Material-Driven Innovation in Apparel and Footwear – How to Compete

by Steve Riordan

Have you noticed the recent uptick in innovative new apparel and footwear products that have been introduced? It’s hard not to. Many of these new products are actually enabled by innovative new materials. This trend has grown as retail, footwear and apparel (RFA) companies have elevated the role of materials.

The following organizations have moved beyond viewing materials as a key lever for margin improvement. Instead, they fully embrace materials as a source of competitive differentiation. For these leaders, there is much more emphasis on driving innovative new products through innovation in materials.

- **Nike Tech Fleece Aeroloft** and **Flyknit** – Tech Fleece Aeroloft combines two innovative technologies to provide lightweight warmth and thermoregulation, while Flyknit’s durable yarn and single strand construction creates a strong, lightweight shoe that uses less resources.

- **Patagonia’s Truth to Materials Collection** – All items are made from reclaimed or alternatively sourced materials, highlighting new production methods.

- **Uniqlo’s Heattech** – This innovative lightweight material creates and maintains warmth from body moisture, without adding bulk. While originally launched over 10 years ago, Uniqlo has branded this innovative material and has continued to evolve it over the years.

- **Ministry of Supply’s Apollo Dress Shirt** – This business shirt is made of high-tech fabric from NASA and reacts to the environment to keep the business person dry and comfortable.

Innovating through materials started in performance apparel and has spread to become more mainstream. It’s largely fueled by the consumer’s **appetite for athleisure** as well as an increasing expectation for what’s possible. Scientific advancements and enhanced mill capabilities have also become much more accessible.

What does it really take to compete on materials? As a result of helping numerous organizations improve their ability to drive business results with innovative new products, here are the four things you need.

1. **Strategic Significance**

   Competing on materials can’t be just an R&D effort or something dreamt up by the product development team. It needs to be championed by the organization’s executives as a key strategic pillar for driving growth. Strategic alignment helps secure the resources required for success.

2. **The Right Supply Chain**

   Suppliers are getting more sophisticated in their capabilities, so it’s important to foster the right strategic partnerships. There are many options to practice open innovation when it comes to materials - 3rd parties including boutique/specialty firms and universities are all doing cutting edge R&D related to materials. Find the right partners to collaborate with to accelerate innovation.

3. **A Well-Designed Materials Organization**

   If a focus on materials is new, look at organizational design and reporting structures, starting with a materials leader who has end-to-end responsibility, from innovation all the way through to production. In addition, focus on attracting the right talent with the technical skillset and knowledge to support the entire product development cycle. As materials become more complex, technical expertise will be required where it may not have been needed before. These material experts can no longer be seen as mere support; their role should be elevated giving them an equal seat at the table with the rest of the key functional areas.

4. **Mature Processes and Systems**

   More focus on the development and management of materials requires more mature processes and systems. Consider whether or not the centralization of materials design/development will enable more effective use of materials expertise. Ensure strong connectivity and visibility from innovation through design/development to production. Success requires the ability to get the right data to the right person at the right time at any point in this process. Part of the process also needs to include analytics that in turn inform planning and future developments.
Getting Started

Build a business case for elevating materials within your organization. Understand your current state as well as leading practices. Set your future state vision and align key executives to the path forward.

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What’s your view? Add your question or comment
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