



The Digital Challenge in Retail An evolving consumer market requires constant innovation

In a world where consumer habits have evolved considerably, and consumers effortlessly shift between the physical and digital worlds for product discovery, purchasing, and consumption, retailers are forced to rethink their tactics and strategy to meet the demands.

Today's consumers are savvy. They leverage social platforms for product discovery. They gather information from digital sources to determine quality and price before making a purchase. And they can achieve instant gratification with an increasing number of delivery on demand services. With this evolution of the modern consumer, it's no wonder that retailers are struggling to effectively reach them and engage through emerging digital commerce channels.

While driving customer acquisition, retailers also need to simultaneously look inward—to optimize the way they use costly physical space. In-store shopping will continue to be an important way for consumers to discover, try, and purchase goods—but will evolve considerably in the years to come.

The future for retail involves leveraging data to drive new digital distribution channels and better decision-making.

EVOLVING YOUR MOBILE STRATEGY—THINK LIKE A PLATFORM

Several years ago, retailers set about on an omni-channel strategy that would merge the way they engaged customers across physical and digital shopping experiences. With the explosion of mobile and the proliferation of smartphones, many companies spent the past several years building their own mobile apps.

CASE STUDIES

ARGOS

"Our APIs were initially solely focused on our mobile apps, but we soon identified unexpected opportunities for their use in other channels and by other parts of the business. Digital transactions account for 50% of our total business, and APIs provided the data security, scalability, and multi-platform innovation fitting for our brand as a top multi-channel retailer.

"Our maturing knowledge of APIs has also given us the capability to disassemble business processes and connect more cohesively with our affiliates, so that we can sell to consumers in new places with our product information presented in different ways."

> —Jeremy Gooch, Group Integration Architect at Argos parent company Home Retail Group

MACY'S

"Macy's overarching business goals are centered around a famous quote from our first woman executive, Margaret Getchell, 'Be everywhere, do everything, and never fail to astonish the customer.'

"APIs have made it easy for our internal developers to spin up new products that are serving the millennial market. For instance, we launched image search within the IOS app, where you can just take a quick picture of something someone is wearing, and it will find that product at Macy's. Then you can easily and quickly purchase it within the app.

"One of our newest APIs makes the checkout experience a lot faster and easier and has actually increased the conversion rate.

"Macy's is going to heavily leverage APIs. We're building new, innovative ways to capture the millennial market. It's going to allow us to grow our internal applications, which are capturing and wowing customers, and reach out to third parties—to be everywhere, do everything, and delight customers."

> -David Moyer, head of API Management at macys.com

However, 60% of consumers have two or fewer retail apps on their phone¹, so retailers need to think beyond this channel to reach customers wherever they may be in the digital ecosystem.

And the digital ecosystem is quickly moving beyond apps into new channels. Pinterest and other platforms boast over 110 million active users who curate and share products across a wide variety of categories. These platforms also enable direct purchasing. The Pinterest blog states: "93% of Pinners have used Pinterest to plan for or make purchases and 52% have seen something on Pinterest and made a purchase online."²

These are not platforms that can be ignored, and forward thinking retailers are actively engaged with them. Macy's has partnered with Pinterest to provide inventory and fulfillment capabilities to allow consumers to purchase products directly through Pinterest, enabling this functionality through Macy's APIs.³

For many retailers, greater benefits are derived from APIs that plug into existing and thriving platforms rather than from spending resources building and marketing mobile apps. This strategy will also prove valuable when newer platforms like augmented/virtual reality become mainstream and inevitably impact the retail business.

INTEGRATED PHYSICAL-DIGITAL EXPERIENCE

Online sales are outpacing retail. In 2015, online sales grew 14.6% over 2014, while retail increased 1.5% for the year.⁴ However, the majority of sales are still completed in-store.

The fact is that we are now in a truly omni-channel world where consumers are comfortable with both online and in-store shopping. As consumers seamlessly shift between online and offline shopping, they expect retailers to provide a seamless experience.

Information about a customer's online shopping history—and recommended in-store items based on that history—can be automatically pushed to store associates when a customer enters, providing them with critical information to help guide the customer towards suitable products. This combination of data and intelligent recommendations enables the creation of the "digital associate"—a store employee who combines the power of data analytics with human curation to create a more personalized in-store experience to drive sales.

DATA TO DRIVE SUPPLY CHAIN OPTIMIZATION

The ability to process and analyze large amounts of data has resulted in a better understanding of the customer, but it is also being used to better manage stores and inventory. As commerce increasingly shifts toward digital channels, carefully managing limited and costly physical space becomes extremely important.

1 Forrester Consulting. The State of Mobile Apps for Retailers, a study on behalf of RetailMeNot, July 2015. https://www.retailmenot.com/corp/static/filer_public/78/9c/789c947a-fe7c-46ce-908a-790352326761/stateofmobileappsforretailers.pdf

2 How Pinterest drives purchases online and off. https://business.pinterest.com/en/blog/how-pinterest-drives-purchases-online-and

3 Macy's API App Gallery http://developer.macys.com/App_Gallery_Sample_apps

4 Internet Retailer https://www.internetretailer.com/2016/02/17/us-e-commerce-grows-146-2015

CASE STUDIES

BEST BUY CITI REWARDS

Through a high-profile partnership, Citibank Rewards members can purchase Best Buy products using Citi Rewards points. Customers in a Best Buy store can scan a barcode of any product and find out on the spot if they have adequate Citi Reward points for purchase. Through a mobile device, these same joint customers can even purchase products using points.

ASOS HACK DAY

An internal hack day resulted in numerous prototypes, including a social shopping app, a portable ASOS "search button" for integration onto any website, an online fashion trading game, and a Twitter search bot. The winning team created a single button integration that would allow customers to discover, save, or consume any part of the ASOS experience through as news feed readers such as Feedly and Flipboard.

MARKS AND SPENCER

"With Spotfire, we have the confidence that when a customer goes into one of our stores, they can see the product they want and buy it. The solution helps to ensure M&S is number one."

> –Pete Williams, Head of Enterprise Analytics

Companies like Marks & Spencer use analytic tools to ensure they have the right inventory for their customers at the right time. Analytics technology enables their employees to access the information they need so that data can drive every business decision. To ensure this decision-making capability is broadly available to teams and employees beyond just data analysts, M&S relies heavily on data visualization, helping decision-makers quickly understand the data without having to interpret it. Marks & Spencer uses analytics to make better decisions faster.

With a combination of APIs and data analytics, retailers will increasingly have the ability to dynamically price and discount goods through real-time offers negotiated with suppliers. Retailers will understand customer propensities and brand affinities through data and enable suppliers to grant real-time offers to entice customers to switch brand allegiance. This type of dynamic already exists in other industries, and we expect that retailers will soon benefit from it. The key for retailers is a deep understanding of their customers at the individual level through analytics so they can create an appropriate set of recommendations and engage the right suppliers.

GETTING TO THE PROMISED LAND

Retailers often struggle to adapt their organization and infrastructure quickly enough to meet upcoming challenges. TIBCO has worked with the world's leading retailers to accelerate their digital transformation efforts, and provide the technologies and expertise that allow them to take advantage of impending digital opportunities.

Our technologies allow companies to easily create, distribute, scale, and securely manage APIs using the systems they already have in place, with no coding required. Our analytics tools allow for insights to be easily generated from the massive amounts of data that retailers have collected in their data warehouses, business intelligence systems, or other big data store.

LEVERAGING APIS FOR DIGITAL TRANSFORMATION

An API is a way to make your digital assets consumable in any sort of application, whether an iPhone app, in-store kiosk, or product curation platform like Pinterest. The same assets that power your e-commerce site should be accessible through an API so they can be repurposed. Key data sets like product catalogues, inventory, pricing, customer loyalty programs, coupons, and promotions, are all commonly centrally managed and scaled across different channels by forward-thinking retailers. To easily unlock your data and allow it to be easily consumed across a number of different platforms, you need APIs.

A SECURE PLATFORM BUILT FOR RETAIL

Retailers need a secure and robust API platform to handle their sensitive data. TIBCO Mashery^{*}, a leading product in API security, is used by some of the largest retailers in the world. In recognition of TIBCO's commitment to data security, the payment card industry has made Mashery the first and only PCI-compliant API management product. With proprietary tools and industry-standard technologies that include Traffic Manager, Packager, OAuth 2.0 Accelerator, hashed signatures, and SSL connections, customers can be confident that their data will remain secure and safe.



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