

Newsletter

October 2009



Email and Fax Management

Managing the large volumes of information generated by email continues to be an issue for most organisations. Add in the legal and compliance requirements of retaining email and it presents a challenge.

This article looks at some of the issues and solutions, focussing on Microsoft Exchange with Outlook as the client.

Accessing emails once they have been deleted can be an issue in a poorly configured and managed email environment. Most organisations rely on backups to restore from. Larger organisations may also have emails stored within their document management systems.

One of the shortcomings in

the current version of Exchange is the inability to archive centrally. This is being addressed in Exchange 2010 due to be released next year.

There are also a number of software solutions available that capture all incoming and outgoing email. These solutions tend to sit outside of Exchange although integration is possible. One of the benefits of these types of applications is copies of deleted emails are retained.

Facsimiles (faxes) shouldn't be overlooked either. There are a range of fax solutions now available that allow faxes to be sent and received via Outlook. Exchange 2010 also has some enhanced faxing capabilities.

So what do you need to consider when determining your archiving requirements. Here are some pointers that may assist.

- In-house or outsourced solution?
- How does it fit with the information management plan?
- Operating systems
- Number of email servers
- Storage infrastructure
- Governance and compliance requirements
- Business rules for retention and disposal.

Realising Potential has the expertise to assist you to improve your email and fax management. Please call Richard Barnsley to discuss your requirements.

INSIDE THIS ISSUE:	
EMAIL AND FAX MANAGEMENT	1
PRODUCT LIFECYCLE MANAGEMENT	2
PRODUCT LIFECCYCLE MANAGEMENT	3
KNOWLEDGE PRACTICES	4

This Issue

Welcome to the September 2009 issue of the Realising-Potential newsletter. Did you notice the logo? We thought it time for a change and a new look. Our service offering has evolved over a period of time so we thought the logo reflected the move forward into new services and markets.

We have planned a series of articles on PLM (Product Lifecycle Management) as the feedback we received on the June newsletter indicated there is a growing interest in both the process and the technology components associated with it. The first article is in this issue. Brian will be providing insight into some of his experiences with PLM implementations. We have also looked at another topic of interest to most and that is the management and archiving of email. We hope you enjoy the content and welcome your feedback.

Jackie O'Dowd

Product Lifecycle Management

PLM (Product Lifecycle Management) is the next wave of lean manufacturing but it takes us far beyond the scope of previous efforts in now allowing companies to manage information and knowledge outside of their own domain. This will be the first in a series of articles on PLM and provides a foundation upon which we can build.

PLM is focussed on using the power of information and technology to deliberately pare inefficiencies from the design, manufacture, support and ultimately the disposal of a product.

Even in its initial phases, PLM is a “big picture” information technology undertaking, its greatest promise is not in the foundation projects that affect one functional area, but in the larger strategic use that is cross-functional, enterprise-wide, or even supply chain inclusive. PLM holds the promise of improving productivity by linking different functional areas through shared product information.

At this point you may be thinking that PLM is only applicable to very large companies but given the way that business has changed we now see smaller organisations dealing with multiple suppliers and outsourcing parts of their development to be more efficient. PLM provides a framework to manage and control this information transfer.

There is no one PLM model that will span every industry as each tend to have their own requirements in terms of nomenclature and process methodology. For this reason you will see a number of vendors providing industry templates to address vertical markets such as apparel and medical to name just two. It is still fundamental that each company develop a clear requirements definition to assess the fit and functionality

So do we need PLM?

To answer this question we need to look at how organisations have structured their operations to cope with the rapid proliferation of information and the speed of product

development.

It was not that long ago that the automotive industry design cycle was typically around seven years, in today’s competitive environment and with the new tools and processes in place this has now been reduced to eighteen months! In the clothing and fashion industry the cycle times are reduced to fewer than 60 days placing demands on both people process and the supply chain.

In order to meet these cycle times there has been rapid expansion in the use of technology resulting in the “**Virtualisation of Physical Objects**”. Whilst this may sound futuristic, the new generation of product designers take for granted that we can now produce virtual 3D models of real objects, whether this be a sports shoe, a new consumer item or even a mineral processing plant. The 3D model has significant advantages in removing ambiguity about how it is constructed, performs and ultimately even considers how it may be disposed of.

If we now consider that we can develop a digital model that is readily transferable across the internet to anywhere around the planet we now provide the option of moving the various parts of the design and production phases to localities that can provide the best service, be this based on performance, cost or geographic access to markets.

In the mid 1990’s I was actively involved in the Automotive, Aerospace and Defence markets supplying leading technology in the areas of product design (CAD), product manufacture (CAM) and product data management (PDM).

One of companies that I worked closely with established a “follow the sun” approach to their product design. In simplistic terms this would mean that if a designer started the design in Australia, they would save their work into a digital vault at the



close of their working day. His European based counterpart would then pick up his design and continue to work on the design for another eight hour shift. At the end of their working day they would likewise file the part back into the vault and their US based counterpart would work on the part for the next eight hours. The following day in Australia the design creator would return to work to open up the design part and continue on with the design development. There were enormous hurdles to overcome in both the information standards and network communications to allow this to happen but with the advent of this technology being available on a PC and with fast internet connections this interoperation between remote locations, whether they be part of the same group or even disparate companies is becoming a regular occurrence.

Virtualisation of project information is a significant development but with it comes the overhead of managing all of the data from multiple applications associated with the design. Organisations continue to compartmentalise stages of the design process into functional, independent business units to source, create, modify, manage and distribute as required, then hopefully pass information on in an orderly manner to the next functional group.

As not all the information gathered at one stage is relevant then decisions are made as to what information is required. If the information passed on is a subset of original data then it is easy for synchronisation to be lost.

At Realising-Potential we have created our own project wheel graphic that illustrates a typical project flow for a product. Most will start with a product definition stage. This could be a brand new product or a development of an existing product. Next would be undertaking some sort of feasibility (functional, financial, aesthetic etc.) before going into detail design. From detail design it then goes across to manufacturing and from there to delivery and contractual handover or in the case of consumer products sale to the distributor or end user.

From this point onwards the cycle changes from one of design to one of warranty and support. Whilst the first processes may takes hours, weeks or months depending upon the type of product, the warranty and support phases are typically measured in years. In the case of military projects then is typically measured in decades.

To close the loop we can upgrade the existing product, using the existing product data as a basis for a brand new design or we can effect its disposal. To be able to track the product from concept to disposal is important from a knowledge management perspective and allows companies to capture and retain information about their design, converting tacit knowledge into explicit, available and reusable information.

This is a highly desirable criteria from a design perspective as it allows new users to be able to learn from the previous designs and build knowledge into their design process.

On the R-P model on the previous page you may notice that there is no simplistic arrow showing this as a linear

progression as many loops and iteration may take place over the course of the project. The surrounding layers show the design phases as well as industry applications that may address part of this cycle, most typically these being ERP (Enterprise Resource Planning) and CRM (Customer Relationship Management).

Whilst these mid tier applications address specific transactional requirements within the organisation limited interaction takes place between them. The role of PLM is to provide the "glue layer" to enable data and information visibility across the organisation or federated environment.

In today's design groups with CAD, CAM and CIM applications many companies have looked to implement lower level Product Data Management (PDM) or Enterprise Data Management (EDM) solutions for their engineering data. A broader approach in PDM is now seen as a more logical step.

In the past few years there have been a proliferation of bolt on data management tools provided by the CAD software vendors and independent third party developers in trying to address this opportunity, but not all are created equal.

The correct application selection and fit is essential if both functionality requirements and Return on Asset (ROA) is to be achieved.

The requirements definition for the selection of a PLM solution is similar to that required for the selection and implementation of an ERP application.

Realising Potential has developed a PLM selection,

and implementation methodology, which encompasses four key streams:

- Planning
- Evaluation and Selection
- Implementation
- Monitoring

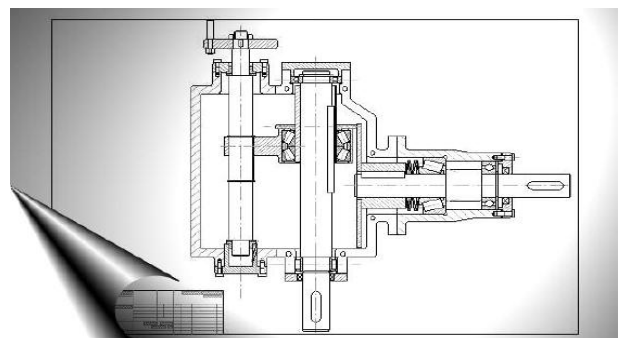
We have also built considerable expertise in helping companies work through complex projects.

In the next newsletter we will look at the role that PLM plays alongside the organisations other key corporate systems and why PLM is very different from Enterprise Resource Planning (ERP).

Realising Potential continues to invest in researching and working with real world applications that improve the integration and alignment of technology, process, people and information.

If you have any specific questions relating to information in this article or the subject generally, please contact Brian Higson.

Product Lifecycle Management (PLM) is a strategic business approach that applies a consistent set of business solutions in support of the collaborative creation, management, dissemination, and use of product definition information across the extended enterprise from concept to end of life - integrating people, processes, business systems, and information. - Ref: CIMdata



ARK Group - Knowledge Practices Sympathetic to resource and energy practices.

On the 19th and 20th of October Ark Group will be holding a forum in Perth on Knowledge Management for the Energy, Engineering and Resources sectors. Realising-Potential has been asked to present a session on "Knowledge practices sympathetic to resources and energy sectors". We will present some of our experiences with Information and Knowledge Management projects. We would like to thank both Fremantle Ports and Immersive Technologies for letting us reference materials.

Whilst some organisations see knowledge management at best as "old hat" and at worst "redundant" you only need to look at the pressures on business to do more with less to see the role that knowledge management can play in improvement projects.

Combined Information and Knowledge Management initiatives can deliver tangible benefits such as:

- Process agility.
- Answers to specific Product and Process questions.
- Improved workflow.
- Intellectual Property Management and Protection
- Improved management of both direct and indirect risks.



We hope to see you at the Ark Group KM forum.

*Realising the potential of **Technology, Process, People and Information***

This newsletter is produced by Consultants at Realising-Potential Pty Ltd for general information. It is not intended to provide specific advice on individual circumstances.

Realising-Potential is a West Australian based organisation, providing business consulting and project management services in the areas of Information & Knowledge Management, Enterprise Application Implementation, Product Lifecycle Management, Process Improvement and Strategy Alignment.

We measure our success by our clients meeting their desired outcomes.

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