



A N A L Y S T C O N N E C T I O N



Ivano Ortis
Vice President

Why Retail Analytics Are a Foundation for Retail Profits

April 2017

Success in retail analytics requires coordination across key roles and processes as well as up and down each organization. Executives have to discharge critical responsibilities with skillful organizational coordination and domain acumen. They must drive analytics adoption grounded in the belief that their initiatives are critical for gaining and sustaining success in navigating the digital transformation of retail.

The following questions were posed by SAP to Ivano Ortis, vice president of IDC Retail Insights in Europe, on behalf of SAP's customers.

Q. Retail is fundamentally changing as stores, ecommerce, fulfillment, and assortment strategies change to deliver omni-channel customer experiences. What are the top 3 strategies for retail profitability?

A. It is all about insights, speed, and agility.

The first key strategy involves **insights** into customers and products to understand the context across complex and dynamic customer journeys and product life cycles. It uses customer insights everywhere — both anonymous and loyalty customers — to drive better, more personalized, more profitable product ranging and fulfillment decisions. The insights strategy entails a more intelligent use of information — for example, inventory data. No matter stock location, warehouse, distribution center, or store, achieving omni-channel inventory visibility is foundational. Using this capability for intelligent order orchestration, more flexible logistics, and last-mile delivery is fundamental to achieving profit targets. Therefore, insights must embrace all aspects of retail — operations, product, and customer — to enable endless aisle approaches with reduced operational costs, higher sales close rates, and improved fulfillment performance.

The **speed** of change, in other words the pace of implementing innovation at scale, is the second key strategy. As James F. Nordstrom, Jr., executive vice president of Nordstrom, said, "The better job we do in all our stores — but particularly our higher-traffic stores — of showing the customer something new, giving them a reason to buy something new, the better our business is." Outdated business models, company cultures, and organizational structures can hinder the speed and the impact of retail digital transformations and omni-channel strategies. Consider, for example, working on a new micro-merchandising strategy while organizational silos still exist. Or consider a merchandise- and buying-centric organization that cannot

leverage new capabilities quickly enough. This results in very long projects (two to three years), missed opportunities, and higher implementation costs. Also, the lack of a technology road map and a formal innovation model across discovery, selection, pilot, and implementation can result in slow time to market and higher costs. Thus, improved collaboration; a unified, real-time information and analytics landscape; and a new commerce platform are necessary for retailers to succeed in the next decade.

Agility refers to the ability to be flexible and efficient when responding to changing business requirements, customer expectations, and competitive dynamics. To execute current and future customer journeys effectively and efficiently, retailers need a new unified and flexible customer experience architecture. This architecture will provide a seamless composition of customer services leveraging information (customer, product, inventory), processes (merchandising, supply chain, commerce), and channels consistently. The foundational elements of the new customer experience architecture are data lakes, advanced analytics (predictive analytics, machine learning, artificial intelligence), and a retail omni-channel commerce platform.

Q. New merchandising archetypes are emerging. While buying, merchandise, and assortment planning remain at the heart of retail, what are the key directions and how can analytics support core retail business constructs?

- A. Merchandise and assortment planning are the hub of retail product strategies and tactics. Buying, localization, pricing and promotion, merchandising, replenishment, and allocation for stores and ecommerce channels flow from the range and breadth of decisions made in these processes. A common element across most retail segments is that they become fast moving in a relentless drive to offer customers more options, whether products, services, or experiences. For example, the rate of new product launches is escalating to more than 50% of the product catalog for many retailers. Meanwhile, product life cycles accelerate and merchandise becomes old quicker. This requires faster and more granular assortment and buying decisions, which can drive significant payback in reducing working capital and unsold inventory (often worth hundreds of millions or even billions) and increasing sales. The result is a significant improvement in operating margins.

In response to these challenges, a new generation of merchandise and assortment planning processes has emerged. New efficiencies are achieved through more integrated and intelligent planning capabilities based on predictive demand analytics, enabling new collaborative planning, forecasting, and replenishment processes. This new integrated planning and analytics platform enables finance, merchandise planning, purchasing, sales, and demand planning to work within an integrated environment, synchronizing plans with consistent key performance indicators (KPIs) that leverage qualitative and quantitative data sources and predictive analytics. A broad body of IDC research demonstrates that organizations that introduce new analytics and metrics are much more likely to achieve better results than competitors that introduced one or neither of these capabilities. Retailers adopting next-generation merchandise planning are achieving a 5% increase in revenue and a 20% improvement in stock turns.

The shift in merchandising and assortment planning strategies signifies that retailers are moving away from product-centric to customer- and profit-centric planning. This is realized by delivering micro-merchandising strategies built around customer experience strategies; in other words, converging the merchandising genome with the customer genome.

Q. How are supply chain operations impacted, and what are the opportunities for omni-channel fulfillment and logistics?

A. The availability of sensor-based data on physical assets and the opportunity to transform machine data into usable information can deliver supply chain visibility in real time. The Internet of Things (IoT) and a new generation of analytics are driving transformational improvements across the supply chain and business operations. As fulfillment models change, industry evidence suggests that the introduction of ship-from-store options can generate savings of more than 30% (compared with traditional warehouse and distribution center fulfillment) thanks to lower transportation costs and better stock rotation. Likewise, an omni-channel approach for return management can reduce the cost of managing returns by over 50%.

To realize these benefits and achieve omni-channel order and fulfillment management capabilities, retailers should efficiently orchestrate in real time the movement of items across the supply chain. This movement can be driven by business rules linked to efficiency and effectiveness priorities. Omni-channel order and fulfillment management is a key enabler of retail profitability because it executes the optimal supply chain route for every order — again, based on insights, speed, and agility.

The key point is having a real-time, unified view of the inventory connected to the omni-channel commerce engine, a single transactional engine that processes orders regardless of channels. This ensures an efficient coordination of order capture and order configuration, providing a unified view of the customer and the inventory. IDC has observed that breakthrough analytics can be applied to generate insights that deliver a reduction of 20–30% in surplus stock and a 40% increase in forecast accuracy. However, effective planning without efficient operations is like strategy without execution. Thus, ensuring continuous efficiency improvements across order management, store operations, store workforce, and warehouse automation is imperative. Likewise, such improvements need to occur in supply networks as they change and extend; for example, with third-party last-mile delivery through new logistics platforms and shared-economy service providers.

Achieving customer experience differentiation is the goal and opportunity as this is built upon synchronized, seamless execution of connected tasks across supply chains, stores, ecommerce, mobile, logistics partners, and the extended business ecosystem.

Q. How is the new commerce reality changing customer engagement opportunities, and what will be the long-term impact?

A. The number of retail touch points is exploding along with customer expectations at each touch point. This is forcing retailers to address the need for customer intimacy on a scale and in a real-time time frame never seen before. Great consumer experiences will hinge on seamless, connected business processes that ensure simple, intuitive, and highly productive interactions.

One example is Ulta Beauty, a beauty specialty retailer in the United States. Ulta adopted several in-store mobile solutions that have contributed to reducing back-office work, allowing staff to be more productive and effective when serving customers. Integration between a mobile inventory application and other systems provides sales associates with real-time access to customer behavior and product information, enabling omni-channel customer engagement and commerce everywhere through inventory transparency across the supply chain. Associates can spend more time assisting customers and deepening relationships, helping the company achieve a year-on-year sales growth of 16.6% (as reported by the company in March 2017), while shares are up 70% in the past year.

IDC Retail Insights has identified over 20 technologies — including mobile point of sale (POS), retail mobile applications, self-service systems, connected consumer IoT technologies, and concierge commerce applications (artificial intelligence [AI] enabled) — that have different levels of adoption and impact on the business. These technologies allow retailers to capture new streams of data, understanding each customer's context to define relationships and personal preferences, and treat customers as individuals while improving commerce operations efficiency and reducing wait time.

A unified information lake makes available all the information from different sources, structured and unstructured. Retailers need to expand the rich offline data they hold to include the more dynamic aspects of the customer relationship — transactions and interactions across all channels, both traditional and digital; opinions and sentiment; customer-to-customer relationships; browsing and shopping basket contents; cart and checkout behavior; and delivery choices. Omni-channel analytics are a foundational element providing capabilities for real-time listening and triggering, behavior data capture, and sophisticated contextual analytics. Hyper-micro personalization delivers significant business benefits. For example, we have seen retailers improve conversion rates by 32% and increase repeat purchases by 65%.

In a recent interview with the *Financial Times*, Kasper Rorsted, CEO of Adidas, stated that the company's single most important store in the world is the dot-com store. Retailers will accelerate store transformation in sync with mobile-first, third-generation ecommerce strategies, turning fragmented customer journeys into a larger opportunity and delivering operational efficiencies and omni-channel profits. Retailers that are effectively driving omni-channel orchestration achieved a 2–4x increase in promotion return on investment (ROI) and a 65% lift in store visits.

Looking ahead, we see not only tremendous opportunities but also more disruptions for retail. Consider IoT commerce, the new digital commerce ecosystem that is rapidly emerging. Connected devices and the IoT are expected to account for over \$10 billion in revenue for the payment market by 2020. One part of the \$10 billion will be incremental to the current retail business, but the other part will be overlapping with the current market. This means that there is not only a large, new opportunity ahead but also a risk for established retailers to lose market shares to new entrants.

Furthermore, new digital ecosystem opportunities are being shaped by platform extension marketplaces. New business ecosystems are also emerging; for example, connected vehicles that will allow retailers to extend real-time interaction with customers in an omni-channel context when guided by predictive intelligence and real-time engagement.

Q. What does the future look like for analytics and the future of retail? Will retailers simply use more technology, or are they becoming technology companies?

A. As IoT transforms products, stores, and logistics, predictive analytics will support new levels of customer individualization and workforce efficiencies. Predictive analytics let retailers understand which communications channels, products, and pricing options will be most likely to elicit a response for each customer in a specific context. In the future, we envision AI becoming pervasive across customer journeys, supply networks, merchandising, marketing, and commerce, providing better insights for optimized retail execution.

Artificial intelligence will augment rules- and analytics-based decision systems and automate manual decisions and processes to new levels. AI can ingest high volumes of structured and unstructured data, understand what the data means and describes, reason through the data to predict outcomes and prescribe actions, interact with business teams, and explain itself in technical and nontechnical terms. AI can support decision making with more accuracy,

confidence, speed, and agility based on the analysis of broader and deeper bodies of evidence applied to a more comprehensive view of pertinent conditions without bias. IDC predicts that by 2019, artificial intelligence will change how 25% of merchants, marketers, planners, and operators work, improving productivity by 30% and KPIs by 10–20%.

In the short term, we recommend that retailers build an analytics-driven, omni-channel retail planning and execution platform to automate and optimize a customer experience that delivers specific goals with the necessary insights, speed, and agility. This capability will enable retailers to guide customer, product, inventory, order, and fulfillment decisions on KPIs such as:

- Speed of delivery — for high-value customers, high-value purchase to save the sale
- Margin target — to reduce fulfillment costs and hence maintain product margin
- Sales target — to reduce old stock with increased sales velocity
- Customer digital footprint
- Customer micro-segment profitability

Will retailers become technology companies? Some already are. As Under Armour CEO Kevin Plank has said, "What are we going to do if Apple decides they're going to make a shirt, or they're going to make a shoe, and more importantly, why don't we beat them to it?" Technology companies are becoming new competitors, so retailers need a much broader and deeper vision for what technology will mean to them. Under Armour chose to undertake digital transformation, moving from sports clothing to fitness technology, high-performance apparel, and new customer experiences. To build its digital road map as a technology company, Under Armour is recruiting engineers across numerous disciplines — architecture, infrastructure, software development, data science, and user experience.

Under Armour invested \$710 million to acquire health tracking mobile applications MapMyFitness, MyFitnessPal, and Endomondo, creating a connected fitness platform of over 190 million users who have done more than 1.7 billion workouts. The company has launched a new shoe with a built-in chip that contains an accelerometer, a Bluetooth antenna, and a battery, and it is building partnerships with organizations such as HTC to create a suite of wearable devices such as HealthBox. The platform and connected devices allow Under Armour access to a huge amount of consumer data such as demographic profiles, workout habits, preferences, and purchase behavior. Through a recommendation engine, Under Armour can inspire demand for its products based on customers' exercise patterns. In parallel, the company is improving analytics capabilities, moving to predictive and prescriptive analytics to deliver valuable insights to create strategies that will keep customers engaged.

In conclusion, commerce and technology will converge, enabling retailers to achieve short-term ROI objectives while discovering untapped demand. But implementing analytics will require coordination across key management roles and business processes up and down each retail organization. Early adopters are realizing demonstrably significant value from their initiatives — double-digit improvements in margins, same-store and ecommerce revenue, inventory positions and sell-through, and core marketing metrics. A huge opportunity awaits.

ABOUT THIS ANALYST

As vice president, Ivano Ortis is responsible for managing IDC Financial Insights, IDC Manufacturing Insights, and IDC Retail Insights in Europe, providing strategic directions for the groups and advising vendor and end-user clients.

A B O U T T H I S P U B L I C A T I O N

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC Retail Insights, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC Retail Insights content available in a wide range of formats for distribution by various companies. A license to distribute IDC Retail Insights content does not imply endorsement of or opinion about the licensee.

C O P Y R I G H T A N D R E S T R I C T I O N S

Any IDC Retail Insights information or reference to IDC Retail Insights that is to be used in advertising, press releases, or promotional materials requires prior written approval from IDC Retail Insights. For permission requests, contact the IDC Custom Solutions information line at 508-988-7610 or gms@idc.com. Translation and/or localization of this document requires an additional license from IDC Retail Insights.

For more information on IDC Retail Insights, an IDC company, visit <http://www.idc-ri.com/>. For more information on IDC, visit www.idc.com, or for more information on IDC Custom Solutions, visit http://www.idc.com/prod_serv/custom_solutions/index.jsp.

Global Headquarters: 5 Speen Street Framingham, MA 01701 USA P.508.872.8200 F.508.935.4015 www.idc-ri.com