

How implementing the right asset management platform transforms media

No matter the size of project, the need for intelligent production asset management has become essential for every production or post facility, and choosing the right platform is the key. In this document Howard Twine, Editshare's Director of Software Strategy and a veteran of 20 years in broadcast & media technology development, outlines the main questions and issues to address as part of that decision process.



The proliferation of content formats and delivery platforms form some of the largest and most mobile targets for any content producer today. Additionally, the broad range of production tools available mean that any number of editing and effects solutions can be used. Add to this any legacy content managed by other systems or coming from other agencies and the combinations of software and content types are almost infinite. Obviously the scope for errors increases proportionally with the level of system and workflow complexity.

There are ways that program makers can mitigate against possible errors. Retaining the same staff, keeping to same cameras, repeating the workflow they used ten years ago may even help. Hell, why not just stick to tape, after all how many times do you hear someone say “ well, that wouldn’t have happened with tape!” But when you consider that one of the biggest problems production companies face today is shorter and short production times, few producers have the luxury of waiting for the FedEx package with the rushes from location to arrive. Let alone waiting a week before the shots are logged!

The single biggest improvement to the early part of any production process, is the introduction of a Production Asset Management system or PAM. However, don’t be fooled into thinking that a PAM is just an app you can download to your mobile phone for 99 cents! It’s a complex suite of applications that when deployed and used correctly can deliver business changing efficiency improvements.

How to begin the definition process when choosing a PAM

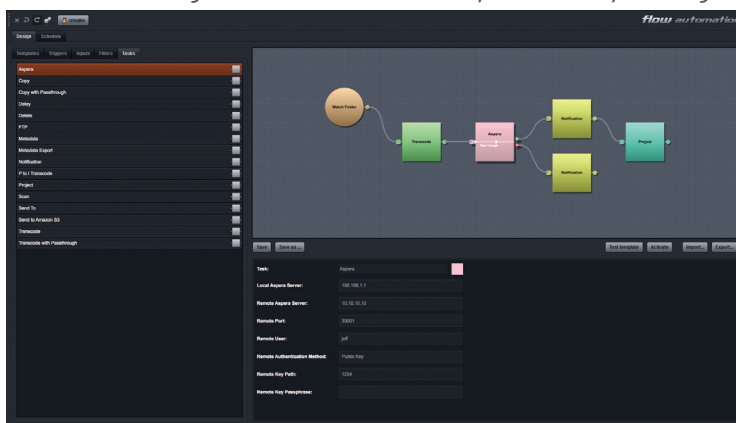
Many start the system definition process by trying to replicate legacy or inherited tape-based workflows. But such an approach is far too limiting for digital content. After all, there is only so much information one could write on a tape label or post-it note. The workflow definition needs to account for the vast amount of metadata that accompanies or defines all content data that will be processed.

There really is no right or wrong selection process as long as there is an implementation plan. This is perhaps where many projects falter - the “plan.” Some would say “the plan was flawed,” but more often than not, the biggest issue is that the plan gets changed mid project, or it just isn’t followed correctly. This could be for reasons too numerous to detail here. The main thing to consider is the impact of any changes to an implementation plan.

Delivery is the easy part

The output formats for content to be delivered are usually well defined, but what about ingest and internal formats? All too often we hear stories of clients being told, “Deliver your content to us in any format you like, our engineering team will work it out!”

While it may be true that engineers and tech operators can often pull rabbits from top hats, but at what cost to the business? The desire to the gain the business from one particular client



Workflow orchestration is now an essential PAM toolset

may be at odds with the number of hours required to make it work. However, help is on hand in the shape of workflow automation. Some production asset management systems provide an automated workflow designer feature. This enables the creation of simple or complex workflow templates to drive repetitive processes using triggers, inputs, tasks and filters. In this image, workflow templates are built graphically on screen in the style of a process flowchart.

This is where a PAM product comes into its own, having the ability to orchestrate these types of processes and ensure that valuable metadata is not just preserved during the process but also enriched. The enrichment process is vital when things go wrong.

If the PAM system can provide some form of audit trail, it may not be necessary to go back to the rushes when someone realises that the audio has been messed up after the final colour grade. Better yet, if the PAM system is integrated into an automated quality control system, it may have the “awareness” that something is wrong at any key part of the process, and be able to alert an operator.

Even if a fully intelligent and aware QC workflow is a way off, it is possible to use processing and monitoring systems in a PAM-controlled environment to make sure that when things break (which they will) the right people know about it. Crucially, these people also need to be provided with enough information about the problem, in order to make an informed decision.



A PAM needs to be flexible in tools and supported platforms

What is broken? How broken is it? The PAM system should be the place where they go to find that information. Why? Because over time the information on these types of problems (and other processes) can be stored within the database. This repository can provide users with valuable analytics on the overall performance of the many workflow processes.

Scalability

Since it is every business owner's ambition to expand and do more, it is vital that the tools within that business can also grow. At its heart any PAM has a database. This contains user data as well as valuable content metadata that will continually be added to throughout the production process. Wrapped around the database any good PAM should have robust and efficient software services that allow the flow of data to the application tools. These services need to be developed in such a way that they can either be bundled together on the same physical machine as the database (for smaller scale operations) or can be moved onto their own environments for larger more distributed applications. Either way there should be no loss in system performance.

All too often technical teams get excited about the performance of the storage system and networking more than the overall business or workflow process. Obviously having a shared storage solution that works and scales effectively is vital to the business, but if you don't know how well you are using such an asset, how do you know if it represents value for money?

The key questions for success

Purchase due diligence requires asking yourself the following questions, and then finding answers to each one as it relates to facility needs for today and in the future.

Does the PAM system match your current working processes?

For example, if you work with projects, can you arrange the work in the PAM by project? Can you add project-specific metadata to help with the overall management of these?

Is it easy to adopt new working practices or add new codecs for ingest and delivery?

If you have teams of remote users that need to collaborate on the production process, will your PAM system cope with this? Can you host all or parts of it in the cloud? You'd be surprised at the number of PAM systems that cannot be run on major cloud services simply because of licensing restrictions.

One additional value of a PAM is the ability to capture, store and process both images and metadata from remote editorial workflows. Production managers may find that an integrated PAM is not just a useful tool, but the essential component to building an efficient production workflow.

How easy is it to customise metadata schemas within your potential PAM system?

If for example, you have a delivery specification for a certain broadcaster or network, there may be mandatory metadata parameters you have to deliver along with the content. Can you take a sample file from the client and can it be used to create a work template for the PAM system to make sure everything you deliver meets the customer's requirements?

Can you automate repetitive tasks and can these tasks be interdependent?

For instance, if the workflow performs QC, does the QC report get fed back into the PAM system as metadata? When errors occur, how easy are they to find and interpret? Are they displayed as low resolution proxies managed by the PAM system?

EditShare Flow

For the past 6 years EditShare has been developing a scalable PAM that is used at the heart of many media facilities. Flow simplifies and turbo-charges the creative process creating a unified environment where creatives can work together while technicians, administrators and managers optimise the use of resources.

For more information on EditShare's Flow asset management solution and how it integrates with their EFS storage range please go to their website: www.editshare.com/products/flow

Does the system provide analytics on storage and workflow performance, or generate reports to better understand how well your investments are performing?

This could apply to physical storage or processing platforms (servers, etc.) as well as the PAM users themselves, which could be controversial in some areas. However, if you have operators making the same mistakes repetitively such analytical reports can show where additional training may be necessary.

And finally....

Many more questions could and should be asked as part of the design process, but the above highlights the key issues you should consider. Taking input from experienced vendors and integrators will only help the implementation, and where possible 'try before you buy'. However, because Production Asset Management is all about workflow processes and since no two workflows are the same, there is no silver bullet or "one size fits all" solution. So asking the tough questions now will save future pain.

With the many changes in digital formats, delivery channels and increasing complex workflows, a file-based PAM is more than a convenience. It can be the key to more production volume, higher product quality—the virtual key to a successful business. Can you afford not to?