

# Object Matrix

## Digital Content Governance



### Benefits



Maximize Content Value through efficient storage and retrieval processes



Improve Searchability with integrated metadata management and automated indexing



Ensure Authenticity And Integrity with secure retention policies and ransomware safeguards



Future-Proof Content and Operations through seamless migration, long-term accessibility, and business continuity features



Boost Efficiency by automating workflows and reducing manual intervention

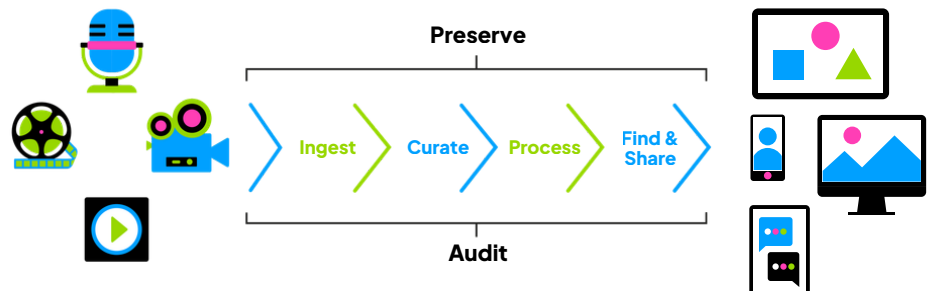
Any organization that creates, curates, processes, or manages video content understands the complexity of ensuring that this content remains protected, authentic, and accessible from anywhere – all while maintaining a full audit trail. This is where Digital Content Governance (DCG) comes in.

### Riding the Deluge of Unstructured Content

The main problem with the deluge of content and huge file sizes (4K/8K+ media) is that it requires different skillsets and toolsets to manage. And naturally, it relies on a lot more storage space. Without the right structures and processes in place, it is all too easy to misplace content you have previously created, which often leads to content producers having to reshoot footage, often at great expense.

Combine this with the rapid pace of innovation in the media industry, and it's no surprise that media companies struggle to keep their staff's skills up-to-date. Only a few years ago, engineers were managing physical tapes, so the move to a world of file-based systems and IP technology is quite a difference.

In this new world of media production and delivery, one of the biggest mistakes made by media companies is the lack of integration, automation, and governance. Disk is often managed the same way as tape - with manual processes. This not only causes bottlenecks but also introduces errors into the workflow. Media companies are wasting valuable resources on managing storage rather than more beneficial functions. The result is, more often than not, a number of unsecured, unmanaged storage silos, made up of everything from scalable NAS and USB drives to large cloud buckets full of content they cannot find nor afford to use.



## Digital Content Governance

Clearly, if organizations wish to profit from their content or build a successful community, they need their hands on their data 24/7 to use, re-use, re-shape, and re-use again. Digital Content Governance platforms enable that, but they also focus on the whole package required to protect, curate, share, distribute, and audit digital content.

Ultimately, it is about ensuring a number of crucial factors:

- Maximizing value
- Easy search
- Ensuring content is authentic
- Protecting data
- Business continuity
- Future-proofing content & metadata
- Access controls

## Maximizing Value

Generating revenue from content requires knowing exactly what you have, being able to locate it easily, and understanding how it can be used. Content sitting idle on a shelf doesn't create value. To maximize the value of your content, it needs to be rapidly accessible. With high-definition files, this could mean tens or even hundreds of terabytes of data needed on short notice.

If that content has been archived, getting it back out of archive can be a pain. On the other hand, if it is sitting in the public cloud, there could be a big cost associated with retrieving it at short notice. If you don't mind waiting four hours, a day, or even a week, then costs may be reduced. However, it simply doesn't work for media organizations that rely on on-demand workflows.

Digital Content Governance enables organizations to access their content when they need it and in timeframes set out by the business.

## Easy Search

One of our maxims from way back rings true today as much as it did in 2003, "If you can't find it, you do not have it".

With increasing volumes of data coming in and out of your facility, metadata management is as important as protecting the content itself. The ability to search for content based on up-to-date and relevant metadata will unlock the value of content for many organizations. Loosely coupled metadata and content will always make "find" an inefficient or impossible process.

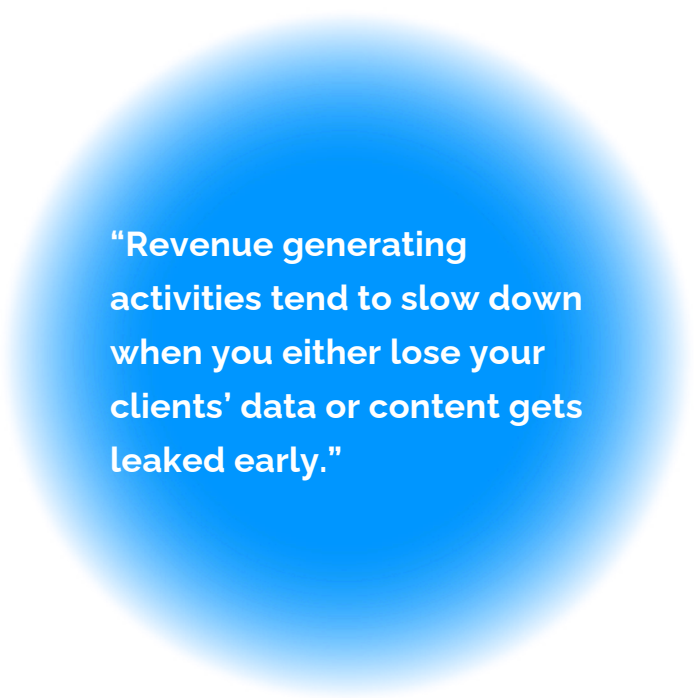
Using Media Asset Management (MAM) solutions increases find substantially. But as mentioned above, there is a risk in loosely coupling the MAM database and the storage where the media resides. If metadata is not embedded or associated with the essence and where the essence lives, then MAM can become more like Maybe Asset Management at times.

DCG platforms protect the metadata along with the essence for the lifetime of the content. Using APIs enables future-proof, integrated, and automated workflows that ensure content can be found even if media asset management is not available. DCG platforms can also automate the extraction and indexing of any embedded metadata which will also vastly increase the efficiency of find.

## Ensuring Content is Authentic

Trusting our data is crucial, so we need to know that our content is authentic and that it has not been altered or tampered with. Can we prove that the rushes from the interview with the politician or financial analyst actually tally with the message portrayed in the edit? Digital preservation practices include providing options for data immutability, ensuring content cannot be deleted until authorized by the business, or the law.

DCG platforms make multiple copies of content on ingest using checksums (digital fingerprints) to ensure its integrity from day one and throughout the lifetime of the content. DCG can ensure rushes are immutable throughout their lifetime and can place retention policies on the data so that not even administrators can accidentally delete it on a bad hair day.



**"Revenue generating activities tend to slow down when you either lose your clients' data or content gets leaked early."**

**“Security through obscurity is no way to protect content. Just because you can’t find it does not make it secure.”**

## Protecting Data

Digital preservation, and protecting content from ransomware, is a massive deal in the media industry. Many companies are required to comply with internal or external regulations around the digital preservation of their digital content.

Digital preservation processes ensure your content is protected at ingest and remains so throughout its lifetime. However, this requires regular integrity checking of data which can be a costly exercise with legacy technology. How many media companies regularly follow good LTO management practices?

## Business Continuity

If the lights go out at a facility, so too do the chances of continuing revenue generating activities. Using incumbent platforms that rely on legacy archive and backup practices do not guarantee the continuity of business operations. Data loss—or loss of access to that data—can lead to catastrophic revenue implications for any sized company.

Relying on manual procedures, scripts, or the skills of individuals within an organization does not provide levels of redundancy and automation required to get a business running when outages occur. The ideal scenario is for staff to be able to easily switch to the location where data is accessible, whilst continuing to use the tools they are used to.

DCG platforms provide automated and integrated business continuity functionality ensuring work can continue despite

disruptions. Implementing automated, asynchronous replication of metadata, data, and user access information ensures that everything that is needed will be available at the DR location. Integration of DCG platforms into the end-user ecosystem (i.e. they do not have to learn new skills) also makes this a non-disruptive process.

## Future-proofing Content

There are a wealth of articles out there discussing how to create the perfect ‘forever’ archive. Truth is, whilst the manufacturer states the media will last 100 years, the machines required to read the format will likely not. It is also questionable whether the format of the files themselves will be supported. With this in mind, organizations need to implement platforms that make it easy, or even automatic, to migrate content to new storage platforms or formats.

Migrating content from different formats of offline media (LTO etc.) is non-trivial and vastly increases the TCO of those platforms – ask any system administrator about the joys of data migration. If data resides in silos of dumb storage, then migrating the data, and metadata, to newer platforms, poses a problem for many organizations. Quite frankly, it is a right royal pain, so much so, an entire industry has grown up around it.

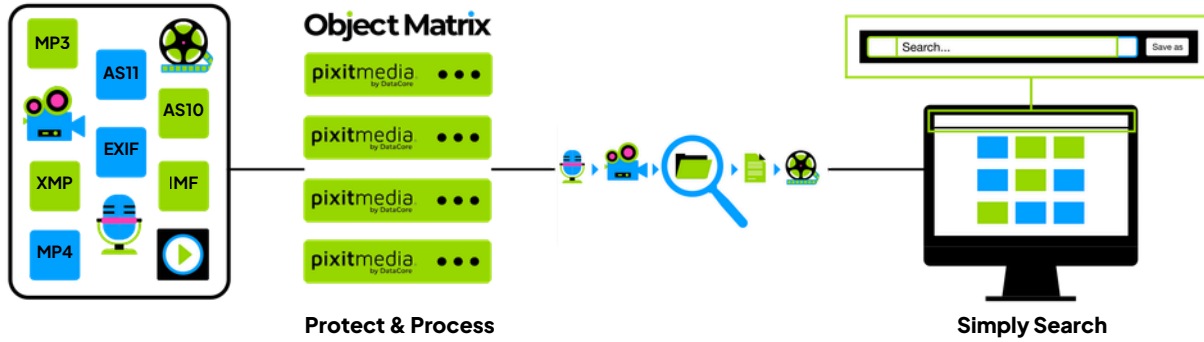
DCG platforms provide the functionality to ensure future-proof access to content with the minimum of manual intervention:

- Migration in place allows content to move from older, legacy hardware to newer generations of hardware within the DCG platform and with no manual intervention.
- Content and associated metadata are stored in a non-proprietary format and it portable meaning the data and metadata that belongs to you will always be accessible to you.
- Process-in-Place (PiP) does what it says on the tin. It enables content to be processed where it resides, on the storage platform. This means content does not need to move around to have simple processes performed upon it. Examples include:

» Any metadata embedded in the content itself can be automatically indexed and thus makes searching for content much easier without manual logging. Formats like Adobe XMP, AS11/AS10 can be dropped into a DCG platform, and it will become very easy to find as its metadata will be automatically extracted and indexed for search. Hands free.

» It is not inconceivable to have PiP performing tasks to transform content from one format to another. As a format of PDF/MOV/JPEG becomes obsolete it will be possible to inject algorithms into the DCG platform to transform legacy formats to the new standard. The functionality to provide those services is available today. Automatic and systematic processes. Again, hands free.

# Process-in-Place (PiP)



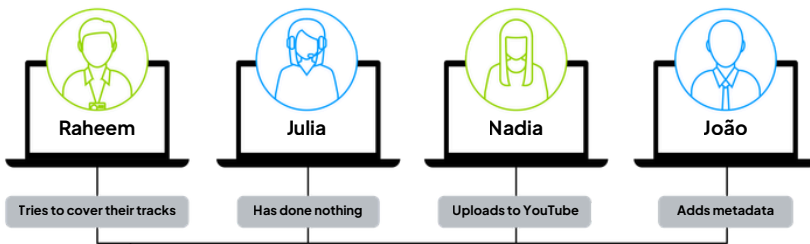
## Access Controls

If content generates revenue, then it is crucial to ensure the control of access to that content throughout its lifetime. Providing searchable audits of every action during the lifetime of the media is essential, as it means you can track exactly what has happened to that content and who has accessed it. If your media is on dumb NAS, removable media, or tape, you have no idea who has had access to the content.

DCG platforms can offer native, searchable audits of every action from ingest, moves, deletions, attempted deletions, and most importantly, read. It has to be said that audit is also

possible with public cloud accounts if the user logins are granular to individuals performing the actions.

With all these bases covered, organizations will be able to focus on the important things, such as how to generate income from their prized assets and not spend money and cycles on managing the infrastructure that houses them. A Digital Content Governance platform that integrates into the way you work and enables automation keeps everyone happy, from the editor to the CTO and the CFO.



Every single action audited	
<b>pixitmedia</b> by DataCore	23.02.26 08:12 Read object by Raheem
<b>pixitmedia</b> by DataCore	23.02.26 11:31 Delete object by Nadia
<b>pixitmedia</b> by DataCore	23.02.26 11:35 Update object by Raheem
<b>pixitmedia</b> by DataCore	23.02.26 12:10 Read object by Raheem
<b>pixitmedia</b> by DataCore	23.02.26 14:31 Read object by Nadia
<b>pixitmedia</b> by DataCore	23.02.26 15:02 Update object by João
<b>pixitmedia</b> by DataCore	23.02.26 17:11 Read object by Raheem
<b>pixitmedia</b> by DataCore	23.02.26 17:33 Delete object by Nadia
<b>pixitmedia</b> by DataCore	23.02.26 22:34 Attempt to delete object by Raheem

**Object Matrix**

To learn more about Digital Content Governance or discover how Pixitmedia can help you resolve your storage challenges, please get in touch!



Pixitmedia by DataCore is a leading provider of intelligent content and metadata management solutions for the media and entertainment industry. We go beyond storage to deliver a smarter ecosystem for media workflows, with end-to-end solutions that combine high-performance file, nearline, and archive platforms with metadata enrichment, indexing, and search. Enabled by data orchestration tools, our multi-tier technology simplifies content management and migration to ensure media assets are always where our customers need them.

Pixitmedia's innovative solutions integrate seamlessly into existing M&E workflows, optimizing efficiency and collaboration at every level - from ingest to archive to delivery. With Pixitmedia, content is always searchable, secure, and available whenever it's required. Learn more at [pixitmedia.com](https://pixitmedia.com)

