

Content Intelligence

How metadata drives automation for reduced operational costs and improved efficiency across the entire content life cycle



Content Intelligence enables the automation and orchestration of software-defined workflows based on metadata values thus significantly reducing operational costs and improving efficiency across the entire content life cycle.

There are over seven and a half billion people in the world today. You can go to worldometers.info and watch the total rise. What opportunities does this hold for those of us in broadcast?

Already, there are more mobile phones than there are people. And today it is hard to buy a mobile which is not a smartphone. When Apple launched their most expensive phone in 2017, the iPhone X (10) starting at a mere £999, the 64GB storage device sold out in less than 10 minutes. And the annual CES (Consumer Electronics Show in Las Vegas) tempts us with an endless array of the latest gadgets and devices to keep us connected wherever we go.

There are also tablets of course. And no-one would even try to estimate the number of computers in the world. Cisco estimates that next year there will be 25 billion devices connected to the internet; and up to 50 billion by 2020. Newer technologies like LTE and 802.11ac not only make it easier for all those devices to get online, they provide faster, more stable, more predictable connectivity.

What does this mean for us humble folk who used to work in broadcast? It means:

- more consumers
- more devices
- more formats
- more delivery platforms
- more content

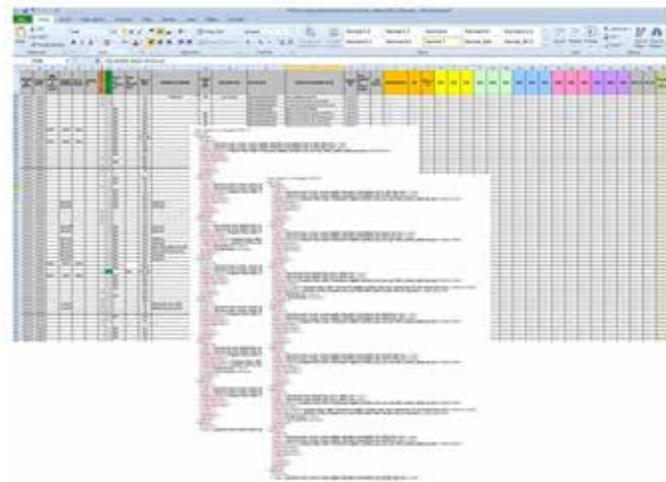
...all of which will be digital, and will be managed through digital workflows.

Formats

Television used to be simple. We made a master version of a programme, and if we sold it overseas we told them to subtitle or dub it. Then we made HD masters, and told SD broadcasters to downconvert it.

Now we have multiple devices, and each one demands a different combination of screen resolution, frame rate, codec, wrapper and delivery format. To maximise the experience on mobile devices we invented sophisticated variable bitrate delivery, and even then we got not one but three different systems. And if anything, the rate of arrival of new platforms is still increasing.

This is not something that can be tackled manually. Some of the biggest broadcasters in the world have survived up until now by managing workflows on Excel spreadsheets: those days have gone or going fast due to the demands on the business to deliver more, faster. To achieve operational efficiencies, processes need to be automated.



Manual scheduling on Excel, which is time consuming and prone to errors.

Software-Defined Network (SDN)

The software-defined network is the new big buzzword in the industry. Along with file-based content and IP connectivity, it is the only way we are going to survive. In simple terms, the SDN means we define all the things we might ever want to do with content as processes, and we push the content from process to process, in software (via workflows), until we reach the required deliverable.

SDN is our friend. It gives us a technology platform that can quickly adapt to changing business requirements for broadcasters, content owners, producers, and the creative community. Where once it took nine months to put a new channel on air, today we can measure that in days. We are no longer hard-wiring workflows, we are drawing them on screen and allowing the SDN to interpret.

But the SDN is not the clever part. The thing that is absolutely central and critical to success, is metadata - the data that provides information about other data. If you manage all the information that you know about your content in one place, you have the ability to maximise your business activities.

Rights information, technical parameters and content descriptions have individual applications, and departments within the operation care about each of them. But taken together, they allow automated decision making, and it is this which releases the power of the modern workflow.

Content Intelligence and Automation

When the word metadata first appeared in broadcast circles, one convenient definition was that it is 'bits about bits'. It is a digital description of a digital content file. In a well-ordered system the metadata and the essence are permanently linked, perhaps with the metadata even embedded in the content itself. That means you can mine the metadata to make decisions in business process management. We call this content intelligence. And it is critical to making all these new deliverables happen.



Mining metadata to drive and automate workflows reduces errors. Staff can work on more value-added tasks.

Take a simple case. A new piece of content arrives at the broadcaster. First, you have to determine what needs to be done to the content: does it come from a trusted source or does it need QA? Is it for immediate transmission – so needs a priority path through the system – or is it for later use? What rights do you have for it? Which platforms can it be used on? How many rescales, transcodes and transwraps do you need to perform? Software-defined workflows, driven by metadata can manage all of this automatically and thereby reduce errors and increase operational performance.

Automation is the key to improving efficiency and, as complexity grows, to even making it possible. Take the content intelligence and use it to make business decisions, then update the metadata so the next process down the line can make its decisions accurately and automatically.

The result is an environment in which workflows are software defined in business process terms. Essentially, you state in what forms your audiences expect to see the content, and therefore how you will achieve your revenue goals. The software-defined workflows, driven by content intelligence, makes it happen: securely, accurately and efficiently.

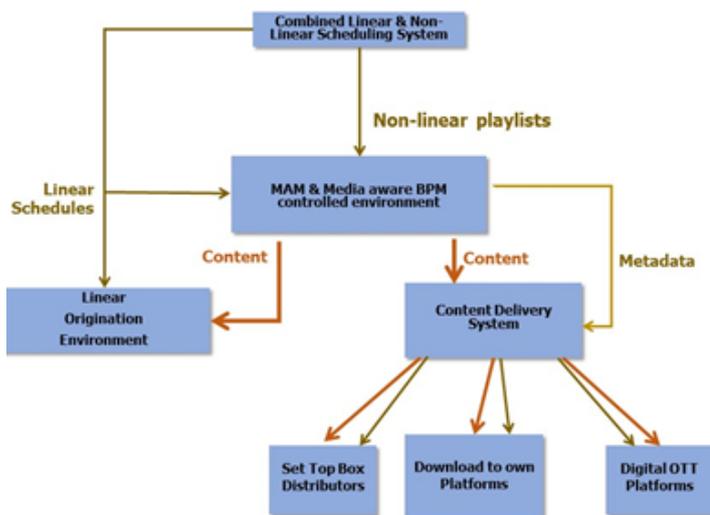
Mediaflex® Content Intelligence

The Mediaflex-UMS (Unified Media Services) platform, delivers media aware, software-defined workflows via the cloud-native, service-oriented architecture and supports the management of both physical media (i.e. film and tape), and digital content. It enables organisations to manage media content, including acquisition, creation, digitisation, repurposing, preservation, enrichment, delivery, publishing, and archiving, through TMD's own media applications and from its extensive list of leading integration partners.

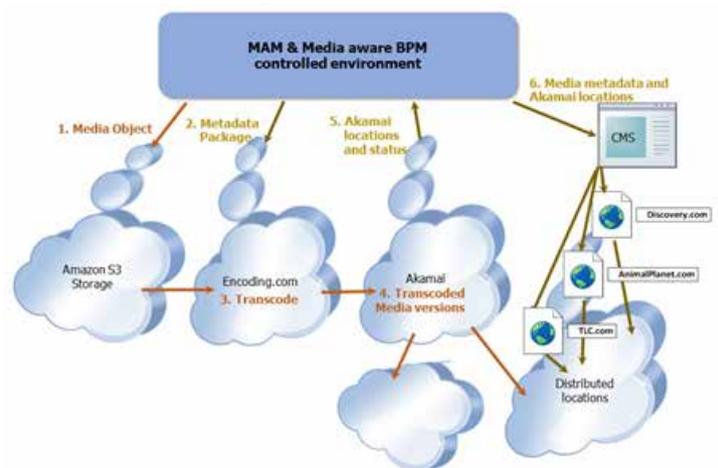
The platform incorporates comprehensive business and media-aware workflow management and the powerful workflow designer allows workflows to be easily created, cloned, and edited in-house at any time, without recourse to expensive programmers or TMD's professional services. There are no restrictions on the number or complexity of workflows and no need to restart the system to implement workflow changes. Solutions can be deployed on premise, in the cloud, or as a hybrid configuration and scale for either (stand-alone) workgroups or integrated enterprise solutions.

Many of the world's most prestigious broadcasters, media organisations, archives and content providers rely on Mediaflex-UMS, and it's agile, software-defined workflows to fulfill all their content management needs.

Metadata's importance in today's automated software-defined workflows for broadcast content preparation and layout



Automated software-defined workflows for both linear and non-linear content preparation and layout.



Automated software-defined workflow integration to cloud services.

To find out how you could improve efficiencies in your media asset management system, contact TMD today.

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