

# PDM and Workflow

Martyn Day talked with Joe McBurnie of CSI, the developer of Design Data Manager (DDM), about the current RDM (Product Data Management) market and trends in workflow

**Martyn Day:** PDM and Workflow have been buzzwords in the industry for decades now. Do you think people understand the terms and what the technologies can do?

**Joe McBurnie:** I've been selling PDM since 1993 and our own PDM product Design Data Manager (DDM) is 10 years old this year. Back in the early days, there was an education process for us to explain PDM to prospective customers. However, once people understood what PDM could deliver it wasn't so difficult to see the benefits of deployment. Today, people are smart. The engineers we talk to have quite defined expectations of what a PDM system will deliver. The trouble is getting them to realise how easy PDM can be and how it actually could help from day one of the implementation. In the past, some of the big enterprise PDM systems were purchased and not implemented for as long as two years. Huge costs came in with consultancy and there were failed systems just because the software was hard to use. We have focused on ease of use. We work on how people would expect something would operate. DDM's interface is based on Windows Explorer; it's what everyone knows - people understand it. It doesn't have to be difficult.

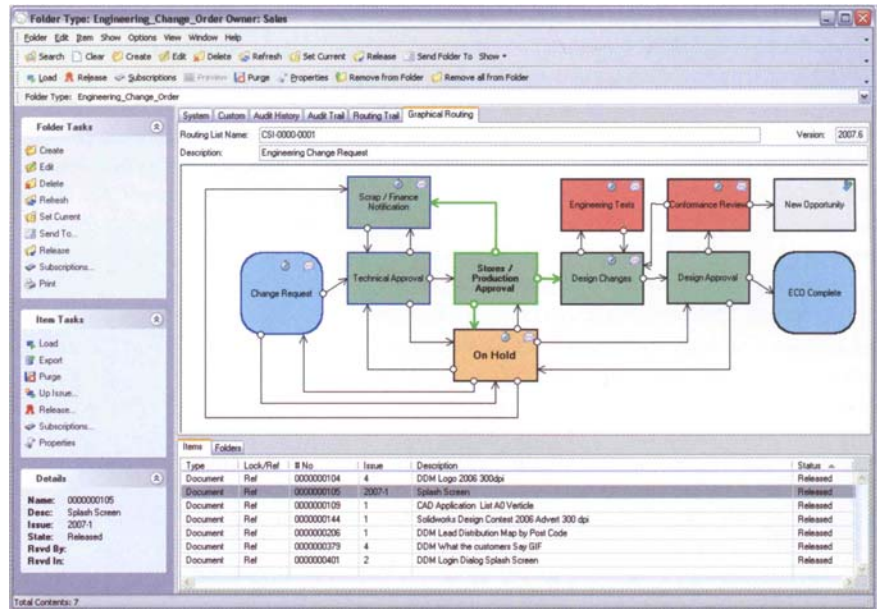
The case for PDM is simple to explain.

Companies pay a huge amount of money for the engineers, the hardware, the software, the support and infrastructure and all of these people are creating information - and that's your IP. Our company tag line is 'securing your investment in design' for this reason. People spend a huge amount of money on creating this engineering data and typically they don't look after it particularly well.

The issue that holds up PDM deployment is that many of the systems on offer are too regimented. Businesses are culturally changing, becoming much more dynamic. Everyone wants everything for nothing - that's the start point. If you can deliver something that's easy to use, easy to understand and demonstrate, that doesn't need a lot of training, people want these types of relaxed systems, so long as you have traceability. Who did what, when and why? In business you have to respond to demand a lot quicker; should that be internal departments or external customers. Product design is a very aggressive and competitive field.

**MD:** PDM and now PLM (whatever that means to you) seem to be mainly based on cost per seat, infrastructure and a consultancy-based

While 'Workflow' is now included in DDM, it's not something that CSI pushes on people, as the systems can be used with or without workflow.



implementation in the engineering environment. Surely this scares off small to medium sized engineering firms?

**JM:** People are unhappy to hear it's going to take 10 to 20 days of consultancy before they get anything of any value out of their investment. That's very, very expensive. Our focus is not on building a consulting organisation, it's about developing a product that is so easy to use the customer can use it out of the box. We have to make it as generic, scalable and configurable as possible for all SMBs.

**MD:** The latest buzzword in PDM is Workflow and having these systems automate document sign off loops and business processes. Understanding your process is often the hard part!

**JM:** Processes are usually there because they have evolved overtime. In my experience, all of these systems have been built up because historically something has gone wrong, so there's been an internal review and steps, loops and checks get added in order to stop the problem happening again. When implementing a PDM system with Workflow you give each company the chance to review these processes. There are things in the past that have been done in a way because a technology-based solution wasn't available.

Unfortunately, consultancy is often linked by other PDM vendors to implementation of Workflow technology but implementing that feature of DDM is not something we push on people, you can use it with or without workflow

**MD:** With consultancy costs being involved in Workflow implementation do you think small to medium sized engineering companies will really take to using it?

**JM:** I think SMBs will start to use Workflow technology more if it's made easy enough, if it's affordable and ultimately puts them in control. Workflow gives traceability with a full audit trail and that's not just about the document's lifecycle but also auditing the process. If a document has been involved in an iterative process, the audit trail will show where it has been - so the document is tracked and so are the processes.

The focus for us with DDM is to make something that people are comfortable and confident to use themselves. It's designed so you don't have to have a consultancy day every time you want something changed. Consulting is available but our focus is on developing the product so it's easy enough to use, and so the customer can actually build it themselves

There's no programming required at all. It's very visual, using the graphical process building so that the administrator can visually see the process as a graphical workflow. In fact, each user can see this process image too when they are signing off documents. It's basically a 'this is where I am' map and the map of the process shows the choices that I have, given the defined workflow. There are also options to see the routing of a document, showing where it has been before being sent to you.

**MD:** So how do you get people to start using Workflow? Is it a Return on Investment (ROI) argument or another business case?

**JM:** Workflow is something that we have to make users aware that it is in the package they have bought. There's a lot of hype about it and when we didn't have workflow capabilities within our product, our competitors would point to that reason as to why they were better; regardless of whether the customer was going to be implementing 'Workflow' or not. It is something that people can benefit from, absolutely, no question, provided that it's delivered in a way that's easy to use. We think it's important to show the user the process and where they are within it. New people need to know this information, they need to see these visual maps of how work is done and signed off. Our graphical front end, for the Admin and each user in DDM helps companies understand the benefit of Workflow management.

The ROI is a very difficult thing to do. Getting specific numbers is always something I am a bit dubious about. From a selling standpoint we hear competitors state that Product X will save you X amount of time chasing change orders and there is some validity to this, especially for the management case. However the time efficiency is in not wasting time - the information is available to you in real-time and you can configure the system to alert you as documents move through the system. With a PDM system and Workflow, not only can you find all your documents but you can immediately check their status and eliminate process bottlenecks, which ultimately make your company more reactive.

**MD:** So implementing Workflow isn't hard?

**JM:** The hardest thing for customers is figuring out what exactly they need the system to do. You need to think about what you need the system to do, not about all the fancy things it can do. Business is fast moving these days and engineers typically do a much wider variety of tasks these days.

Using Workflow gives you full audit tracking and traceability. You can easily demonstrate who did what, when. With the additional benefit that as the document moves from step to step, the

system provides you with a dialogue of comments. It gives you 'who', 'what', 'when' and 'why' at a process level. It's really useful in ISO compliance.

**MD:** Engineering management isn't just about CAD formats these days, how do you cope with incorporating other formats and workflows?

**JM:** CSI is known for working with complex 3D data from all the mainstream engineering applications. However the product and the workflow are quite generic. PDM is about objects and processes, there's nothing to stop you using the product for any other document.

DDM is available as an Office Client or a Professional Client, where the Office Client is a reduced cost option with all the document

management capabilities just with out the 3D CAD integration and support for 3D data structures.

Engineering is now about multiple document types. These days engineers use MS Word, Excel, PowerPoint and graphics, whereas probably 15 years ago they used to produce more documentation within the CAD files! Engineers range from spending 80% in their CAD system to just 20%, with the rest of the time working on other documentation which is linked to their designs in some way. We understand it's just as important to control a specification document or a project document as it is to control the CAD model and drawings.

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