



PLM - *What's that all about then?*

It is no wonder end users in the design and manufacture-to-order community are confused! On the one hand, some Product Data Management (PDM) vendors sell products as Product Lifecycle Management (PLM) solutions while on the other, the Computer Aided Design (CAD) vendors are wrapping their CAD and PDM products together and calling that PLM. Then there are the big ERP vendors claiming that PLM is a costly combination of ERP, data management and supply-chain collaboration functionality.

So what is PLM? An intelligent starting place can be found in the literal meaning of the term, Product Lifecycle Management. In other words, the management of a product from its initial concept right through to the point where it becomes redundant. It can even go beyond end of product life, for example when disposal and recycling activities need to be managed and audited. The word 'management' is critical as it does not simply refer to managing the documents or the design data, but everything about the product. This can include stock requirements, shop-floor scheduling, shipping, financials, serial number tracking for warranty, repair and maintenance, field service and recycling.

In other words, it is 'joined-up' manufacturing. Compared to this literal understanding, the majority of PLM offerings simply fall short of the full potential offered by genuine PLM. It is this disparity between promise and reality that lies behind the recent observation by Benchmark Research, that while the functionality that PLM *ought to promise* remains top on many SME manufacturers wish-lists, PLM products remain firmly at the bottom. A consideration of some of the problems faced by SME manufacturers outlines the very real need for genuine PLM. Sales people sell things that won't work or can't be made and the designers are left to pick-up the pieces. The designers are also under so much pressure to get stuff out to the shop floor that they are often not able to come up with the best solutions. Using PDM can slow down the process which doesn't help when there are tight deadlines to be met, so it is often by-passed. Enormous amounts of time can be wasted re-typing Bill of Materials (BoM) into your ERP system. This can result in mistakes, whilst anything that remains can be spent answering questions and helping other people from other departments to find the information they are looking for. It's no wonder many design and manufacture SME's have little or no time left to develop new products!

People who have spent many years in both Drawing Offices (DO) and CAD, find it most frustrating to see the DO being treated as a necessary evil – an overhead which must be kept to a minimum. They find this ridiculous, as these people are the ones who should be the driving force designing and developing the company's next 'killer product'. However, so many companies have got themselves into a 'Catch 22' situation. They cannot afford the extra staff needed to develop new products because they are being price-driven by the customers, and cannot get out of the price war because they are not innovating. The DO is reduced to a 'low-cost machine' for pumping out contract drawings, and the company eventually goes to the wall.

It is common knowledge that the Far East and Eastern Block countries have the benefit of cheaper labour costs, so what UK SME manufacturers need to do is play to their strengths. We have the benefit of technology, and the best designers and engineers in the world, so why not use them both to our advantage? It stands to reason that if the burden of generating contract drawings could somehow be removed or reduced through intelligent product configurators, that designers would be able to spend more time designing. What if companies could interrogate their ERP systems for existing stocked parts, or supplier costs at the design stage? This could have a huge impact not only on the stock carried, but also reduce the design time. Designers would no longer waste time drawing something again that already existed because no-one knew about it, or because it was quicker to draw it again.

What if the customer data in the CRM system could be used to automatically fill-in the drawing borders on proposal drawings, and automatically set up an account in an ERP system with their details? And what if a job could be costed as it was designed? By having the system track not only the cost of the material but also the cost of manufacture, the typical lead-time of the material, and the availability of machine time to make it, real-time decisions could then be made to keep the job within budget. Maybe this all sounds too good to be true, but all this information is available somewhere in your company. All you have to do is make it available to those who need it, in a sensible and useable way. Which goes back to the heart of genuine PLM and all it has to offer manufacturing SME's.

Genuine PLM begins by focussing on solving the real issues that manufacturers face, and providing solutions that improve the effectiveness of their companies, rather than being led by technology and three-letter acronyms. The irony is that many such companies already have much of this in place but in disparate business applications such as CRM, CAD, PDM, and ERP. The PLM myth for many SME's is that all existing systems need to be ripped out and

replaced. This is simply not the case. By tightly integrating these systems, and automating many of the laborious processes - such as quoting and estimating, proposal design generation, the generation and transfer of BOMs and Cutting Lists, and the registration of documents into Data Management - genuine PLM can be within the grasp of much of the SME design and manufacture to order community. And by doing so, the DO can once again be restored back into a design office, getting designers designing again, and helping UK companies win through innovation.

If you would like to hear more about PLM and ERP systems from In2grate Business Solutions and how leading organisations are benefiting from them please contact our Sales and Marketing Team on 0207 881 2560 (email info@in2grate.com) visit our website www.in2grate.com.