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Geek meets chic: Four actions to jump-start advanced analytics in apparel

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Success in the apparel industry relies on carefully balancing art and science, yet companies lag behind in the digital revolution. Here's what they can do to catch up.

The retail landscape is going through an undeniably titanic shift. Channels are proliferating, new direct-to-consumer and online pure-play companies are rapidly capturing market share, and consumers are expecting far more from their retailers in personalized marketing and products. With the rate of change accelerating, many retailers are struggling to keep up. In this environment, data has become one of the core competitive advantages. We believe the winners will be the ones that can best harness data to inform core business decisions—and advanced analytics is a critical lever to make that happen.

In recent years, advanced analytics has become a core component across a wide range of consumer-

facing industries to address increasing complexity. Companies in grocery, hospitality, consumer packaged goods, and financial services have shown that advanced analytics can accelerate their businesses, support smarter decision-making, strengthen relationships with their consumers, and improve team management. Perhaps most important, many are using advanced analytics at scale to produce unique insights that fuel performance improvement. Digital companies—with Amazon leading the pack—are at the forefront, constantly finding new and innovative ways to apply analytics throughout the value chain, from merchandising to marketing to operations to human resources.

The apparel industry, comparatively, lags behind in embracing analytics, often favoring merchant- and designer-driven “gut feel” over insight-driven decision-making. Apparel players point to several core challenges as constraints for investing in their analytics capabilities, including poor data quality, a rapidly changing assortment and competitive landscape, high SKU and logistics complexity, and limited analytics expertise within the current employee base. Still others hang back under the belief that transformations entail a three- to five-year tech overhaul and Amazon-level resources or operational capabilities.

A number of successful apparel wholesalers and retailers have begun to crack the code on analytics—and they are now seeing material benefits. We regularly witness specific analytics applications increase top-line sales or improve the bottom line by 2 to 10 percent, with larger transformations achieving a more than tenfold return on investment.

Therefore, it is important for players to develop an approach that revolves around demonstrating the value of specific use cases and then scaling accordingly. In working with a wide range of fashion retailers and wholesalers, we have identified four best practices that apparel executives should consider when seeking to establish advanced analytics as a core driver of their operating model. These actions can enable apparel makers to lay a solid foundation on which to extend advanced analytics throughout the enterprise.

1

Not everything matters: Prioritizing to win

While apparel is an inherently creative industry, it has historically required some level of analytics to run the business. To date, however, these analytics have been highly siloed within different functions—such as planning, finance, and marketing—with little coordination or information sharing across functions. With analytics sitting in so many

places, it can be difficult for apparel companies to thoughtfully invest to build their capabilities. As a result, advanced analytics capabilities rarely reach the scale or level of insight required to create a competitive advantage.

To effectively enhance analytics capabilities, apparel players need to first decide where analytics will achieve the greatest business impact. A cross-functional road map should be developed to make the tough decisions on where analytics matter most. Companies should scan all areas of the business to identify the largest advanced analytics opportunities, as well as those that are most critical to the organization’s strategy (Exhibit 1). These opportunities should be focused directly on business outcomes versus simply developing insights.

One specialty apparel retailer, for example, used analytics to achieve one of its core strategic objectives: building a tailored assortment that meets the needs of its core customers. With this goal in mind, the organization rapidly prioritized the specific opportunities—assortment, space and display tailoring, store clustering and localization, demand forecasting, inventory planning and allocation, and user-experience personalization and optimization. By better understanding its shoppers’ key pain points, the retailer was able to identify a set of high-priority opportunities, such as trend analytics and demand forecasting.

Once these high-priority opportunities have been identified, functional teams can build individual use cases. To be successful, use cases must be well-defined and specific. The best ones solve a particular business problem and achieve a measurable benefit by applying advanced analytics. For example, assortment optimization is far too broad a use case to be effective. Instead, teams should consider two things: first, how they want to optimize the assortment, such as improving a mix of basics versus fashion, establishing ideal size curves by product category, or balancing price points; and, second,

EXHIBIT 1

We regularly see specific applications of analytics use cases drive meaningful increases in the bottom and top lines.



what the business impact will be, such as increasing availability of popular items to increase sales or reducing excess inventory and markdowns. These more specific problems could then be crafted into individual use cases.

Once use cases are identified, they need to be prioritized. Trying to pursue each of the advanced analytics use cases simultaneously is the fastest way to fail. While some use cases may have a massive financial impact, we often find that the largest opportunities are more complex and require significant time and investment. Likewise, some use cases are smaller in scale but can be implemented quickly. Ideal analytics road maps balance quick, impactful wins with longer-term, more complex investments.

If organizational acceptance or approval is a major concern, automating manual processes (such as consolidating performance reports) as a first step can win buy-in. It provides productivity benefits for the business and frees up employees to focus on higher-value activities. For example, many apparel retailers have looked to replace the painstakingly manual store allocation process with analytics models that assign inventory while maximizing margins and reducing opportunity cost.

2**It's all about data: Extracting privileged insights**

One of the first and most frequent challenges that apparel players face when they begin an advanced analytics journey is discovering the limits of their data. A retailer's data can be a treasure trove of insights if used appropriately, but many of the unique aspects of apparel—including an ever-changing assortment, rapidly changing trends and product attribute needs, and nonstandardized SKU-naming processes across wholesale customers—often result in relatively poor data collection and quality on product attributes, customer behavior, and supply chain history.

Instead of seeing data as a limitation, building the appropriate data ecosystem—the sources and governance of a company's data—should be a core piece of an advanced analytics journey. Data sources should be expansive, but prioritization should be guided by target use cases. For example, an apparel retailer that wants to focus on assortment optimization may accelerate the enhancement of its merchandising hierarchy and attributes but deprioritize updates to its supply chain and customer databases. By grounding the data strategy in business use cases, apparel players can ensure

that data investments are directly tied to business outcomes.

Data can be enhanced within a single use case over time (Exhibit 2). Consider, for example, an apparel retailer that is looking to enhance its personalized messaging in customer relationship management campaigns but lacks a comprehensive customer data platform. Initial pilots can start with whatever data is available—such as recent shopping behavior—and expand over time to include email engagement, online browsing behavior, coupon usage, and demographics. Adding external data to get a comprehensive view of customer behavior can push the insights further. For example, social media activity, market data (Experian and NPD, for instance), third-party product reviews, and other data points can all be integrated to develop a comprehensive set of insights to better serve customers.

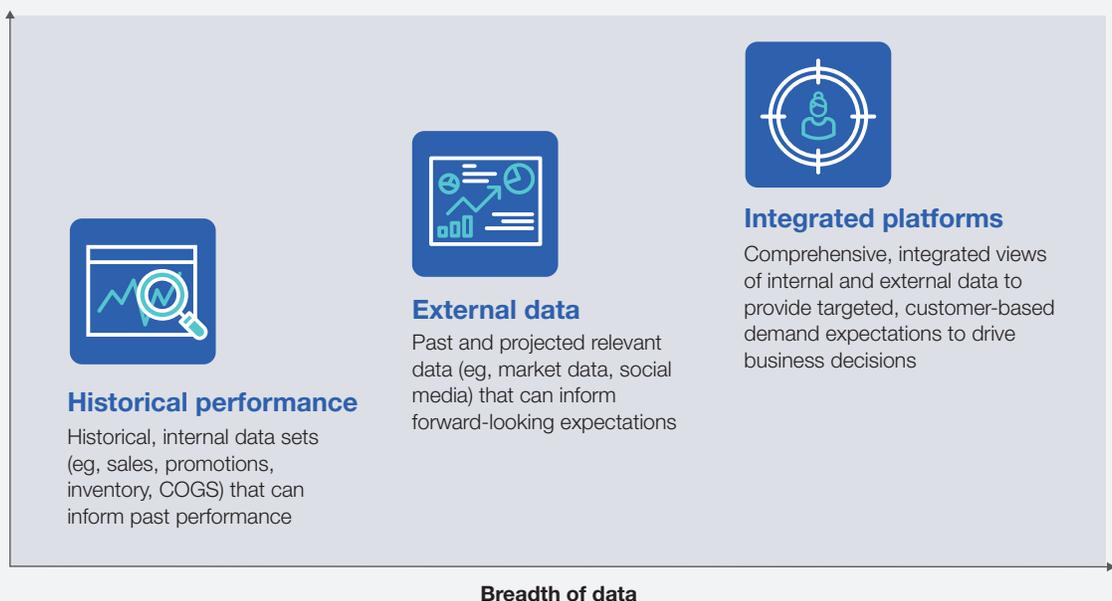
As additional data sources are layered in, new use cases can be introduced. For example, initial data might simply identify customers who are highly likely to shop; over time, however, these models can be enhanced to determine what those customers will shop for, when they will shop, and how much they will buy.

No matter the starting point, data availability and quality are not valid excuses to delay the development of advanced analytics capabilities. In fact, by starting with data that are already available, apparel players can learn more about their data quality and gaps. This, in turn, helps better inform their IT priorities, including how much data history is needed at what level of detail or aggregation, as well as how often it's updated. The key is to build a use case road map around the organization's current data capabilities and enhance them over time, which then enables the business to pursue more complex use cases.

EXHIBIT 2

Data can be enhanced over time to develop a comprehensive customer data platform.

Level of insight



3

Chase the value, not the calendar

At most apparel companies, the seasonal calendar is the dominant operating rhythm of the business. At any given time, the organization is simultaneously selling one season, producing another, and designing for yet another. These long lead times too often expand beyond product development—innovation can become pegged to these seasons as well, and timelines for projects can extend over long periods due to the need to navigate calendar-driven capacity constraints.

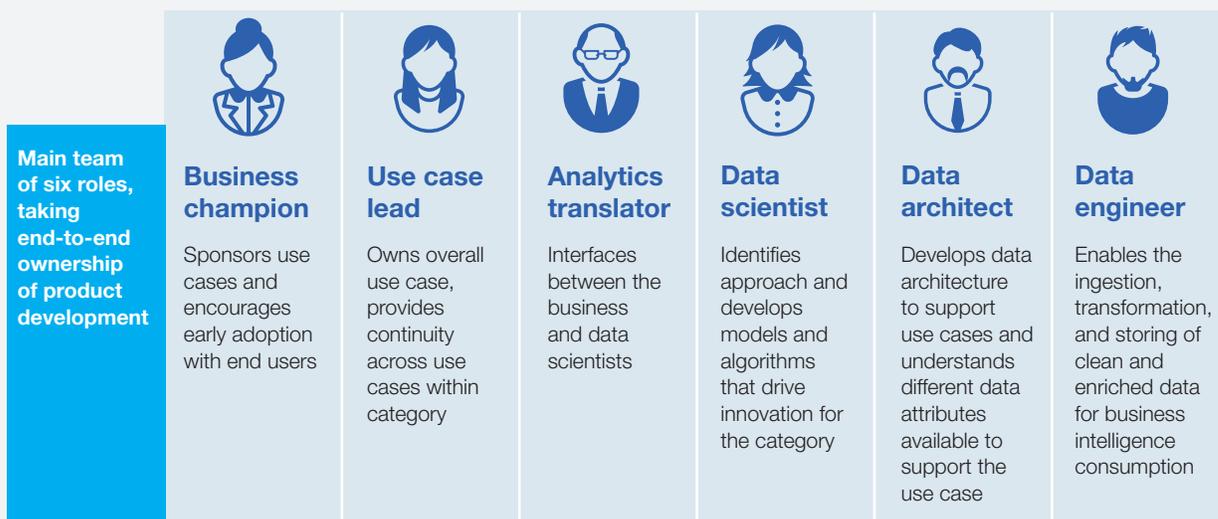
Instead, analytics can totally transform apparel players' ways of working. Using an agile operating model to pursue analytics use cases dramatically accelerates time to impact. Agile models use short, structured "sprints" to accelerate impact and keep business owners engaged. For example, a specialty apparel player recently used an agile approach to launch its e-commerce business,

building cross-functional "pods" of 10 to 12 people from development, analytics, merchandising, and marketing to rapidly test new user experiences and pursue growth (Exhibit 3). While agile pods are not applicable in all circumstances, apparel organizations should look to incorporate sprints in their analytics road map to create rapid test-and-learn capabilities.

One of the most important features of an agile approach is emphasizing output versus process: teams should feel autonomous enough to shift direction if something is not working. Furthermore, an agile approach emphasizes progress over perfection—sprints are designed to produce prototypes, which can then be tested in real business settings as quickly as possible. This model is a huge departure from the calendar-driven world in which most apparel players operate, where all steps in the process are carefully planned months—if not years—in advance. Shifting to a more rapid operating model may be the hardest change to manage in this journey, but it will substantially accelerate the analytics road map.

EXHIBIT 3

A high-functioning use case squad has six key roles that draw flexible resources from other functions and third parties.



Main team can pull flexible resources from other functions (eg, marketing, legal) and third parties (eg, design and engineering firms, manufacturing partners, testing firms).

4

Designers versus data scientists: Winning the talent battle

Apparel players have long had to balance tensions between creative-minded design teams, consumer-focused merchant organizations, and efficiency-oriented operations teams. Apparel is a fundamentally art-based business that will always require creative direction to ensure that products remain innovative, relevant, and beautiful for the consumer. Investing in analytics and technical skill sets—for example, data scientists and architects, as well as coders and developers—will certainly be an important aspect of an advanced analytics

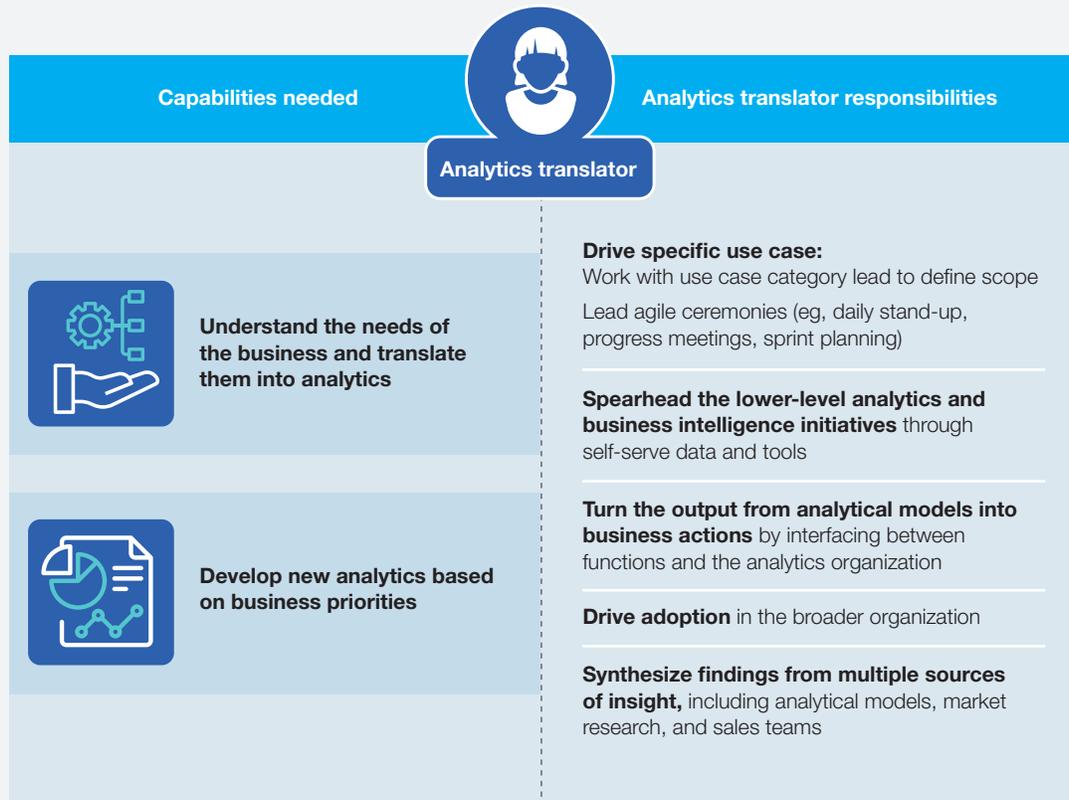
transformation. But apparel players should place additional emphasis on finding and training analytics translators within their organization.¹

Translators become the cross-functional glue that helps infuse analytics throughout the organization, combining a deep understanding of the apparel industry with general technical fluency, product management skills, and an entrepreneurial mindset (Exhibit 4). While translators will not be the ones building analytics models or data architecture, they will be critical for ensuring that analytics investments are translated to action, ultimately generating value for the business.

¹Nicolaus Henke, Jordan Levine, and Paul McInerney, "You don't have to be a data scientist to fill this must-have analytics role," *Harvard Business Review*, February 5, 2018, hbr.org.

EXHIBIT 4

Analytics translators are becoming an increasingly important function.



Apparel companies typically use a combination of internal skill-building and targeted recruiting to assemble a bench of analytics translators. When developing internal skills, many organizations have established translator curriculums to train their teams. We also often see apparel players develop translators within their planning and merchant functions, as these areas typically employ basic analytics in their day-to-day activities. By including these groups in the creation of the analytics road map from day one, apparel companies can both ensure the road map is aligned with business objectives and help to facilitate buy-in among their peers.

In addition to internal skill-building, companies should put in place a robust external recruiting plan (such as skill sets, job descriptions, target sources) tailored to their specific needs to fill in additional gaps. The use of third-party resources

can be an effective change agent or interim option to complement early internal leaders and support capability building.



The apparel landscape is changing rapidly. Consumers are more demanding in their need for an end-to-end, personalized offering; complexity has never been higher across assortments and channels; and competition continues to increase from nimble and new digital-native brands. Advanced analytics can further help apparel companies tackle these challenges, turning even the most complex use cases into opportunities for growth. ♦

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