Understanding Apparel Product Development in the Age of ToT

Presented by yoram.burg@efi.com
• (R)evolutionize the Fashion Industry with 3D solutions
• Lead small, medium and large businesses through supporting the change
• Driven by industry experts & deliver continuous innovation of 3D
• Client and Cloud Solutions for better design, development and production overall experiences
• Integrating PD with external systems in ways never available before
EFI – where we excel?

- 3D Product Development
- Color and Imaging
- Fabric and Textile
- Commercial Printing
- Photo & Fine Art
- Ceramic Tile Manufacturing
EFI at a glance

Key Facts
• Founded in 1988, IPO in 1992 (EFII)
• Headquarters in Silicon Valley
• $2.2B Market Cap / $1B in annual sales
• Over 33,000 Customers
• ~$5B Total Addressable Market

Business Overview
• Focused on the Growth Areas of Industrial Print Applications
• Growing ~10% per Year and With ~30% Recurring Revenue
• Leading Manufacturing Transformation from Analog to Digital
challenges?
Digitizing the Core Product of the $1.4T Fashion Industry, but it’s changing!
More to ponder on
The reason we are here?

Spending on clothing from net consumer spending was 8% in the 90’s, or 20% a century ago!

<table>
<thead>
<tr>
<th># of US households</th>
<th>124,590,000.00 (2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>average gross income / household</td>
<td>69,629.00 (2015)</td>
</tr>
<tr>
<td>net household income</td>
<td>68,000.00 (2015)</td>
</tr>
<tr>
<td>net consumer spending</td>
<td>56,000.00 (2015)</td>
</tr>
<tr>
<td>net saving per family</td>
<td>4,000.00 7.1%</td>
</tr>
<tr>
<td>clothing spending per household</td>
<td>1,838.00 3.3%</td>
</tr>
<tr>
<td>clothing apparel market</td>
<td>229.0 Billions</td>
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source: bureau of L. Statistics
Is it going to get better?

Boston Consulting Group did an apparel-specific study on trend dissemination. It used to take 1 year for an apparel trend to become dispersed into the main stream and now it takes only 3 to 5 weeks!
Retail latest news

American Apparel bit the clean. So did Nasty Gal. BCBG Max Azria petitioned for chapter 11, alongside high schooler retailer Wet Seal.

Why Every Outdoor and Athletic Apparel Brand Should be Looking for a Domestic Production Partner Right now

Published on March 9, 2017

Bill Amos Follow CEO at Ten Alpine

The future of retail is Now; Age of retail ubiquity has begun

Published on April 28, 2017 | Featured in: Editor's Picks, Retail & E-Commerce

Michael Spencer Follow LinkedIn Top Voice 2016 | Copywriter | Social Media & Content...
What will the mall of the future look like?

Brick and mortar will be visited for **different purposes** than in the past. It does not mean retail is dying, all it means is that it will be repurposed for all other reasons like:

- Returns (sad but true)
- More technology/digital related experiences (virtual/holo/others)
- Display areas for those needing the hand feel/touch, fulfillment through other means (one size, not inventory)
- Consultation, visiting store terminals for product browsing
- Other things we always thought of differently (seeing a doctor, buying a car)
- Spending time window shopping the old fashion way
- Yes, we will still need nail salons 😊
## The three tenets

<table>
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<tr>
<th>Develop Faster</th>
<th>Develop right</th>
<th>Work efficiently</th>
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<tbody>
<tr>
<td>Ideally working to deliver faster, not just internally but also against the competition</td>
<td>Developing accurately, while meeting guests expectations—market trends</td>
<td>Focusing on operations efficiency, both from the brand and all other business partners</td>
</tr>
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so?
Digital Design Methods
Collections are virtually created with variety of colorways, fabric options and designs, within days and not months.

- **Reduce** over development.
- **Stop** the constant wait for samples.
- **Analyze** fit and design earlier in the process.
- **Execute** more design iterations in a fraction of the time – designing better products.
- **Shorten** design & development to suit faster time to market.
- **Lower inventories**
- **Reach the guest** home faster
3D Enable Your Designers

“3D Enabled” designers leverage 3D models to create variations, texture and artwork options and more...

• **Avoid** costly errors with graphics, scaling & fit by seeing in 3D from the start.
• **Free** your technical designers and pattern makers to focus on their core tasks.
• **Allow** virtual prototyping at the designer desk, and stop the constant wait for samples.
• **With** *Adobe Illustrator 3D* Plugin, Designers, Technical Designers and Pattern Makers are much more efficient during collection planning.
Faster DECISION MAKING

Leverage 3D content for review, collaboration and approvals throughout the design cycle.

- **Cloud based collaboration** allows all relevant parties to collaborate very early in the process.
- **Using just a web browser**, the Brand & Vendor can collaborate around the 3D design and communicate needed changes effectively.
- **From fit and pattern comments**, to fabric/texture/artwork options, annotation and customization is done in the browser with no need for any software installation.
- **WIP collaboration**, fast and lightweight, before getting into the heavier approval processes.
- **Costing of production**
FIT PERFECTION

3D design allows analyzing the fit early in the process, allowing the perfection of fit to your target audience(s)

- **Import** your model 3D Avatar.
- **Drape garments** in relevant sizes and analyze fit.
- **Use 3D animation** to validate your fit and identify potential problems.
- **Scale it up** with 3D avatar libraries that represent market segments
The micro factory (Magic, Vegas 2/2017)

designing, managing color, fabric printing, cutting & sewing a shirt in 30 min
What to expect?
What if you could deliver **personalization**?

- Target your best customers with personalization
- With digital, every box can be different with no additional costs!
- It’s easy to highlight special things
  - Your garment
  - Your box
  - Your colors
  - Your **guest** experience
  - Special holidays
  - Much more!
CASE STUDIES?
“In the few years since Target started using 3-D virtual prototyping Optitex, Product Development has sped up by two weeks and sampling has been reduced by roughly 65 percent” - Alexis Kantor, Director of Apparel and Accessories
Target

Photo image

Virtual image
Marks & Spencer

- Reduce time per iteration of a block by 50% Actual result was by up to 96% (!!!)

- Reduce time for end-to-end approval process by at least 40% Actual result was up to 68%
• Already **9 months** in post pilot stage

• Early deployment **successful** with far east suppliers

• HQ developing, suppliers provide with content

• **Significant improvement** in FIT and consistency already observed

• Enhanced communication with suppliers **already achieved**

• **Global rollout** with suppliers underway
How do we do this?
All kinds of questions?

Is my process changing? Or is it just the medium?

Hire?

Repurpose?

Is all the effort on me? Do I need to learn something new (again...)?

Will I see a sample? If so when?

We are scared of changes 😒

How do I test fabrics? Where do I get the avatars from?

What about the vendors?

Wait! What am I not asking?
The process makes it easy

1. Consult
   - Initial Discovery
     - Needs Analysis
   - Digital Vision
     - Roadmap
     - Structured process plan
   - Experience & review
     - Needs Analysis
     - Validation
   - Communication coordination

2. Assess
   - Deployment planning
     - Process Design
     - Business Case
     - Project plan

1. Plan
   - Configuration
     - Technical setup
   - Training
     - Basic
     - Mentoring
     - Advanced

2. Implement
   - Adoption Management
     - Bi-Weekly & Monthly mentoring & PM
   - KPI
     - Success metrics analysis

3. Adopt
• Digital design and 3D is here!
• But not only design, through PLM and all the way to store layout and guest experience
• This is now an ecosystem
• Real companies are experiencing real saving
• The retail market is changing, and not in your favor
• old ways are... old ways
• Quick wins lead to change. Start!
Thank You!

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