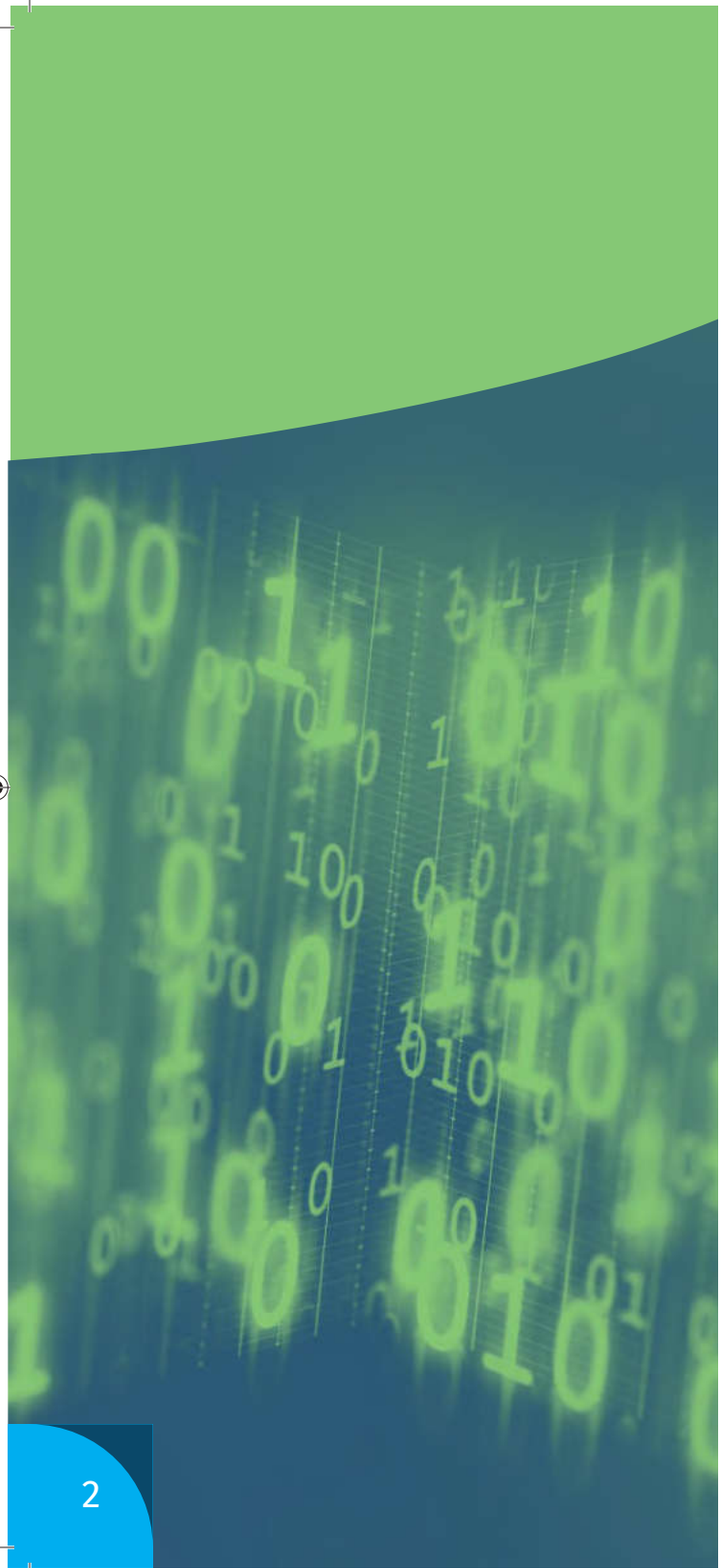
TECHNICAL GUIDE

PREPRODUCTION DATA MANAGEMENT

DIGITAL ASSET MANAGEMENT

Second Edition

FESPA
profit for purpose



Digital Asset Management In Wide Format Print Production

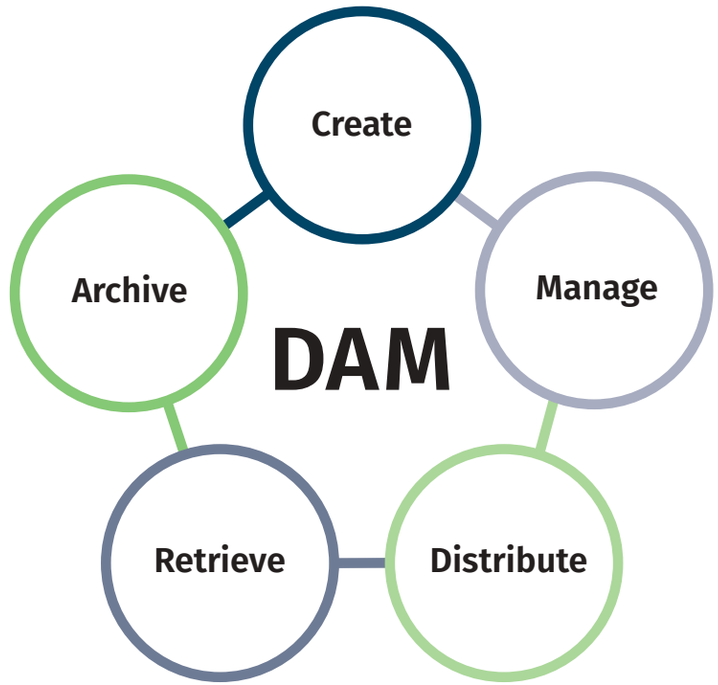
One of the great advantages of digital print production is the ability to offer print buyers a rapid turnaround and short, customised print runs, sometimes down to a single copy of a single page job.

Add to that the promise, or challenge if you like, of personalised printing, and it's clear that we need robust and flexible database systems with up to date information. More importantly, we need data management systems in place to sustain data driven services over time. At the heart of such systems is Digital Asset Management (DAM) technology which includes both web-to-print solutions (WtP) and digital assets.

A WtP solution integrates with your MIS system and provides an ordering portal for your customers. The WtP system should, if properly setup, create opportunities for additional sales to new categories of customers as well as existing clients for whom the portal can make life so much simpler. New customers might find their way to your company by browsing the internet for print suppliers, possibly guided there by your sales team's other marketing activities. But a good WtP solution is of most benefit to your existing customers, if it can simplify repeat ordering of standardised printed products.

For such repeat orders to be managed efficiently and in a way that ensures high quality production data, all the components of the print production system need to be available in the right format. This includes accessing the correct version of the document, that it has the right colour space, and that pixel based images are at the right resolution. This is where a professional Digital Asset Management system provides value for your customers and for you.

A DAM system should be evaluated using a range of criteria, some of which will matter more than others depending on your list of requirements for the business. Most important of all is that the system is scaleable, which means that as your databases of assets grow, the system can expand accordingly. Technologies that are too feeble to support the data adequately will compromise access flexibility and search response times will be just too slow to be acceptable. The scaleability and openness of modern digital systems mean that you can upgrade to a more powerful solution with relative ease. However factor in hardware and software upgrades as part of your DAM investment planning.



Adobe InDesign can't save a document directly as a PDF, but can generate a PDF through an export function. The most commonly used PDF/X-format today is probably PDF/X-4, which allow images to be in RGB and also allows the use of layers and live transparency.

Metadata

Perhaps one of the most underestimated tasks associated with managing digital data is the importance of being able to add, maintain and manage the metadata associated with the document files. Metadata is how you or an automated process find the assets you need for a job fast and efficiently. For images this means that proper digital rights management should also be in place, so that you can keep track of when an image was last used, what the publishing rights are, and who owns the copyright for the image and any restrictions on usage. For instance an image might be licensed for unlimited use or restricted for limited use and in certain contexts. If the image needs to have copyright protection (a digital watermark) to prevent its use outside its intended application, the DAM system must be able to support such digital watermarking.

Consider also the upgrade path as your system grows, because you don't want to risk losing all the metadata associated with individual datafiles that reside in your existing asset management system. This points to an important concern for all DAM systems: they absolutely must be able to support a wide range of commonly used metadata formats. This includes such formats as the Exchangeable image file format (Exif), the extensible Metadata Platform (XMP) format, and the International Press and Telecommunications Council format (IPTC). In addition to these, a DAM system must also be able

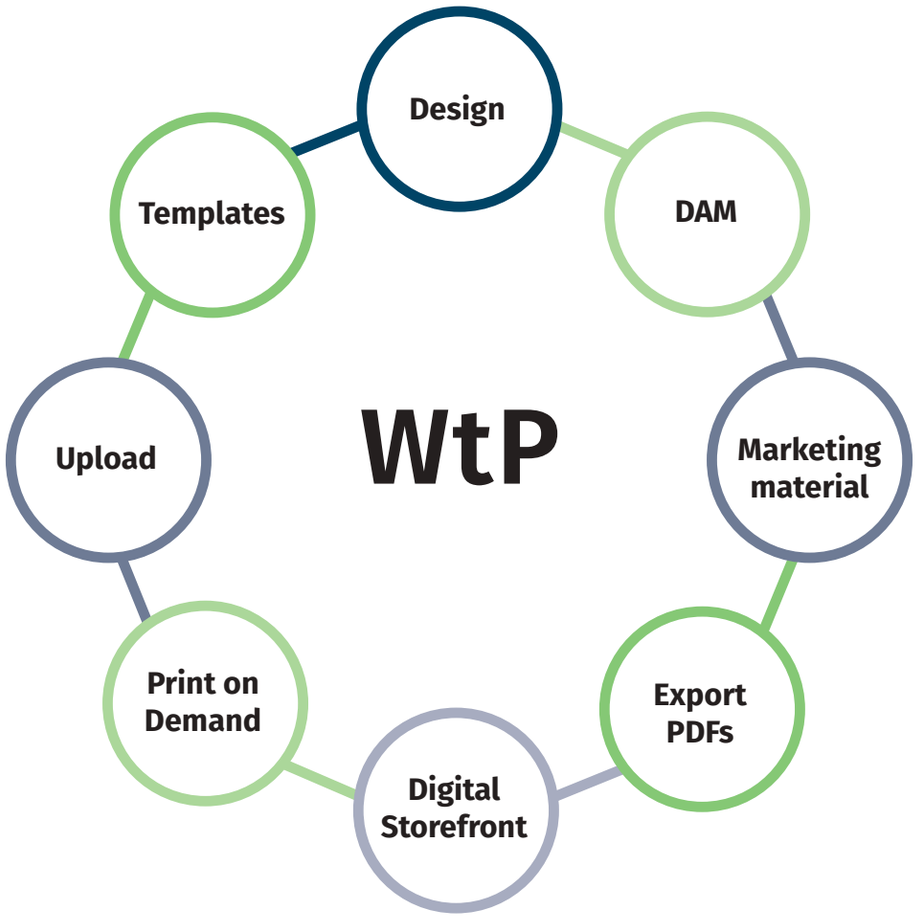
Over the years DAM systems have become more and more sophisticated, to help the users not only to find but also catalogue images. Here the Adobe Sensei technology use Artifical Intelligence to apply face recognition in Adobe Lightroom. This information can then be use in an image database or complete DAM system to retrieve images efficiently.

to support all the commonly used document file formats. These are the native file formats used in popular applications such as Microsoft Word and Excel, or Adobe Illustrator, InDesign and Photoshop. Of absolute importance is support for Adobe PDF files.

One way to secure scalability and a successful migration between databases, is to ensure that the database uses the Structured Query Language (SQL), or that it can export and import to or from an SQL database. This is a good way to build an asset management solution that is future proof, and that allows you to extend the DAM system over time without risking your existing assets. You absolutely don't want to spend a lot of time and energy building a database solution that is suddenly obsolete and can't be updated or migrated to a new architecture. And you will find that it's not always possible to host all the assets in a single database, so it makes sense to establish connectivity throughout a suite of interconnected databases that works now and for the future.

DAM & WtP

A DAM system should work seamlessly both with a WtP system, and an authoring system for variable data production. Amongst other things this means that the DAM system needs to have an automated repro function to take care of converting files to the correct colour gamut and resolution for the chosen output path, as well as resizing if necessary. This is not a trivial task, and it is where many DAM systems fall short. Maintaining a high and consistent colour output quality across all the print you produce has to be an overarching goal for production, so the WtP, DAM and Raster Image Processing (RIP) systems all need to work in a collaborative and mutually supportive way.



A Web-to-Print (WtP) solution combines automated design with DAM resources and efficient print ordering solutions.

For the designers involved in the manual layout of pages, the DAM system must be able to integrate with the layout application they use. This means that when a designer starts working on a job, search functions should be available as plugins or similar, directly inside the applications, through pull down menus or floating tool panels. This will allow images and other objects to be incorporated into designs, easily using simple drag and drop commands to place them onto the page. When the design is proofed and approved, the repro function in the DAM system should be able to make sure that image resolution and colour gamut are appropriate for the output path, and indeed be able to support multiple output paths consistent with the fleet of presses. There should be no need for manual intervention at this stage, because this would mean a less efficient workflow and create opportunities for possible errors.

Since a DAM system is supposed to help the print buyer to both order and produce their printed material, it needs to offer support for collaborative workflows. The system's tools and

assets in such a system are available through a web browser interface, or through custom made apps that work on different types of tablets and smartphones. This is because the softproofing and approval function of a WtP solution is so crucial. It must support a role based setup, where clear responsibilities are defined and access to functions controlled. It's not necessary for everyone to be able to do everything, on the contrary in fact. So the DAM system should have a user interface that can be custom tailored, for the role and function of individual team members. This can be a challenge in today's mobile community, with so many types of devices in use, but thankfully many software vendors work hard to at least support most of the commonly used platforms.

An increasingly common choice for these platforms and devices is HTML5 a mark-up language used to structure and present content via the web. Your WtP, DAM and variable data authoring solutions should all be able to support HTML5 and will enable you to provide customers with true cross-media solutions, if this is your aim.

Blurred Lines

It might be difficult to see the boundaries between a WtP solution, a DAM system and your MIS. But wherever you define it, you need to include some type of Customer Relationship Management (CRM) module in the mix. Your customers are where it all starts and ends, so you should use technology to support efforts to identify customer needs and make sure you achieve customer satisfaction. While this is all about relationships and doesn't need computer support, customer and related data patterns can help you identify business trends. Digital systems make it easy to allow customer information to be seamlessly integrated into your network of management resources. This will make it possible to base your strategic decisions on facts, based on analysis of the statistics that can be pulled from the systems, from the databases interconnected in your workflow.

In this respect, Digital Asset Management includes not only the software in use, and the devices, but also human resources. This is perhaps the most precious asset of all for a company, and the staff should have the best possible tools available to do their job well. Blending digital and human resources effectively means you can provide customers with efficient service and tiptop quality assurance.

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