# DATA-DRIVEN RETAIL:
Extracting Value From Customer Data

Among the industries that have seen their traditional ways of doing business upended by the rapid advent of the internet and mobile device usage, retail is perhaps one of the most affected. On one hand, technology has introduced customers to new buying behaviors, and the rise of e-commerce has provided retailers with new avenues to reach those customers. On the other hand, it's now increasingly difficult for midsize retailers to remain competitive against the ubiquity and scale of global online marketplaces while margins dwindle and the costs of meeting customer expectations only continue to rise.

To respond to these challenges, retailers are increasingly turning to data and analytics to make better business decisions and guide customer marketing initiatives. While some retailers are still learning how to best collect customer data, others possess it but are unsure what to do next. This brief is focused toward retailers in the latter category, discussing how data can be used to better reach customers and compete more effectively across channels.

GETTING DATA RIGHT

A top priority for retailers is creating more personalized, customer-centric experiences, and doing that starts with knowing the customer. To get a better sense of their audience, retailers must first understand how to bring
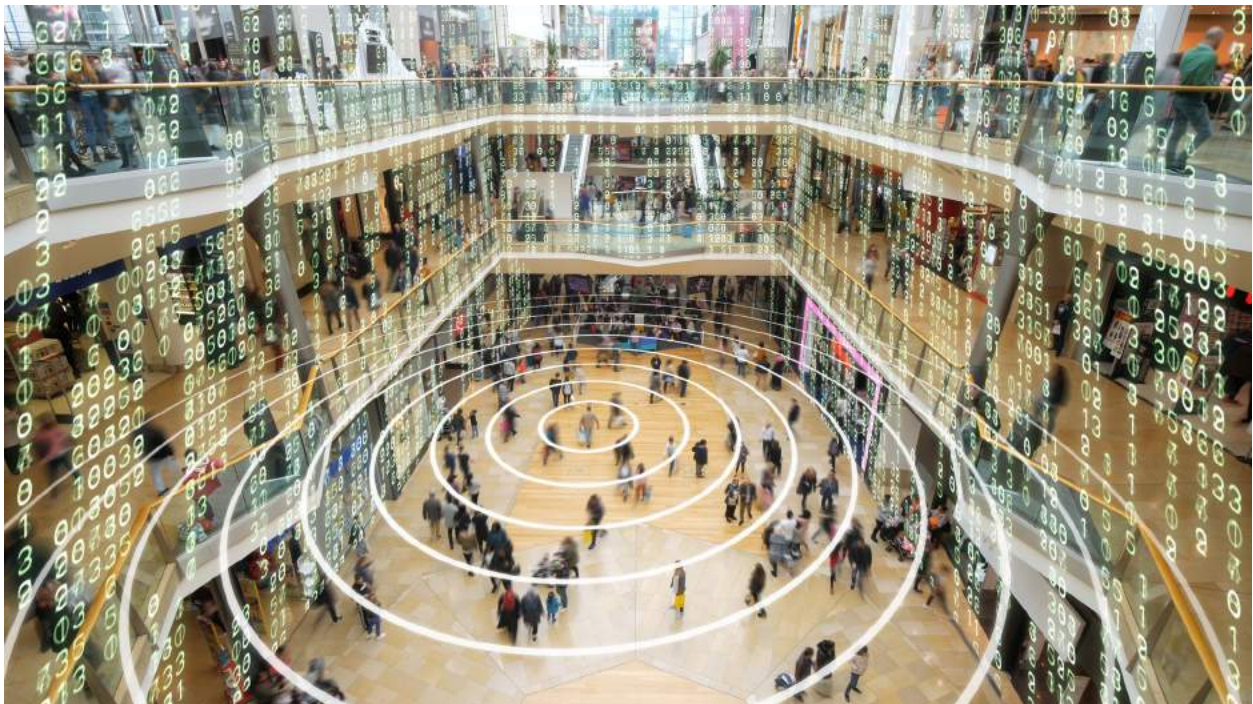
together external data sources, such as demographics, location and market data, with internally held customer data, such as transaction histories and loyalty status. Once these sources have been identified—and the data has been checked for accuracy—retailers can begin creating a detailed understanding of their customers, ideally on the way to establishing a trusted single view.

A single customer view is a way to bring everything that is known about a customer into one manageable place, unifying it into a "golden record," or single source of verified information, linked to a known physical or digital address for each customer. That record can then inform manual and automated decisions, such as those around intelligence-based marketing, planning and expansion strategies, and cross-channel campaigns. "An enriched view of customers helps pave the way for an improved customer experience," says Andy Reid, global director, retail at Pitney Bowes Software. "Regardless of how, when and on which channel they choose to interact with a brand, it makes them feel like they're known."

Before establishing a single customer view, retailers should ensure the quality of their data inputs is high. It's a critical step, but one where retailers often struggle. "It's not that retailers lack the data," says Reid. "It's the exercise of connecting and cleansing that data, and then knowing what models to build with that information that is needed in many cases."

High standards of data quality are achieved through a multi-step process that involves cleansing and validating data against existing authoritative sources for accuracy, removing duplicates by matching existing records and resolving inherent conflicts, either on a routine basis or as data is captured. Such a minimalist approach isn't arbitrary; high-quality data helps reduce mistakes and minimize costs associated with superfluous and incorrect data, such as failed delivery attempts. As a result, addressing data-quality issues as customers are acquired is critical to minimize the costs associated with poor data. As the world becomes more comfortable with cross-border commerce, the challenge for retailers to properly understand delivery addresses in multiple countries adds even more complexity and risk.

To learn more about how to improve data quality, read, "The Data Differentiator: How Improving Data Quality Improves Business."

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Undergoing these steps will resolve many of the foregoing issues retailers are facing and ensure that what customer and address information is held accurately reflects the truth—ultimately allowing businesses to confidently make data-driven decisions that move the needle on revenue or costs.

Another important aspect of the single customer view is the ability to infer relationships, particularly where several people live at one address. Because customers can be grouped not only by their names but by their addresses, retailers can begin to understand where relationships exist among customers. If they also understand the ages, life stages and interests, for example, the combined data can inform the events and demands that drive purchasing decisions. "Gaining insights from the relationships between people, places and things requires good data as a foundation," says Reid.

Beyond the single customer view, there are other ways data can be used to help retailers improve revenue and operational performance. Here are a few:

INCREASING AVERAGE TRANSACTION VALUE: Many online retailers have mastered the method of increasing cart values by recommending additional products they know sell well together. These are the types of decisions analytics engines can make by dynamically identifying trends and upsell opportunities and leveraging demographic and location data in the moment to offer customers the combination of products and price that is most appealing to them.

LOCATION-LED STRATEGY AND PLANNING: Location data can help businesses make strategic decisions that improve margins—analyzing footfall data in combination with

DATA IN USE

How are today's retailers using data and analytics to help address questions in their businesses? Here are three examples.

1 A multi-brand, fast-food franchise was experiencing marketing issues caused by the varying data approaches taken by each brand within its portfolio, which was making cross-brand marketing difficult. To solve this, the company centralized its entire customer database, consolidating across nationwide brands and multiple legacy systems. As a result of these efforts, open rates and conversions for email campaigns improved by more than 10 points, while campaign costs remained flat.

2 A Canadian pharmacy chain supported its aggressive growth plans with a data-driven site selection strategy that used predictive analytic modeling to evaluate different scenarios based on location, drive times and psychographic, demographic and transaction-level data sets. The company used these results to help forecast sales at different sites and benchmark performance, ultimately allowing them to quickly identify stores that deviated from their sales potential.

3 A national retail chain was concerned about the complexity of tax rates on online purchases, which differ based on a customer's location and the chain's own physical presence in a given state. In response, the business integrated its own customer address data with tax rate information—purchased from a vendor—into the point-of-sale system so calculations would happen seamlessly for purchasers. As a result, the retail chain saw lowered risk of audits and of under- or overpayment of sales tax.

location and socio-economic information, for example, to optimize the mix of physical and online locations or to identify new store locations and plan franchise territories.

STREAMLINING REQUIREMENTS: The rise of online shopping has created a need to understand frequently changing shipping and tax costs. External data sources on tax rates and delivery costs can be used in combination with customer address data to keep the buying experience consistent. Doing so requires that retailers have the ability to integrate data changes seamlessly and accurately to correctly estimate costs, and avoid tax underpayments or overpayments, without interrupting the customer experience at the point of sale.

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THE POWER OF ANALYTICS

Once retailers have the right data and can trust it, the next question is how to best leverage it. "To capitalize on the opportunity, you must use the data to drive additional revenue and margin," says Reid. Customer data and location analytics platforms can help in this regard, allowing retailers to make sense of the information they have and then act appropriately.

Reid says that while he sees retailers applying data to many different use cases, a lot of customers focus on these three core uses.

1. RETAIL ANALYTICS: This helps answer questions about the business, including how to increase revenue with existing customers, secure new customers or increase margins. Retailers can also use analytics to understand customer preferences and personalization needs, feeding into decisions about communications delivery and customer experience.

2. COMPLIANCE: The General Data Protection Regulation (GDPR), which went into effect on May 25, 2018, is just one of a number of global regulations that retailers need to be aware of and comply with. In GDPR's case, compliance terms stipulate that businesses must be able to show customers what personal data is being held or collected about them—an obligation made far easier when there is a single source of the truth to query.

3. FULFILLMENT: Data is increasingly being used to help retailers automate decisions around fulfilling purchases once a customer has checked out, whether domestic or international shipping is required. This can mean dynamically determining the best carrier and method—one-hour versus one-day or one-week, for example—to meet customer expectations while minimizing cost.

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LOOKING TO THE FUTURE

Amazon's recent entry into the brick-and-mortar marketplace has underlined a shift in retail, away from either of the extremes of predominantly physical- or digital-only commerce and more toward the middle—a blend of the two. It's clear retailers now prefer a more unified strategy that makes use of their physical and digital platforms in complementary ways, rather than in isolation. For example, some technology brands offer deeper information on product specs and customization options online, while in-store experiences favor hands-on engagement and personal interaction with representatives.

Regardless of the specific approach, data is key to facilitating these strategies across channels so that a customer's experience is seamless regardless of how they come into contact with a brand. "Having the data to understand the consumer is the foundation," says Reid. "You then need to get the blend of online and offline right."

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So how can retailers make the most of their data and continue to compete in today's ever-changing landscape? Here are three recommendations.

1. PUT DATA TO WORK: There's little value in collecting data if it's not used to generate new insights and drive decisions. Targeting and personalization efforts both require interrogation of data to understand where and how resources should be directed.

2. UNDERSTAND YOUR DATA: Analytics helps answer questions, but those answers will be only as good as the underlying data and the questions being asked. So it is important to understand both the types of questions that data can answer, and the suitability of the data being queried for that purpose. A corollary is to understand where the data gaps are. Third-party market and reference data can both add value to internal data held by a retailer.

3. SEEK EXPERT ADVICE: It's not always feasible to have data specialists in-house. In those cases, it can be helpful for retailers to partner with outside experts to outline how to make the best use of existing data and identify where it can be improved, enriched and contextualized to ensure it not only delivers but exceeds expectations.

For more information about Pitney Bowes, visit http://www.pitneybowes.com/us/data.

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