

# **Integrated Design-to-Delivery for Fast Fashion**

On Time, On Trend, and On Profit

August 2009

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## Executive Summary

There's little question that the apparel and footwear industry is a difficult place to run a profitable business. The trends shift quickly and unpredictably. The deadlines are short and there are harsh consequences for delays. The profits are slim with little to no safety net. However some companies have found a way to grow profitably during these most difficult of times as the top 30% of study respondents (the Best-in-Class) are realizing almost twice the revenue growth (13%) compared to all other respondents (7%). This report provides guidance on the best approach to improving operations from concept to delivery of apparel and footwear products.

### Best-in-Class Performance

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Aberdeen used four key performance criteria to distinguish the Best-in-Class from Industry Average and Laggard organizations with regard to design to delivery operations. Performance differences across the competitive framework show that the Best-in-Class are 25% more likely to achieve sell-through targets and sell 27% more of their products at full price than all other companies (all others). The result is a 13% revenue growth for the Best-in-Class compared to 7% for all others.

### Competitive Maturity Assessment

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Survey results show that the firms enjoying Best-in-Class performance shared several common characteristics, including:

- Place designs under formal change control (60% versus 24%) and provide stakeholder notification (52% versus 46%)
- Designers collaborate with both sourcing (65% versus 56%) and suppliers (67% versus 51%) to reduce product costs
- Standardize both tech packs and the RFQ process (48% versus 24%)
- Use commercial software solutions and capabilities that are integrated across functional roles in the organization

### Required Actions

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In addition to the specific recommendations in Chapter Three of this report, to achieve Best-in-Class performance, companies must:

- Place designs under change control with stakeholder notifications
- Institute design collaboration with sourcing and suppliers
- Standardize both tech packs and the RFQ process
- Select and deploy commercial software with integrated planning, design, costing and sourcing capabilities

#### Research Benchmark

Aberdeen's Research Benchmarks provide an in-depth and comprehensive look into process, procedure, methodologies, and technologies with best practice identification and actionable recommendations

"Previously, we used a homegrown system for our ERP system and all the interfaces to other systems. Four years ago, we implemented a PLM system and within the next year we will move to a new ERP program. The PLM program provided us with a central repository for all of our design information. The implementation plan and follow-up gave us the catalyst to foster collaboration."

~ Business Process Manager  
Apparel Manufacturer

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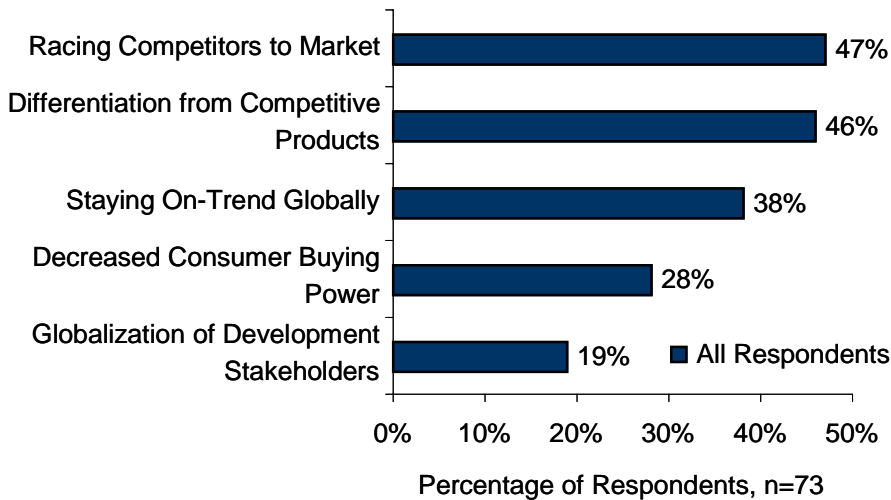
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## Chapter One: Benchmarking the Best-in-Class

### Business Context

There's little doubt that the last 18 months have been difficult on the manufacturers, wholesalers and retailers that design, make and sell apparel and footwear goods. Estimates from the US Bureau Census News finds that "US retail sales for July 2009 are down 9.4% compared to July 2008, a continuing trend of downward spending for the year, [Advance Monthly Sales for Retail and Food Services](#), August 2009. But even though consumer spending is down, other factors are motivating these companies to improve the operations and efficiency of their design to delivery processes (Figure 1).

**Figure 1: Top Five Drivers of Design to Delivery Improvement**



Source: Aberdeen Group, August 2009

These drivers fall into a few different themes that play off each other:

- **Dual competitive pressures.** Two age old drivers are encouraging design to delivery change. One the on hand, getting to market before your competitor is critical in capitalizing on opportunities. Yet many are struggling to differentiate their products in the market. These two pressures actually compete or conflict with one another.
- **Global fast fashion and development.** Even products that get to market on time and are differentiated may not be successful. They must also be on-trend on localized regions with tastes that vary around the world. The targets are varied and change quickly. Furthermore, the stakeholders in the design to delivery process are distributed around the world, presenting challenges to make the right decisions as fast as possible.

### Fast Facts

Best-in-Class companies successfully:

- ✓ Hit on-time launch targets **88%** of the time
- ✓ Achieve sell through targets **86%** of the time
- ✓ Sell **82%** of their products at full price
- ✓ Meet product cost targets **89%** of the time

“Our seasonal product calendar is 13 months, and we start designing for a new product line nine months in advance. Due to the short design cycles, we are constantly looking at our processes and trying to figure out how we can improve in order to differentiate from our competitors and deliver high quality products.”

~SMB Apparel Manufacturer

- **The receding recession.** Surprisingly, the recession's impact on consumer buying power isn't driving as much change as competitive or global pressures. While the volume of spend to be won may have curtailed, apparel and footwear companies realize the old rules still apply: beat your competition on the global stage. There's just less of a reward at the end of the rainbow.

Despite all that has changed in the past 18 months, the story actually remains much the same. Findings from Aberdeen's January 2008 report, [PLM for the Fashion, Apparel, and Footwear Industries](#), found the drivers for change were much the same:

- Respond rapidly to change customer demands (44%)
- Keep pace with shorter competitor's lifecycles (41%)
- Manage a global product development process (39%)

Today's drivers aren't the new new. They're the same pressures in a new context.

### The Maturity Class Framework: The Profit Equation

To determine which strategies, organizational characteristics and technologies impact performance, Aberdeen surveyed respondents not only on their practices, but their performance. Specifically, there are four metrics that were used in categorization:

- **Hitting launch targets on-time.** Apparel and footwear buying cycles are transitioning into shorter seasons. The right product must be on the rack to be sold in the right season.
- **Achieving sell-through targets.** Achieving sell-through targets is a means to hitting revenue targets based on assumed sell prices.
- **Percentage of products sold at full price.** This measure is proof positive the product launched on time but was also on trend.
- **Meet product cost targets.** Early costing models for a product may promise healthy margins, but reality can often derail any promising idea.

**Table 1: Top Performers Earn Best-in-Class Status**

Definition of Maturity Class	Mean Class Performance
<b>Best-in-Class: Top 30%</b> of aggregate performance scorers	<ul style="list-style-type: none"> <li>▪ Hit on-time launch targets 88% of the time</li> <li>▪ Achieve sell through targets 86% of the time</li> <li>▪ Sell 82% of their products at full price</li> <li>▪ Meet product cost targets 89% of the time</li> </ul>
<b>All Others:</b> Remaining respondents to the survey	<ul style="list-style-type: none"> <li>▪ Hit on-time launch targets 67% of the time</li> <li>▪ Achieve sell through targets 64% of the time</li> <li>▪ Sell 55% of their products at full price</li> <li>▪ Meet product cost targets 81% of the time</li> </ul>

Source: Aberdeen Group, August 2009

While there is a relatively insignificant gap of 8% between the Best-in-Class and all others in hitting product cost targets, other metrics tell a more differentiated story. The Best-in-Class have experienced a 7% decrease in year-over-year cost of goods compared to just a 3% decrease for all others – and that is significant. Just about everyone is hitting their product cost targets at the same rate. However, the Best-in-Class are not only setting their sights more aggressively lower but are achieving their lofty goals at a slightly higher pace.

From a time to market perspective, the Best-in-Class are achieving success at a sizeable advantage. As a result of getting to market on time, they are selling their products through at a higher rate. This has two effects on the profitability equation for the company. The Best-in-Class have seen an 8% decrease in inventory carrying costs, further expanding the bottom line. But just as importantly, they don't have to mark down the product's price, translating to a higher percentage of products sold at full price. Overall, this translates to a higher revenue growth rate, to the tune of 13% for the Best-in-Class compared to 7% for all others.

Collectively, the Best-in-Class have decreased their cost of goods sold and inventory carrying costs faster over the past year. Furthermore, they have higher sell through rates and percents of products sold at full price. There are a number of initiatives and strategies around integration and collaboration across the design to delivery process that have impacted performance that we will analyze and discuss next.

### The Best-in-Class PACE Model

Achieving commercial success is not easily achieved by pursuing any single strategy, process change or adoption of technology. It requires a combination of strategic actions, organizational capabilities, and enabling technologies per this research study that can be summarized as shown in Table 2.

**Table 2: The Best-in-Class PACE Framework**

Pressures	Actions	Capabilities	Enablers
<ul style="list-style-type: none"> <li>▪ Racing competitors to market</li> <li>▪ Differentiation from competitive products</li> </ul>	<ul style="list-style-type: none"> <li>▪ Supplier rationalization</li> <li>▪ Supplier co-design</li> </ul>	<ul style="list-style-type: none"> <li>▪ Line planning conducted electronically</li> <li>▪ Design-materials relationships documented electronically</li> <li>▪ Designers and suppliers collaborate on technical design</li> <li>▪ Designers and sourcing collaborate on technical design</li> <li>▪ Technical design placed under change control after completion</li> <li>▪ Centralized management of calendars, cost sheets, design samples, supplier scorecards and work-in-process tracking sheets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Product line planning systems</li> <li>▪ Technical design management systems</li> <li>▪ Material management systems</li> <li>▪ Costing management systems</li> <li>▪ Integration between line planning, technical design, supply management, costing management, materials management and sourcing management systems</li> </ul>

Source: Aberdeen Group, August 2009

### Case Study — Steve Macdonald, CIO at Carole Hochman

*During the development of this research study, Aberdeen posted updates to its [Product Innovation Insights Blog](#) to document case studies, share early findings and profiles of solution providers. The following is an excerpt from a [Carole Hochman Group case study](#) originally published on the blog.*

Carole Hochman Design Group designs and produces women's sleepwear and intimate apparel across a variety of brands and private label. Currently, each of these business units operates independently, creating silos in the development process. The organization is investigating PLM as a means to provide a resource for collaboration and consistency across these groups. As a result, Carole Hochman expects to reduce errors and enable greater collaboration across the development teams. The ultimate goal is to reduce development time and perform better business analysis across the brands.

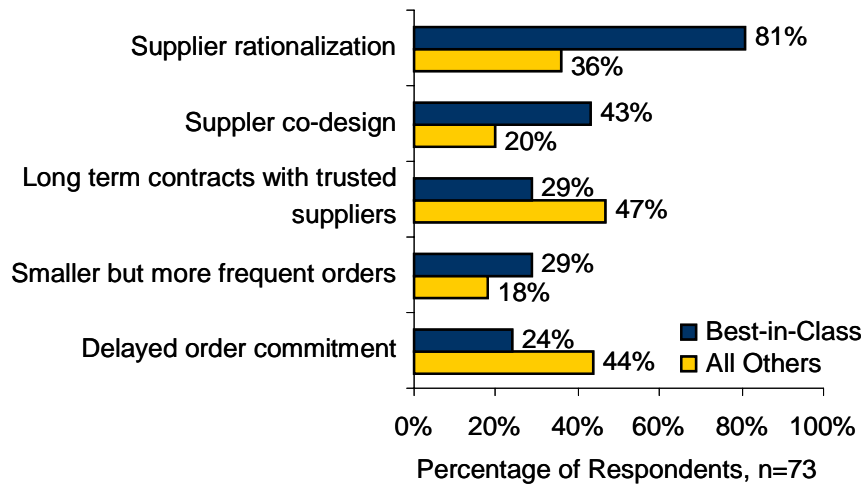
The push for PLM is coming from IT, rather than from the business units. Each of the development teams within the organization face five to seven month design cycles, offering little time for cross department planning. Instead, it's the IT organization, with visibility across these groups that has recognized the need for PLM. Steven MacDonald, Chief Information Officer at Carole Hochman believes this is common throughout the industry, "A lot of older companies tend to be very slow to change. They are not used to using technology as a driving force for improvement."

Carole Hochman Design Group is still investigating PLM providers, but they do intend to use technology as a driving force for improvement. They are identifying the processes that they will gain the most benefit by changing and will be deploying PLM where required to achieve those benefits. "It needs to be flexible," reports MacDonald, "We would like to focus on Product Data Management for one source and one copy of data. Then, we can roll out the lifecycle aspect when we get to it."

### Best-in-Class Strategies

So far, we've seen a sizeable difference in the business performance of the Best-in-Class and all others across a variety of business metrics. Why is one group succeeding over the other? As a starting point to answer that question, we'll look at which strategies or initiatives the Best-in-Class are pursuing at a more or less frequent rate than all others (Figure 2).

**Figure 2: Differentiated Strategies for Design to Delivery**



Source: Aberdeen Group, August 2009

Each of these differentiated strategies, with their benefits and detriments, are being pursued by the industry as a whole at relatively high rates.

- Rationalization and co-design.** Options for sourcing are good, but too many can result in paralysis by analysis and a lack of economy of scale. In the most differentiated strategy, the Best-in-Class are consolidating the number of suppliers to a smaller more choice list that result in two benefits. The decision making speed is accelerated with fewer what-if scenarios to consider. Furthermore, closer relationships with fewer suppliers open up real opportunities for co-design, where suppliers suggest modifications and changes in an effort to reduce the costs of their products in a win-win scenario.
- Consolidation without commitment.** While supplier rationalization is the most differentiated strategy, it's doesn't translate into longer term supplier commitments. The Best-in-Class are maintaining supplier flexibility by not locking themselves into any more commitment than necessary. You never know when opportunity may knock.
- Orders: decisive, more frequent and smaller volumes.** An emerging yet differentiated initiative is to decrease order volumes in an effort to reduce a company's outstanding financial commitment. In order to maintain production levels, the frequency of these orders have increased. Despite the increased workload for the sourcing and procurement functional roles, it does expose the fiscal risk for the company. But interestingly, the tactic to delay order commitment as long as possible, thereby further reducing fiscal risk, is not pursued at high rates by the Best-in-Class. Due to the short cycle nature of the industry, any order delay could result in delays in time to delivery which in turn translates into reduced sell-through, higher markdowns and increased inventory carrying costs.

“By making smaller but more frequent orders, we are able to have the right inventory at the right time. We communicate with our suppliers and prepare them in regards to space and materials. It has allowed us to have inventory control of our materials.”

~SMB Apparel Manufacturer

In addition to these differentiated strategies, there are a number of other initiatives that are frequently pursued but undifferentiated, each delivering some amount of value and risk:

- **Design locally (53%).** In today market, most companies can't afford to ignore the global opportunity (as found in the third highest pressure in Figure 1) to *stay on-trend globally*. In an effort to keep up with local trends on a global scale, many companies are choosing to design products in the same region in which they will be sold. Local designers will have a higher likelihood to understand and design products to meet local trends.
- **Formal trend tracking (45%).** Many years ago, understanding what is 'hot' from a trend perspective was much more art than science. With the advent of real time global communication and collaboration, formally tracking trends to drive apparel and footwear design is leaning more towards science than art. Companies are explicitly and quantitatively tracking trends to minimize the risks behind investments in product lines.
- **Integrate development processes (39%).** With short deadlines and thin profit margins, executives have realized that decisions made anywhere in the design to deliver process can have broad ramifications on other stakeholders, and ultimately on the profitability of the product line. The objective of this initiative is to foster collaboration and integration between functional roles in the process so that the implication of any decision is fully understood across the design, cost and sourcing of a product.

In next chapter, we'll look at what the Best-in-Class are doing to support their strategies and initiatives from a tactical level.

#### **Aberdeen Insights: Aggressive Strategies for the Risk Adverse**

The fashion industry is a tough place to make money. Deadlines are extremely short. Customers are unforgiving. And margins are thin. During our investigation, a single characteristic recurred in our conversations with practitioners: they are risk adverse. Why? Because making the wrong decision could result in the ruin of the company. But unfortunately recent times have delivered difficult questions to their doorstep. *What happens when a company's future is threatened?*

Companies frequently have highly divergent reactions to that question. Either they become more conservative, withdrawing and hoping to wait out tough times or they become more aggressive, willing to undergo a sometimes risky and difficult path that could transform them into a business leader. For an industry that often concluded that the painful design to delivery process of apparel and footwear products is just the cost of business, it is a difficult pill to swallow. Unfortunately, the conservative often means that opportunities to improve both sides of the profit equation are missed.

## Chapter Two: Benchmarking Requirements for Success

### Competitive Assessment

Aberdeen Group analyzed the aggregated metrics of surveyed companies to determine whether their performance ranked as Best-in-Class, Industry Average, or Laggard. In addition to having common performance levels, each class also shared characteristics in five key categories: (1) **process** (the approaches they take to execute their daily operations); (2) **organization** (corporate focus and collaboration among stakeholders); (3) **knowledge management** (contextualizing data and exposing it to key stakeholders); and (4) **technology** (the selection of appropriate tools and effective deployment of those tools). These characteristics (Table 3) serve as a guideline for best practices, and correlate directly with Best-in-Class performance across the key metrics.

**Table 3: The Competitive Framework**

	Best-in-Class	All Others
<b>Process</b>	Designs placed under change control once technical design is complete	
	60%	24%
	Stakeholders notified if design is changed after technical design	
	52%	46%
<b>Organization</b>	RFQ process and Tech Packs are standardized	
	48%	24%
	Designers and suppliers collaborate on technical design	
	67%	51%
<b>Knowledge Management</b>	Designers and sourcing collaborate on technical design	
	65%	56%
	Centralized management of data and information:	
	<ul style="list-style-type: none"> <li>▪ 48% line planning and calendaring</li> <li>▪ 48% design sketches, digital images and artwork</li> <li>▪ 24% RFQ and tech packs</li> <li>▪ 52% cost sheets and bill of materials</li> <li>▪ 29% factory profiles and supplier scorecard</li> </ul>	<ul style="list-style-type: none"> <li>▪ 22% line planning and calendaring</li> <li>▪ 28% design sketches, digital images and artwork</li> <li>▪ 14% RFQ and tech packs</li> <li>▪ 28% cost sheets and bill of materials</li> <li>▪ 14% factory profiles and supplier scorecards</li> </ul>
<b>Technology</b>	Commercial software providing the following capabilities:	
	<ul style="list-style-type: none"> <li>▪ 48%, product line planning</li> <li>▪ 65%, technical design management</li> <li>▪ 57%, material management</li> <li>▪ 47%, costing management</li> </ul>	<ul style="list-style-type: none"> <li>▪ 39%, product line planning</li> <li>▪ 48%, technical design management</li> <li>▪ 32%, material management</li> <li>▪ 29%, costing management</li> </ul>
	Software solutions that integrate the following capabilities:	
	<ul style="list-style-type: none"> <li>▪ 48%, technical design, materials management, costing and sourcing</li> <li>▪ 38%, line planning, demand planning and supply planning</li> </ul>	<ul style="list-style-type: none"> <li>▪ 16%, technical design, materials management, costing and sourcing</li> <li>▪ 24%, line planning, demand planning and supply planning</li> </ul>

Source: Aberdeen Group, August 2009

#### Fast Facts

Compared to all competitors, Best-in-Class companies are:

- √ 2.5-times as likely as their competitors to have designs placed under change control once technical design is complete
- √ 1.9-times as likely as their competitors to centrally manage cost sheets and BOM
- √ 78% times more likely than their competitors to implement commercial software for material management

## Case Study — A Wholesaler's Story

*In another conversation, this time with a leathersgoods wholesaler with design through delivery responsibilities, we gained greater insight into the implications on the business by running design to delivery processes the "old way". Because the insight was so compelling, we published a five part series to our [Product Innovation Insights Blog](#). The following is an excerpt from the [summary post](#) of that five part series with links below to the individual posts.*

- **Introduction:** In this [post](#), we introduced a specific stakeholder at the wholesaler who held responsibilities across the front end of the process related to design, sourcing, costing and supply collaboration. This broad role allowed this individual to gain visibility into issues that are commonly hidden in other organizations because her responsibilities are spread across many functional roles.
- **The process:** Next we dove into the [process](#) this stakeholder drives ranging from line planning and technical design to request for quotation and supply collaboration. Prime challenges were the rate of change and speed of decision making.
- **Documents and spreadsheets:** From a [technology](#) perspective, this wholesaler uses documents, spreadsheets and emails repeatedly throughout the process. This wouldn't be an issue if not for the fact that external participants and the rate of change make manually tracking modifications and decisions highly difficult.
- **Enterprise solutions:** Next, we looked at how today's [enterprise solutions](#) hold promise to address the challenges inherent in the process. Specifically, collaboration through the firewall and version and access control address the concerns around rate of change and external participants.
- **Business implications:** Last, we looked at the [business implications](#) of these solutions. This particular wholesaler reviewed and considered a \$250K proposal for a PLM solution but declined to make the change. There are benefits to such a solution, but the advantages must be translated to your specific business. A few of the implications for this wholesaler were discussed.

Finding a way to be successful in this industry during the recession is tough. Investing in such a solution can be risky. Our research is aimed at providing more statistical evidence on exactly what sort of business impact these solutions can have on day to day business.

*Even though we've published this report from this study's survey, we will continue to publish more findings from the survey over time. If you want to contribute, simply follow this link and take the 10 minute [survey](#).*

## **Process and Organization Traits of the Best-in-Class**

When it comes to processes and organizational characteristics, the differences between the Best-in-Class and all others are a focus on clearer communication and execution of processes as well as collaboration for reduced product costs:

- **Technical designs under change control.** With a rapid pace of change, it's easy to lose track of which version is latest. Once that boundary is crossed, the chance that subsequent decisions might be made off old or incorrect design information increases dramatically. The Best-in-Class avoid this scenario by placing the technical design under change control, a set of rules that govern and document how changes are approved and stored. That way, they explicitly understand who, what, why, and how changes were made. Interestingly, the percentage of all others that notify stakeholders of change is higher than the percentage of those that place the technical design under change control. Unfortunately, stakeholder notification without change control is often ad-hoc and prone to error and miscommunications because the right version of the technical design is explicitly and rigidly documented. These capabilities support the design locally and integrated product development strategies defined in Chapter One.
- **Sourcing and supplier collaboration to cut product costs.** Because margins are so thin in the apparel and footwear industry, a premium focus is placed on lowering product costs. The Best-in-Class are doing so by collaborating closely with internal sourcing stakeholders as well as external suppliers to take cost out of the products. Specifically, technical designers work with sourcing to make adjustments that either explicitly take costs out of the product, make modifications such that a wider set of suppliers can be considered or make changes so suppliers can deliver at a lower pricepoint. Additionally, technical designers collaborate with suppliers to conduct multiple what-if scenarios of changes that could take further cost out of the product yet still meet original trend and revenue profile targets. These capabilities support the supplier co-design strategy described in Chapter One.
- **RFQ process and tech pack standardization.** Processes that are highly creative and variable in nature often must be ad-hoc in nature. Alternatively, processes and deliverables that are run or created on a highly repetitive basis lend themselves to standardization and automation. The latter is the case with the sourcing process in that it has the same steps, information and result every time. Similarly, tech packs, which are provided to bidding suppliers so they can respond to the RFQ, often provide the exact same types of data and information every time. The Best-in-Class have standardized both the RFQ process and the definition of the tech packs for quicker and more consistent execution and results from their processes. These characteristics support the smaller yet more frequent order strategy defined in Chapter One.

“In order to successfully collaborate with our suppliers, we have iterations within the quotation process. During the quotation process, alternate fabrications or trims are proposed by the supplier.”

~VP IT

Apparel Manufacturer

### **Knowledge Management: Centralization for Integration**

Because the development cycles are so short and the pace of change is so high for the apparel and footwear industry, it's easy for changes to not be communicated to all of the effected stakeholders. When those changes aren't communicated, one or more stakeholder's calculations are incorrect. As a result, the product is off-schedule, off-trend and as a result, less profitable.

The Best-in-Class are mitigating these risks by centrally managing sets of knowledge and information. This 'single source of truth' approach means that stakeholders have accessibility and know the location of the most up to date information about the product.

In the end, centralized management of these sets of information reduces stakeholder's errors and enables quicker and more confident decisions. This is an important step towards an integrated product development strategy, as outlined at the end of Chapter One, which helps on-time, on-cost and on-trend product launches.

“Currently, our Bill of Materials (BOMs) are maintained by the manufacturing factory. We are working to use PLM to store our BOM at the corporate level for our footwear products. If this can be done, we can have a standardized material database. This will allow us to use the same materials with the same specification and part number. Essentially, our plan for the future is to expand the use of PLM to control the introduction of products and materials that are used in them. We want to have a common material library and be able to track the revisions and material status.”

~Director of Engineering

Footwear Manufacturer

#### **Case Study — Timberland**

*During our research, we talked with Timberland to understand how they had progressed since we talked with them during our last research study in this space called from Aberdeen's [PLM for the Fashion, Apparel, and Footwear Industries](#) (January 2008). Below is an excerpt from the case study post that was published to our [Product Innovation Insights Blog](#).*

Last year, in the [PLM for the Fashion, Apparel, and Footwear Industries](#) report, we included a case study on Timberland and their adoption of PLM to monitor the development process and manage specifications. By using PLM to manage their specifications, it has meant a big improvement in reducing clerical work and in controlling data. With factories and suppliers spanning the globe from the Dominican Republic to China, Vietnam and Thailand, a PLM solution is essential. “PLM means we have access to the same information all the time, and we all know that we are accessing the most up to date information,” explains the Director of Engineering at Timberland's Recreational Footwear Company division. “We develop probably 4,000 different SKUs per year, so just managing that would be a nightmare any other way.”

Last year, Timberland rolled out an initiative to store their Bill of Materials (BOMs) within their PLM in order to standardize their material database at the corporate level. In doing so, it would facilitate all Timberland manufacturing facilities to use the same materials with the correct specification and part number. Successfully accomplishing this would result in a substantial decrease in rework and scrap across all the facilities, provide corporate greater visibility into the production process for correct pricing and sourcing and provide leverage to negotiate prices with suppliers.

## **Technology: Commercial Integrated Software Solutions**

Because of the pace of change in the apparel and footwear industry, process, organizational and knowledge management changes can only get a company so far. At some critical threshold, even staff members making manual changes to data and information simply gets overloaded. As a result, many have turned to more advanced technology to help. The Best-in-Class are taking specific approaches in this respect:

- **Commercialized software.** More than most others, the apparel and footwear industry is well known for its extensive use of spreadsheets to support their business processes. Fully 54% of the respondents for this study use them as the system of record. But furthermore, others in the industry, including 49% from this study, have developed their own homegrown systems in an effort to advance the support for their processes. The difficulty is in the ease at which solution providers of commercial software can surpass an apparel and footwear company to develop new functionality and adopt advanced technology in homegrown systems. Apparel and footwear companies have neither the core competencies nor the resources to keep up with the advances in fundamental technologies that commercial enterprise solutions are readily adopting and assimilating today. As a result, the Best-in-Class adopt commercial solutions at a higher pace across many functional responsibilities and process areas including: product line planning, technical design management, material management and costing management. This lets them take advantage of investments in new functionalities, such as visual or graphical line planning, as well as new technologies, such as thin web clients that are highly functional in low network latency locations.
- **Integrated capabilities.** In addition to adopting commercial software solutions, the Best-in-Class have a keen eye on integration of capabilities across functional roles. This mainly includes data and information that is highly interrelated but also highly dynamic in nature. The importance is that as one piece of information changes, its impact is propagated in an automated fashion to all of the other pieces of information dependent on it. Why is this important? Because with the high pace of change, stakeholders need to immediately understand when something that their calculations are dependent upon changes. Otherwise delivery dates are off, profit calculations are off, and designs are off-trend.

In some cases, the adoption of technology can be attributed to supporting a single strategy or initiative pursued at a higher rate by the Best-in-Class. In this case, the central capabilities that these technologies support, such as integrated collaboration and communication, support a wide range of strategies and initiatives identified in Chapter One.

“We have a heavy reliance on excel spreadsheets. For users, it acts like PDM on the desktop with complete flexibility. However, different facilities have purchased various PLM solutions. The good news is that the user community realizes that a full blown centralized database and secure access offers improved efficiencies.”

Director of IT, Fortune 500  
Apparel Manufacturer

“In the past, we used a homegrown system for line planning. Between freehand drawings and files located on separate servers, we needed a central repository for our information. Two years ago, we implemented a PLM system for the entire design process. The PLM system has allowed us to have more accurate tech packs and databases. It has greatly helped with collaboration and facilitating design changes. In general, the system has met our needs and the enhancements make it only better.”

~SMB Apparel Manufacturer

### Aberdeen Insights: Is it PLM, SRM, SCM or ERP?

During the course of the development of this research study, we've had the chance to talk to a wide variety of practitioners in the fashion industry as well as the solution providers that offer technology. What's most interesting is that a single question repeatedly cropped up again and again.

*What is PLM? Is this solution a part of SRM, SCM or ERP?*

There is confusion between practitioners and solution providers alike around this solution. Most would agree that the answer, at least in part, is that PLM has subsumed Product Data Management (PDM) which centrally manages a variety of product and process data and information. However most of the confusion isn't around where PLM begins, but where it ends. It comes in part from the breadth of the solutions offered in this industry. PLM solutions in the discrete manufacturing industry have well defined boundaries where Supplier Relationship Management (SRM), Supply Chain Management (SCM), Warehouse Management Systems (WMS), Transportation Management Systems (TMS) and Enterprise Resources and Planning (ERP). That is mainly because the solution providers of these offerings evolved alongside one another, recognizing spaces they could not or did not want to compete in as their core competency.

However in the fashion industry, the competition is wide open because of the lack of adoption of these solutions, with perhaps the exception of SCM and ERP solutions. As a result, the solutions end up as combinations of PLM and SCM, PLM and TMS, PLM and ERP and far more combinations. Many practitioners are left wondering where to begin when it comes to technology. For you, I have this advice.

*You don't need to define a catchy acronym to make technology work for you.*

Guidance from prior Aberdeen studies such as [\*Getting the Process Right: A Fresh Look at PLM and Product Development\*](#) (September 2008) and [\*Profiting from PLM: Strategy and Delivery of the PLM Program\*](#) (July 2007) hold true:

1. Define a strategy of initiative that will drive accomplish a business objective
2. Determine the changes that need to be made at a tactical level, such as process change
3. Identify and deploy the technology that supports those tactical changes

And in the end, you'll find you don't have to define PLM. You just need to make the technology work the way you need it too, regardless of the acronym associated with it.

## Chapter Three: Required Actions

Whether an apparel or footwear company is trying to move its performance in design to delivery operations from Laggard to Industry Average, or Industry Average to Best-in-Class, the following actions will help spur the necessary performance improvements:

### Steps to Success for All Others

- **Place designs under change control with stakeholder notifications.** After the technical design phase, the Best-in-Class put their design under change control, following strict rules on when, who, how and why the deliverables are changed. In fact, the Best-in-Class are 2.5-times as likely as their competitors to place designs under change control once the technical design is complete. With change under control, they notify critical development stakeholders when the deliverables are modified so they can update their information as necessary.
- **Standardize the RFQ process and tech pack definitions.** The Best-in-Class are twice as likely to do this. Because the bid process is executed so repetitively and tech packs are created so frequently, the Best-in-Class have standardized both the process and deliverable in an effort to accelerate both the execution of the process and the award decisions.
- **Centrally manage planning, design and costing deliverables.** Because the pace of change is so rapid, it's easy for stakeholders to fall behind and base their work on out-of-date information. The Best-in-Class avoid this issue by managing and providing access to a variety of deliverables in a centralized location. This way, any stakeholder in the process can gain insight into the latest information and ensure their work is up-to-date. The Best-in-Class are 2.2-times as likely as their competitors to centrally manage their line planning and calendaring.
- **Adoption commercial solutions for line planning, design, material and costing management.** The Best-in-Class are 62% more likely to invest in commercial solutions for costing management. Many in the apparel and footwear industry have used both spreadsheets and homegrown solutions for design through delivery processes. The Best-in-Class have adopted commercial solutions to leverage both new functionalities as well as new technologies to the benefit of their business.

### Best-in-Class Steps to Success

- **Centrally manage sourcing and quality information.** While the Best-in-Class are more likely to centrally manage sourcing and

#### Fast Facts

- √ Centrally manage and control all information that is used and created during the technical design phase
- √ Leverage commercial solutions for line planning, design, material and costing management
- √ Integrate design, materials, costing, and sourcing capabilities - integration between functional areas is important

“To better collaborate between the different organizations, sourcing is involved in the earliest discussions of the product design. In addition, designers and developers travel to suppliers / factories early in the design cycle.”

~ Business Process Manager

Apparel Manufacturer

quality information and knowledge centrally, the practice has not been widely adopted. In fact, only 24% of the Best-in-Class do this. For these deliverable specifically, the Best-in-Class can gain more of an advantage by centrally managing these items to remove miscommunication and errors from their processes.

- **Integrate design, materials, costing and sourcing technology capabilities.** While deploying commercial software solutions provides an advantage in capability and technology, integration between functional areas is also important. Only 48% of the Best-in-Class integrate these technology capabilities. Changes made to the design often impact materials management. The Best-in-Class have adopted integrated solutions or modules specifically around design, materials, costing and sourcing to address this need.
- **Integrate line, demand and supply planning technology capabilities.** Additionally, the Best-in-Class also integrate technologies between line planning, demand planning and supply planning due to the interrelated nature of this data and information. Only 38% of the Best-in-Class are integrating line, demand and supply planning technology capabilities. By doing this, it will allow the top performers to gain a critical advantage because this up-front planning directly impacts the business success or failure of products.

#### Aberdeen Insights: Making it your own...

When it comes to investing in enterprise solutions for an industry that is risk adverse and conservative, many executives approach the precipice of change and ultimately walk away. This was certainly the case with the Wholesaler highlighted in the five part series to our [Product Innovation Insights Blog](#) (the [summary post](#) can be found here). They considered a \$250,000 solution and decided not to act. Ultimately any return on investment or cost justification can be picked apart or undercut if the real value is not clearly understood.

But, in an interesting contrast, other executives are choosing a more aggressive stance. "There wasn't any impending event that instigated the change," says a CIO at an apparel and footwear manufacturer. "When the economic downturn happened, we saw it as an opportunity. We snapped up some good people with process and system knowledge and started the initiative." This CIO led the deployment of an integrated mix of PLM, CAD and visualization that met great success. In the beginning, their goal was to achieve positive Net Present Value (NPV) after three seasons. And while this CIO won't share the specific numbers, she adds "meeting those expectations wasn't a problem."

The point here is that while examples from the industry are good in understanding what technology can do, ultimately you have to figure out how it will positively affect your business. In short, you have to make it your own.

## Appendix A: Research Methodology

Between May and August 2009, Aberdeen, conducted an in-depth examination of design-to-delivery strategy, experiences and plans of 73 key actors in the fashion, apparel and footwear enterprises.

Aberdeen supplemented this online survey effort with interviews with select survey respondents, gathering additional information on PLM strategies, experiences, and results.

Responding enterprises included the following:

- *Job title:* The research sample included respondents with the following job titles: Executive Level (23%), EVP / SVP / VP (8%); Director (14%); Manager (20%); Engineer (5%); and other (30%).
- *Industry:* The research sample included respondents from the following industries: apparel (45%); retail (34%); wholesaler (5%); and other (16%).
- *Geography:* The majority of respondents (63%) were from North America. Remaining respondents were from Europe (13%); the Asia-Pacific region (22%), and other (2%).
- *Company size:* Twenty-three percent (23%) of respondents were from large enterprises (annual revenues above US \$1 billion); 47% were from midsize enterprises (annual revenues between \$50 million and \$1 billion); and 30% of respondents were from small businesses (annual revenues of \$50 million or less).
- *Headcount:* Thirty-two percent (32%) of respondents were from large enterprises (headcount greater than 1,000 employees); 39% were from midsize enterprises (headcount between 100 and 999 employees); and 32% of respondents were from small businesses (headcount between 1 and 99 employees).

### Study Focus

Responding apparel and footwear executives completed an online survey that included questions designed to determine the following:

- √ What processes are being taken to develop product agility?
- √ The actions these companies take to optimize their design-to-delivery process
- √ The capabilities and technology enablers they have in place to support and optimize their design-to-delivery process

The study aimed to identify emerging best practices for PLM usage in the fashion, apparel, and footwear industry, and to provide a framework by which readers could assess their own management capabilities.

**Table 4: The PACE Framework Key**

Overview
<p>Aberdeen applies a methodology to benchmark research that evaluates the business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes. These terms are defined as follows:</p> <p><b>Pressures</b> — external forces that impact an organization’s market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)</p> <p><b>Actions</b> — the strategic approaches that an organization takes in response to industry pressures (e.g., align the corporate business model to leverage industry opportunities, such as product / service strategy, target markets, financial strategy, go-to-market, and sales strategy)</p> <p><b>Capabilities</b> — the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products / services, ecosystem partners, financing)</p> <p><b>Enablers</b> — the key functionality of technology solutions required to support the organization’s enabling business practices (e.g., development platform, applications, network connectivity, user interface, training and support, partner interfaces, data cleansing, and management)</p>

Source: Aberdeen Group, August 2009

**Table 5: The Competitive Framework Key**

Overview	
<p>The Aberdeen Competitive Framework defines enterprises as falling into one of the following three levels of practices and performance:</p> <p><b>Best-in-Class (20%)</b> — Practices that are the best currently being employed and are significantly superior to the Industry Average, and result in the top industry performance.</p> <p><b>Industry Average (50%)</b> — Practices that represent the average or norm, and result in average industry performance.</p> <p><b>Laggards (30%)</b> — Practices that are significantly behind the average of the industry, and result in below average performance.</p>	<p>In the following categories:</p> <p><b>Process</b> — What is the scope of process standardization? What is the efficiency and effectiveness of this process?</p> <p><b>Organization</b> — How is your company currently organized to manage and optimize this particular process?</p> <p><b>Knowledge</b> — What visibility do you have into key data and intelligence required to manage this process?</p> <p><b>Technology</b> — What level of automation have you used to support this process? How is this automation integrated and aligned?</p> <p><b>Performance</b> — What do you measure? How frequently? What’s your actual performance?</p>

Source: Aberdeen Group, August 2009

**Table 6: The Relationship Between PACE and the Competitive Framework**

PACE and the Competitive Framework – How They Interact
<p>Aberdeen research indicates that companies that identify the most influential pressures and take the most transformational and effective actions are most likely to achieve superior performance. The level of competitive performance that a company achieves is strongly determined by the PACE choices that they make and how well they execute those decisions.</p>

Source: Aberdeen Group, August 2009

## Appendix B: Related Aberdeen Research

Related Aberdeen research that forms a companion or reference to this report includes:

- [\*The Top Five Principles of Successful Product Development\*](#); February 2009
- [\*Getting the Process Right – a Fresh Look at PLM and Product Development\*](#); September 2008
- [\*PLM for the Fashion, Apparel, and Footwear Industries: Enabling Speed and Responsiveness, Delivering Higher Profitability\*](#); January 2008
- [\*Profiting from PLM: Strategy and Delivery of the PLM Program\*](#); August 2007

Information on these and any other Aberdeen publications can be found at [www.aberdeen.com](http://www.aberdeen.com).

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