"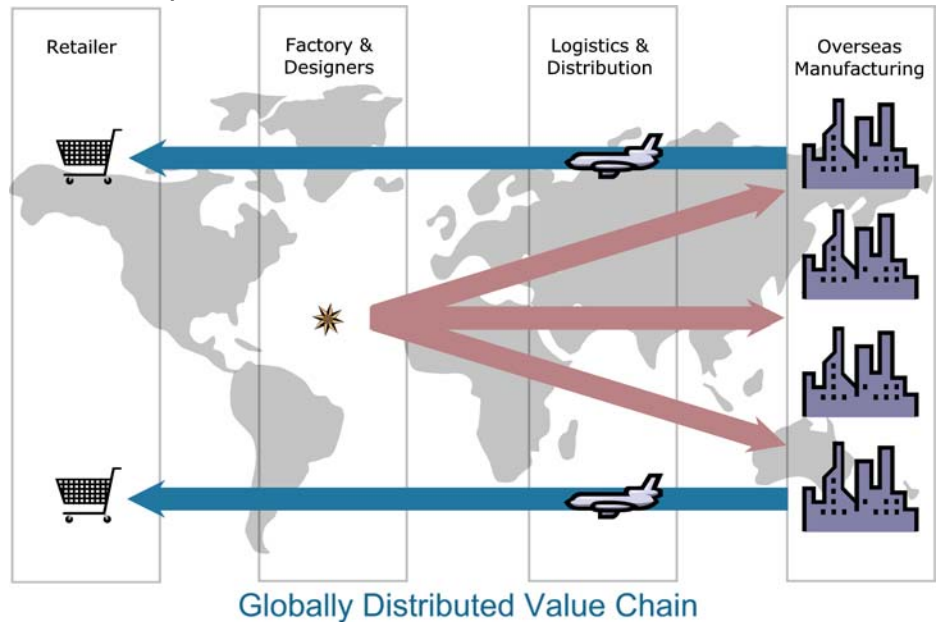Product Lifecycle Management: 25% reduction in time-to-market, greater management visibility, and $100,000+ in opportunity cost and annual savings.... no wonder companies like Global Views, Inc.® and The Uttermost Company® are turning to PLMresearch's Product Lifecycle Management services to automate their product development efforts".
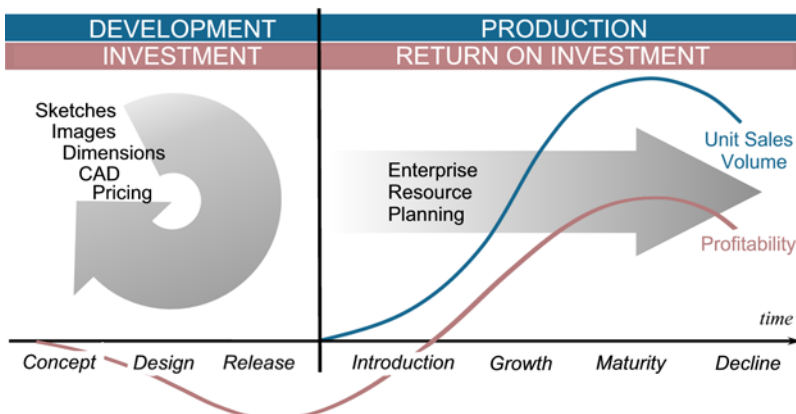
In the world of furniture accessories - wall décor, mirrors, lighting, tabletop art, etc. - new product is the lifeblood of a company's existence. "Our retailers need fresh and new accessories to keep their stores and associated furniture interesting", explains Mac Cooper, President of The Uttermost Company. "However, if it takes nine months to deliver those designs to market, much of the opportunity is lost due to the accessory market's increasingly shorter product lifecycles". Furthermore, many in the accessories world rely upon an outsourced manufacturing model - often on a global basis - to provide more value and product diversity to their consumers, adding yet another layer of complexity to their efforts. And therein lies the rub:

Globally Distributed Value Chain

"How do midsize manufacturers maintain their creative edge, leverage a globally distributed value chain *and still* deliver hundreds of new SKU's to market promptly?"

Product development typically involves a number of designers, suppliers, manufacturers and internal personnel all engaged in a cycle of iterative sketches, reviews, samples and revisions until the design(s) are "just right". But let's face it; getting the design right is only part of the challenge. When the dust settles; when the design reviews are complete, and the sample is "tossed over the wall" into production, all of the "qualitative" design vocabulary needs to be translated into a set of "quantitative" product attributes - various dimensions, CAD drawings, photographs, vendor numbers, etc. - in order for production plans/delivery to be met. Managing and sharing this information (it's not uncommon for each SKU to have 100+ product attributes) falls under the heading of Product Lifecycle Management and is directly related to the speed at which new product can be brought to market.

Information Flow During A Product's Lifecycle

Managing Development

According to consulting firm Pittiglio Rabin Todd & McGrath approximately 80% of a product's cost structure is determined during the Development phase of its lifecycle. Paradoxically, however, this is one area that management has had little visibility or control - *and* distributing product development around the globe exacerbates an already challenging situation.
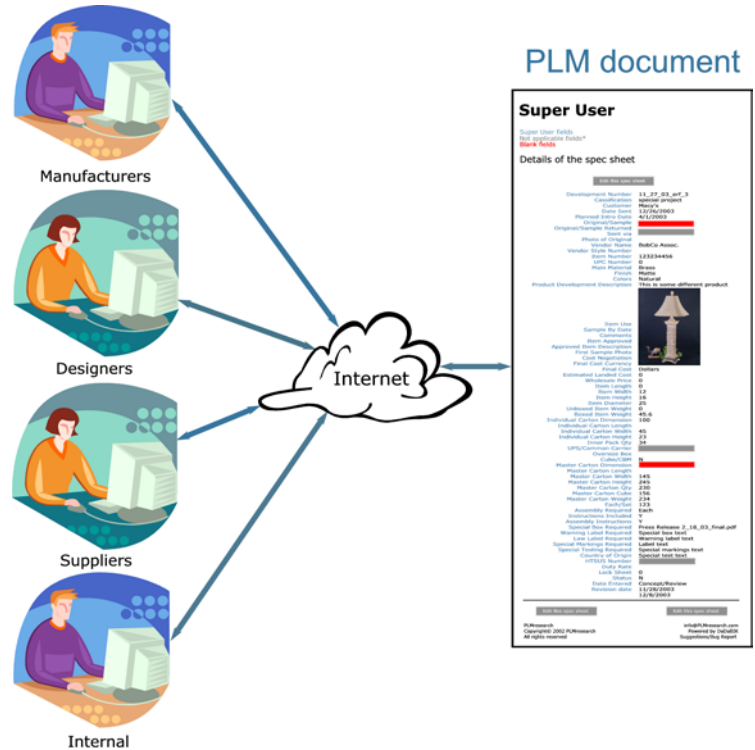
Why is Development so difficult to manage? Unlike Production information that concerns itself with internally generated accounting, planning, and procurement

information, Development information often originates outside the walls of the enterprise. CAD drawings, samples, images and sketches emanate from a cadre of outsourced design, manufacturing, sourcing and logistics services. These "external" stakeholders participate heavily during Development, and the exchange of development information becomes intense. Unfortunately, this interaction has historically flown under the radar scan of Enterprises Resource Planning (ERP) systems.

Product Lifecycle Management (PLM) defined

When Product Development was conducted in-house, sharing product information (collaboration) was relatively simple. Today, product conception, design reviews, sourcing, launch strategy and manufacturing rarely occur in the same location… or time zone… or country. Global competition, favorable overseas manufacturing opportunities, and the overwhelming success of outsourcing as a business model has stretched Development across borders, cultures and *value chain* partners.
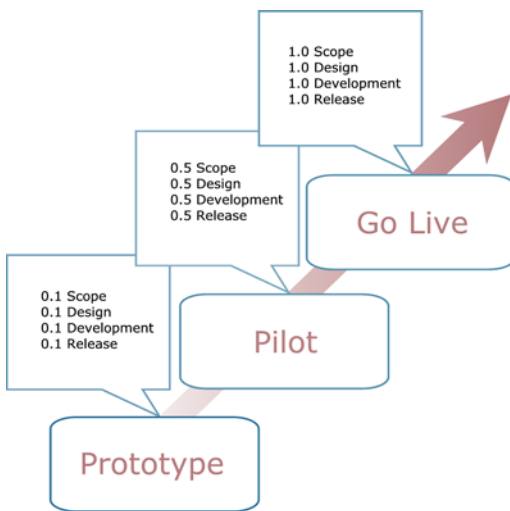
PLM promotes value chain collaboration by providing a centralized document repository – "the same sheet music" – from which Development information can be shared; commissioned designers can upload sketches, CAD and concepts; Agents can respond with prototype images, dimensions and weights; Vendors can offer component suggestions and design alternatives; Internal personnel can review material lists to ensure long lead time items are in process; Logistics can assign customs numbers; Quality Assurance can ensure labeling, hazardous materials, and assembly instruction are uploaded and attached to the design; Development comments and price negotiations can be recorded to ensure "a paper trail of accountability" follow the product from conception through to delivery. In short, the velocity of information between Development stakeholders increases, resulting in accelerated time-to-market and tremendous cost savings.

PLMresearch's Product Lifecycle Management services

PLMresearch's Product Lifecycle Management system offers a secure Internet venue where product attributes can be uploaded/entered, viewed, and edited providing a centralized, "collaborative" repository of product Development information. Each participant (stakeholder) can interact <u>only</u> within *their* level of authorization:

- Designers can upload sketches, CAD and concepts;

- Agents can respond with prototype images, dimensions and weights;

- Vendors can offer component suggestions and design alternatives;

- Internal personnel can review material lists to ensure long lead time items are in process;

- Logistics can assign customs numbers;

- Quality Assurance can ensure labeling, hazardous materials, and assembly instruction are uploaded and attached to the design, and

- Design comments and price negotiations can be recorded to ensure "a paper trail of accountability".

6 Week Development Methodology

Unlike traditional mass-produced, "shrink wrap" software that requires your existing business processes and procedures to be modified to fit the software's needs, PLMresearch's Product Lifecycle Management services are tailored to *perfectly* match your existing Development processes.

While traditional project methodologies assume system developers, users and business owners are able to have a clear and detailed understanding of the kind of system they need well into the future, PLMresearch's approach recognizes that the business environment and user requirements are constantly changing and the users' understanding of what they need evolves with the system use. PLMresearch's Rapid Development Methodology (RDM) framework fosters success through rapid prototyping and client feedback utilizing an iterative three phase delivery over a six week period – Prototype**,** Pilot and Go Live - each containing four development themes – Scope**,** Design**,** Develop, and Release. Please visit our website (**www.PLMresearch.com**) or call **800-310-**

3992 for a full explanation of the RDM methodology or to request an online demonstration of our Product Lifecycle Management service.