

Reinventing media and entertainment in the cloud

How companies will thrive in a diversified
content marketplace



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INTRODUCTION

Keeping pace with a hyperactive media landscape

The way we consume media—what we watch, how and when we watch it, and what we expect in terms of content choice, quality, and access—has forever changed. Like most everything in our daily lives, media has largely gone digital. As technology continues to reshape media and entertainment (M&E), lifestyle shifts driven by disruptive events, such as the COVID-19 pandemic, have made online experiences as much of a necessity as a choice.

Meeting the challenge of new expectations

Evolving audience expectations and habits put pressure on companies in the M&E industry to reimagine nearly every aspect of their business: how they create shows and movies, optimize media supply chains, and deliver content to our screens. As demand for digital content soars, production and workflows are moving from physical premises and hardware to remote platforms. Simultaneously, business models such as direct-to-consumer (D2C) and streaming video are creating powerful and permanent change across the media landscape, with a focus on globalization, monetization, and personalization.

A cloud-based path to media innovation

Industry pioneers have migrated media workloads to the cloud to expand into D2C and streaming services, monetize their content catalogs more effectively, and use data to meet viewers on their terms. In this eBook, you will learn how the cloud addresses today's key challenges for M&E organizations and drives content relevance and business sustainability and how solutions from Amazon Web Services (AWS) and AWS Partners allow customers to experiment, innovate, and effectively connect with and grow their audience.

Transform your media workloads with the most purpose-built capabilities



Content production ›



Media supply chain and archive ›



Broadcast and live production ›



Direct-to-consumer and streaming ›



Data science and analytics ›



Monetization ›



CONTENT PRODUCTION

Reinventing content creation

The content challenge: More, better, faster

Content is king—and companies that can deliver the most exciting, innovative, and exclusive content will attract the biggest viewership. The demand for new content is ever-growing. And with more choices at their fingertips, viewers are becoming more sophisticated in vetting what they want to watch.

To meet these expectations, producers are pivoting to solve challenges that include delivering fresh, high-quality productions on time with minimal overhead and enabling a process for distributed teams that relies on remote and virtual production—a process that saves significant time and costs in logistics and other operations.

CONTENT PRODUCTION

Less time managing, more time creating

Leading media companies are turning to cloud solutions for a simpler, faster, and more cost-efficient way to enable content production workflows. With reduced physical infrastructure, production teams can spend less time managing hardware and render farms and more time creating and collaborating. These companies are using AWS capabilities to:

Create faster with more capacity

Producers can set up a creative studio with near-limitless scale in hours instead of weeks and launch state-of-the-art virtual video editing and rendering workstations anywhere on an extensive global footprint.

Collaborate seamlessly

Using AWS Regions and AWS Local Zones, producers can run latency-sensitive applications using compute, storage, database, and other AWS services close to their end users. By leveraging the network connectivity and global infrastructure of AWS, team members can work together no matter where they are in the world.

Work flexibly

With AWS, companies can eliminate the overhead of managing physical infrastructure and minimize the administration of installing, configuring, and maintaining their creative, compute, network, and storage resources.

AWS services and solutions allow M&E companies to focus on creating content that delights audiences while achieving unprecedented versatility and efficiency across their production workloads.

Solutions spotlight*



[Edit in the Cloud on AWS](#), [AWS Thinkbox](#), [NICE DCV](#), [AWS Studio in the Cloud](#) for digital content creation, VFX workstations on AWS

AWS PARTNERS

EditShare, Epic Games

Over 40 partners in the AWS Partner Network combine to offer a deep and diverse set of purpose-built content production solutions.

“Video production requires increased flexibility that cloud deployments offer – scalability and the ability to work from anywhere. EditShare and AWS provide a compelling and cost effective solution for this transition to the cloud.”

Sunil Mudholkar, VP of Product, EditShare

“Unreal Engine frees storytellers across film, television, brands, and live events to create without limits. Flexible tools and AWS put collaboration at the heart of the design process with no compromises on quality.”

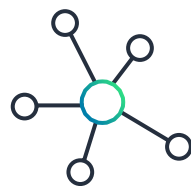
Marc Petit, VP & GM, Unreal Engine, Epic Games

CASE STUDY

wētāFX

Wētā FX (formerly Weta Digital), a highly respected creative force collaborating on visual effects (VFX) for some of the highest-grossing blockbusters of all time, went all in on AWS services in the cloud.

[Read the story ›](#)



MEDIA SUPPLY CHAIN AND ARCHIVE

Keeping up with storage demand

More and more content, not enough storage

With the exponential increase in content production and distribution, the demand for storage of video assets is growing. On-premises storage and access systems lack the capacity to keep pace with demand. Decades-old video archives stored in tape libraries and on-premises systems require physical space, are costly to access, and are subject to data loss. And as content is funneled to an increasing range of downstream applications, it's essential that companies keep improving durability and integration for distributed workflows and production operations. Added to these challenges are stringent demands for localization, rich metadata, and robust rights management fueled by the trend in international content distribution.

Simply put, M&E companies require virtually unlimited storage capacity to keep up with the increasing appetite for content. A cloud infrastructure for asset storage, management, and other capabilities provides the solution.

Beyond storage: Asset analysis and access in the cloud with AWS

Leading content suppliers and creators use AWS and AWS Partner Solutions to centralize their content storage, processing, creation, and distribution operations in the cloud. By migrating from on premises to the cloud, companies gain nearly limitless storage capacity for assets and metadata that answers the demand for archiving resources.

AWS also offers ready-made solutions that apply sophisticated analysis to cloud video assets, including machine learning (ML), to extract metadata and content insights for downstream applications. The same tools can be used to converge storage and chain of custody for everything from scripts to licensable media assets.

Additionally, the speed, flexibility, and security of cloud access enable a broad range of monetization options for asset libraries, including comprehensive syndication and international distribution operations, flexible content licensing, and long-tail content browsing services. Discover how AWS customers are reinventing M&E with dedicated tools for media supply chain and archive.

Solutions spotlight*



[Amazon Simple Storage Service Glacier](#) (Amazon S3 Glacier), [Amazon Simple Storage Service](#) (Amazon S3), [Content Analysis on AWS](#), [AWS Elemental MediaConvert](#), [Media Exchange on AWS](#), [Content Localization on AWS](#), [Media2Cloud on AWS](#), [Simple File Manager for Amazon Elastic File System](#) (Amazon EFS)

AWS PARTNERS

IMT, SDVI, Telestream

“IMT, the expert in media and entertainment technology and MAM solutions, along with SoDA data management software, enables customers to create cost-efficient hybrid cloud workflows and archive throughout the media supply chain.”

Jason Kranitz, President - Systems Integration, Integrated Media Technologies (IMT) + SoDa

“True media supply chain optimization requires new ways of thinking coupled with a purpose-built technology platform. Together with AWS, SDVI makes it possible for our customers to achieve business agility, realize operational efficiency, and pursue growth opportunities with supply chain optimization powered by Rally.”

Geoff Stedman, CMO, SDVI Corporation

“Telestream’s services on AWS are leveraged by customers around the world to create, transform and ensure media quality with our Telestream Cloud services including Transform, QC and Stream Monitor.”

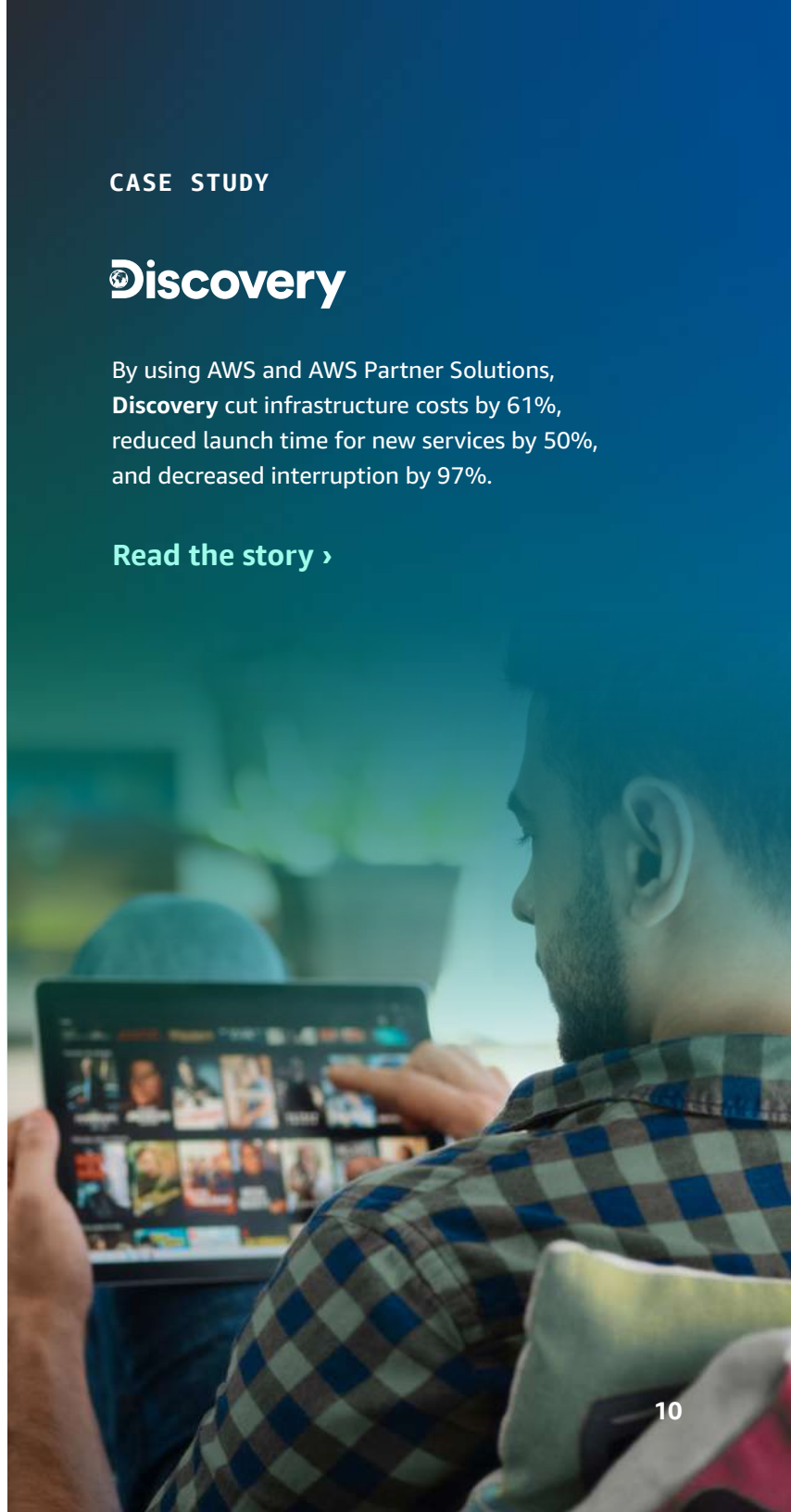
Scott Murray, SVP Corporate Marketing, Telestream

CASE STUDY

Discovery

By using AWS and AWS Partner Solutions, **Discovery** cut infrastructure costs by 61%, reduced launch time for new services by 50%, and decreased interruption by 97%.

[Read the story >](#)





BROADCAST AND LIVE PRODUCTION

Navigating the profusion of new platforms

Balancing quality, agility, and cost

The explosion of content and online delivery platforms puts broadcasters at a crossroads. Satisfying both viewer and advertiser expectations is more challenging than ever. With more viewing choices available—and more ways to access them—it's essential that broadcasters stay in front of expectations by delivering innovative, high-quality content while maintaining agility and reducing expenses to maintain a share of the revenue pie.

These challenges put pressure on broadcasters to transform. That means shifting from hardware-based legacy systems to software applications and from a capital expense to an operating expense paradigm.

Seizing the future of broadcast with AWS

Leading broadcasters, such as **Warner Bros. Discovery**, **FOX**, and **ViacomCBS**, use AWS solutions to develop new opportunities and respond quickly to changes in viewer behaviors and preferences.

With solutions built on AWS, broadcasters can:

- Run low-latency broadcast workloads with game-changing agility, elasticity, scalability, and reliability
- Optimize costs by spinning infrastructure up and down as needed—paying only for the resources they use—with zero up-front equipment costs
- Access the broadest selection of instance types on the most extensive set of cloud services
- Collaborate with above- and below-line talent anywhere they are

Read on to learn how broadcasters worldwide use AWS to create and deliver outstanding content and pioneer video services that drive viewership and advertising revenue.

Solutions spotlight*

[AWS Cloud Digital Interface \(CDI\)](#),
[AWS Elemental Live](#), [AWS Elemental
MediaConnect](#), [AWS Elemental MediaLive](#),
[AWS Elemental Statmux](#)



AWS PARTNERS

Evertz, Imagine Communications

“Evertz’ Mediator-X and Overture solutions for Media Asset Management, Content Supply Chain, and Linear playout applications running on AWS deliver the scalability, flexibility and operational efficiency demanded by today’s leading broadcasters.”

Dan Turow, VP of File Based Solutions, Evertz

“We built the Versio modular playout ecosystem on AWS so our customers can launch new channels and services faster at a lower total cost. What formerly took weeks now takes hours, without managing underlying infrastructure.”

Steve Reynolds, President, Imagine Communications

CASE STUDY

FOX

FOX Corporation (FOX) produces and distributes news, sports, and entertainment content. Millions of viewers engage with content from FOX through its broadcast and over-the-top (OTT) platforms. FOX pioneers live and on-demand media content delivery and production using cloud-based solutions, including storage, compute, ML, media solutions, and databases from AWS.

“We were in a unique position to be able to leave our legacy technology behind and truly reinvent our future as a business. Through our partnership with AWS, we’ve combined best-of-breed infrastructure with leading-edge media operations.”

Paul Cheesbrough, CTO, FOX

[Watch the video >](#)



DIRECT-TO-CONSUMER AND STREAMING

Where scale and speed count

Succeeding in the crowded D2C marketplace

The direct-to-consumer (D2C) and streaming space has become highly competitive, with more than 200 D2C service providers in the US alone. The need to attract viewers puts pressure on operators to continually bring premium experiences to screens. To keep up with demand, service providers must move fast to innovate content management workflow and delivery while driving down costs.

DIRECT-TO-CONSUMER AND STREAMING

Accelerate time to value with AWS

Using purpose-built services and solutions from AWS, customers can move faster in developing, launching, and expanding investments in consumer and streaming experiences for high-quality programming—from live sports and news to on-demand and personalized entertainment. With a wide range of AWS Partners supporting specialized D2C workloads, you can deploy ready-made solutions on AWS to accelerate time to value.

With AWS, customers leverage more than 15 years of industry experience supporting leading streaming platforms globally. AWS continues to lead the industry with services such as [AWS Elemental MediaLive](#), a broadcast-grade live video processing service, and [AWS Elemental MediaConvert](#), a file-based video transcoding service with broadcast-grade features.

Access the largest global infrastructure footprint of any cloud provider

With AWS, D2C providers can deliver massive video-on-demand (VOD) catalogs or live stream content to millions of viewers with the industry's largest global infrastructure. AWS provides over 200 Points of Presence (PoPs), a private network backbone, and software that is continually tuned and optimized to the needs of D2C and streaming service providers.

Solutions spotlight*

[Amazon CloudFront](#), [Amazon Interactive Video Service \(Amazon IVS\)](#), [AWS Elemental MediaConnect](#), [AWS Elemental MediaConvert](#), [AWS Elemental MediaLive](#), [AWS Elemental MediaPackage](#), [AWS Elemental MediaTailor](#), [Live Streaming on AWS](#), [Video on Demand on AWS](#)



AWS PARTNERS

Accedo, Bitmovin, Evergent

“Combining Accedo Orchestra and AWS Media Services enables customers to quickly launch and evolve their own video management platform handling live and VOD content, to be easily connected to an existing OTT ecosystem.”

Bleuenn Le Goffic, VP Strategy & Business Development, Accedo

“Bitmovin gives OTT video providers a choice of deployment options that simplify and accelerate use of cloud-based media workflows on AWS, allowing them to redefine the consumer viewing experience while significantly lowering cost.”

Stefan Lederer, CEO & Co-Founder, Bitmovin Inc.

“For media companies focused on launching and rapidly growing direct-to-consumer (D2C) services, time to market is critical. Working with AWS helps us enable flexible and agile monetization in weeks, not months.”

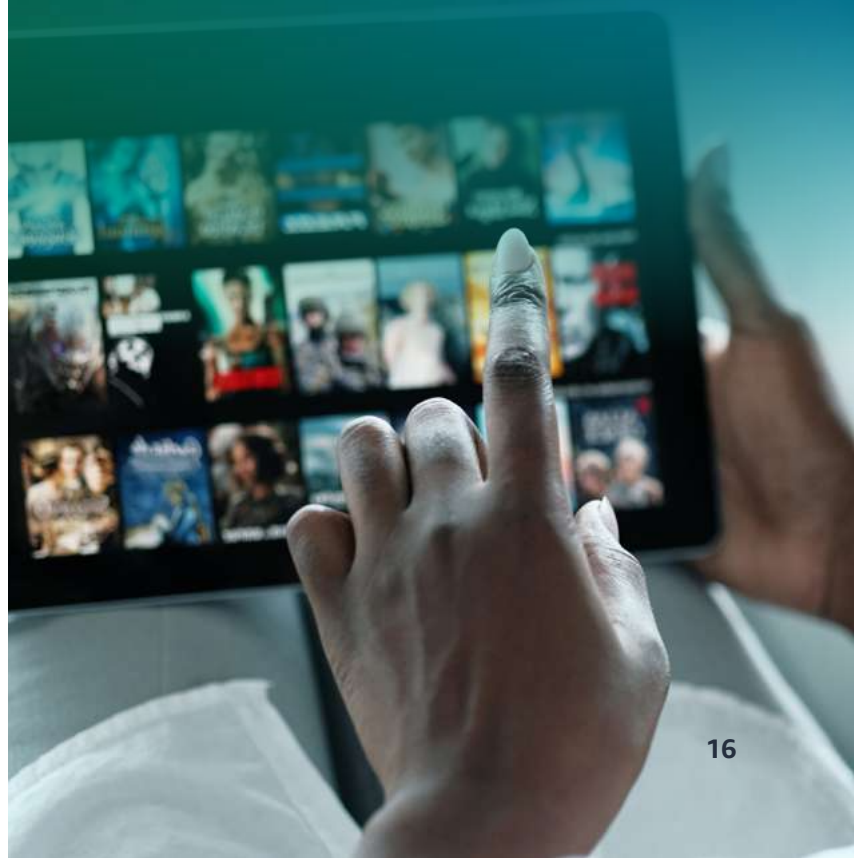
Vijay Sajja, Founder & CEO, Evergent Technologies, Inc.

CASE STUDY

NETFLIX

Netflix uses AWS to power its business and deliver award-winning entertainment to more than 200 million members.

[Read the story ›](#)





DATA SCIENCE AND ANALYTICS

Leveraging the power of audience data

Using data to drive viewer engagement and monetization

Today, audiences want and expect not only robust content choices but also content that speaks to their individual interests and tastes. Capturing a bigger share of today's media consumers depends more and more on using data to identify those preferences—data that can guide providers on what types of content will best resonate with their target audience.

But merely gathering and storing massive data streams is not enough. Operators require intelligent, automated processes that can measure, understand, and incrementally optimize the viewer experience. M&E companies benefit not only from data but also from actionable insights to differentiate themselves in the expanding content ecosystem.

Delivering standout experiences with AWS

AWS and AWS Partner Solutions enable customers, including **Bundesliga**, **Formula 1**, and the **National Football League (NFL)**, to ingest and analyze billions of audience events per day to build dynamic experiences. With AWS, customers can:

- Choose from over 15 purpose-built AWS database engines to match specific M&E analytics use cases, including audience analysis, customer 360, advertising analytics, cross-account data sharing, contextual analysis, and identity enrichment
- Easily integrate artificial intelligence (AI) and ML into media content workflows to enable rapid prototyping for four use cases: content search and discovery, captioning and localization, compliance and brand safety, and content monetization
- Automatically convert audio and video assets into fully searchable archives to increase content discovery, accessibility, and personalization

Discover how leading content suppliers use media intelligence solutions from AWS to create personalized experiences and reinvent the way they engage audiences.



Solutions spotlight*

[Amazon Personalize](#), [Analytics on AWS](#), Content Analysis on AWS, AWS Media Insights Engine (MIE), [Media2Cloud on AWS](#), Predictive User Engagement

“The new [AWS] platform gives us the ability to present users with a balance of editorial, segmented and personalized content, enhancing the overall customer experience. Increased viewing was the main aim of the project and we are pleased with the results and how quickly we achieved them.”

Andy Clarkson, VP of Technology Operations, hayu

AWS PARTNERS

EPAM Systems, GrayMeta, Quantiphi

“We are thrilled to be partnering with AWS for the media and entertainment industry. By leveraging the power of their cloud platform, we can create innovative solutions—backed by advanced data—that drive operational efficiencies and better customer experiences.”

Robert Koch, VP, M&E Technology Solutions, EPAM Systems, Inc.

“GrayMeta’s customers save time and cost using the power of our AI/ML embedded applications on AWS, enabling content playback and QC to generate valuable metadata from hidden information in audio and video assets.”

Josh Wiggins, President & CCO, GrayMeta, Inc.

“Quantiphi’s next-gen media intelligence solutions on AWS helps M&E clients to boost their user reach and engagement, increase the lifetime value of existing content, automate content compliance and conformance helping drive top-line growth and reduce costs.”

Arnav Gupta, Global Practice Lead – AWS, Quantiphi

CASE STUDY



F1 Insights powered by AWS transforms the fan experience before, during, and after each race. By using distinct data points to inform each insight, F1 Insights enables fans to understand how drivers make split-second decisions and how teams devise and implement race strategies in real time. Here are a few examples of how it all comes together.

[Read the story ›](#)





MONETIZATION

Maximize advertising revenue with AWS

Adapt to dynamic audiences and a quickly changing industry by leveraging a broad selection of data-driven services informed by AI and ML. With services and solutions from AWS and AWS Partners, advertisers are empowered to build deeper, more personalized connections with audiences and lasting consumer relationships that deliver increased revenue and long-term business value. With AWS, customers can:

- Increase ad revenue by modernizing linear and digital advertising sales. Simplify and unify the linear and digital advertising ecosystem by leveraging data to facilitate cross-platform ad buying, fulfillment, and measurement.
- Deliver effective and profitable audience development and engagement. Map the customer journey by unifying customer data and behavioral and contextual insights. This helps predict and minimize churn and enables new audience development by identifying and targeting similar viewers.
- Maximize revenue through end-to-end data-driven optimization of the ad sales process. Use AWS data science and AI and ML services to increase revenue with data-driven campaign planning, ad placements, and optimized delivery across channels.

Solutions spotlight*



[AWS Clean Rooms](#), [AWS Elemental MediaTailor](#),
[AWS Entity Resolution](#)

AWS PARTNERS

ActionIQ, ThinkAnalytics, TripleLift

ActionIQ delivers fast and reliable analytics to its customers. Large-scale managed services from AWS give ActionIQ the flexibility to experiment and the independence to focus on building smart business logic to deliver measurable value and impact.

ThinkAnalytics Ltd. solutions on AWS help M&E companies use a data-driven approach to increase revenue and customer engagement. The Think360 platform integrates with **Amazon Personalize** and lets developers quickly build and deploy curated recommendations and intelligent user segmentation at scale using ML.

TripleLift pioneered a solution for dynamically inserting product placement ads into streaming TV shows by using a combination of custom-built models and ML on AWS, enabling advertisers to improve ad effectiveness and recall.

CASE STUDY

NBCUniversal

The **NBCUniversal (NBCU) One Platform** allows ad buyers to unite linear and digital media planning and to reach target audiences across television, streaming services, and mobile apps. NBCU uses services from AWS within the One Platform to help manage and process large volumes of data effectively and synthesize it for forecasting across linear and digital.

[Read the story ›](#)



Powering the future of M&E with AWS

The legacy use of specialized hardware, connectivity, and dedicated storage has been eclipsed by cloud innovation—with tools that can meet or exceed the demands for mission-critical workloads for M&E companies. It's easy to see why cloud transformation is thus becoming a business imperative—one that can drive improved ROI and give companies the flexibility to quickly shift in lockstep with consumer behavior.

Offering a comprehensive, secure, and proven global set of cloud solutions tailored to the needs of the industry, AWS is ready to help you meet your challenges with the most purpose-built capabilities of any cloud and access to over 400 leading technology and consulting partners offering an unmatched range of solution-specific support.

[Learn more](#) about how AWS can accelerate your cloud transformation, help you achieve your goals faster and at scale, and give you the capabilities to shape the future of M&E.

[Explore AWS for Media & Entertainment >](#)