viewing devices.

Kaltura provides live and on-demand video streaming solutions to thousands of organizations around the world, engaging hundreds of millions of viewers at home, at work, at school and at church.

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Solution

Two primary areas of challenge among Nonprofits become less challenging-with video!

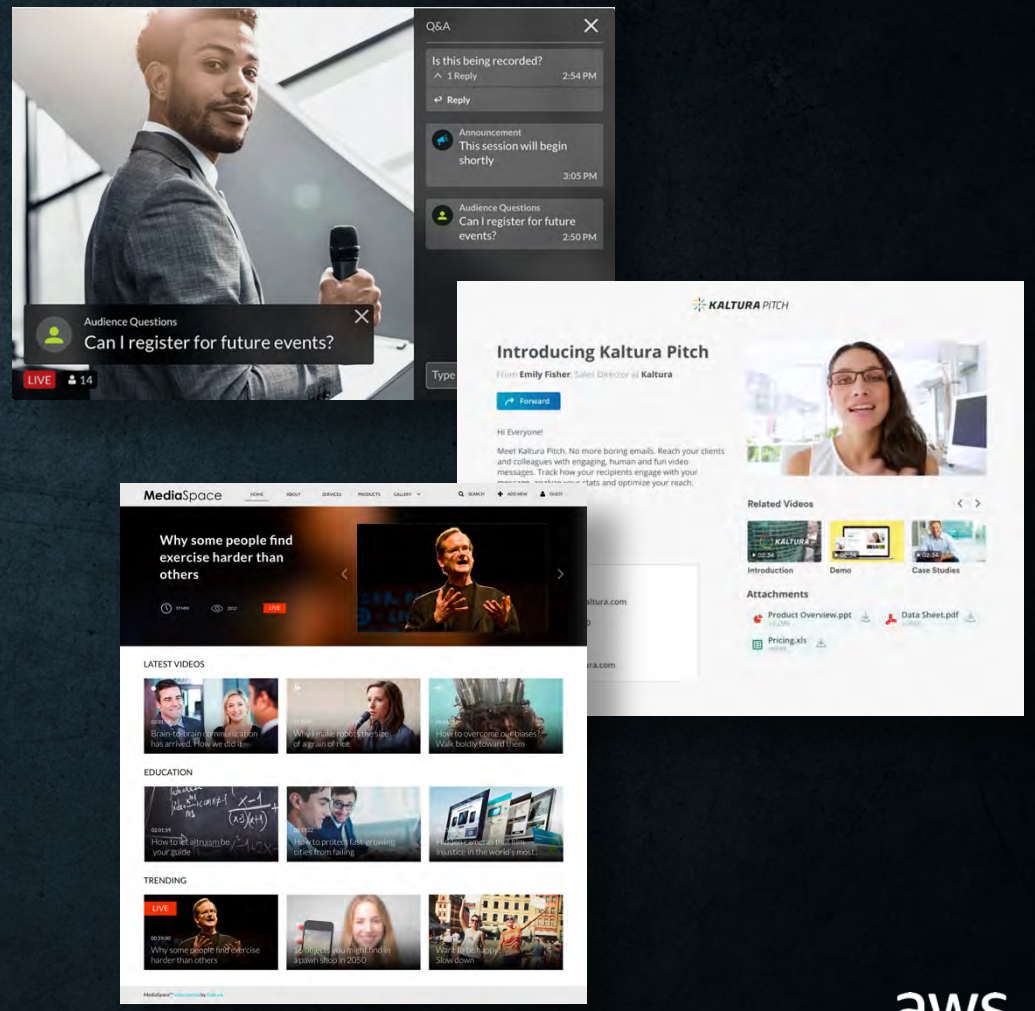
Fund Raising :

-Kaltura Pitch: Video email messaging
-Kaltura MediaSpace: Your own private YouTube

Recruitment :

-Share recruitment videos on your own portal
-Conduct Remote Interviews with Kaltura Meeting Experience
-Two-way video email messaging

Kaltura provides everything you need to reach a global audience in real-time while providing them opportunities for remote meetings, community building, collaboration and even monetary contributions.



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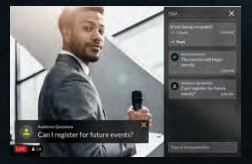
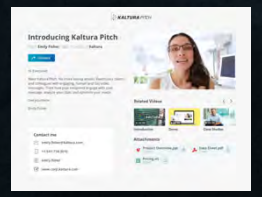
Workflow

KALTURA

Webcam Recordings, Presentations, Meeting Recordings, Video Messages





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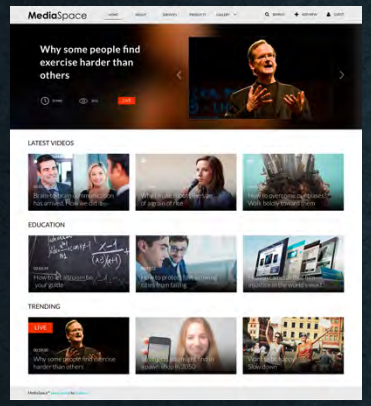

Branded Video Portal

Manage video portal, create video messages, host video meetings

Kaltura Platform

Global distribution for the HLS, DASH, MSS, and CMAF versions of the live feed

Amazon CloudFront

content delivery network

Multiple OTT devices

Desktop, tablet, mobile phone, smart TV

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Resources

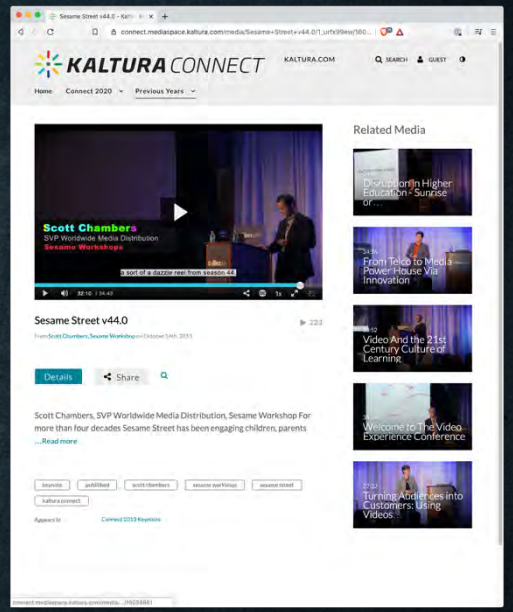
Overview + Ask for a demo:
https://corp.kaltura.com/best-video-kaltura-aws/

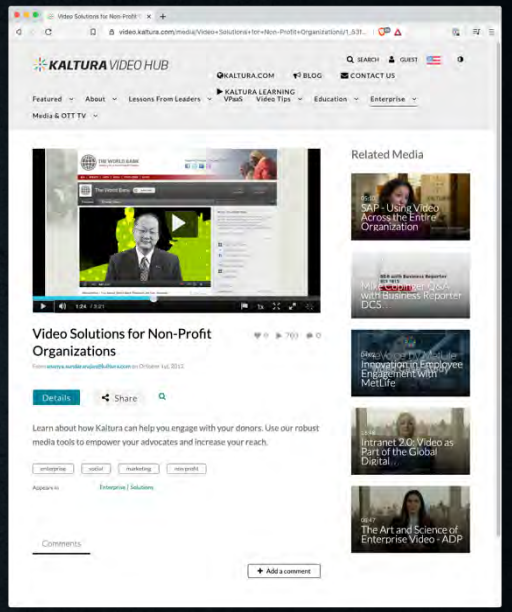
Case Study: Sesame Workshop
https://connect.mediaspace.kaltura.com/media/Sesame+Street+v44.0/1_urfx99ew/16038881

Case Study: University of the People
https://corp.kaltura.com/case-studies/university-people-transforming-education-video/

Solution video: Kaltura for Nonprofit Organizations:
https://video.kaltura.com/media/Video+Solutions+for+Non-Profit+Organizations/1_53fv3jsz/8955521

Contact us:
noa.oron@kaltura.com





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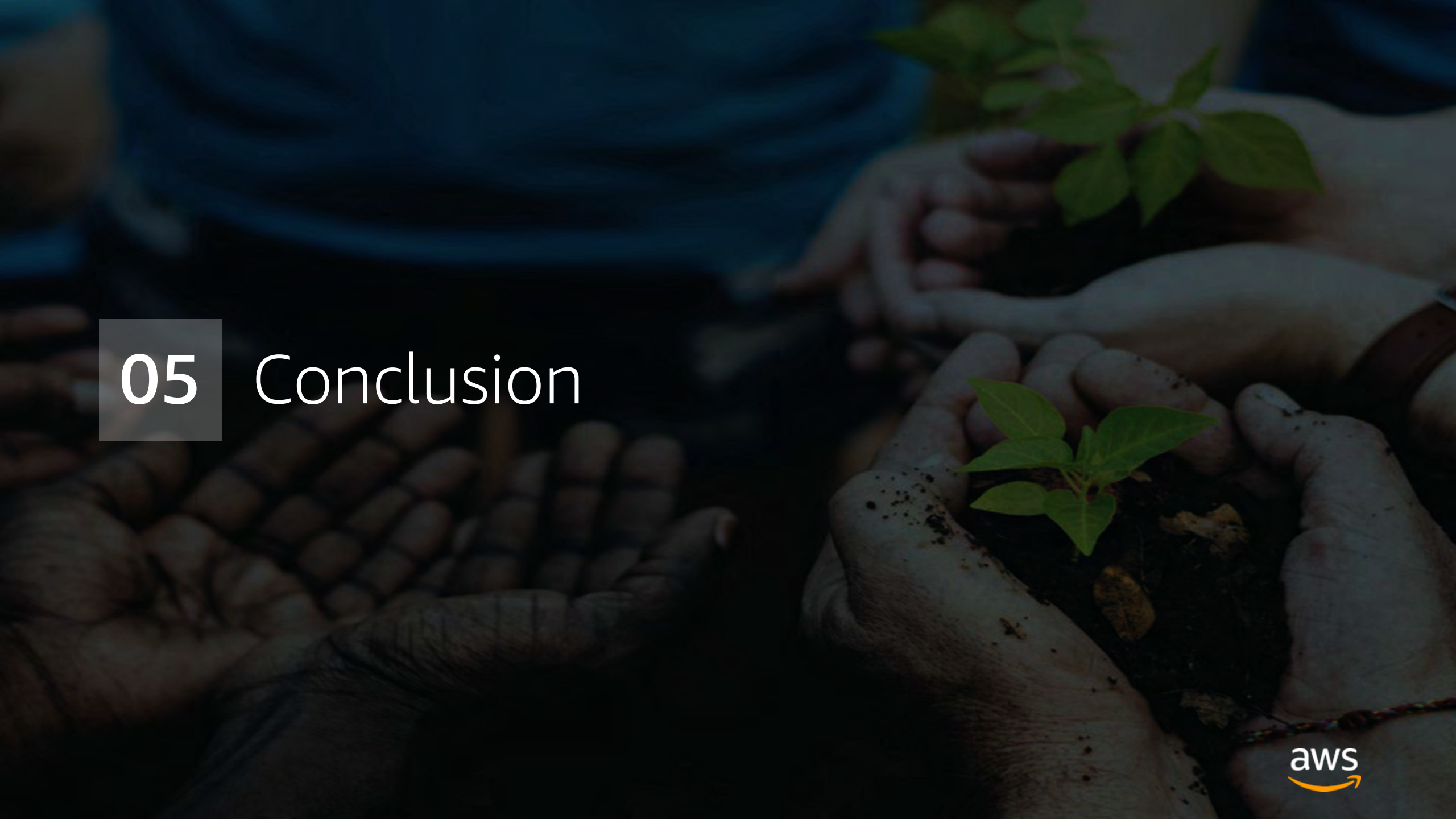

05 Conclusion

AWS enables faster deployment and innovation

Faster

- Shorten time-to-market to test new approaches
- Instant global availability with no commitment
- Scale as your media and compute needs grow, not as a physical data warehouse allows

Smarter

- Fully integrated AI and ML to unlock the value of your content
- Focus resources on your business, not on hardware provisioning and maintenance

More Efficiently

- On-demand, pay-as-you-go compute, storage, and video services scaling to demand
- Handle unpredictable and bursty media needs
- Automated workflows reduce manual processes and cut costs

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aws

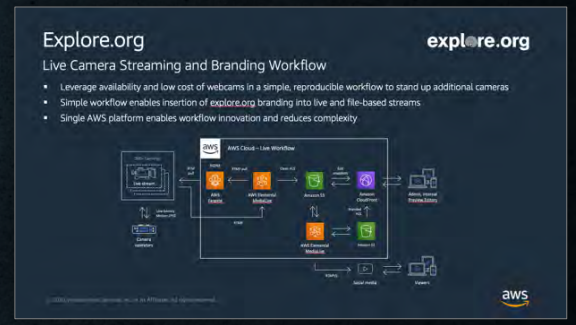
Additional Resources

- Industry page
  https://aws.amazon.com/media/resources/nonprofit

- Blog
  https://aws.amazon.com/blogs/media/tag/nonprofit/

Case Studies:

- Explore.org
- BigMate
- C-SPAN



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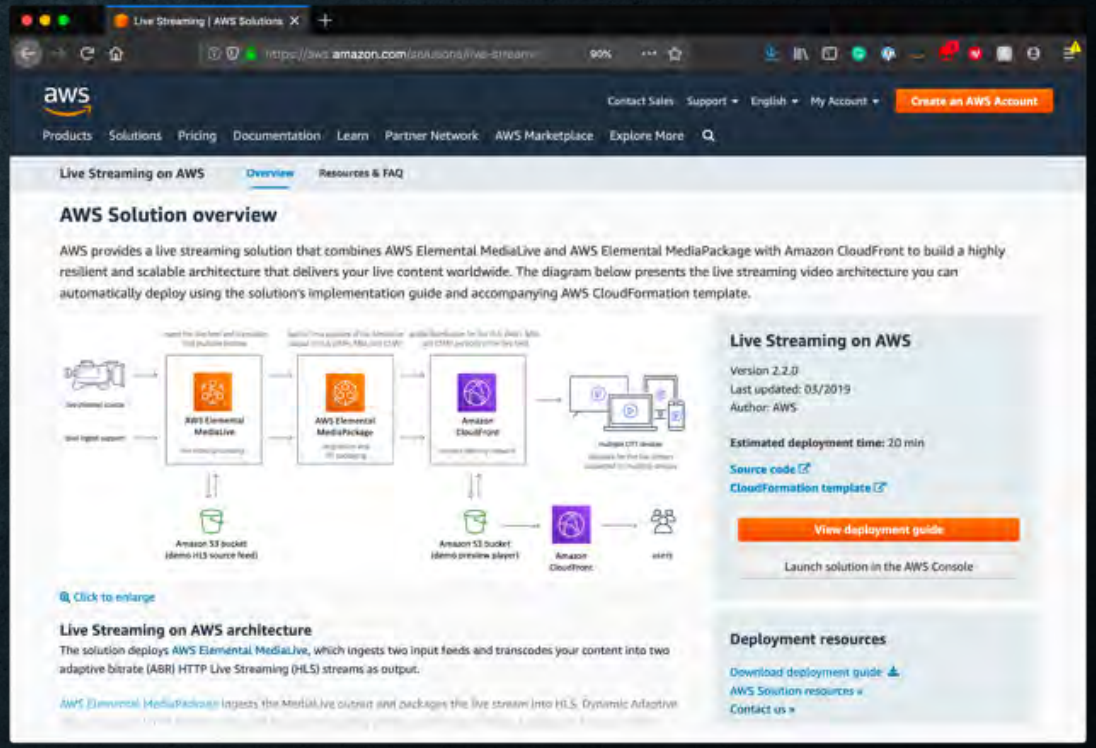
Additional Resources (cont)

- Solution: Live Streaming CFT https://aws.amazon.com/solutions/live-streaming-on-aws/
- Solution: On-Demand CFT https://aws.amazon.com/solutions/video-on-demand-on-aws
- Solution: Live Streaming with Automated Multi-Language Subtitling CFT https://aws.amazon.com/solutions/live-streaming-with-automated-multi-language-subtitling
- Solution: Media Analysis CFT https://aws.amazon.com/solutions/media-analysis-solution

- Media Services Training Path: https://aws.amazon.com/training/path-mediaservices/



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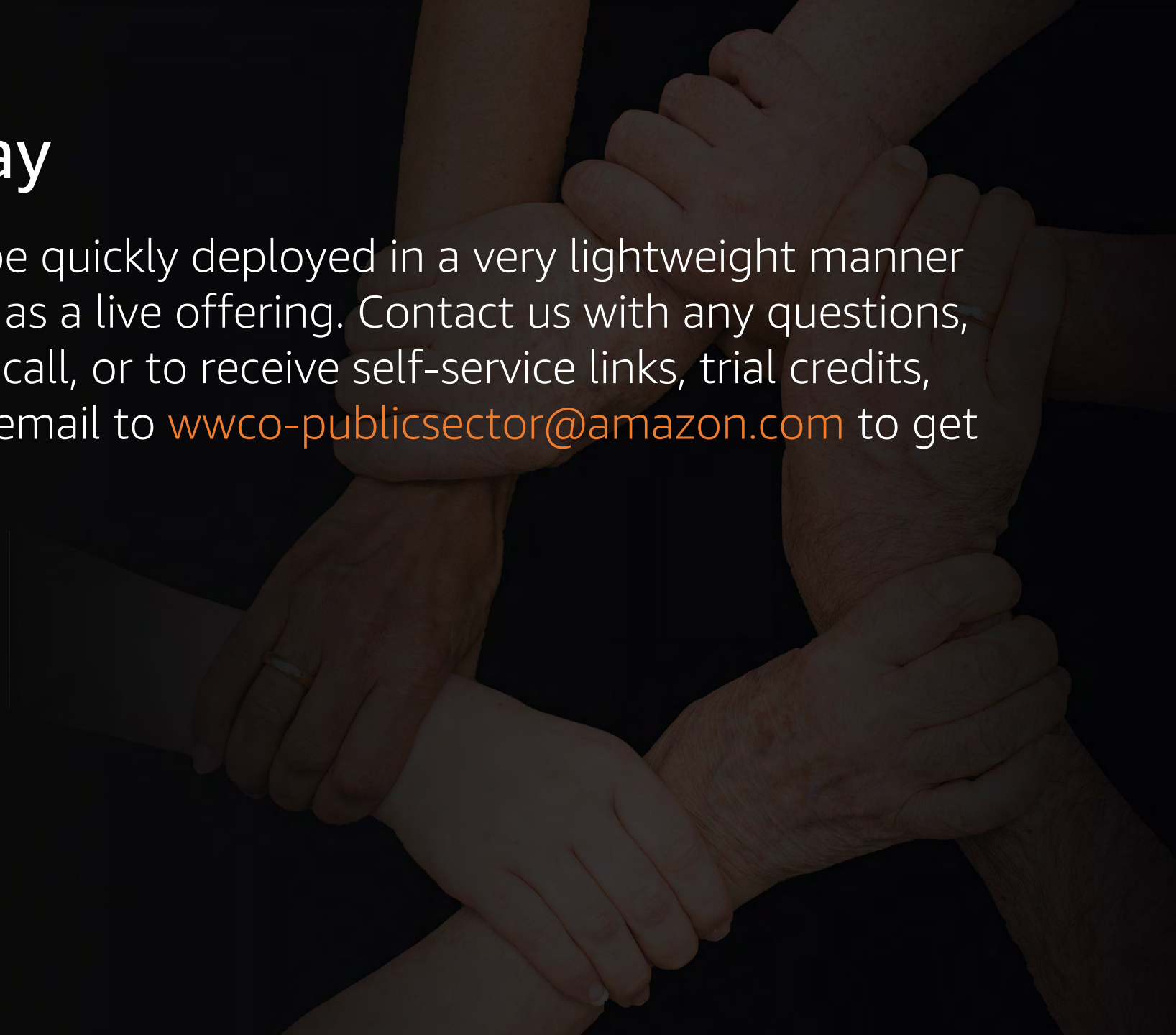
Get Started Today

AWS media solutions can be quickly deployed in a very lightweight manner for testing, prototyping, or as a live offering. Contact us with any questions, to have an initial discovery call, or to receive self-service links, trial credits, and more. Simply send an email to wwco-publicsector@amazon.com to get started today.



Q&A

06 Case Studies

C-SPAN

Scaling video indexing

C-SPAN uses on-premises **AWS Elemental Live** encoders feeding **Amazon Rekognition** to automatically index video news footage for search. With Rekognition, C-SPAN reduced indexing time per video from 1 hour to 20 minutes and uploaded 97,000 images in under 2 hours.

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Making history fun

The White House Historical Association uses Amazon Rekognition to power the Presidential Lookalike tool, letting users upload a selfie to see which President or First Lady they most resemble.

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aws machine learning

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Thank You!