How analytics and digital will drive next-generation retail merchandising

As merchandising in retail continues to evolve with the integration of analytics and other digital solutions, merchants need to become much more nimble and ready to fulfill customer needs.

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There is no denying that the retail landscape is undergoing a revolution unparalleled in recent memory. The pace of change continues to accelerate, driven by increasingly savvier and more demanding consumers as well as shortening product and trend life cycles, making it increasingly challenging for retailers to keep up. All the while, traditional avenues for growth through brick-and-mortar expansion are drying up, and newer forms of growth, such as online retail, localized assortment, and expansion into international markets, are more competitive than ever.

Against this backdrop, the historical core of every retail organization—namely, the merchandising function—is finding itself at a critical inflection point. Over the past few years, the role and scope of the merchant has been forced to evolve rapidly. Endless-aisle assortment now provides more breadth and depth of products than ever before. With the rise of omnichannel sales, merchants must deliver a more interconnected shopping experience. To get product to customers quickly, merchants are working with cross-functional colleagues to increase vertical integration and with third-party partnerships to speed up and boost the supply chain. In today's faster-paced, more complex environment, these adjustments have allowed merchants to become more nimble and adaptive to consumer trends while they pursue the goal of presenting a seamless, omnichannel customer experience.

That said, winning decisions are increasingly driven by analytics more than instinct, experience, or merchant "art"; what succeeded in the past is now a poor predictor of the future, and analytics is helping to inform and unlock new pockets of growth. By leveraging smarter tools—those beyond backward-looking, "hindsighting" analysis—retailers can increasingly make forward-looking predictions that are no longer considered advanced but quickly becoming the "table stakes" necessary to keep up. Despite recent progress, most (if not all) leading

retailers recognize the need to develop next-generation merchants to drive their business in this new world.

Indeed, retailers need nimbler merchants who leverage automated technology solutions to support decision making, have a more strategic mind-set with a focus on proactive category management, and who allocate more mindshare to the customer to create a truly personalized and distinctive shopping experience. However, several challenges in building this vision plague many retailers: talented merchants adopt traditional mind-sets that limit the ability to evolve, legacy technology systems hinder the ability of merchants to reach the better decisions they desire, and limited time and mindshare leave many merchants stuck focusing on day-to-day execution.

In this article, we lay out a vision for the next-generation merchant many retailers need, and we address the common questions that naturally arise when thinking about how to bring this vision to life.

Supporting next-generation merchants

Complexity has driven inefficiencies in today's merchandising organizations, where the burden of low-value-added work is quite high. Case in point: in a recent McKinsey survey of more than 30 retailers, we found that merchants spent approximately two-thirds of their time gathering data, managing exceptions, "firefighting," and participating in meetings to syndicate with colleagues and only one-third of their time working on critical strategy and analytics or insights. Ultimately, we believe four key principles will underpin the next-generation merchant and lead to increased efficiency and effectiveness within the broader merchandising organization.

Merchants are the backbone

Merchants will operate like a "category owner" and lead a cross-functional team, as the role will evolve to be more strategic to free up capacity for new avenues

of growth (Exhibit 1). We believe that with a three- to five-year time horizon, the primary responsibilities within merchandising, such as assortment, planning, and negotiation, will remain core to the role. Furthermore, the fundamental decisions made as part of this evolution, such as what the price of a product should be, will also remain. However, the automation of insights is expected to have a meaningful impact on the way a merchant works, how decisions are made, and what new capabilities will be required.

We believe that many of the core merchandising responsibilities at leading retailers could be almost entirely automated in the near future (many retailers have already started this journey). For

example, the reactive nature of many replenishment actions will transition to proactive mitigation, leveraging better decision models and algorithms that move inventory and reduce opportunity cost. Time spent developing manual planning reports can be offset with automated predictive analytics. The typically tedious practice of drawing planograms across different store formats and floor plans can be swapped for smart planograms that adjust for microsegments, which will enable faster and more granular inventory management.

While some responsibilities, such as negotiations and sourcing, will continue to require a meaningful human touch, they can still be heavily supported

Exhibit 1   Merchants are evolving from quarterbacks to 'category owners.'

Merchants have classically been described as quarterbacks

- Running structured playbook around standard product or seasonal calendar

- Coordinating multiple teams

- Driving toward specific outcomes

- Solving business problems

- Focusing on specific categories and channels

Next-generation merchants reflect product-manager and -owner traits, becoming category owners

- Using agile practices to respond rapidly to changes in business

- Partnering with subject-matter experts and relying on experts to deliver answers on solution pieces

- Investing in overall performance and making appropriate trade-offs to get there

- Helping others solve their own problems by clearing organizational roadblocks

- Taking customer-back view of holistic experience that delivers on overall company strategy

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with standardized tools and approaches backed by insights based on internal and external data points and real-time analytics to optimize decisions (Exhibit 2).
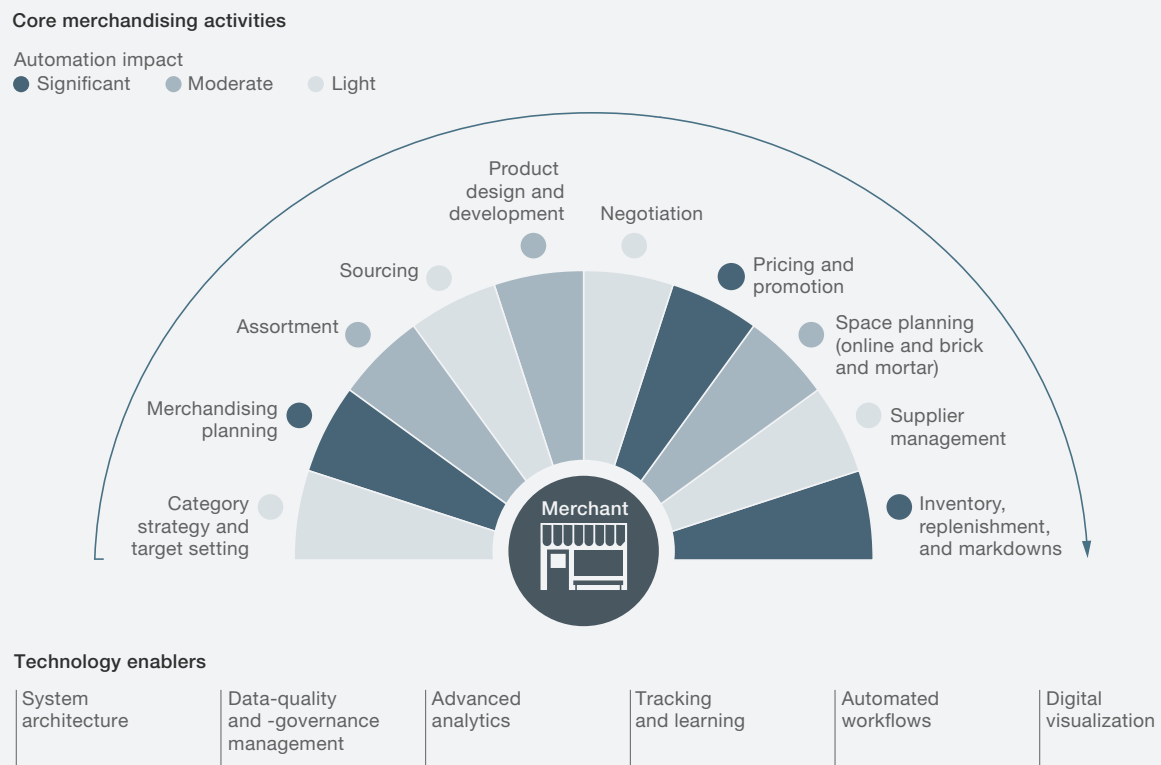
In line with these changes, retailers will be forced to assess the capabilities required to be a successful merchant and the changes needed within their talent pools. While automation will guide merchants to insights more quickly, it will place an even higher emphasis on their ability to interpret insights and implement them to achieve their objectives. This will take analytics capabilities, critical problem-solving skills, and a shift to a proactive, forward-facing mind-set.

Customer-focused approaches are critical

A seamless, customer-centric, omnichannel approach will be key to engaging customers across multiple formats. Retailers will need to ground their approach using a customer lens. As shoppers increasingly fluctuate among channels, retailers must find ways to ensure that different functions and business units work together toward a more seamless customer experience. Customers expect consistency across channels but understand and appreciate variation when there is a rationale— for example, when customers expect a broader assortment from e-commerce channels.

There is no single "right" approach to organizational structure, but we see the following three typical

Exhibit 2 Automation will have an impact on most elements of the merchant role.

Core merchandising activities

Automation impact
● Significant ● Moderate ● Light

- Product design and development
- Negotiation
- Sourcing
- Pricing and promotion
- Assortment
- Space planning (online and brick and mortar)
- Merchandising planning
- Supplier management
- Category strategy and target setting
- Inventory, replenishment, and markdowns

Merchant

Technology enablers

System architecture	Data-quality and -governance management	Advanced analytics	Tracking and learning	Automated workflows	Digital visualization

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archetypes for how retailers set up their organizations at a global level to support the omnichannel experience:

- standalone e-commerce unit (common starting point)

- semi-integrated e-commerce with a center of excellence (most common in ramp-up)

- fully integrated e-commerce in business (more mature companies operate here, although they often retain e-commerce and digital-product teams, such as those for apps and websites)

Leaders show architected differentiation across their channels to create a complete merchandising offer. They might use the following approaches:

- add long-tail products (such as sizes and special-purpose products) to capture fragmented demand where economical

- exclude some iconic items online (in other words, have a smaller assortment online) to drive footfall to stores

- push items at the end of their life cycles out of stores for space or new-drop reasons (in other words, have a larger assortment online) to drive incremental full-price sales

Omnichannel leaders are using highly consistent visual merchandising, such as consistent in-store and online themes, to keep the brand message and story clear across channels. Furthermore, the online space—including third-party platforms and marketplaces—is an increasingly important channel for clearance and low-volume SKUs because of its pleasant, convenient experience, lack of space constraints, and high ease of flexibility in executing markdowns.

Systems and tools need increased attention

Systems and tools will become more critical in the day-to-day tasks of retail merchandising. As complexity and pace increase, merchants will find it harder to rely on the Band-Aid solutions they have used. Instead, more sophisticated solutions that streamline the ability to develop insights will help merchants focus on the most important strategic priorities rather than the most pressing "fire drill" (Exhibit 3).

Technology improvement is necessary

Foundational and core technologies will need enhancement to support the advanced analytics and insights-driven approach necessary for next-generation merchandising work. Organizations will need to invest in the following four key foundational capabilities to empower the merchants:

- *Flexible, modular system architecture.* This system model will allow various layers to operate in a decoupled fashion through the extensive use of application programming interfaces and microservices.

- *Deeper data-governance, quality-control, and data-management capabilities.* Enabling merchants to make data-driven decisions will start with the use of a well-established data-governance model that includes data access, ownership, and classification. The model will be owned by the merchandising business units and supported by "data stewards" from the IT and business teams. The data-management capabilities must support big data processing and storage through next-generation data warehouses, data lakes, and distributed, often cloud-based, data platforms. At the same time, data quality must be tracked by key performance indicators, with clear cleaning protocols established.

- *Computational capabilities, such as advanced analytics and machine-learning models.*

Exhibit 3 As merchants manage a more complex set of decisions, more automated, efficient systems are becoming critical.

Examples of future requirements

Category strategy and target setting	**Planning**	**Assortment**	**Sourcing**	**Product design and development**	**Negotiation**	**Pricing and promotion**	**Space planning**	**Supplier management**	**Inventory, replenishment, and mark-downs**
Consolidate set of internal and external insights from the previous year that automatically provide recommendations for next year's performance to guide merchant's top-down business plans	Automated historical analytics and predictive-scenario analysis embedded in advanced planning system	Recommendation engine that suggests changes by item and links to category strategy (eg, evaluates incremental sales by SKU, substitutability and transference, and consumer insights)	Integrated line-review tools to enable cross-functional collaboration (eg, vendor vetting, merchandising, and design)	Increased use of automation to clean-sheet product design and guide "design to value" decisions and insights	Automated negotiation playbooks with direct data feeds to data systems and prepopulated insights for automated visualization of current and historical vendor performance across category and assisted negotiation strategies	Predictive impact analytics integrated into dynamic pricing/markdown system, with web scraping, to inform retail trends	Merchant-led planogram capability with automated, assisted drawing with real-time advice tailored to local demands	Automated supplier portal and dynamic purchase-order-management system	Automated predictive inventory-optimization and forecasting tools that trigger alerts, prioritize actions based on key performance indicators, and recommend supplier communications

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New proficiencies that enable automated predictive and prescriptive analyses based on market, finance, and customer data will drive better, faster decisions and actions. These should be coupled with monitoring and feedback mechanisms to create a continuous-improvement loop across all actions, which will enhance machine-learning models with time.

- *User-journey capabilities.* Enable consistent visualization standards for the merchant interface and experience, and utilize work flow–management tools, optical character recognition, and robotic process automation to streamline work.

Encouraging organizational success

To build tomorrow's merchandising organization, retailers will need to become more agile, digitally enabled, and rooted in advanced analytics. This should not come as a surprise to most

readers; the question is how to build a culture and performance-management system that promotes these changes. We have recently worked with clients to support their rapidly changing merchandising functions and have learned several key lessons along the way. We believe that a set of organizational enablers will support the next-generation merchant (Exhibit 4).

First, there is a critical need for digital-talent management, including talent quality, recruiting, and value proposition, to attract strategic merchants with broad, deep skills that extend into the digital and analytics domains. Married to this talent management is talent retention. Retailers must ensure they have well-rounded performance-management methods, such as a continuous-improvement culture, and well-defined career paths that reward and develop top performers.

Exhibit 4 Organizational enablers will be critical to setting up next-generation merchants for success.

Organizational enablers and the key elements and questions to ask

Digital-talent management	Digital culture	External networks and partnerships	Key performance indicator (KPI)-based steering	Performance management
Talent quality: Do employees possess sufficient digital expertise to meet business-unit requirements?	**Risk culture:** To what extent does the organization support risk taking and experimenting with new ideas?	**Partnerships:** Are there systematic partnerships with digital vendors and leaders to complement the organization's digital capabilities?	**Measurement and communication:** Are digital KPIs (eg, traffic, usage, digital revenues) defined, measured, and transparently communicated?	**Continuous-improvement culture:** Does the organizational culture support continuous improvement and develop-ment? How are new ideas and critiques received?
Recruiting: Which recruiting approaches are used to win top digital talent?	**Leadership style:** How do managers lead employees and teams?	**Expert networks:** To what extent do employees possess relationships to relevant external communities?	**Steering:** Do digital KPIs have clear, tracked targets that drive product adjustments?	**Collaboration and process automation:** To what extent are digital tools used to share, coordinate, and streamline work?
Value proposition: Is there a convincing value proposition to attract and retain digital talent?	**Vision and values:** To what extent is the organization driven by a common vision, values, and team spirit?		**Performance culture:** How open and transparent is the organization regarding employee performance? What are the incentives for performance?	

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More broadly, we recognize a need for retailers to fully adopt a digital culture. In such a culture, these high-performing merchants are encouraged and rewarded for taking risks and innovating. The next step is to go beyond the core working merchant team to leverage external networks and partnerships to drive performance further. All of these enablers come together through the use of key-performance-indicators-based steering to prioritize and track performance.

Starting the journey

Retailers of all sizes are looking to start the journey toward developing next-generation merchants. While several have made headlines for innovation in the space, many are simply trying to figure out where to get started. The most important thing for all retailers to realize is there is not a "one size fits all" approach to managing this transformation. We typically see functions and decisions addressed through a wide range of solutions and approaches (Exhibit 5).

Not every solution will perfectly fit these approaches. As such, we encourage retailers to think through the following key questions when determining their paths:

- What is the scale of the impact at stake? Determine if the returns of the decision offset the costs.

- What technology resources are internally available? Be realistic about the ability to implement that path forward.

- What is the problem you are trying to solve? Be honest with what you need and the scale of the solution needed.

- What is the timeline for success? Strike a balance between what is realistic and taking an agile approach to be flexible.

Next-generation merchants will continue to sit at the heart of retailers and will be able to lead their organizations through incredibly dynamic times. They will spend more time on strategic issues, including category strategy, calendar development, and vendor negotiations, and steer away from backward-looking strategy reviews. This, in turn, will create greater process efficiency, and the results—for example, lower overhead—will make for leaner, more streamlined merchant organizations that can do more with less. Some manual routines might also be automated across systems, with the use of machine learning to highlight areas where merchants need to focus. Smart workflows with integrated decision options will eliminate the need to jump among systems before taking action, and the insights generated will be available in real time and even when merchants are "on the go," which will reduce time behind the desk. These factors, in all, will define the next-generation merchandising landscape. ∎

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