



PLM Interest Group

PLM_UERP Handbook

A primer and two technical manuals in one document, that explains the theory and methodology of advanced PLM and ERP management.

This is not a book, or theoretical treatise. It is a hands-on instruction manual for producing a genuinely integrated and effective manufacturing environment.

Roger Tempest, PLMIG Co-Founder

0 Executive Summary

The most instantly noticeable thing about this [Handbook](#) is its title: what *is* PLMuERP? Why not PLM-ERP, that everyone has been working on for two decades?

The distinction between the two is very important. PLM-ERP is a traditional and long-standing approach, but one that delivers sub-optimal results. It seems logical, but it is based on a fundamental misunderstanding, and this "bakes in" problems that become impossible to avoid.

Crucially, it also drives ERP and PLM practitioners into separate "us and them" camps, This in turn means that PLM-ERP is always approached from the PLM side, with ERP being dragged into the discussion; rather than starting with a balanced view that takes in the whole business.

A much better paradigm is PLMuERP - the 'Union' of the two environments, which recognises the fact that the disciplines are merely different elements of the same goal: an over-arching product management solution that reaches through the whole enterprise.

This [PLMuERP Handbook](#) was created by members of the PLM Interest Group based on a series of Workshops that were held in 2012-13 in Europe and the United States.

The whole area of PLM-ERP at that time was clouded by misconceptions and lack of clarity. The aims of the Workshop series were to resolve the subject, and to formalise the best practices into a methodology that can be used universally.

This [Handbook](#) embodies the comprehensive and authoritative methodology generated by the Workshop series. It combines the collective PLM and ERP experience of the Workshop participants with the core theory of the PLMIG, and can be applied by any commercial organisation to structure and manage its overall implementation.

Even when companies are happy with their existing PLM-ERP implementations, these usually rely on "black box" proprietary interfaces; tend to be heavily customised, and typically require intensive support and management. The theory in this Handbook enables you to get inside the complexities of the integration, to find ways of making it simpler and more effective,

The purpose of this [Handbook](#) is to provide a neutral working guide to PLMuERP so that it can be easily implemented by any organisation that has a need to do so. It should not matter whether you start from PLM, or from ERP: if you apply the Handbook, you should reach the correct outcome.

This is a very complex subject, and needs a clear and structured explanation. This Handbook therefore consists of 3 separate documents: a Primer, to provide an easy-to-read introduction; a comprehensive Technical Manual for the detailed specialists; and a Data Management Manual to unearth the hidden traps.

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Handbook Structure

About This Handbook 15

This [Handbook](#) consists of three different, stand-alone documents; brought together into one place so that you can understand everything about the subject.

Each document is self-contained, so you may encounter some text more than once as you work through the whole [Handbook](#).

As always, there is a PLMIG contact email for readers to ask questions as the documents are used.

The PLM_uERP Primer 19

The workshop series that produced this [Handbook](#) revealed that even experienced PLM and ERP practitioners can have a slightly "grey" or fuzzy understanding of the subject. These small misunderstandings are the cause of many arguments and mistakes.

There is no point in moving to the Technical Detail until you are certain that your understanding of the context is correct.

Everybody who uses this Handbook should therefore start by reading the Primer. The Primer can also be read by those who want only an overview of the whole subject.

PLM_uERP Technical Manual 39

Integrating PLM and ERP into one optimal environment is an immensely technical exercise, and one that requires extensive specialist knowledge.

The Technical Manual explains everything in detail from an entirely neutral standpoint, so it can be applied to any commercial or vendor environment.

This enables PLM and ERP practitioners to understand each other's environments and work together in the most effective way.

Data Management Manual 109

The interaction of PLM and ERP is based on a flow of structured data that develops and evolves over its lifetime.

Getting your data management right at the outset leads to better information and fewer errors down the line. Following these Data Management Principles will steer you away from 'Garbage In, Garbage Out'.

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