FORRESTER®

Cloud To Fuel The Future Of Media And Entertainment

How Modern Customer Infrastructures, Partner Networks, and Marketplaces Enable Security, Skills, And Scale

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Executive Summary

Cloud solutions provide the media and entertainment (M&E) industry valuable opportunities to accelerate content pipelines, modernize operations, and diversify business models. However, these companies have historically lagged behind other verticals in their public cloud adoption.[1] In 2023, these trends are changing as M&E firms rapidly adopt cloud technologies and approach the global adoption average.[2]

M&E IT and business decision-makers in the streaming, broadcast, and direct-to-consumer (D2C) space have come under increasing pressure to choose the right cloud solution and partner to underpin business objectives of generating prized content, optimizing media supply chains, and competing for audience attention.

In June 2023, AWS Marketplace commissioned Forrester Consulting to evaluate the role of cloud solutions in the media and entertainment industry. Forrester conducted an online survey with 623 respondents and six in-depth interviews with technology strategy decision-makers at global organizations to explore this topic. We found that purpose-built platforms, cloud solutions, partner networks, and marketplaces help M&E companies overcome hurdles to security, skills, and scale to boost customer experience (CX) and competitive advantage.

Key Findings

M&E firms are accelerating their cloud adoption. The need for better CX, content capabilities, and differentiation in a competitive landscape is rapidly driving this shift. M&E firms also need to connect their IT and business functions better to improve scalability, reduce costs, and protect the business into the future.
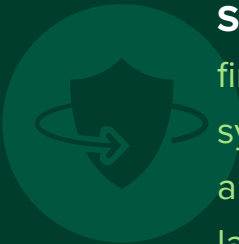
Security, skills, and scale hold back greater cloud usage. As M&E firms accelerate cloud adoption, they're feeling the effects of legacy systems and capabilities shortages. Across content production, analytics, and D2C streaming alike, security and privacy concerns, a lack of key skills, and poor scale of deployment are impeding their ability to improve CX and differentiation.

Firms are putting their weight behind the cloud. M&E firms realize the future importance of cloud-based capabilities and are investing in better solutions. In doing so, they expect greater operational efficiency, real-time insights, and content pipelines and archiving, with the ultimate payoff being improved CX and competitive advantage. For firms that are already successful with their cloud-based technology adoption, these CX and competitive benefits are even greater.

Marketplaces and partner networks offer a critical role in M&E. M&E decision-makers plan to adopt and expand their use of software and data marketplaces for stronger CX, improved real-time insights, and greater ability to fill critical capability gaps with tool sets. These benefits align IT and business priorities, make firms agile, and provide the speed to market that M&E firms require into the future.

From TV to film to gaming and beyond, content remains the determining factor in delighting customers and winning and retaining their hard-fought attention in the M&E sector.[3] Doing so necessitates ever-increasing speed of delivery, leveraging large data sources and storage, and dealing with low customer tolerance for disruption or inconvenience. M&E firms must balance all priorities to remain viable in today's competitive environment.

In surveying 623 M&E decision-makers, we found that respondents are juggling a number of business priorities in their journey to not only create large amounts of content, but also continually deliver it, establishing competitive advantage. Above all, they're prioritizing:

- **Improving CX.** Eighty-five percent of respondents said better customer experience is a top priority for their organization over the next year (see Figure 1). This is little surprise as firms navigate a fractured and competitive M&E landscape. To help, M&E decision-makers are also prioritizing modern applications and tools facilitating marketplace procurement (78%) and marketplace delivery (71%), which extend the reach of key M&E partners and services and improve their understanding of the customer.

FIGURE 1

Top Organizational Priorities Over The Next 12 Months

(Showing "High priority" and "Critical priority")

85%
Improving the **experience** of consumers/customers

80%
Improving our **differentiation** in the market

77%
Adopting better **data and analytics** capabilities

Base: 623 global technical and business decision-makers in media and entertainment
Source: A commissioned study conducted by Forrester Consulting on behalf of AWS, July 2023

- **Strengthening differentiation**. Four in five respondents stated a top priority is improved differentiation in the market. To this end, M&E firms are prioritizing content supply chains (72%) and accelerated pipelines (68%) to differentiate their content and customer experiences. They understand content is still king and that customers will simply direct their attention elsewhere if they're not creating and delivering content.[4]

- **Adopting improved analytics**. Seventy-seven percent of M&E decision-makers said adopting better data and analytics capabilities is a top priority. M&E decision-makers are directing resources toward analytics to better serve and engage their existing customers, attract new subscribers or viewers, and improve operations and production efficiency.

MEDIA AND ENTERTAINMENT FIRMS ARE TURNING TO THE CLOUD WITH URGENCY

M&E organizations are increasingly adopting and expanding their cloud solutions to fuel customers' increasing demand for content.[5] They're doing so to infuse agile storage and modernized operations at scale, which cater to their current digital business needs. Seventy-three percent of respondents whose organizations currently use cloud solutions said they value the improved security, consolidation, and data and insights they receive from cloud providers, which bolster business decision-making and hedge against risk.

> "There's just endless amounts of content being streamed and so [we need] technology to do it affordably and efficiently all around the world. Direct-to-consumer is critical."
> DIRECTOR OF PLATFORM DISTRIBUTION IN CABLE, STREAMING, AND BROADCAST MEDIA

Despite rapid cloud adoption, surveyed M&E respondents found themselves still playing a game of catch-up. As one director of advertising strategy in cable and streaming media put it: "On the cloud side, we need to get faster and

simpler. We have legacy tech that I kid you not is at least 20 to 30 years old."
To help, most surveyed M&E respondents said their organizations are turning
to a multicloud model (see Figure 2). This comes as many firms transition
away from private-only to public and hybrid models. Those currently with
cloud solutions also said they use a mix of centralized and independent cloud
management strategies — many developed emergently.

So, what does this all mean? It suggests that as M&E firms evolve, there's still
a disconnect between IT and business teams within organizations, which will
be critical to repair as cloud decision-making into the future will not come from
a one-team strategy but rather a committed, joined effort between IT and the
business. Failure to foster this partnership will lead to a lack of business model
scalability, rising costs, a lack of available resources, an increase in cloud
vulnerabilities, and weaker cloud effectiveness across the organization.

FIGURE 2

Cloud Solutions Firms Currently Use And Plan To Use

● Multicloud ● Hybrid (public and private) ● Public ● Private

Currently using
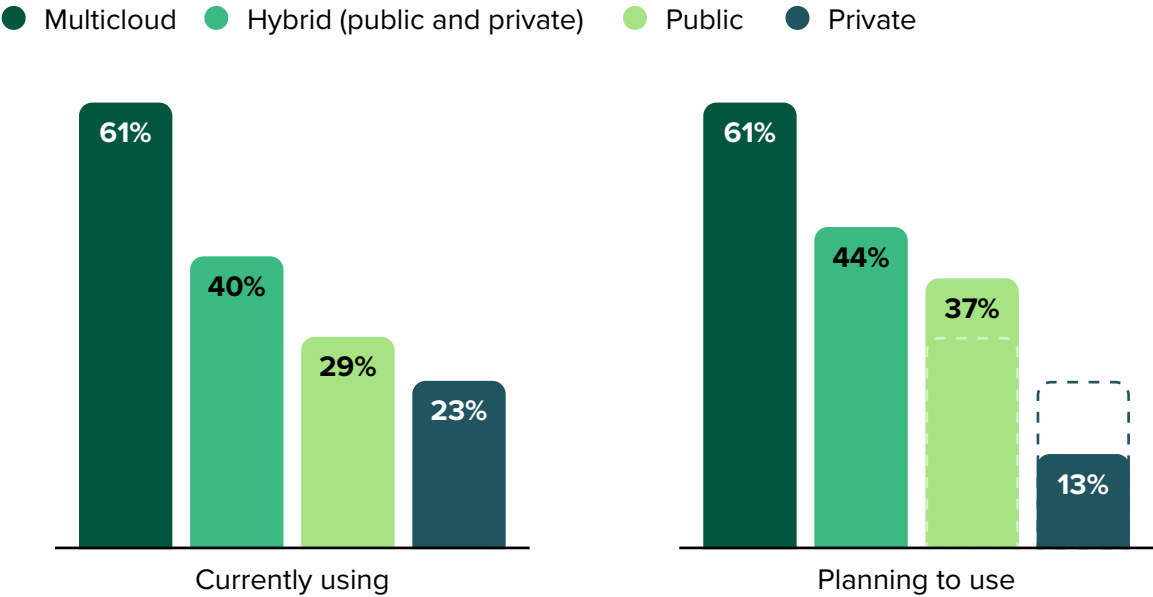
Planning to use

Base: 456 global M&E decision-makers with implemented
cloud-based technology systems
Source: A commissioned study conducted by Forrester
Consulting on behalf of AWS, July 2023

Base: 167 global decision-makers planning to implement
cloud-based technology systems
Source: A commissioned study conducted by Forrester
Consulting on behalf of AWS, July 2023

M&E firms have work to do to remain competitive with their technology infrastructures. Two in five respondents do not feel their organization is prepared to compete today with its current infrastructure (see Figure 3). Fifty-six percent of respondents are not satisfied with their organization's speed of delivery. Meanwhile, though 84% said they've been successful with their cloud-based technology to date, just one in four said they've been very successful. Key infrastructure capabilities are lagging and fail to inspire organizational confidence as firms navigate present hurdles and future uncertainties. Respondents from M&E organizations across content production, analytics, and direct-to-consumer streaming all noted that their organizations suffer from similar challenges (see Figure 4). They're held back by:

- **Security and privacy concerns.** Forty-two percent of respondents said security and risk concerns are a barrier to improving their organization's technology infrastructure.

FIGURE 3

Media And Entertainment Firms Lack Speed And Ability To Compete With Current Infrastructure
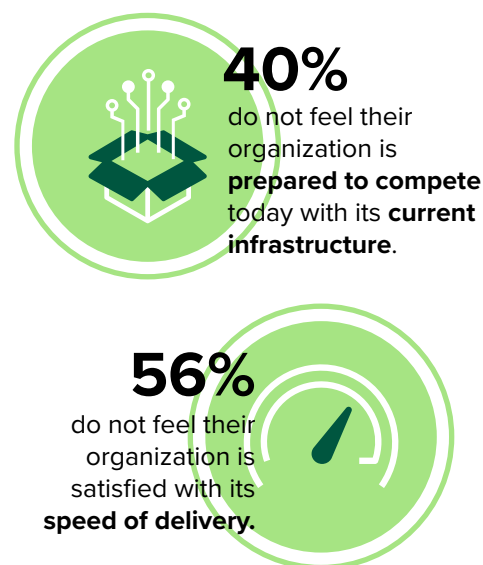
40% do not feel their organization is **prepared to compete** today with its **current infrastructure**.

56% do not feel their organization is satisfied with its **speed of delivery.**

Base: 623 global technical and business decision-makers in media and entertainment
Note: Showing two responses
Source: A commissioned study conducted by Forrester Consulting on behalf of AWS, July 2023

"It's fragmented. … Teams are given their own functionality and their own stuff. We lose negotiation power … since teams across the company sometimes use [different providers]. … How do we get smarter? We have a workforce that's an expert in one or the other."

DIRECTOR OF ADVERTISING STRATEGY IN CABLE AND STREAMING MEDIA

Cloud security and privacy are new practices for many organizations. Data residency, secure access, partner integration, and adopting Zero Trust provide complications for organizations working to implement cloud services.

FIGURE 4

Top Technology Challenges Organizations Experience

Media/Content Production	Analytics	D2C Streaming
My organization has concerns that new technology brings new security/risk challenges **43%**	My organization lacks key technology skill sets **45%**	My organization lacks key technology skill sets **45%**
Software/systems are inconsistent/unreliable/nonperformant **41%**	My organization has concerns around security and risk **37%**	My organization has concerns around security and risk **39%**
Limitations stemming from data volume **37%**	Scaling/expansion costs **36%**	Pipeline integration challenges **34%**

Base: 623 global technical and business decision-makers in media and entertainment
Note: Showing top three responses per type of challenge
Source: A commissioned study conducted by Forrester Consulting on behalf of AWS, July 2023

> "With tech improvements and the growth of programmatic being really easy and turnkey, it creates a lot of fraud … that's an area of focus in the connected TV space. It's lucrative and people want inventory so we're seeing more bad actors in the space."
>
> DIRECTOR OF ADVERTISING STRATEGY IN CABLE AND STREAMING MEDIA

- **A lack of skills.** Nearly half (46%) of decision-makers cited a lack of in-house expertise and skill sets as a top barrier. Cloud management and architecture requires a different set of skills than on-premises management. Adopters are finding themselves underequipped to get the most of their environment, running into challenges such as performance and cost optimization.

- **The scale of deployments.** Two in five respondents said a lack of fit with their existing technology stack is another barrier holding back their organization's technology infrastructure. The data volume M&E firms create and manage in content production, analytics, and D2C streaming is significant. Migrations or refactoring of performance sensitive apps, content repositories, and production pipelines involve both business and technical hurdles that are difficult to quickly overcome.

> "Our biggest challenge in long-term archiving is to find and restore the content. … Replacing that model to an only cloud-based one is such a big deal."
>
> SENIOR DIRECTOR OF TECHNICAL SERVICES IN STREAMING AND BROADCAST MEDIA

INFRASTRUCTURE AND SECURITY CHALLENGES STIFLE PIPELINES, CX, AND PERFORMANCE

The M&E industry faces unique challenges in meeting the scale of customer demands and dealing with the real-time effects of failure.[6] When things go wrong, the impact is felt. Respondents said the challenges they face across security, skills, and scale ultimately hamper organizational productivity (45%), content needs (40%), customer experience (37%), and cost of doing business (35%) (see Figure 5).

> "We have a lot of tech that is either dated or used by legacy customers that we haven't transitioned off, and that's just multiplied."
>
> DIRECTOR OF ADVERTISING STRATEGY IN CABLE AND STREAMING MEDIA

FIGURE 5

Organizational Consequences Given Their Technology Challenges

Weaker organizational efficiency/productivity	**45%**
Weaker ability to build content pipelines	**40%**
Poor customer experience	**37%**
Growing cost of doing business	**35%**
Routine digital platform failures	**35%**
Misalignment of strategy across the business	**34%**
Poor partner experience (e.g., misalignment, difficulty communicating)	**33%**
Weaker ability to compete/differentiate	**32%**
Weaker content supply chains	**32%**

Base: 623 global technical and business decision-makers in media and entertainment
Note: Showing top nine responses
Source: A commissioned study conducted by Forrester Consulting on behalf of AWS, July 2023

One director of platform distribution at a cable, streaming, and broadcast firm highlighted a host of challenges across their organization: "The cost of content is extremely expensive, so that's a huge issue. The advertising business is up and down and left and right — that's certainly an unknown. Data and privacy are always immediate concerns for consumers." A senior director of technical services in streaming and broadcast stated: "It's been at least six months, and we still don't have a final shared metadata model. We have to move all the content with the new metadata model and that'll be a long process … to move to the archive system and the cloud on the new metadata model. Multiply that complexity by 10."

> "We cannot have a single point of failure, so we need to design it that way in the cloud … that's going to require many more resources."
>
> **SENIOR DIRECTOR OF TECHNICAL SERVICES IN STREAMING AND BROADCAST MEDIA**

Faced with these challenges, what are M&E firms doing? They're getting serious about the cloud and solution partners. As the industry recovers from the repercussions of the COVID-19 pandemic, the most successful M&E firms are those leaning on cloud platforms, partner networks, and marketplaces to fuel innovation and scalability.[7] Four in five respondents said it's important that their organization uses cloud-based technology solutions (see Figure 6). Nearly half see third-party providers and partners as key to improving how they do business. Firms are also putting their money where their mouth is. One in three respondents from cloud users plan to increase their current cloud investment by more than 10% over the next year. Those increasing investing by less than 10% (43%) are in for a nasty shock when they realize that simply won't be enough.

Cloud-based capabilities will only grow in importance as markets continue to evolve. Today, though just one in five M&E decision-makers said cloud solutions are "mission critical" for their organization, this figure will jump to one in three by 2024 (see Figure 7). In addition to the cloud, over half (56%) of respondents said they're either expanding/ upgrading their use of marketplaces or planning to implement marketplaces in the next 12 months to support the shift to purpose-built platforms and solutions (see Figure 8).

> "Our strategy is move as many workflows as possible to the cloud."
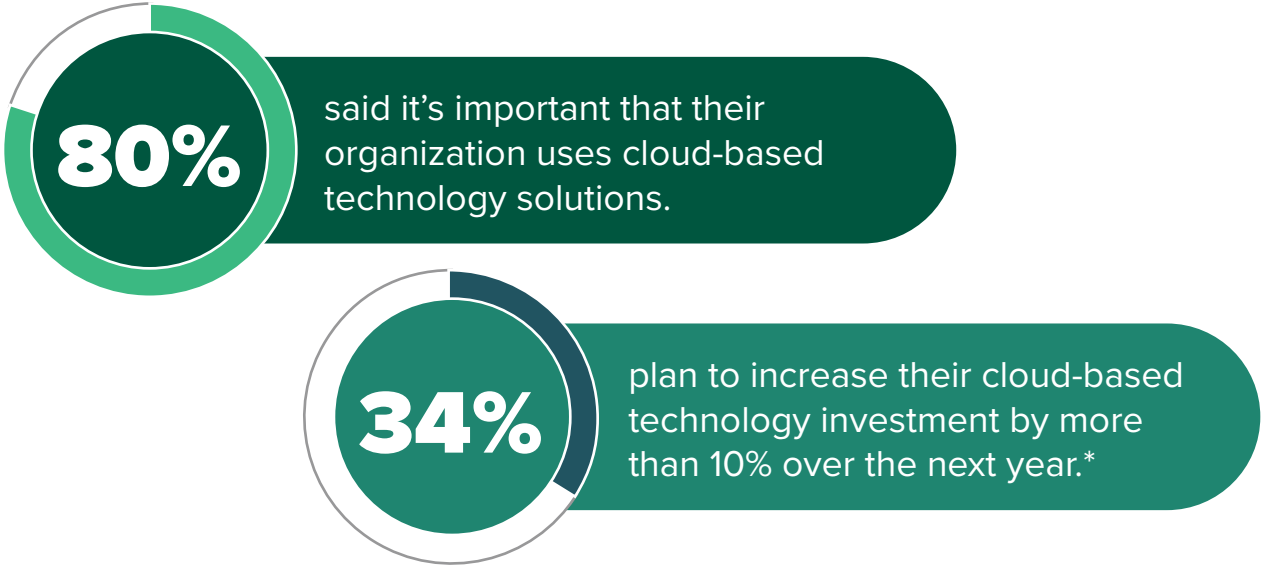>
> **SENIOR DIRECTOR OF TECHNICAL SERVICES IN STREAMING AND BROADCAST MEDIA**

> "We're investing more in resources to power D2C services — investing in the cloud and infrastructure, acquiring rights in a smart way, and security with customer data."
>
> **DIRECTOR OF PLATFORM DISTRIBUTION IN CABLE, STREAMING, AND BROADCAST MEDIA**

FIGURE 6

Cloud-Based Technology Is On The Rise

80% said it's important that their organization uses cloud-based technology solutions.

34% plan to increase their cloud-based technology investment by more than 10% over the next year.*

Base: 623 global technical and business decision-makers in media and entertainment
*Base: 456 global decision-makers with implemented cloud-based technology systems
Note: Showing one response per base
Source: A commissioned study conducted by Forrester Consulting on behalf of AWS, July 2023

FIGURE 7

Importance Of Cloud-Based Capabilities To Organizations

(Showing "Mission critical")
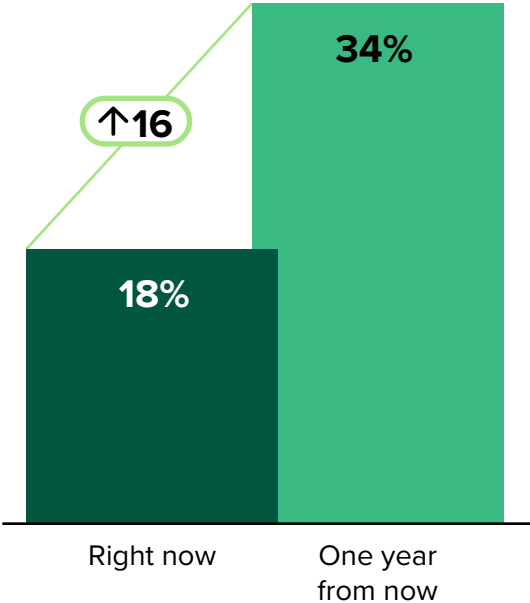
↑16

34%

18%

Right now

One year from now

Base: 623 global technical and business decision-makers in media and entertainment
Source: A commissioned study conducted by Forrester Consulting on behalf of AWS, July 2023

FIGURE 8

Organizational Plans To Use Software And Data Marketplaces In The Next 12 Months

56%

Over half of respondents at M&E firms **reported expanding/upgrading their use of marketplaces or planning to implement** in the next 12 months.

Base: 623 global technical and business decision-makers in media and entertainment
Source: A commissioned study conducted by Forrester Consulting on behalf of AWS, July 2023

CLOUD AND MARKETPLACE ADOPTION ENABLE GREATER CX, EFFICIENCY, AND DIFFERENTIATION

Respondents at firms who have already adopted software and data marketplaces noted they've experienced better customer experience (64%), real-time insights (58%), access to capabilities (54%), and organizational agility (50%) — all critical to achieving top priorities of improved CX, differentiation, and analytics over the next year. Marketplaces also shore up disconnects that remain between IT and the business — despite the best efforts of firms to formalize cloud strategies. They do so by allowing organizations to access standardized tool sets at the speed the business requires. One director of platform distribution in cable, streaming, and broadcast said: "[Marketplaces are] absolutely valuable. … The benefits are that they're aligned with corresponding cloud services; it's just about getting different buckets of services through the same software stack. That would allow us to expand our offerings." A director of advertising strategy in cable and streaming media shared, "[With marketplaces,] we can put the power back in the hands of the retailer or ad buyer because we don't want to get in the way of the customer in every interaction."

> "[Marketplaces are] a focus. [We're] trying to determine how can we offer additional value and efficiency with video ad customers in a data marketplace where they can find new sources of data or vendors that have been approved and can run within our tech environment."
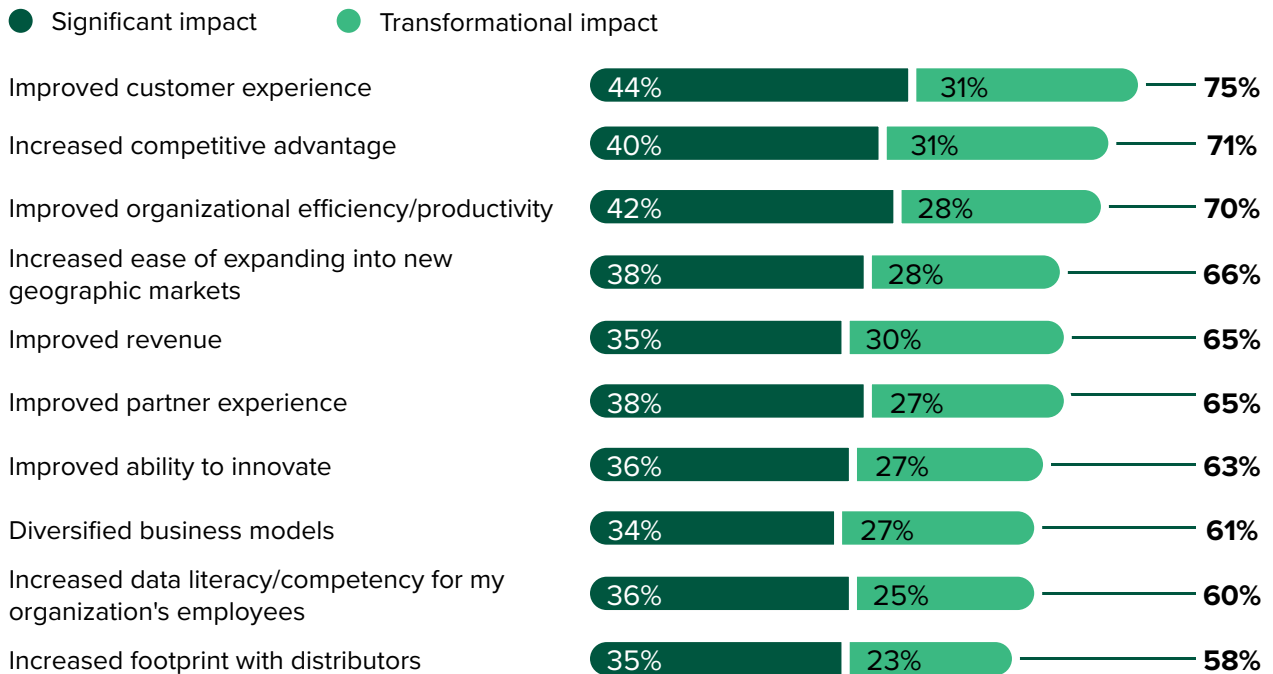>
> **DIRECTOR OF ADVERTISING STRATEGY IN CABLE AND STREAMING MEDIA**

From investing in cloud solutions, surveyed respondents expect improved operational agility, real-time insights, and content capabilities. Cloud-based capabilities allow organizations to accelerate content pipelines and archiving, modernize operations, and diversify business models.[8] M&E decision-makers will be able to do more and faster, while connecting directly with key partners, such as those found through marketplaces and related tools. Ultimately, respondents said they expect these cloud benefits to lead to:

- **Better CX.** Three in four decision-makers said they expect their cloud-based technology investments to lead to improved customer experience (see Figure 9). As one director of advertising strategy in cable and streaming media said: "[With cloud solutions,] we can find new products to please our customers because we're bringing something new with attribution within a given timeframe. We can prove that video is working and, if you take it away, you'll notice a drop-off."

- **Greater productivity.** Seven in ten respondents said they expect better efficiency and productivity across their organization from cloud investments. Cloud-based capabilities allow organizations to streamline operations, improve production efficiency, and scale the business to meet the demands of the market.

- **Improved ability to compete.** Seventy-one percent of surveyed decision-makers expect cloud investments to lead to improved competitive advantage. With better CX and productivity, organizations can innovate faster and generate content at greater speed, differentiating their services and delighting customers along the way.

FIGURE 9

Expected Business Outcomes From Cloud-Based Technology Investment

● Significant impact   ● Transformational impact

Outcome	Significant impact	Transformational impact	Total
Improved customer experience	44%	31%	**75%**
Increased competitive advantage	40%	31%	**71%**
Improved organizational efficiency/productivity	42%	28%	**70%**
Increased ease of expanding into new geographic markets	38%	28%	**66%**
Improved revenue	35%	30%	**65%**
Improved partner experience	38%	27%	**65%**
Improved ability to innovate	36%	27%	**63%**
Diversified business models	34%	27%	**61%**
Increased data literacy/competency for my organization's employees	36%	25%	**60%**
Increased footprint with distributors	35%	23%	**58%**

Base: 623 global technical and business decision-makers in media and entertainment
Note: Total percentages may not equal separate values due to rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of AWS, July 2023

Adding to the value of the cloud, respondents at the most successful cloud firms — organizations that have been successful or very successful with their cloud-based technology to date — said they experience even greater benefits across CX, productivity, and competitive advantage (see below).

Compared to laggards, successful implementers of cloud report they're more likely to agree:

● "My organization's satisfied with how it engages customers."

● "Using platforms like marketplaces is an effective way to purchase technology to meet my organization's industry needs."

● "My organization feels prepared to compete today with its current technology infrastructure."

GOING FORWARD, CLOUD STRATEGY MUST ACCOUNT FOR AI

The buck doesn't stop with just cloud solutions. Looking ahead, M&E decision-makers must also consider the role AI has to play in optimizing cloud operations and decisioning with intelligence.[9] According to a director of advertising strategy in cable and streaming media, this comes as "people want a more immersive experience of the genres they love." M&E interviewees shared where AI can help today; one senior director of technical services in streaming and broadcast said: "Last year, I did an analysis on how many editing hours we used doing highlights/clips. We spend more than 10,000 hours a year doing this. If we can find an AI system to do it for us … man, do the numbers, right?"

Meanwhile, others looked further down the road to address industrywide barriers. A director of platform distribution in cable, streaming, and broadcast media said: "Interoperability is a challenge facing the industry. Complementary services between different software stacks … if you commit to [one cloud brand] is [another brand] compatible with AI? I think that's critical three to five years ahead." Prudent M&E decision-makers will prepare today for a future with AI to catalyze operational efficiency, maximize critical skill sets, and accelerate content pipelines at scale with the customer at the center.

> "The digital platform is the future we're betting on."
>
> **SENIOR DIRECTOR OF TECHNICAL SERVICES IN STREAMING AND BROADCAST MEDIA**

Key Recommendations

Forrester's in-depth survey of 623 IT and business M&E decision-makers yielded several important recommendations:

Create a federated cloud strategy to tackle larger cloud problems.

As M&E firms have adopted cloud, emergent need has frequently driven implementation. This might have been guided by things like a central cloud strategy, but IT and the business have been adopting in silos, resulting in repeat work, fragmented security posture, and a lack of available skills. As cloud strategy matures and adoption accelerates, your M&E firm will need to mature its practice, with IT focusing on platform enablement and platform engineering and the business becoming more effective at coordinating initiatives.

Leverage partner networks and marketplaces to fill in key capability gaps.

Key to an effective cloud strategy is prioritizing the development of business differentiating capabilities. Marketplaces and partner networks help businesses refocus on this, meeting broader vertical- and production-specific needs with specialized cloud apps and capabilities and resulting in a faster time to market than the usual build-it-yourself approach.

Secure your approach through Zero Trust.

The principles of Zero Trust must be adopted during development, deployment, and migrations, not after. Reactively managing for cloud security will be a losing battle and impede your organization's initiative. Start by eliminating implicit trust and instead treat all entities as untrusted. Enforce least-privilege access across human, machine, application, and computing infrastructure identities. Implement comprehensive security monitoring through specific cloud security monitoring solutions to overcome ephemeral asset gaps. Finally, attach and enforce cloud security through cloud management solutions. These foundations build the foundation for a Zero Trust cloud.

Develop a cloud platform group.

Similar to the federated cloud strategy of adoption, a cloud platform team should be created to build out automation, develop and identify needed policies, and bulk out internal skills. Different from a traditional IT team, a platform team must continuously strive to exceed developer and customer expectations. A focus on automation, policy, and skills will ensure your organization overcomes some of the more difficult-to-solve cloud challenges.

Appendix A: Methodology

In this study, Forrester conducted an online survey of 623 respondents and six interviews with decision-makers at global organizations to evaluate the role of cloud solutions in the media and entertainment industry. Survey participants included technology strategy decision-makers in manager positions and above in business and IT roles. Questions provided to the participants asked about organizational priorities, challenges, cloud usage, and investment plans. Respondents were offered a small incentive as a thank-you for time spent on the survey. The study began in June 2023 and was completed in July 2023.

Appendix B: Demographics

REGIONS	
North America	**50%**
EMEA	**33%**
APAC	**17%**

COMPANY REVENUE	
More than $5B	**1%**
$1B to $5B	**26%**
$500M to $999M	**33%**
$400M to $499M	**19%**
Less than $400M	**21%**

RESPONDENT POSITION	
C-level	**10%**
Vice president	**16%**
Director	**34%**
Manager	**40%**

TOP 3 RESPONDENT TEAMS	
Analytics	**23%**
Content production	**22%**
Direct-to-consumer streaming	**21%**

COMPANY SIZE	
20,000+ employees	**10%**
5,000 to 19,999 employees	**15%**
1,000 to 4,999 employees	**35%**
500 to 999 employees	**26%**
100 to 499 employees	**14%**

DEPARTMENT	
Operations	**23%**
Marketing/advertising	**22%**
IT	**20%**
Sales	**19%**
Finance/accounting	**16%**

TOP 3 SUBINDUSTRIES	
Broadcast media	**83%**
Streaming media	**78%**
Cable media	**77%**

Note: Percentages may not total 100 due to rounding.

TECH STRATEGY RESPONSIBILITY	
Final decision-maker	**38%**
Part of decision-making team	**30%**
Influence decision-making	**31%**

CLOUD SYSTEM PLANS	
Expanding/upgrading	**48%**
Implemented	**24%**
Planning to implement	**27%**

Note: Percentages may not total 100 due to rounding.

Appendix C: Supplemental Material

RELATED FORRESTER RESEARCH

"The CIO's Cloud Strategy In 2023," Forrester Research, Inc., March 1, 2023.

"Scoring Our 2022 Cloud Predictions," Forrester Research, Inc., February 22, 2023.

"Navigate The Cloud-Native Ecosystem In 2022," Forrester Research, Inc., October 25, 2022.

Appendix D: Endnotes

[1] Source: "Best Practices For Gaming, Media, And Entertainment In Cloud," Forrester Research, Inc., August 18, 2022.

[2] Source: "The State Of Cloud In Gaming, Media, And Entertainment, 2023," Forrester Research, Inc., March 10, 2023.

[3] Source: "Best Practices For Gaming, Media, And Entertainment In Cloud," Forrester Research, Inc., August 18, 2022.

[4] Ibid.

[5] Ibid.

[6] Ibid.

[7] Source: "The State Of Cloud In Gaming, Media, And Entertainment, 2023," Forrester Research, Inc., March 10, 2023.

[8] Source: "Best Practices For Gaming, Media, And Entertainment In Cloud," Forrester Research, Inc., August 18, 2022.

[9] Source: "The Future Of Cloud," Forrester Research, Inc., July 17, 2023.