


The Role of PIM and PLM in the Product Information Supply Chain: Where is Your Link?

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1. Introduction
2. Origins and Evolution
3. Summary

Introduction

By now, most of us understand the concept of the supply chain. This is the conceptual representation of product movement from raw material through manufacturing and distribution to the consumer. It's a problem that we've been working on for years and it is critical that we get it right.

Just as important, but not as evolved, is the product information supply chain where information moves from raw product data through value-adding edits and context setting, to retailers where it can be used to optimize the selling process. The current state of this information supply chain is abysmal. As one executive from a large *consumer packaged goods* (CPG) manufacturer recently said, "requests for product information scare me because many times we don't know where it exists in our organization, and if we can find it, it is most likely out-of-date".

The solution to the problem is *product information management* (PIM). A PIM solution would include the ability to organize a company's product information, regardless of location, into a consolidated system of records, and be able to synchronize or distribute that information to any business partners that require it.

Lately, diverse groups have been discussing PIM from the perspective of data synchronization and syndication, *product lifecycle management* (PLM), and enterprise publishing. Each of these product categories includes the management of product information, but each uses product information for a different operational role.



The term PIM has appeared more frequently lately in the discussion of data synchronization and syndication because of a number of market initiatives that act as catalysts for change. For example, many large retailers, including **Wal-Mart, Office Depot, The Home Depot, Albertsons, and Safeway**, asked their suppliers to synchronize product data via EAN/UCCnet registry and data synchronization services.

Other catalysts include the Sunrise 2005 initiative that seeks to standardize on a format for global product identification via a new 14-digit code, and the *radio frequency identification* (RFID) initiatives in place to bring about the rapid adoption of new radio frequency tags on all products, so that they may be more easily tracked through manufacturing and retail environments.

Because of these same initiatives, PLM vendors are also being increasingly asked by their customers to include more commercially-oriented product information in their PLM systems. A few high profile case studies (**Procter & Gamble** and **Heinz** are examples) have shown how the data in a PLM system (**MatrixOne** and **Prodika**, respectively) can serve as the source of valid, consistent and up-to-date product information for synchronization and syndication to supply chain partners. However, most PLM systems lack a PIM system's ability for secure, trusted synchronization of information to data pools like UCCnet.

Lastly, enterprise publishing's goal is to reduce costs to create and speed deployment of all the product-related information, including user manuals, sales collateral, and web sites, that make up the complete product offering. Enterprise publishing is a fascinating topic, but let's save it as a topic for future articles.

Origins and Evolution

PIM and PLM have different origins and were designed for different purposes. PIM originated from the need to optimize distribution channels by supplying them with the most current information on products and promotions. PLM, on the other hand, grew from the need to make better products through better management of engineering and design information around the manufacturing process.



Like most software solutions, PIM has evolved along a path on which the most pressing needs are met first. For CPG companies, the highest-priority need is data synchronization. When faced with mandates from their largest retail partners to synchronize product information via EAN/UCCnet, many CPG companies quickly implemented solutions to upload information to the registry.

However, they soon discovered that they did not have all the requested information, or a process for keeping the registry information up-to-date. A long-term PIM strategy requires integration with other systems, workflow, an information repository, and the ability to synchronize and syndicate information to a variety of destinations in multiple formats.

PLM's origin was the need to manage *bills of material* (BOM) or recipes, manage complex CAD drawings, and consolidate product design information in a centralized repository. To extend that capability, PLM adopted collaborative processes to share design information across the enterprise and with supply chain partners. PLM also added tools to help manage the new product introduction process, including project management to better track project progress through stages and portfolio management, to help target the most profitable products mix available. For more information on the history of PLM and the different aspects of a PLM system, see [PLM Coming of Age: ERP Vendors Take Notice](#) and [The Many Faces of PLM](#).

There are a number of best-of-breed PIM players on the market, including **FullTilt Solutions**, **GXS**, **IBM**, **SAP**, **Sterling Commerce**, and **Velosel**. Each has a number of customers using their solutions, but the PIM market is just now heating up and the lion's share of the market is still up for grabs. Over the coming months Technology Evaluation Centers, Inc. (TEC) will create a PIM Evaluation Center to help companies determine which PIM solutions best fit their needs. In addition, TEC will continue to cover PLM solutions in the PLM Evaluation Center www.plmevaluation.com.

Summary

	PIM	PLM
Goal	Optimize sales channels. PIM automates the processes needed to deliver product information to distribution channel partners.	Deliver more profitable products. PLM automates the processes that bring a product to market, reduce product costs, increase collaboration, and improve product quality.
Original Business Need	Grew from a sales need to supply distribution partners with better product information.	Grew from an engineering need to better manage product designs and specifications.
Technical Origin	Catalog focused, but includes EAI components; XML publishing.	Engineering-focused, includes CAD and PDM; marketing-focused, includes project management and portfolio management.
Leading Vendors	Best-of-breed PIM vendors.	Best-of-breed PLM vendors, some ERP suite providers. See Can ERP Speak PLM .
Evolutionary Path	Data synch > catalog > integration > workflow > syndication and synchronization to a variety of targets.	Product data management > collaborative product data management with separate project and portfolio management, integrated PLM.



About the Authors

Jim Brown has over fifteen years of experience in management consulting and application software focused on the manufacturing industries. **Brown** is a recognized expert in software solutions for manufacturers and has broad experience in applying enterprise applications such as product lifecycle management, supply chain management, ERP, and customer relationship management to improve business performance. He began his professional experience at General Electric before joining Andersen Consulting (Accenture), and subsequently served as an executive for software companies specializing in PLM and process manufacturing solutions. Brown is a frequent author and speaker on applying software technology to achieve tangible business benefits.

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