

The PLM Benefits Reference Model

What would it be, and how could it be created?

Why Do PLM?

At some point in their career, every PLM practitioner is faced with explaining the benefits that implementing PLM would bring. Depending on what your role is, the “audience” of this explanation could be a potential customer; your own line manager; a group of senior directors; the corporate finance department; colleagues in other departments; or counterparts in other sites of a multi-national.

The task of creating this justification is always complex and time-consuming. It tends to rely on qualitative measures because quantitative figures are so hard to generate, and is open to easy criticism by opponents who may have other projects they would prefer to support.

If there could be a Reference Model which already showed the benefits of PLM, this would save everyone having to work out the benefits for each new situation. If this Reference Model was comprehensive enough, then all you would have to do would be to map your own organisation’s parameters onto it, and process the results.

And if the Reference Model was widely supported across manufacturing industries, and endorsed by major vendors and users, it would silence the doubts of those who wonder if the benefits are real or imaginary.

Inertia and Resistance

It is always easier for organisations to do nothing, and if the arguments in favour of PLM are not strong enough people will say they are “too abstract”, when they really mean that they just don’t feel motivated to do any extra work.

There can also be direct opposition from people who feel threatened by PLM. PLM has impacts on so many areas of a company that it can seem as if it is “taking over” from existing managers and departments.

In the end, the most powerful argument is always cost-benefit: “If we spend this money and resources on PLM, we will get benefits that are much greater than what we have spent.”

So All We Need Is...

... a Reference Model that is comprehensive, accurate, and accepted throughout industry as a standard. If it is not all three of these things, then it will not be useful.

The problem is that all three of these things will be difficult to achieve. The PLMIG may be able to lead the way, but this will be a major project which will need wide support and interaction.

A Comprehensive Model

We know from holding the PLM Best Practice Forums in Oxford and Paris that any kind of PLM model will be very complex.

At the Paris Forum one of the delegates presented a slide showing how different industries had different elements of Best Practice - so for example, virtual collaborative working is done best in the automotive industry, and management of risks is done best in the nuclear industry.

Even though the Reference Model will be a subset of Best Practice, it must still cover the benefits across the whole spectrum of PLM, and across all industries in which it is likely to be applied.

Creating a comprehensive Reference Model will take many months of carefully-planned and co-ordinated work from an active group, or consortium, of major PLM organisations.

An Accurate Model

The Model needs to be accurate so that when it is applied to real situations, the benefits that it calculates are actually achieved.

If organisations use the Model as the basis for PLM investment and the results turn out to be very different to the prediction, then the Model will become discredited and its users will have wasted their time and money.

Creating an accurate Reference Model will need active investigation by the group or consortium to extract real data from their own organisations, that can then be validated and combined.

An Industry Standard

This factor is just as important. It will be of little use to have a comprehensive and accurate Reference Model if it has no credibility, and if decision-makers are not prepared to accept it as evidence of what can be gained through PLM.

The PLMIG has no ambition to be a global authority on PLM, or to have a “heavyweight” industry profile. We are much more concerned with being active in PLM and achieving things that no other organisation is in a position to do.

The value of the PLM Benchmarking Handbook, for example, is not in the PLMIG name on the front but in the contents. The Methodology in the Handbook embodies new knowledge, created by members, which stands in its own right.

The PLMIG can lead and manage the creation of the Reference Model, but the industry credibility must come from the respected organisations that support it. These will need to be the major vendors and the world’s best PLM user organisations.

Worthwhile

The value of a Benefits Reference Model is that it answers the single most common question that we meet when running PLMIG events:-

“How do I create the PLM business case for top management?”

This was first asked in 2003 before the PLMIG was even formed. At the Frankfurt Charter Meeting, one vendor representative asked “How do I explain PLM benefits to Chief Financial Officers?” At the Open Day in Harrogate in 2004, one participant said “You have to be a chameleon when explaining PLM.” At the Paris Best Practice Forum, one of the four items on the wish list of the user participants was “How do I convince my senior managers about PLM?”

A Benefits Reference Model would also incorporate other project ideas that have been suggested for the PLMIG:-

- Capability and Maturity Model
- PLM Return on Investment (ROI)
- PLM for CEOs
- PLM Definition

Furthermore, as the Model will need to be generated by a group of organisations working together, the participants will learn from each other as the Model is created. This will give insights into questions such as “How do other organisations in my industry manage PLM?”

What’s In the Model?

Features of the PLM Benefits Reference Model must be:-

- Industry Standard
- Comprehensive
- Accurate
- Independent
- Global (US, Europe, Asia, Antipodean)
- Include Financial ROI
- Include Management Perspectives
- Contain a ‘Number Cruncher’
- Have Industry Mapping
- Have Language Variants
- Contain cross-referencing to ERP, SCM, CRM, and other disciplines
- Contain Understandable PLM Definitions
- Contain Expressable PLM Actions and Plans

How to Get the Model

There will need to be many organisations taking part in the Reference Model project, who will join in not just in financial terms but in the active use of their own resources on the work tasks.

This is where the accuracy and usability of the Model comes from, and also where the participants themselves receive many benefits.

The key to the whole process will be the coordination framework and working material provided by the PLMIG.

It will not be possible to be sure of the project configuration until some launch meetings have been held, but the project structure described overleaf would give the most cooperation, flexibility, and protection of intellectual property.

Project Structure

Top Level

At the top level of the project would be a group of major PLM vendors and users who would form both a Steering Group and a Working Group.

The Steering Group would meet once every 3 months to oversee the project direction and results, and would guide the project to production of the final Reference Model by the end of 2006. They would also advise on the timing and content of interim Models during the earlier part of the year.

The Working Group would participate in a series of workshops to generate material which they would apply in their own organisations, and return to the next workshop with the results. This group would be the “engine room” of the project, providing the most detailed and thorough structure and validation of the eventual Model.

Participant Level

If the Model is to be a true industry standard, then as many organisations as possible should be able to contribute to it. PLM is not just an activity for multinational organisations, so smaller companies would take part as Participants.

Participant organisations would take the material generated by the Working Group and test it on their own PLM in a formalised way (structured by the PLMIG) so that widespread results can be collated and added as extra input to the Working Group workshops. It is likely that the Participants would attend one of the workshops during the year.

Leverage

A great deal of PLM knowledge is held within vendor and national user groups, and it would be a major boost if their members could take part. The project structure should allow this without exposing vendor customer bases to each other, and without undermining the authority of the national groups.

The PLMIG is a neutral and independent organisation, and will be structuring and collating all of the working material.

It would therefore be possible for vendors to add the material to the agenda of their user group

meetings (which would be both constructive and instructive for them and their customers) and for national user groups to take the material to their own members.

This would add to the overall input of knowledge to the Model without intruding into the relationships that the user groups have, and enable the user group members to participate in a global PLM initiative.

Global Coverage

If the project gains a critical mass, then the Steering Group will be able to decide where the input to the Reference Model should be.

When the workshop formats and material have been created, it will be easy to repeat workshops in the USA as well as in Europe, and (if required) in Asia or the southern hemisphere. The Model can therefore include the best results from the leading PLM arenas.

Benefits of Participating

Every organisation involved in PLM knows the difficulty of getting projects started which have a true PLM scope, and of holding them together so that they deliver what has been promised.

Being part of the PLM Benefits Reference Model project would give a driver to gain internal support (because: “we can find out what other organisations are getting for their investment”).

At the top level, it would position your organisation as an industry leader, as the project will generate an increasingly high profile as it progresses. And at the detail level, it would give a clear picture of where you are now with PLM, with many insights into areas of improvement as you compare your benefits scenario with other participants.

Next Steps

The concept needs to be developed with a wider audience so that issues such as the Model parameters, ownership, deliverables and distribution can be sorted out. The PLMIG will begin by getting individual feedback from members and industry contacts, and is then likely to run one or more launch meetings as Open events, probably in October of this year.

You can add your own input in the meantime via benefits_model@plmig.com.