Retail, Footwear and Apparel Industry Solutions

Retail, Footwear and Apparel Process Overview
June 2006
Agenda

Retail, Footwear & Apparel product development processes & lifecycle introduction.

What is RFA?

- Merchandising
- Design
- Materials Management
- Technical Design
- Sourcing & QA
- Manufacturing
- Customer Service
PTC’s Definition of RFA

**R = Retail**
- Stores, Catalogs or Websites that sell products
  - Segmented into clothing stores, department stores, furniture stores, home goods, etc.

**F = Footwear**
- Companies that design and sell footwear

**A = Apparel**
- Companies that design and sell apparel, leather products, draperies, etc.

Current Focus

- Apparel
- Footwear
- Private Label Retail – Apparel and Footwear (products designed by a retailer)
Characteristics of RFA Products

- 1000’s of products per season
- Several seasons per year
- Tight lead times - Design closer to delivery to react to market trends
- 80% of product line is new every season

One Product
- Comes in many Colorways
  - Each with multiple Size Categories
    - That each have many Sizes
      - Produced in multiple Factories
        - And sold in different Regions
          - Merchandised with many other Products

1 product
- 1 x 4 = 4 variations
- 4 x 3 = 12 variations
- 12 x 10 = 120 variations
- 120 x 3 = 360 variations
- 360 x 3 = 1080 variations
RFA Product Development Process & Lifecycle
Product Design and Development Lifecycle

Calendar Management / Workflow

- The process of defining a schedule that has to be adhered to in order to meet in store delivery dates.
- Managing the calendar at both the overall line level and tracking the steps on an individual product.
- Evaluating the overall calendar based on dependencies of an individual product.

Change Management

- Streamline the change process across the enterprise from problem identification and investigation to change proposal, disposition and incorporation.
- Automate reporting to allow management to track change process metrics.
Merchandising Processes

Attribute Planning
- Analyzing last year's sales and current industry trends to define the number and mix of product offerings based on product attributes.

Assortment Planning
- Planning from last year's sales and the current market for product offerings based on store layout, location, and region.

Financial Planning
- Analyzing last year's sales to define the financial goals (# of units, cost, price point) for a product line.

Channel Management
- Defining and managing the line and product strategy for different distribution channels (retail, wholesale, catalog, web).

Brand Strategy
- Defining the brand strategy for a product line, including licensees. Brand strategy includes the target customer, look, and feel of a line and trends appropriate to the Brand.
Design Processes

Market Research
- Collect ideas and physical samples from multiple sources to be used in concept development.

Seasonal Concept Definition
- Defining and communicating key trends (color, fabric, silhouette, mood) that will drive the look and feel of seasonal line.

Product Design and Development
- Define candidate designs by developing and analyzing many ideas, and viewing alternatives using art programs to evaluate prototypes’ characteristics such as styling, performance, and aesthetics.

Artwork Design
- Designing and managing visual components that are part of a product. Artwork can include prints, logos, hangtags, screen prints, embroidery, appliqués, etc.
Design Processes, continued

Line Planning

- Manage the line plan process for selection and final approval of a group of related products that will be merchandised together.
- Many changes are made in the development of the line plan and it is critical to follow up and communicate all revisions to ensure that store deliveries for the season will be met.

Presentation Materials

- Provide product details to Marketing for the publication of promotional materials, such as sales collateral, brochures, and catalogs.
- Manage the modification of the product marketing deliverables as part of the engineering change process.
Materials Management Processes

Raw Materials Planning
- In order to reserve materials, planners will use product development data aggregating components in order to project quantities for a season. This data helps identify potential sources and defines early material commitments.

Material Research and Development
- Create a raw material design specification for fabrics, trims, labels, packaging and hardware. Identify suppliers for purchased items. Maintain physical samples in a material library.

Material Color Development
- Develop standards for individual colors used in seasonal color palettes. Manage approval process of material colors and lab dips.

Material Testing
- Use standardized tests for testing of raw materials to ensure quality standards are met for production.
Technical Design Processes

Specification Development

- Initial Specification:
  - Defines the basic elements of a product. Requirements for initial costing and prototype sample development.

- Pre-production Specification:
  - Defines more details about the product. Specification contains information required to approve a product request fit sample in preparation to move it to production.

- Production Specification:
  - Defining a detailed product specification that can be used for manufacturing a production run.

Sample Management

- The process of requesting, reviewing, tracking and approving samples of products and their components.
Sourcing & QA Processes

Sourcing Planning
- Early in the design process, planning where products will be placed based on the product requirements as well as the supplier’s performance.

Costing (Proposal Request)
- Manage the process of selecting new strategic suppliers for existing or new products or for outsourced design and manufacturing. Streamline and standardize the creation and delivery of cost requests, facilitating supplier responses and selection.

Quality Control
- Evaluating products from the production line to ensure compliance to construction, measurement and packaging guidelines.

Vendor Management
- Managing and evaluating the supply chain based on a vendor’s capabilities, capacity, compliance adherence and scorecard. Process of periodically inspecting vendors to ensure compliance.
Manufacturing Processes

Manufacturing Outsourcing

- Manage collaboration with outsourced manufacturing partners.
- Ensure partner capabilities and feedback are taken into account early in design.
- Manage design hand-off into manufacturing and track the progress of the digital and physical manufacturing deliverables.

Vendor Collaboration

- Identifying components of the product specification that the vendor is responsible for creating.
- Managing the approval process of the vendor’s responsibilities.
Customer Service

Customer Interaction
- The publication of product specification information for field personnel interacting with the consumer.
- Tracking of product returns with consumer descriptions of quality or performance issues.
- Documentation of consumer requests are important so that favorite products can be considered in merchandise planning.

Customer Satisfaction
- Focus group and survey information used as feedback for future product development.
- Usually measured in sales dollars and volume.
Summary

Familiar with Apparel / Footwear product development process.

Familiar with the product lifecycle road map beginning with concept, followed by plan, design, develop, production & QA.

Recognize and appreciate how a PLM solution can facilitate these processes, provide instant visibility to product information, enable quick responses to issues and increase speed-to-market.