



International Conference of Fashion Incubators

White Paper | Program Topics

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Pure PLM and its international consulting partner, Optimize LLC, would welcome the privilege of presenting the following topic for speaking at the International Conference of Fashion Incubators in Perth, Australia in September 2011.

Topic:

Product Lifecycle Management as a set of processes and an enabling technology is the hub to help manage fashion business information for development, sourcing, costing, purchasing, government compliance, marketing, e-commerce, finances, etc. to reduce redundancy for the small business owner.

Executive Summary:

While nurturing the talent of young design professionals is incredibly important, it is equally important to enhance their understanding of running a fashion business and the necessary components to successfully level the playing field of opportunity.

Technology is an imperative underpinning to developing businesses today to drive competitive advantage. In an ever-changing global business landscape, technology is the groundwork that can enable businesses to develop and grow and flourish from a solid foundation of best practices at the outset.

Technology allows planning, design, sourcing, purchasing, standards and guideline compliance, marketing, e-commerce and financial management to take place in an organized and central manner; helping young design professional to make informed decisions via one source of information and easily access historical, referential information.

Incubators that serve as supporters and mentors of fledgling businesses must provide a balanced platform of creative and operational topics and understand the technologies and where they add the most value to assist businesses in prudent decision-making.



Product Lifecycle History

The entire concept of the product lifecycle differs from previous thinking.

Managing the lifecycle has expanded from the traditional definition of concept to consumer; and now refers, in widening circles, to the initial financial planning all the way to the recycling of previously used components and product disposal. With many young designers jumping on the organic and recyclable bandwagon, the lifecycle complexity is advancing. There are many more details to consider and capture throughout the much longer lifecycle.

As incubators embark on the mission of nurturing young design talent, the awareness of how dramatically the industries and business have changed weighs heavily. The design and creative industries are much more complex today, and concurrently simplistic, than ever before. Fashion is so much more about the running of the business and numbers, than the truly creative elements that previously defined the efforts. Increasingly intricate supply chains, raw material cost fluctuations, government regulations, etc... all require a more focused effort on the business and operational front. Much more information must be considered, captured, and disseminated to partners to ensure success.

Simultaneously, fashion is also more simplistic as once strictly-defined marketing and sales channels collapse to allow anyone to sell anything anywhere at any time. While this freedom (based on technological advancement) is a huge equalizer, there are definite drawbacks. One wrong move or a missed deadline can now spell disaster more quickly than traditional business models. A perceived lack of quality or the lack of social responsibility in production can have serious implications for a young business before it even gets off the ground.

Managing this business minefield is more easily accomplished with clear processes on cost-effective tools that allow designers to maintain and/or increase the amount of time they dedicate to creativity; but also capture and have easy accessibility to the necessary data to run their business. This process is especially more sensible when it is only one or two people managing the entire business with only limited hours within which to do so.

In the following segments, we will provide insight into the technologies and their benefits, as well as why to select and embed the appropriate tools into a small or start-up business at the onset.



Current Fashion Industry Trends:

As part of the larger global fashion presence, New York City's Garment District alone is home to 846 fashion companies - more than Paris, London and Milan combined. Most of these businesses will never be featured in magazines or win awards, but many will thrive despite this fact. We ask what the recipe is, or differentiators are, that allow certain businesses to thrive and others of equal talent to succumb.

Some small start-ups are self-financed and others seek financial support to get their businesses started. Some businesses are started by creative design students looking to build a brand rather than work for someone else. Many are started with an idea to fill a gap in the current marketplace by people with no fashion industry experience or history on which to base decisions. The one common thread amongst all is a passion associated to fashion like no other industry.

In recent years we have experienced many changes that have contributed to the current fashion business climate:

- **Access to manufacturers and partners-** online scorecarding provides relatively easy access to manufacturing in various parts of the world, meaning any business can locate production facilities synergistic to their needs (e.g. cost, lead time, minimums).
- **Raw materials technical innovation-** textile and trim innovations have increased the ability for designers to differentiate their products. Technical innovation in fabrics and construction allow for designs that may not have been possible to replicate on the production line in the past. Access to easy ordering of raw materials enhances a designers' ability to be creative.
- **Access to information-** new tools and unfathomable amounts of information on the Internet allow design companies to search for anything, anywhere, at any time, giving access to current trends, better suppliers, cost effective manufacturing, etc.
- **Ease of selling product-** Instant access to consumer feedback, viral marketing and crowd-sourcing are all recent concepts to help a company build a reputation quickly outside the traditional methods. E-commerce and new methods of presenting product online to consumers out of reach of retail stores broadens appeal and market share beyond geographic constraints.
- **Greater competition-** competitors are no longer just the pool of design graduates. Anyone with an idea can become a designer and open a business. Logistically, it is no longer necessary to live in the traditional fashion capitals to run a fashion business.
- **Cost considerations-** as development and production costs continue to rise, companies have become savvy at how to cut corners but still maintain design integrity.
- **New job opportunities-** the advent of tools such as 3-D modeling have altered the landscape for resources to explore creativity without the cost of sampling.



All of these changes have one thing in common- they are all based on technological innovation of some sort. The more we look into the world of fashion, the more we see the imprint of technology on the future business environment as well:

- CAD tools
- Color consistency tools
- 3-D modeling software
- RFID
- Smart tags
- Mobile applications

Mission Critical Considerations:

With literally thousands of small to midsize fashion businesses around the globe competing for market share, any advantage is alluring. Much of the product conceived today is not truly original, but remakes of past trends or copies of upmarket products. With the need to constantly reinvent product, creativity takes priority in most businesses. However, a designer can conceive of the most beautiful, perfect product; but if it can't be produced or sold, it is meaningless in the larger context.

In order to give designers and engineers maximum time to seek out inspiration and create product, proper processes and technology must be part of the business plan and executed properly to assist in running the operational components of the business with maximum efficiency and little creative interference. Technological advancements are also supporting the creativity which, together with the operational aspects, promotes healthy best practices. Creating the foundations for growth as their businesses go through the various stages of development also helps small to midsize businesses better negotiate change and respond rapidly to it.

In the technology space, there are hundreds of individual programs and applications to support the nuances of retail, fashion and consumer products companies. A combination of creative and analytical solutions abound from which companies can choose. We ask:

- Do company owners know why they need technology?
- What type of software is the best given all the options and budget constraints?
- How do non-tech people properly evaluate software?
- How much can a company afford NOT to spend on technology?
- How do you gauge whether the technology cost structure is appropriate?

Information on these technologies needs to be brought to the awareness of these businesses through the incubator and larger mentoring process. These technologies can be utilized by these businesses to speed up processes thereby appearing larger, more capable and more professional.



Another option for companies is to partner with service organizations that supply cost-effective services and online technologies that otherwise would be out of reach for most young or new companies. Effectively navigating the partnerships is a critical part to ensuring success.

Product Lifecycle Management (PLM):

PLM is the process of managing all the lifecycle elements of a product from the initial planning phase through conception to its being sourced and manufactured, and ultimately to service and disposal if required. Managing the lifecycle, regardless of whether a company is involved in wholesale or retail, is somewhat similar. Supply chains of ever-increasing complexity and stricter trade regulations means that the lifecycle elements must all coordinate and be timed accordingly. In order to plan the business, synchronize the various types of information, manage timelines, manage creative assets, and then retrieve reports, some type of PLM technology is the logical choice. PLM integrates people, data, processes and business systems and provides a product information backbone for companies and their extended enterprise.

PLM software is the ultimate in collaborative Product Design and Development. Designed to be used interactively throughout the development process, the solution delivers an effective approach to managing all aspects of a creative business. Every process from initial sample sketch right through to final product selection is available and configurable so each business can work uniquely. Because the initial information on product drives all other downstream systems and decisions, it is especially beneficial to be integrated so data flows smoothly throughout the entire lifecycle.

PLM Software Value Proposition:

No system should be considered unless it is deemed to add value to an organization. In small businesses, where one or a few people are responsible for managing a majority of the business tasks, any solution to speed data entry and manage business processes is indispensable. Setting best practices early on in business makes later transition much easier.

With PLM, many of the typical functions are covered in one solution, on one platform, making it seamless for a few users to manage lots of data efficiently. The PLM software technologies can be made to work in many ways to assist small businesses in avoiding common business pitfalls.

PLM adds tremendous value in the following areas:

- **Line Planning**-Financial and operational planning, generate placeholders for styles, fabrics and trims, manage progress and assign resources.



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- **Storyboards-** Ability to create within or upload storyboards, concept boards, etc for customer or management review and approval. Further integrated solutions with Adobe allow seamless sharing of digital content and visual search capability.
 - **Digital Asset Management-** as a library of all types of digital content (e.g. shopping pictures, store windows)
 - **Colour Management-** Creation of seasonal colour palettes, digital download of Pantone colour chips, and the ability to house spectral values for colour regardless of substrate manage all colours from library to BoM and through to PO and shipping contents.
 - **Raw Materials Management-** Libraries to house all raw material content and specifications for fabrics, trimmings, labels, graphics, embellishments and packaging give visibility for ordering and seamless integration to BoM's to reduce redundancy and workload for communication with suppliers and vendors.
 - **Product Definition-**Create the recipe for communicating product specifications and methods to finished goods vendors without having to retype, rescan or email. Collectively see product groups, allocation and planning.
 - **Sourcing & Vendor Management-** Holding information on vendor and supplier contacts, locations, lead time, minimums, currency, etc link all vendor data directly into style records, PO's, and compliance documents for customs leaving no need to copy/paste or retype vendor information.
 - **Request for Samples-**Fast and effective way to produce and manage sample requests including the attachment of sketches, photographs, summary specifications etc combined with real time supplier notification and critical path tracking.
 - **Product Specifications-**User defined specification content, including points of measure, grade rules and size ranges to easily prepare for fitting and product approvals. Specification content can be directly linked to e-commerce sites.
 - **Construction details-** Template the construction and sewing techniques to minimize margin erosion and maintain style integrity.
 - **Labelling / Folding / Packaging-** Use of libraries to house folding and packaging templates to ensure compliance with retailers to reduce charge-backs and confusion in shipping and receiving.
 - **Request for Development-**Automatic transmission of sampling requests for fabric, trim or finished goods linked to workflow to track progress and stay on top of samples.
 - **Costing-**Integrated to product specifications, user defined cost elements, landed cost calculations, margin modelling and "what if" analysis.
 - **Supplier Cost Quotations-** Quotes for finished goods, fabrics, trims etc linked to product specifications along with user defined cost templates and full approval/rejection cycles.
 - **Product Approvals-**Any product types (e.g. finished product samples, fabrics, trims) covering all processes such as concept fits, seal samples, lab dips etc combined with real time supplier/customer notifications and tracking of progress.



- **Testing and Compliance**-The ability to house all testing documents from factory and third party to ensure country compliance and expedition of cross border shipping. Also used for wear testing trials, wash testing, etc to ensure quality products.
- **Quality Assurance & Quality Control** –Various methods to track assurance of quality throughout development, and then monitor, fix and transmit any necessary controls to maintain quality standards through product end-of-life.
- **Trade Compliance**- Seamless integration of style information for US, EU etc customs compliance and tracking. Information from third-party consolidators can be directly uploaded to reduce redundancy and human error.
- **Purchase Orders**- Evolution of product information from concept to PO to ensure complete and error-free contracting of goods.
- **Document Management**-Linked to key entities such as products, suppliers and customers with multiple security levels, version control, check in/out and document approval/rejection process.
- **Collaborative Forums**-Real time online discussions with suppliers about key design and development activities delivering full accountability and traceability.
- **Supplier Time & Action**-Enable suppliers to sign on to see their time and action calendars, sample and development requests, process quotations, update their profiles and view or upload documents.
- **Critical Path & Workflow**- Depending on the system chosen, the above processes can be managed by applications to enable users to build their own business rules and automatically schedule and manage key activities with automatic escalation combined with the ability to manage by exception.

Technology Enhancements:

Enhancements in all types of technology allow for cost effective, easy-to-use tools for small companies. The PLM software solution covers all business processes required for development and sourcing cycles and can track and report so fewer users can manage more data in less time.

Historically, software solutions were expensive, hard to configure and hard to deploy. With the ever-increasing geographic dispersion of employees, partners, vendors, and suppliers, it is important for small companies to make prudent decisions about technology and understand how to leverage the benefits to service their organizations. We find the latest upgrades in technology to be especially helpful to small companies.

1. Modularity

Most of the solutions on the market today are sold modularly so users can subscribe to a full product suite or specific modules depending on the needs and responsibilities. The modular approach saves companies money by extracting unused or heavy-handed functions that smaller companies may not use



and therefore, should not pay for. By paying for only the functions that are useful, a company can spend less but also get up and running more quickly.

Modules such as CRM (customer relationship management), SRM (supplier relationship management), and PLM are typical and help support key functions relative to small companies. Where some solutions include all three modules, the added benefit of integration is realized.

2. Web-based applications:

The interactive capabilities come from the use of web-based functions allowing communication internally as well as directly with suppliers on specifics related to the product. The variety of software products on the market indicates how many variables and options are available to help companies work faster and smarter.

A web-based, real-time, collaborative network can easily be established in a matter of weeks involving all key parties such as customers, suppliers and factories. Using the internet to establish direct connections into software packages reduces the need for excessive emailing, faxing, excessive printing, etc.

In an ever changing environment of social media, marketing tools, social networking it is important that these feed from a central hub tool like PLM to ensure complete efficiency and accuracy - being up to date in real time.

3. Integration:

Unlike larger, established companies that become entrenched and have a hard time with change, younger, smaller companies are more adept at accepting change. While many large companies tout the latest and greatest technologies, they often use the tools very poorly, and many refuse to integrate to build efficiency into the process. Integrated capabilities, whether built in or established across various programs, can provide extra benefits not previously available. For instance, Adobe Illustrator, the default drawing program for fashion designers and technical designers, is now fully integrated out of the box with a few PLM programs. This capability gives designers free reign to work exclusively in Illustrator while pushing critical, key information into databases for downstream data integrity. All product information ready to go can be used for easy transfer to create sell sheets, look-books, update e-commerce websites etc.

Integrating PLM to ERP (enterprise resource planning) can trigger the creation of PO's, customs documents and a host of other paperwork that previously needed to be manually typed and sent to business partners.



4. Cross-platform capabilities:

Key data elements can be accessed over the Internet in real time via PC's, Macs or mobile devices. Now Macs and PC's can live comfortably on the same network, accessing the same information. The use of mobile devices like iPads and Smartphones on the factory floor or DC to catalog samples, measure samples or manage quality reports are becoming more commonplace. The ability for PLM to transfer information seamlessly from computer to mobile device gives freedom to the small business to conveniently complete work anywhere.

Technology Future:

There are continuous advances in technology that will be the way of the future. Business owners are realizing that the use of technology is a must-have today to be involved in the culture and be in touch with consumers.

We know that social media for social interaction, uses highly accessible and scalable communication techniques. Social media is the use of web-based and mobile technologies that has turned communication into interactive dialogue and has allowed the creation and exchange of user generated ideas. Businesses are realizing that social media is consumer generated media that can make or break their relationship with their customer. A common thread running through all social media is a blending of technology and social interaction for the co-creation of value – a value the customer increasingly expects. Social media is not something companies can avoid or not be part of, particularly if your customer is the ever-savvy and evolving gen Y consumer. These customers do expect to be able to interact with their favorite brands and products in a highly personalized way. Brands are realizing that social interaction can be helpful or detrimental, and need to be monitored closely and often.

The crossover of 3-D imaging from the video and gaming sectors to fashion creates digital avatars to manage fit and dimension of product to a target customer. Hard, flat patterns leave the fashion lexicon for 3-D options providing vastly upgraded functions. Imagine if you were able to view samples in full 3-D before they left the factory or supplier. You could easily spot quality problems, manufacturing issues or styling details in real time over the Internet and collaborate with your supplier to ensure that the physical product matches your initial design specifications and aspirations. With 3-D applications, users can achieve this and slash development time cycles, vastly reduce the costs of sampling, improve quality and potentially maximize sales opportunities.

3-D imaging also has important contributions to the increasing use of e-commerce and better fit technologies to enhance customer experience and reduce returns. Using dimensional measurements rather than flat measurements gives more relevant feedback to customers on what type of product would fit their body shape and size. The use of digital avatars in cyberspace to replicate the customer dimensions adds to this experience.



Further expanding the concept of embedded information is the use of smart tags to encapsulate information to reduce physical inventory tasks, reduce charge-backs and keep tabs on SKU's in stores and on e-commerce sites. Every sale because the proper products are on the shelf is the end game, and embedded information helps small businesses reach this end game with limited resources.

In Conclusion:

Incubators are so important today for mentoring new and young businesses through the trials of launching and shaping a business in an often unyieldingly competitive global industry. By enlisting best practices in business processes from the onset, listening and learning from the mistakes of other businesses, and exploring ways to alleviate the vast amount of “busy-work”, businesses can thrive. Utilizing the mentoring capabilities, enlisting the help of advisors who specialize in key business areas and offering broad ranging seminar topics is essential to maintaining a value-add to the fashion industry.

Since technology is so mission critical and often totally misunderstood by the creatively focused, incubators play a key role in leading businesses through the important learning experiences. It is critical to the continuation of the global fashion industry that incubators thrive and remain in touch with the changing business environment and tools.



OPTIMIZE is an internationally recognized, award-winning advisory services firm to leading global brands, retailers and manufacturers focusing on all aspects of developing product. **OPTIMIZE** accelerates value assisting companies to harmonize the delicate balance between creativity and analytics by providing truly objective advice. **OPTIMIZE** work has collectively saved companies millions of dollars and huge risk by helping them avoid costly mistakes common to Product Lifecycle projects.

Nancy Johnson, the Founder, President and CEO of Optimize, brings 25 years of experience in Design, Product Development, Sourcing and Enabling Technology to support clients in their business improvement endeavors.



Pure PLM is an independent and objective consultation firm that does not sell software. **Pure PLM** is entirely focused on helping its clients achieve success regardless of the chosen technology platform. **Pure PLM** provides local expertise to Australian Retailers, Wholesalers and Manufactures to enable innovation based on process improvements. The **Pure PLM team** is unique in Australia for its depth and breadth of Product Lifecycle Management (PLM), Retail and Product Development experience, IT System deployment and its understanding of Change Management. **Optimize** is our strategic International business partner.

The **Pure PLM** and **Optimize** relationship accelerates value through integrated Business Strategy, Resource Optimization, Productivity Improvement and Enabling Technology initiatives; bringing international best practices and local expertise together to being value to customers.