JOURNAL

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 Al, metadata, and analytics are endless. But we do have many of the answers already

SECURITY SOLUTIONS:

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

AUTOMATION IN POST-PRODUCTION: MAXIMIZING EFFICIENCY AND CREATIVITY



ABSTRACT: In today's post-production environment, automation is becoming more critical to the success of a project. Automation is no longer a concept, but a reality that can help streamline the entire post-production workflow. It can help teams save time, money, and resources, while freeing up staff to focus on the creative aspects of our art.

By Ryan Gladden, Director, Emerging Formats, Mastering, IDC-LA

The field of media and entertainment has undergone a remarkable transformation over the last few years. With advancements in technology and the increasing demand for high-quality content, automation has become an integral part of the post-production workflow. It has not only made the entire process more efficient but has also enabled teams to focus on the creative aspects of their work.

Automation has played a significant role in streamlining our workflows. One of the most significant benefits of automation is that it saves time and resources. It allows teams to focus on the more complex aspects of their work, such as creative tasks that require a human touch. By automating simple, tedious, and repetitive workflows, post-production teams can reduce errors, increase productivity, and ensure that projects are delivered on time and within budget.

Some examples of the areas that have benefitted the most from

automation, would be automation of source pre-qual to ensure there is no corruption or spec errors present before an operator even touches the assets. The creation of proxies or other simple transcodes without the need of encoding operators means files can go out minutes after the source is received. Large batch conforms of video, audio and text elements can now be done in hours instead of days. Data management tasks like moving assets to lower tiers of storage or archival to the cloud are based on parameters which are set based on the client or show. As well as the creation of complex and detailed metadata assets. Taking all these monotonous tasks away from operators allows staff to focus on the part of our work that needs human intervention.

All the examples given here are just the tip of the iceberg of what is possible, but there are some things that, while close, still need some work. Translation services have come a long way and there are some good tools out there that can do a passable job, but they are still nowhere near as good as using a translator. Script services like audio description, script creation and recording are still best done by hand even though there are tools out there that can translate a script and record a somewhat realistic but still synthetic voice. De-duplication and version control workflows could also benefit greatly from more automated tools and while there are some out there that can help with this, we feel it could still use a bit more refining. We have also reviewed a few tools that will do automated editorial work to clean up masters so all textless inserts can be applied to a master or removing commercial blacks and coming up bumpers from unscripted shows, and while almost ready, they still need a bit more time to mature. Many of these types of automation will or are already driven by machine learning models and as with most machine learning tools, it's just a matter of time before they become indistinguishable from magic.

Here at IDC, we are investing heavily in both the workflows that are easy to automate and in the tools that are still maturing but that we feel will one day be magic. We are either testing, building or already invested in tools for automation for media processing and data management, tools, and workflows to better automate VFX pulls, ONE OF THE MOST IMPORTANT THINGS about automation is taking the time to look through all the workflows you have in place or have coming in and trying to find the best candidates to be automated.

machine learning based cloud tools to automate tedious editorial tasks, and connecting project management tools with asset creation tools for real time updates of work and capacity.

One of the most important things about automation is taking the time to look through all the workflows you have in place or have coming in and trying to find the best candidates to be automated. Finding the commonality between different workflows and researching tools that can automate those workflows is the key to truly being able to take advantage of the new technologies we have at our disposal. We make sure that automation is a topic of discussion every time we start a new project. We look at what parts we may already have automated, what parts need new workflows to automate, and what parts are best done manually by operators. This methodology will allow for smaller teams to be able to take on much larger projects than they would have using manual methods. It can allow for higher levels of quality and consistency improving metrics with our clients by using tools that can review the files and flag issues as soon as they are finished encoding. It allows our workforce to be more spread out using cloud based automation tools or even on-prem systems that can be kicked off with a simple file movement.

The combination of these factors enables operators to allocate more time for tasks that require human creative expertise, enhancing their ability to undertake creative responsibilities, and hence improving the quality of their work.



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