

The Future is Automated

The landscape ahead for M+E looks uncertain.
Automation can ease the journey.

WORKFLOWS AND THE CLOUD

From cloud-based productions to unprecedented storage demands, the supply chain has never been more challenging

SMART CONTENT

The questions around AI, metadata, and analytics are endless. But we do have many of the answers already

SECURITY SULUTIONS:

Cybersecurity and content protection in M&E is always on defense. Can automation can change that?

23.0

HOW CLOUD STORAGE SERVES THE DEMANDS OF MODERN MEDIA PRODUCTION

ABSTRACT: Wasabi's Global Cloud Storage Index showed that 74 percent of media and entertainment respondents will increase the amount of data they store in the public cloud in 2023. This article presents the key ways media and entertainment can benefit from this cloud adoption to unlock new possibilities for the industry.



By Whit Jackson, VP, Media, Entertainment, Wasabi Technologies Few industries have experienced digital transformation quite like media & entertainment. From the emergence of virtual production, 3D capture, high resolution and frame rate, entertainment production has never been more data generating — and data demanding. At the same time, projects are under increasing time and budget pressure, requiring raw data and work in progress to be immediately accessible from almost anywhere to meet deadlines. These developments have combined to put enormous strain on the IT infrastructure in place to manage and store the mountains of data being produced.

To accelerate production workflows and effectively manage all the data generated, the industry is leaning more and more on cloud storage. In fact, new data from Wasabi's Global Cloud Storage Index shows that 74 percent of media and entertainment executives plan to increase the amount of data they store in the public cloud in 2023. The older methods of recording to servers and drives and physically transferring devices to artists, vendors and customers is no longer up to the industry's needs. The Wasabi Index findings are evidence of the industry's growing adoption of the MovieLabs' "2030 Vision," which emphasizes the importance of technological innovation in the industry for the future of media production.

Cloud storage unlocks new possibilities for media and entertainment producers by offering a flexible and readily available storage reservoir that can be

accessed by editors, artists and vendors located around the world. A cloud-first strategy also eliminates the considerable duplication and physical transfer of files that would typically happen with a production project – all of which are time consuming, costly, difficult to track and prone to loss by human error or malicious attack.

Here is a closer look at what is driving the adoption of cloud storage in the M&E industry:

New production paradigms and tighter timelines require on-demand data access

The increasing pace of production and the requirements for rapid delivery of finished content to viewing platforms have forced vendors and partners to re-imagine new ways of completing projects and getting content to the waiting audience. James Cameron's new blockbuster, Avatar: The Way of Water, completely reinvented how movies are made by employing new camera, virtual production, and effects technologies to capture CG characters in both CG and live environments - completely bending and blending reality like never before. As one of the most complex films ever made, The Way of Water also generated massive amounts of data which had to be transferred to post vendors and specialists to work toward a final product. Then came the herculean effort to deliver the many versions of the final film to digital cinemas around the world in near simultaneous fashion which was accomplished using cloud storage, compute infrastructure and automated workflows. In the end, over 1,000 versions of the movie in 51 languages were created and delivered worldwide in a little over two weeks — an impossible task if not for cloud resources and automation.

Cloud storage also is increasingly coming into play in the world of sports. Beyond the live broadcast of an event, there is also the need to aggregate all the camera footage shot, graphics, pre-rolls, etc. into a storage repository for later use. With UHD and 4K as the norm, a single game or match can generate tens of terabytes of data while large multi-day events, like a tennis tournament or World Cup soccer, can go into the hundreds of terabytes or petabytes of data. Sports teams themselves are also keen to capture all their game footage for re-

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view and training as well as for publishing highlights to broadcast, web and social outlets. In these cases, cloud storage can effectively play the role of an "active archive" where broadcasters, rights holders and team members can readily access clips, replays, and images.

Centralized content storage powers remote work

With hybrid and flexible work schedules remaining prevalent in the post-pandemic world, many entertainment organizations are still fine-tuning remote-work processes to keep their workforce productive, engaged, and interactive with one another. Deploying cloud storage turns typical remote workflow barriers into advantages. For example, centralizing a production project in the cloud means there is one place where the content lives, it's accessible from anywhere and less time is spent searching across storage silos or waiting for a file transfer to come through.

Today, there are a variety of project collaboration tools, cloud-based editing, finishing platforms and multi-party application integrations to expedite media workflows and keep teams working together no matter where they are located. More importantly, cloud-based projects are safer from any catastrophic file corruption or hardware failures since they are stored in highly redundant storage arrays and not on local infrastructure.

Cloud-based storage protects valuable work

We all know the infamous story of *Toy Story 2* and its accidental deletion that almost jeopardized the entire film. Luckily it was able to be restored from a team member's backup copy and went on to extreme box



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office success. However, the whole incident underscores the importance of backup copies of work in progress — which is even better to do in the cloud.

Mistakes happen. Natural disasters are an increasing occurrence. Hardware fails. The 3-2-1 rule of data backup has been standard across many industries and is equally relevant to M&E. Three copies of your data, two storage mediums, one copy off-site. And for the off-site copy, it makes little sense to do things the old way and ship a tape off to a remote vault where it sits on a shelf and is essentially unusable. The major cloud storage providers offer eleven-9s of data durability which provides extreme data protection while the stored files remain accessible for download when needed.

Ransomware attacks are also on the rise in the M&E sector, at both high-profile companies and smaller post and effects companies. When ransomware strikes, it's not just data that's at risk, but your whole creative output and business. A robust data protection strategy with immutable off-site backups can be the difference between business continuity and operations grinding to a halt. Most cloud storage services now offer data immutability – meaning the data stored cannot be altered or deleted by anyone for a set period. With a proper backup strategy, the content in the cloud is both impenetrable and recoverable should your business come under attack.

The media and entertainment industry is charging ahead to deliver the technologies, tools and processes that allow creatives to build bigger, innovate more, and deliver higher-quality content faster than before. These new practices result in the generation of vast amounts of data which must be managed in efficient, robust, and highly accessible storage ... and that's where cloud storage comes in. \blacksquare