In collaboration with

Digital transformation through data: a guide for retailers to drive value with data

May 2019
**Content**

### Data foundations

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture and ways of working</td>
<td>8</td>
</tr>
<tr>
<td>Skills</td>
<td>10</td>
</tr>
<tr>
<td>Technology</td>
<td>12</td>
</tr>
<tr>
<td>Data</td>
<td>14</td>
</tr>
</tbody>
</table>

### Use cases

**Improve the user experience**
- User interface and navigation optimization: 18

**Enhance core sales activities**
- Product recommendations: 20
- Promotions and house ads: 22
- Product assortment and merchandising: 24
- Customer loyalty and lifetime value (LTV): 26

**Engage in emerging monetization opportunities**
- Digital supplier-funded marketing: 28
- Non-supplier marketing: 30
- Online to offline: 32
Introduction

Digital innovation is revolutionizing the traditional retail model. In addition to e-commerce, digital interactions influence more than half of every dollar spent in brick-and-mortar stores and drive customer expectations of price transparency, convenience, and relevance. Such compounding trends intensify the urgency for retailers to act. Those who successfully manage the digital shift do so, in part, by using online customer data to enhance their core retail activities and develop new sources of media revenue. These digital touchpoints allow retailers to understand customer behavior in ways that were never possible in an exclusively brick-and-mortar world. Retailers who use customer data to transform themselves are better positioned to thrive and create sustainable growth in the new digital retail landscape.

A guide on how retailers can create more value with insights

Digital transformation is not a new agenda item for most online retailers, but it is increasingly important. Deloitte conducted a digital transformation study to better understand how retailers use customer data to engage customers online and drive revenue. To narrow focus and reveal opportunities for retailers on their digital platforms, the study excludes customer acquisition and exclusively offline activities.

As part of this study, Deloitte held interviews with more than 60 retailers and e-commerce experts in the United States; Asia Pacific (APAC); and Europe, the Middle East, and Africa (EMEA). Study participants came from a diverse range of retail backgrounds and varied by:

<table>
<thead>
<tr>
<th>Categories</th>
<th>Scale</th>
<th>Channel Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>From everyday essentials to specialty retail</td>
<td>From $100 million in annual revenue to $42 billion in annual revenue</td>
<td>Omnichannel versus digital only</td>
</tr>
</tbody>
</table>

In order to compare retailers’ data capabilities across regions and highlight how retailers can become more advanced, Deloitte created a Data Maturity Scale with four distinct levels of maturity - Level 1 (Nascent), Level 2 (Developing), Level 3 (Mature), and Level 4 (Leading).

In addition to representing the retailer perspective, Deloitte conducted more than 20 interviews with technology providers, advertisers, and advertising agencies to understand the data trends affecting the overall retail ecosystem.

About the report
This report was commissioned by Google and conducted by Deloitte. The findings were discussed with Google executives; however, Deloitte is responsible for the analysis and conclusions from the study.
So where are retailers on the digital transformation journey?

Not surprisingly, retailers around the world are at different stages of maturity. Some use customer data to drive meaningful value through innovative data-supported efforts, while others are still trying to get the foundations established and struggle to prioritize data over competing capital investments.

Among other things, limited visibility into what peers are doing can distort a retailer’s view of its own data and analytics capabilities. To provide a common view, Deloitte developed a Data Maturity Scale to help plot study participants on a defined spectrum. The outputs of this analysis were then used to construct the Diagnostic Tool to help retailers self-assess their data maturity and plan the best path forward for their own transformations.

A challenge for retailers is how to improve data maturity. The Data Maturity Scale provides a helpful context for a retailer’s current position relative to best-in-class organizations, but this knowledge alone fails to show retailers how to improve their current position. The intent of this guide is to help retailers understand and articulate the key activities needed to improve the use of customer data within their organizations.

Data Activation Framework

Based on interviews and learnings from top-performing retailers, Deloitte developed the Data Activation Framework shown below.

The following three stages are critical to a retailer’s transformation:
Making Strategic Choices

Many factors, including business model, region, brand pillars, and product strategy influence where a retailer should focus its digital transformation efforts. To prioritize investments and plan initiatives to enhance data capabilities, retailers must first begin by answering a set of questions designed to express the organization’s strategy:

- What is our winning aspiration? What are the corresponding organizational goals when balancing financial profit with other factors (e.g., social impact)?
- Where will we play? In which specific categories, customer segments, or channels will we win?
- How will we win? What is our customer value proposition that sets us apart from our peers? Do customers come to us because of our speed, quality, or cost?
- What capabilities must we have? What do we need to be distinctively good at to deliver customer value? Do we need a superior targeting capability that enables suppliers to reach specific customer segments? Do we need proprietary technology or can we buy off-the-shelf solutions to support these capabilities?
- What management systems do we need? How do we measure success against our strategic choices? Which metrics will tell us whether we are achieving our winning aspiration?

Bypassing this key starting point and moving forward without a clear strategy puts the organization at risk of solving the wrong problem. The most common error is solving a problem that might be critical to another retailer’s strategy, but not to the retailer’s own strategy. Think about an online retailer that only carries items that are purchased infrequently, like electronics. The frequency with which customers visit the website may prevent certain data-enabled initiatives designed to help understand a customer’s daily routine. Or imagine a jewelry retailer attempting to drive all traffic online when consumers show a preference for making big ticket purchases in-person. In articulating strategic choices, retailers are defining a set of guiding principles for their digital transformation and associated initiatives.

Building Data Foundations

There are core cultural, technological, skill-based, and data-related capabilities required to successfully activate customer data. For example, hiring data analysts to build product recommendation algorithms is a prerequisite to improving the relevance of product recommendations. While these topics may seem obvious to most, the reality is that even though retailers try to pursue more advanced customer data applications, many still struggle to build the data foundation that will underpin their data strategy.

Activating Use Cases

There are multiple ways in which retailers collect, analyze, and activate customer data to drive value. These efforts tend to fall into one of three operational objectives:

- Improve the user experience
- Enhance core sales activities
- Engage in emerging monetization opportunities

Within each operational objective is a set of defined use cases designed to drive value through more effective application of customer data.

To learn more, go to the Building Data Foundations section.

To learn more, go to the Activating Use Cases section.
How to use this guide

This document is designed to guide retailers through the Data Activation Framework. Best practices are outlined in both the Building Data Foundations and Activating Use Cases sections to help retailers ask the right questions and facilitate conversations necessary for positive change.

The material is intended to provide value to retailers at any stage of the maturity scale. As a result, certain sections may resonate more depending on a retailer’s maturity.

As a rule of thumb, retailers earlier in their data transformation journey may want to direct their focus toward understanding how to build data foundations, while mature retailers may focus on specific use cases that validate existing decisions and spark new ideas for improvement.

We encourage readers to self-assess their data maturity using the Diagnostic Tool and hone in on the sections of this guide that are most applicable to their near-term and long-term data needs.

To learn more, go to the Data Maturity Scale section.
Building Data Foundations

This section of the guide is designed to explore detailed perspectives on improving data foundations across four layers:

**Culture & ways of working**
- Broadcast a thoughtful data strategy
- Strive for inspired data leadership
- Foster collaboration and cross-functional working
- Create a safe place for experimentation

**Skills**
- Integrate the data team with the rest of the business
- Identify the skills you need

**Technology**
- Democratize your data using self-service tools and applications
- Collect, store, analyze and take action - does your technology stack up?
- Open the technology toolbox
- Take your technology to the next level

**Data**
- Understand the different types of data (i.e., first-, second-, and third-party data)
- Categorize customer data
- Activate and differentiate the value of data
Culture & ways of working

Culture plays a significant role in determining whether a retail company will be successful executing data initiatives. A winning culture articulates data’s role in achieving the organization’s overall strategy, fostering an environment that encourages data-informed decision making, and creating mechanisms for cross-functional working and collaboration.

Retailers should focus on the following four actions:

Broadcast a thoughtful data strategy

When asked, most employees can share their organization’s mission statement with some degree of accuracy. However, most employees do not know their organization’s data strategy. While a data strategy is not as foundational as a mission statement — it is important for leaders to send a clear message about why and how the organization uses data.

Consider these two examples that were heard during interviews with leading retailers:

- “Data underpins the majority of the push towards [better] monetizing customers directly and indirectly”
- “Use data and analysis when you can, and use intuition when you need to”

Strive for inspired data leadership

It is important to align data functions with the centers of power in an organization. Many retail executives are not data natives, and yet they are critical influencers of data investment, cross-functional support, and strategy. Absent senior leadership to explain and shape how data supports the overarching objectives of the organization, the data team will struggle to communicate the data strategy and empower the rest of the organization.

For leaders aiming to become more data forward:

- Listen to your team.
- Identify cross-functional subject matter experts at varying levels of the organization to help you think through data challenges.
- Leverage the strengths of staff that have an intimate understanding of how data is used in the business.

For managers aiming to inspire the interest of senior leaders:

- Document goals and aspirations for data. Though some leaders may have an inherent bias against data initiatives, others may not be equipped with the right facts or may be prioritizing other costly initiatives.
- Isolate the relevant facts about data and model their overall impact on the business. Start small, and, once credibility is established through precedent, propose transformational solutions.

Key questions

Do any senior leaders live and breathe data?
Can the leadership team articulate how data supports the organization’s mission and strategy?
Who is rewarded for using customer data in business decisions? How is success measured?
How often do marketing, data, merchandising, and information technology (IT) teams work together?
Foster collaboration and cross-functional working

The most important objectives for any retailer are moving customers through the retail funnel, maximizing their basket size, and securing repeat visits. Moving a customer through the funnel requires teams to work together seamlessly hand over the customer from marketing to sales to customer service. Setting consistent KPIs across teams can be a challenge, but leading retailers typically identify an overarching organizational objective that is tied to tightly defined metrics.

Common KPIs that support this process include:
- **Acquisition** — Number of new site visits, email distribution volume, etc.
- **Engagement** — Number of emails opened, source of website traffic, etc.
- **Conversion** — Basket size, number of purchases, etc.
- **Retention** — Time between visits, annual spend, etc.

Leaders must take hold of their mission and begin to break down walls by setting organizational objectives and routinely hosting meetings with cross-functional teams.

Disciplined attention to continued cross-functional team engagement will slowly build habits until cross-functional collaboration between teams is expected. Typically, teams only work collaboratively with the teams that are closest to them, but that can create paralyzing organizational inertia.

For many retailers, the best way to drive change is to make big, bold organizational changes that promote collaborative working since incremental steps often fail to address the underlying problems.

Data is not static. Organizations do not stand still, and neither should the data strategy. The data strategy must be built on a foundation that enables continuous evolution to capture technological improvements and customer changes.

**Leading retailers not only collect and analyze customer data — they generate it** by requesting customer feedback on new strategies and initiatives. These data points are used to guide decisions on whether to pursue or abandon certain activities. Leading retailers also encourage experimentation by using control groups to test new ideas for just about everything related to the buying experience, including product descriptions, advertising, promotional copy, product mix, and store layout.

Set key performance indicators (KPIs) to bring teams together

Break down walls and bring people together

Create mechanisms that both require and support cross-functional work

Engage the data and IT teams to design and build a data infrastructure that captures relevant data for marketing and customer segmentation purposes.

Implement a customer engagement dashboard that provides:
- **Merchandising team** a view into the drivers of product performance
- **Marketing team** data on customer behavior to optimize the timing of email campaigns
- **Data team** responsible with information to help manage the data infrastructure

Develop data governance policies that take into account relevant legal, public relations, human resources, and product considerations across all relevant organizations.
Skills

Digital transformation requires unique skill sets, including some highly technical skills. Organizations must identify, recruit, and grow individuals with the specialized data skills they need. Establishing a permanent fit for data talent is critical to bringing the most qualified voices to the table in any data-focused effort. Retailers should focus on the following two actions:

Integrate the data team with the rest of the business

Across the wide variety of retailers interviewed in this study, no single organizational structure emerged as “the right one.” However, three common approaches on how to fit the data team into the overall organizational design did emerge:

- **Center of excellence (centralized)**
  - A **single, central data team** acts as a shared capability for the organization.
  - The role of the central data team is to drive innovation and change through all areas of the business.
  - In best-in-class retailers, the central data team drives action by setting the agenda for itself and various groups within the business. Conversely, in less mature organizations, the data team is passively driven by data requests to produce reports and analysis.

- **Distributed / embedded team (decentralized)**
  - Data professionals are **embedded in different teams** (e.g., merchandising, sales) and apply the organization’s data to the team’s specific business problems and data needs.
  - This distributed team acts as a network of data “ambassadors” that show the business value of using data in day-to-day activities. In this structure, the technology and infrastructure responsibilities for data typically sit with information technology (IT).

- **Hub-and-spoke (hybrid)**
  - A **central team focuses on developing capabilities** to serve the wider business, while **specialized team members are embedded** (and sometimes rotated) through different areas of the business.
  - This allows the central team to push forward on significant projects (e.g., new technology or infrastructure), while the specialized team serves day-to-day business needs and feeds information back to the central team.

“**Most of the data scientists we hire want to come and play with the 50 years of customer data we have in-house.**” - Leading retailer, EMEA
Identify the skills you need

Starting with the basics, what does a data professional do?
The concept of a data team or data organization can be an amorphous catchall. A multitude of different data roles exist, from digital business analyst to audience specialist to cloud engineer. To demystify this growing list, the four primary data roles a retailer should consider when staffing a data function include:

**Architects**  
These highly technical system engineers are responsible for the back-end technological integration of data sources. Architects design the blueprint for how data enters, resides, transforms, and exits the retailer’s technology systems.  
**Role:** architecture, network and security, platform and data engineering, and cloud operations

**Insight generators**  
While architects are concerned with designing and constructing the pipes through which data flows, insight generators are more concerned with the data itself. Insight generators organize, curate, and analyze data to make it usable and actionable for a stated business purpose.  
**Role:** engagement analytics, sales and marketing analytics, business intelligence enablement, and data supply chain

**Business translators**  
Business translators are data-fluent business leaders that serve as catalysts between architects, insight generators, and the rest of the organization. Business translators ensure that data teams build products that satisfy business needs, as well as educate the rest of the business on data’s impact on their goals, including its limitations and possibilities.  
**Role:** data partner management, business operations, and business development

**Data governors**  
Data governors are responsible for understanding the legal and security risks associated with how customer data is handled within the business. Data governors translate regulatory and compliance requirements into policies and procedures that govern how data systems and processes are designed, built, and maintained.  
**Role:** privacy, policy compliance, and security assurance
Technology

Technology, tools, and platforms activate the key processes used to gather and analyze customer data. Deploying the best technology to embed data in your key business functions is fundamental to the success of the data strategy, but it is foreign territory to many executives. Retailers should focus on the following four actions:

**Key questions**

What components of your technology stack are used to improve the customer’s experience?

What components of your technology stack are built in-house?

What components of your technology stack are sourced from external providers?

What drives your decision to build or buy?

Who are the users of the technology in your organization?

What proportion of data-related activities require technical specialists?

**Democratize your data using self-service tools and applications**

The technology platform or data layer is generally not something that can be easily used or accessed by the majority of the business. This is the root cause of the complaint, “It takes me weeks to get the data from the data team.” Extending access and education for data-related technology and designing systems and tools with self-service in mind can mitigate the risk of a data bottleneck.

Implementing self-service tools achieves two key goals. First, self-service tools empower a broader set of teams to access data independently and use it to support their decision making. With data in their own hands, teams are more likely to uncover new patterns and drive new initiatives. Second, self-service tools free up time for data teams to work on more sophisticated initiatives. Data teams are often relegated to just reporting, but by widening access and educating the business on how to use data-related technology, you can widen the data team’s role within the organization and increase the value you derive from data.

**Collect, store, analyze, and take action**

A retailer’s underlying technology empowers the organization to perform data-enabled tasks. The technology stack directly influences the quality and timeliness of data, as well as how it is collected, stored, analyzed, presented, and acted upon. Technology is at the core of a retailer’s ability to translate raw data into insights and actions.

For most retailers, the main objective of the technology stack is to assemble all data across online and offline touchpoints in one place to build a single view of the customer journey. They also need flexibility to build different applications based on the changing needs of the business and skill levels of employees.

Leading retailers push the edge of their technical capabilities. They spend years acquiring an integrated mix of core data-related technology components, such as a data warehouse, a Customer Relationship Management (CRM) system, and a Data Management Platform (DMP). They also continue to introduce new technologies to enhance their core technology stack.

“We have to have the right infrastructure, otherwise driving value with data is a non-starter.”
- Electronics retailer, EMEA

“Machine learning is critical...at some point you hit a limited number of dimensions you can support using the human brain.”
- E-commerce platform, EMEA
Open the technology toolbox

When it comes to data-related technology solutions, many executives are confronted with an alphabet soup of acronym-named applications and hardware. To help bring a little order to the clutter, below are some common technology components used in data operations. This is not intended to be a checklist for a complete technology stack but a reference point for executives to understand potential differences in their technology solutions.

**Core performance**

*Systems that support performance and transaction-based activities online.*

- **An E-commerce platform** is the software that connects the customer-facing website with the retailer’s back-end operations. Typically, it performs a wide range of retail functions, including taking payments, managing inventory, and providing customer service.

- **A Content Management System (CMS)** is a software system to publish, edit, and change website elements, as well as modify the visual look of the website’s contents. The main source of content that feeds the CMS is the products-for-sale inventory.

- **A Customer Relationship Management (CRM)** system records and tracks customer interactions with the e-commerce website. This data is critical as it enables the business to enhance segments with known, persistent customer identifiers, which aids individualized targeting efforts.

- **A Campaign Management Platform (CMP)** is the software that manages various aspects of a marketing campaign. The CMP can automate tasks ranging from basic email marketing to event-based content marketing.

**Data enablement**

*Systems that collect and organize data to inform actions performed by the core performance tools.*

- **A data lake (or warehouse)** is a centralized repository of data from multiple sources. It is critical to define the most appropriate structure and rules for the data lake to ensure the data is stored in an organized and accessible manner.

- **A Data Management Platform (DMP)** helps retailers build customer segments, augment first-party segments with third-party data, and push segments to other systems.

- **A Customer Data Platform (CDP)** records and tracks customers’ online behavior across devices. A CDP functions similarly to a DMP, but with a greater emphasis on capturing 360-degree customer identities.

- **Reporting and web analytics tools** collect and organize data captured from online activity, including key insights from the customer journey, such as online basket abandonment rates. These tools help the business build and monitor systems based on aggregate on-site and in-app activities.

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Take your technology to the next level

*Leading retailers see technology as a critical enabler for creating a differentiated customer experience.* They spend years acquiring an integrated mix of core data-related technology components and continuously introduce new and more powerful infrastructure components and applications. *Best-in-class retailers also look to make incremental changes in processing and analytical capabilities to leapfrog traditional solutions.* Artificial Intelligence (AI) and Machine Learning (ML) are examples of critical capabilities retailers rely on to extract the most useful insights from their data.

**Artificial Intelligence and Machine Learning** help deliver rich, predictive insights for retailers. Not only do AI and ML help uncover patterns in extremely large data sets, but trained models improve their insights over time as more data is added.

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Case studies

An **online only retailer** with multiple business verticals recently incorporated ML and AI expertise into its data team to help build an effective product recommendation engine. The purpose of the project was to make product recommendations more data-informed, contextual, and personalized to increase the efficacy of the data and drive more revenue. ML enabled the retailer to uncover complex relationships between multiple categories, thereby delivering a level of customer insight that would not have been possible otherwise.
Managing data sources requires making strategic decisions on how to augment data, which fuels some of the critical use case activities that differentiate leading retailers from others. Organizations also need to consider how to incorporate data governance practices into their data strategies to ensure their data is handled responsibly, compliant with regulations, and structured well.

**Retailers should focus on the following three actions:**

- **First-party data** is information collected directly from customers (e.g., purchase history).
- **Second-party data** is another entity’s first-party data. This is similar to first-party data, but it comes from a source other than the retailer’s own customer base.
- **Third-party data** is data that a retailer buys from an outside source that pulls it from various other platforms and websites where it is generated.

**Understand the different types of data**

- **First-party data** is information collected directly from customers (e.g., purchase history).
- **Second-party data** is another entity's first-party data. This is similar to first-party data, but it comes from a source other than the retailer's own customer base.
- **Third-party data** is data that a retailer buys from an outside source that pulls it from various other platforms and websites where it is generated.

**Categorize customer data**

Retailers collect a wide variety of customer data, including time on site and referral source (i.e., website the customer visited prior to clicking onto the retailer’s website). While the specifics may differ, there are **four common categories of customer data** that retailers either collect directly or through external data sources.

<table>
<thead>
<tr>
<th>Account</th>
<th>Location</th>
<th>Browsing</th>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer’s personal and transaction data across all products and services.</td>
<td>Customer’s location during on-site and in-app browsing activity (i.e., IP address, geolocation).</td>
<td>Customer’s on-site and in-app behavior, including what and when he or she browses, and how he or she navigates the website.</td>
<td>Data from other sources (e.g., third-party providers) that helps augment customer profiles.</td>
</tr>
<tr>
<td>Example data</td>
<td>Example data</td>
<td>Example data</td>
<td>Example data</td>
</tr>
<tr>
<td>Customer name</td>
<td>IP address</td>
<td>Products viewed</td>
<td>Demographic</td>
</tr>
<tr>
<td>Customer address</td>
<td>Mobile device location</td>
<td>Basket contents</td>
<td>Social media activity</td>
</tr>
<tr>
<td>Purchase history</td>
<td></td>
<td>Visit frequency</td>
<td>Other sites visited</td>
</tr>
</tbody>
</table>
Multiple advertisers and advertising agency representatives interviewed for this study said retailer data is extremely important because it suggests intent to purchase. Few other businesses understand customers like retailers do, especially retailers who have frequent customer touchpoints such as grocery stores. However, many retailers are not yet fully benefiting from the value potential of digital supplier-funded marketing and non-supplier marketing. From the creation and sourcing of data, to the data analysis and sales narrative — retailers must master the art of differentiating themselves to suppliers and advertisers.

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**Activate and differentiate the value of data**

All retailers create first-party data. Successful retailers set up systems and processes to capture relevant customer data and create customer data sets. Instead of simply tracking unique visits, click-through rate, or purchase history, sophisticated retailers tie these behaviors to other relevant segmentation categories such as product or customer type. Leading retailers also actively engage customers in direct surveys or other experimental marketing research to gather relevant customer data.

**Source**

All retailers interviewed for the study source second- or third-party data to augment their first-party data sets. However, the extent to which they rely on outside data varies. Most leading retailers are focused on honing their first-party data capabilities and limiting their reliance on external data providers to counteract quality concerns associated with some third-party data and ensure compliance with user privacy regulations.

**Create**

Effective insight generators (see Skills section) develop diverse and valuable customer segments to serve market demand for these specialized groups. They identify patterns within the data to isolate common characteristics for a group of customers. The more robust the data collection and ingestion, the more specific the segmentation and analysis that can be done.

**Analyze**

Successful retailers are beginning to build trusting relationships with brands and advertisers and are able to directly articulate the value potential of reaching certain parts of their customer base. These retailers have proven the performance of their data through A/B testing, and they work with advertisers to identify campaign-level ways to activate their data.

**Sell**

A leading mass-market retailer builds customer segments relevant for both digital supplier-funded marketing and non-supplier marketing. For example, automotive companies can target truck advertisements toward customers who purchase fishing and outdoor products.

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**Case study**

**US mass market retailer**
Five principles of leading retailers

Study participants included retailers across categories and regions who excelled at a variety of different use cases. Despite their diversity, they also shared the following common set of characteristics that may reflect their unique ability to realize value from their customer data.

1. **Have a clear and well-communicated vision.**
   
   For retailers, data is not the end goal, but it is a very important tool to understand customers and improve the purchasing experience. In best-in-class organizations, leadership understands the trade-offs between investing in different data platforms and capabilities and can clearly articulate a cohesive data strategy that permeates through all levels of the organization.

2. **Exemplify data-informed decision making.**
   
   Leadership sets the tone for the organization. When leadership “lives and breathes” data, it encourages and empowers all team members to demand data to support major decisions and analysis, as well as challenge the status quo. Leaders at best-in-class organizations lead by example, including the way they embrace data and analytics to make decisions — both big and small.

3. **Align incentives to intentions.**
   
   One of the first stumbling blocks for many retailers is defining an incentive structure that elicits the right team behavior. Even leading retailers still struggle to identify the right KPIs to measure a cross-functional team. Best-in-class retailers are deliberate about the KPIs they set for each team to incentivize improving overall customer lifetime value as opposed to the success of any one vertical or category.

4. **Experiment, experiment, experiment.**
   
   The diversity of retailers and their customers means that what works for one retailer may not work for another. Best-in-class retailers do not expect to nail the product, solution, or design on the first try. Instead, they embrace the error inherent in driving innovation and aim to test, iterate, and refine to create “perfect” over time. This is enabled by a culture that invites failure as learning and rewards curiosity.

5. **Democratize your data.**
   
   Democratizing data is about implementing self-service technology tools that empower teams to access and analyze data independently, without the need to go through the data team. In essence, it breaks the monopoly the data team would otherwise have over data and, instead, puts data directly in the hands of the teams that are prepared to surface the best insights for their business purposes. Retailers that do this well typically maintain a single view of all their customer data and provide access rights based on how and for what purpose the data will be used. These retailers usually educate their employees on the benefits of data-informed insights and provide intuitive data analysis tools.
Activating use cases

This section is intended to provide a directional guide for retailers who aspire to execute or improve upon a given use case.

Improve the user experience

- User interface and navigation optimization

Enhance core sales activities

- Product recommendations
- Promotions and house ads
- Product assortment and merchandising
- Customer loyalty and lifetime value (LTV)

Engage in emerging monetization opportunities

- Digital supplier-funded marketing
- Non-supplier marketing
- Online to offline
User interface and navigation optimization

Deliver experiences that delight customers and improve their stickiness and propensity to buy by optimizing the look, feel, and navigation of the on-site or in-app experience.

Master these data foundations

Leading retailers who excel in user interface (UI) and navigation optimization exhibit common characteristics that enable them to succeed with this use case.

**Culture**
Top-down advocacy for the use of customer data and experimentation permeates the organization and aligns efforts to seek an optimal customer experience.

**Skills**
Data-informed decision making and flexible test and learn mindset across the data and UX/UI design team.

**Tech**
Flexible tools for rapid prototyping and testing of new layouts and journeys, as well as the ability to measure the impact of key metrics during testing.

**Data**
Access to data and insights that allow teams to understand why customers behave in certain ways, including a click-level view of the conversion funnel.

Maturity scale (extended version in the Diagnostic Tool)

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<tr>
<th>Nascent</th>
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<th>Mature</th>
<th>Leading</th>
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<tbody>
<tr>
<td><strong>Limited segmentation:</strong> All users are analyzed in broad segments.</td>
<td><strong>Basic segmentation:</strong> Uses standard characteristics (e.g., gender, geography) for segmentation.</td>
<td><strong>Detailed segmentation:</strong> Segments are based on personal and behavioral characteristics.</td>
<td><strong>Dynamic segmentation:</strong> The UX/UI can respond to a customer’s in-session behavior as he or she exhibits different segment characteristics.</td>
</tr>
<tr>
<td><strong>Limited UX/UI focus:</strong> UX/UI, messaging, and layout are not regularly updated.</td>
<td><strong>Basic UX/UI:</strong> Basic user understanding is used to design the look and feel of the online experience.</td>
<td><strong>Advanced UX/UI:</strong> Personalization techniques are used at the segment level to enable customers to reach their baskets in fewer clicks, although load speed is a major consideration.</td>
<td><strong>Dynamic UX/UI:</strong> Sophisticated personalization techniques are used to tailor the customer’s experience in near real-time.</td>
</tr>
<tr>
<td></td>
<td><strong>Basic analytics:</strong> Ability to synthesize customer information and observations into actionable insights.</td>
<td><strong>Advanced analytics:</strong> Customer data is captured, monitored, and analyzed quickly and effectively to drive business decisions.</td>
<td><strong>Automated analytics:</strong> Customer data is captured, monitored, and analyzed in near real-time and decisions are automated.</td>
</tr>
</tbody>
</table>

Case study

Digital pure play retailer, US

A digital pure play retailer aims to provide tailored on-site customer experiences. Based on member sign-in and geographic data, the retailer drives regional promotions for customers to drive special items, like in-season fresh foods. Additionally, the retailer may update the home page carousel or other featured items based on a member’s previous buying patterns and preferences. As a relatively young company, the retailer leverages its agile and data-centric culture to move from developing to leading.
Data activation guide: retailers | Activating use cases | USER INTERFACE AND NAVIGATION OPTIMIZATION

Five steps to activation

Activate this use case after you have properly developed your data foundations. Depending on your level of maturity, you may have mastered certain steps and should focus efforts on activities further along the journey.

1. **Design product modules**

   Collaborate with merchandising teams to understand the merchandising strategy and the key metrics for improvement. Review data, identify opportunities to drive improvement, and develop hypotheses for how to enhance the UI accordingly. Focal areas could include category headers, photo thumbnails, video thumbnails, written content, and advertisement placements.

2. **Test and analyze performance**

   Generate control groups for live testing, and publish the UI amendments in an A/B test or multivariate test designed to compare product performance analytics, such as differences in click-through rate, conversion, or length of stay. Outcomes from the testing process will allow you to isolate the most effective ways to drive performance, and should also create insight into customer motivations to support future design decisions.

3. **Target audiences**

   Layering your product module tests with customer segmentation and targeting efforts will lead to a more tailored customer experience. Structuring tests to compare predetermined customer groups (e.g., loyal customers) or by referral source can reveal customer insights that will define common design rules at a segment-level, creating an even more tailored feel for your customer base.

Site navigation development

4. **Refine search tools**

   Retailers should follow a similar test-and-learn approach to optimizing site navigation. Increasingly, enhancements are focused on search and user-friendly, intuitive navigation elements. Depending on existing search capabilities, use machine learning to optimize features such as autofill and site search. This process should account for customer insights, as well as commercial goals.

Continual improvement...

5. **Test, learn, and adjust**

   Refining the customer experience is an ongoing and constantly iterative process. Develop experiments, test with your customers, analyze the output, make design changes, and record updated design rules to guide the ongoing UX/UI direction in the future.

---

**Key teams to activate:**

- Business intelligence (BI)
- Data engineering
- Merchandising
- Customer insights
- UX/UI design
- Search
- IT
Product recommendations

Serve the most relevant product and content recommendations for the online journey based on a customer’s browsing and transaction history.

Master these data foundations

Leading retailers who excel in product recommendations exhibit common characteristics that enable them to succeed with this use case.

Maturity scale (extended version in the Diagnostic Tool)

<table>
<thead>
<tr>
<th>Nascent</th>
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<th>Leading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Limited segmentation:</strong> Little to no customer segmentation.</td>
<td><strong>Basic segmentation:</strong> Some segmentation using standard customer characteristics</td>
<td><strong>Detailed segmentation:</strong> Segmentation uses personal and behavioral customer data.</td>
<td><strong>Individual segmentation:</strong> Routine analysis and tracking of customer performance.</td>
</tr>
<tr>
<td><strong>Limited product segmentation:</strong> Basic ability to segment products is mostly driven by merchandising hierarchy.</td>
<td><strong>Basic customer analytics:</strong> Recommendations based on historical data, not yet predictive.</td>
<td><strong>Advanced customer analytics:</strong> Historical analysis is pervasive across the business, which is starting to experiment with predictive capabilities.</td>
<td><strong>Prescriptive modeling:</strong> The probability that a customer will like and buy a product can be predicted based on browsing history and the physical appeal of the product.</td>
</tr>
<tr>
<td><strong>Basic product tagging:</strong> Products are organized and tagged based on products that are commonly purchased together.</td>
<td></td>
<td><strong>Advanced product tagging:</strong> Product tagging incorporates elements of customer segmentation and behavioral buying patterns.</td>
<td><strong>Advanced content customization:</strong> Produce on-site content that combines relevant content (e.g., thumbnail, text) and product recommendations that inspire customers.</td>
</tr>
</tbody>
</table>

Case study

E-commerce platform, EMEA

A global e-commerce platform wanted to expand its product recommendation capabilities across its many product verticals and move from mature to leading. The retailer spent 12-18 months aggregating all customer data across verticals to create a single view of customers’ browsing and purchasing patterns. The retailer ran A/B tests on the customer data and developed an algorithm to drive continuous improvement in recommendation accuracy. This resulted in a 500% increase in sales conversion in some of the retailer’s product lines.
Five steps to activation

Activate this use case after you have properly developed your data foundations. Depending on your level of maturity, you may have mastered certain steps and should focus efforts on activities further along the journey.

1. Set the strategy

Your product recommendation strategy should consider your customers’ needs and how recommendations will fulfill them. This will help you establish and drive the metrics you seek. Product recommendations do not always have to be about conversion. Some retailers use product recommendations as an opportunity to inspire customers through branded content that drives website visits or increases basket size. Product recommendations are a collaborative effort across the customer insights, marketing, customer experience, and merchandising teams.

TIPS ON HOW TO IDENTIFY YOUR CUSTOMERS’ NEEDS

There is no single right way to identify your customers' needs, but some common methods include:

- **Quantitative research**: Use surveys and polls to ask customers for feedback and their opinions.
- **Qualitative research**: Speak to customers in focus groups or one-on-one to understand their pain points and needs.
- **First-party data**: Analyze customer browsing and purchasing history to identify common needs and trends.
- **Third-party data and research**: Integrate third-party insights that provide additional information on your target customers (e.g., economic context, fashion trends, societal changes)

2. Get the house in order

The product or e-commerce team should have (or develop) a robust process for tagging products online so that every product is consistently tagged with the necessary metadata. Accurate product tagging is critical to ensuring reliable recommendations and product searches. You must also set clear data governance practices that cover the data sets you collect, as well as data management roles, responsibilities, and processes.

3. Build segments

Identify patterns in customer behavior that indicate distinct customer segments. These segments will enable you to tailor recommendations at a cohort level. Beyond product preferences, your product recommendations for each segment should also consider what types of messages elicit a positive response and when customers are most likely to be receptive to the message. This will optimize the best message at the best time for each customer.

4. Look at the whole journey

Consider the whole customer journey. Recommendations can be delivered through email, text, and push notifications, in addition to on-site. Success means providing the right message at the right time through the right channel to maximize the effectiveness of your product recommendations. For this step to work, you must bring together all business units to share data and collaborate.

5. Enhance recommendations

As you increase the sophistication and effectiveness of your product recommendations, you can consider additional ways in which to make the recommendations more relevant. Improving your analytics capability to cope with larger data sets and operate in real-time enables you to react faster and improve recommendation relevancy. Machine learning has been transformative in this area, increasing retailers’ ability to uncover patterns and continue to improve the quality of recommendations.
Promotions & house ads

Develop and deliver the retailer's own advertisements and promotions to create a personalized and consistent customer experience that drives awareness of promotional offers.

Master these data foundations

Leading retailers who excel in promotions and house advertisements exhibit common characteristics that enable them to succeed with this use case.

- **Openness to incorporating customer insights into both short-term and long-term promotion planning.**
- **Advertising inventory yield optimization team** prioritizes the relative benefits of using advertising space for promotions or house advertisements.
- **Real-time analytics and reporting tools** are used to track campaign effectiveness and adapt to changing customer behaviors.
- **Ability to collect, curate, and activate first-, second-, and third-party data** to effectively identify valuable customers.

Maturity scale (extended version in the Diagnostic Tool)

<table>
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<tbody>
<tr>
<td><strong>Limited segmentation:</strong> No customer segmentation and limited content segmentation.</td>
<td><strong>Basic segmentation:</strong> Some segmentation using standard customer characteristics.</td>
<td><strong>Detailed segmentation:</strong> Segmentation uses regularly updated customer personal and behavioral data.</td>
<td><strong>Dynamic segmentation:</strong> Near real-time segmentation using advanced customer characteristics and behavior patterns enables decision making supported by relative value of segments.</td>
</tr>
<tr>
<td><strong>Basic advertising segmentation:</strong> Static rules that deliver segmentation at the category level.</td>
<td><strong>Advanced measurement:</strong> Strong understanding of relative effectiveness across different segments.</td>
<td><strong>Dynamic advertising targeting:</strong> Content recognition and segmentation automatically prioritizes advertisements and serves the most effective advertisement to each customer.</td>
<td><strong>Custom advertising placement:</strong> Advertising placement and volume can be dynamically changed.</td>
</tr>
</tbody>
</table>

Case study

**Specialty jewelry retailer, US**

A jewelry retailer improved its maturity from **developing** to **mature** to help drive **increased sales conversion rates**. The retailer maintains robust, historical profiles for each customer that indicate purchasing patterns, product preferences, and lifetime value (LTV). Combining these inputs with product tagging data, the retailer serves customers relevant promotions.

Depending on each customer’s behavior, the retailer may provide promotional materials that educate the customer on product types. For example, a customer displaying behavior that indicates an intent to purchase an engagement ring may be served content on how to evaluate diamond quality or a quiz to help narrow potential design considerations.
Five steps to activation

Activate this use case after you have properly developed your data foundations. Depending on your level of maturity, you may have mastered certain steps and should focus efforts on activities further along the journey.

1. Collect data

Identify data elements created by your customers on your owned and operated websites or via customer profiles. Identify key gaps where your understanding of customer needs and behaviors is limited, and develop tactics to collect and manage this data through the customer journey. Be mindful that some data may require customers to opt-in before it can be collected and stored.

2. Define promotion and merchandising strategy

Initiate cross-functional collaboration between the data, merchandising, advertising, and marketing teams to align on priorities. Align your merchandising strategy with your promotional strategy. What commercial or customer outcomes do you seek? What are the corresponding metrics? Aside from driving overall customer spend, there might be key products you want to promote or events you want to plan around.

3. Build segments

Analyze your data to reveal customer insights. Focus segmentation on characteristics that influence customers' propensity to positively respond to an offer, the type of offer, and preferred delivery mechanism. Segments could be defined by customer demographics (e.g., gender, age, geographic locale, income) or delve deeper into different types of browsing and purchasing behavior.

4. Test and refine segments

Enhance your existing segments by performing A/B testing on different customer offers and advertisements. Use browsing and purchasing data to ascertain the most effective promotions and ad types. More advanced analytics solutions draw upon Machine Learning capabilities to optimize the offer set (within boundaries), ensure promotions and advertisements are relevant, and determine the most effective delivery method and time of day.

5. Optimize for value

Integrate your promotions with your view of customer lifetime value (LTV). Does the offer you push to a customer consider the potential LTV of that customer? This will require a dynamic offer set and algorithmic approach to pushing offers to customers. At this stage, your advertisements and promotions should be integrated with your overall approach to customer loyalty and LTV.

Key teams to activate:

- BI
- Data engineering
- Cross sell & upsell
- Merchandising
- Customer insights
- Campaign analytics
- Campaign Dev. / Execution
- Sales / Marketing

Common challenge: alignment with promotional planning process

Retailers express a common challenge in aligning segmentation and targeting efforts with promotional teams, given promotion timelines may extend months in advance of an event and optimal targeting efforts require near-real time responses. To bridge this gap, include the data, sales, marketing, and merchandising teams in long-term planning sessions.

Growth in subscriptions

Many retailers are now experimenting with subscription offerings because subscription-based models can build strong customer loyalty, allow retailers to collect richer customer data, and lead to recurring revenue streams (in the case of paid subscriptions).
Product assortment and merchandising

Analyze customer purchasing behavior to help inform future product catalog and web placement decisions.

Master these data foundations

Leading companies who excel in product assortment and merchandising exhibit common characteristics that enable them to succeed with this use case.

- **Culture**: Comfortable tailoring product ranges and merchandising for the online customer experience, rather than simply porting inventory from offline.
- **Skills**: Data analytics professionals are critical to managing large customer data sets and uncovering rich insights.
- **Tech**: Use A/B testing to enable continuous learning on how to most effectively serve different customer segments.
- **Data**: Connect data points that reflect the end-to-end customer journey to inform decision making.

Maturity scale (extended version in the Diagnostic Tool)

<table>
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<tbody>
<tr>
<td>Infrequent catalog changes: Catalog is largely static and rarely updated using data analysis.</td>
<td>Periodic catalog changes: Catalog is periodically updated based on a high-level understanding of customer behavior.</td>
<td>Response to catalog updates: Data insights used to make intermittent adjustments to product catalog.</td>
<td>Immediate response to catalog updates: Product catalog can be adjusted at any time, and products not in stock can be back-ordered.</td>
</tr>
<tr>
<td>Basic customer analysis: Some understanding of customers’ on-site browsing behavior.</td>
<td>Advanced customer analysis: Batch analysis uses first-, second-, and third-party data to provide snapshots of customer behavior and trends.</td>
<td>Ongoing product placement changes: Product placement is constantly monitored using data insights and manually updated as needed.</td>
<td>Automated placement changes: Product placement is constantly monitored and updated.</td>
</tr>
</tbody>
</table>

Case Study

E-commerce marketplace, APAC

A newly established e-commerce platform made it a priority to grow its maturity from nascent to mature by developing a service that helped merchants on the platform improve their merchandising efforts. More than 70% of the platform’s listed merchants were small businesses (i.e., fewer than three people employed). Challenged by their small size and low marketing maturity, the merchants were unable to optimize inventory based on demand. To assist, the platform began tracking customer interactions and transactions to generate demand insights for specific products and segments. The insights were ultimately offered as a paid service to merchants to support their merchandising decisions.
Five steps to activation

Activate this use case after you have properly developed your data foundations. Depending on your level of maturity, you may have mastered certain steps and should focus efforts on activities further along the journey.

1. Collect data
   Identify data elements created by customers on your owned and operated websites. Browsing and purchasing data are two key data sets as they indicate what customers are looking at and what they respond to. Develop and document a data strategy that defines the first-party data you will collect and sets integration goals for data collection and management efforts.

2. Build segments
   Analyze your data to reveal customer insights. Focus segmentation and targeting efforts on grouping customers based on common characteristics, such as the products they browse and buy, traffic source, or basket size. The critical element is to uncover the characteristics that will influence your product assortment, product hierarchy, and merchandising decisions.

3. Develop tests
   Every test should be led by a hypothesis. What types of metrics are you trying to measure? What is the expected impact of those metrics? Start by identifying the different levers you want to pull, and then collaborate with the UX design and product assortment teams to understand any technical limitations.

4. Run tests
   The data team and product assortment and merchandising team need to collaborate to perform A/B testing of the different levers (e.g., layouts, product categories) across the different segments. Tests should be conducted live and continuously to constantly refine your design decisions and drive incremental value.

5. Implement changes and iterate
   Use the insights gained from A/B testing to inform new decisions about product hierarchy, layout, and range, as well as how to most effectively tailor these elements for each customer. For some retailers, merchandising includes content planning to inspire customers who do not yet know what they are looking to purchase.

Key teams to activate:
- Business intelligence (BI)
- Data engineering
- Merchandising
- Customer insights
- Physical stores
- UX / UI Design
Customer Loyalty and LTV

Use data to meet individual customer needs and preferences, engender loyalty, and drive increased LTV. Analyze LTV to inform customer experiences.

Master these data foundations

Leading retailers who excel in customer loyalty and LTV exhibit common characteristics that enable them to succeed with this use case.

- Share metrics and incentives across data and loyalty teams to develop new approaches to loyalty.
- Assemble a cross-functional team with representatives from the loyalty offer design and data teams to deliver data-informed loyalty approaches to market.
- Deliver a single view of the customer across channels and brands and enable the integration of new services into the technology architecture.
- Data is stored and structured in a flexible manner to support a changing set of queries; there is alignment around key metrics and reporting is actionable.

Maturity scale (extended version in the Diagnostic Tool)

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<tbody>
<tr>
<td><strong>Limited segmentation:</strong> Little to no customer segmentation.</td>
<td><strong>Basic segmentation:</strong> Uses standard customer characteristics (e.g., gender, geography) for segmentation.</td>
<td><strong>Detailed segmentation:</strong> Uses customer personal and behavioral data to segment across multiple dimensions.</td>
<td><strong>Dynamic segmentation:</strong> Routine analysis of customer segment performance.</td>
</tr>
<tr>
<td><strong>Universal loyalty:</strong> All customers are treated the same, irrespective of loyalty or value.</td>
<td><strong>Basic loyalty program:</strong> The loyalty program is a generic points reward system.</td>
<td><strong>Tailored loyalty system:</strong> Broadly understands the value of each customer segment, and KPIs are used to move customers to higher value segments.</td>
<td><strong>Individual loyalty system:</strong> Loyalty is rewarded at an individual level with personalized rewards, offers, and messaging to maximize efficacy and value to the customer.</td>
</tr>
</tbody>
</table>

Case study

Multinational supermarket, EMEA

A supermarket with an established loyalty card program wanted to boost its effectiveness in driving long-term customer LTV. To improve its maturity from mature to leading, the retailer incorporated additional metrics into its LTV calculation beyond just spend (e.g., number of categories shopped, number of channels shopped, frequency of visits). The retailer also revamped targeted promotional offerings to personalize every message and offer sent to each customer. Success was measured by the ability to move customers up the LTV curve. By taking this highly personalized approach to customer loyalty, the supermarket increased its bottom line profitability by one percent.
Three steps to activation

Activate this use case after you have properly developed your data foundations. Depending on your level of maturity, you may have mastered certain steps and should focus efforts on activities further along the journey.

1. Set strategy and design loyalty offers

Develop and document a customer loyalty strategy that defines your priorities and approaches for maximizing customer LTV. Describe how customer data will be used to support these priorities. The strategy should be supported by leadership and include clearly shared metrics that assess business performance across teams. Design priority loyalty offers using customer insights, and establish the minimum performance of key metrics needed to deliver objectives.

2. Pilot initiatives

Develop a proof of concept to test loyalty initiatives on a small scale. This will allow you to:

1. Understand the scale and nature of demand, including the customers to whom products appeal
2. Test the commercial impact of the initiative and impact on key metrics
3. Identify data challenges and operational ways of working to support the initiatives

Extract the learnings and update the loyalty offering.

3. Enable at scale

Engage a cross-functional team composed of representatives from the data, development, design, and loyalty teams to build out successful loyalty offers at scale. This team should also be responsible for creating and updating the offer, identifying new opportunities to influence customer loyalty behaviors, and monitoring the effectiveness of the offer. Leading retailers are beginning to use Machine Learning capabilities to extract rich insights from large data sets.

NEW APPROACHES TO CUSTOMER LOYALTY

Retailers are increasingly moving away from traditional loyalty programs due to falling participation rates and increasing costs. Instead, the focus is shifting to propositional loyalty and developing experiences that delight customers or solve their problems. Data on customer browsing and purchasing behavior is a key input to both defining and assessing the efficacy of loyalty offers. This data helps retailers understand what and why a customer is purchasing, and these insights can be used to design new experiences around those needs. This data will also help to prove the commercial impact of the initiative.

Retailers generally develop in two waves of maturity around data-informed loyalty:

Wave 1: Cohort-level programs

Run loyalty offerings targeted at customer cohorts that are segmented using data on shopping behaviors, demographics, and commercial objectives. Examples of such campaigns include targeted customer communications, personalized promotions (subject to appropriate permissions), product recommendations, and add-on features such as a delivery pass.

Wave 2: Individual programs

Take an individual customer approach to loyalty, analyzing individual behaviors and preferences collected and inferred from browsing behavior and recent purchases, as well as insights into long-term needs, life stage, and habits.

This will typically be driven by an algorithm that enables different communications, promotions, and recommendations to be automatically pushed out.

Understand your opt-ins. The European Union’s General Data Protection Regulation (GDPR) and other impending data privacy regulations mean many retailers must collect permission from their customer bases to collect customer data. In more direct terms, retailers will need to ask customers to explicitly give permission to use their data for marketing purposes. Keep in mind that a separate opt-in may be required for loyalty communications. Some retailers have already sought two separate opt-ins, which has led to a significant decrease in the contactable customer base.
Digital Supplier-Funded Marketing

Improve the effectiveness of marketing funded by suppliers on a retailer’s site through better campaign execution and creative design.

Master these data foundations

Leading retailers who excel in digital supplier-funded marketing exhibit common characteristics that enable them to succeed with this use case.

Culture

- Willingness to develop greater transparency with suppliers to facilitate more effective supplier marketing.

Skills

- Collaboration between sales, marketing, and data teams to communicate the value proposition to suppliers.

Tech

- Flexibility to replicate suppliers’ target customer segments and tailor them based on customer insights.

Data

- Ability to combine customer data and contextual information to facilitate ad targeting.

Maturity scale (extended version in the Diagnostic Tool)

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<td><strong>Dynamic segmentation:</strong> Near real-time segmentation uses advanced data sets to understand relative segment value.</td>
</tr>
<tr>
<td><strong>Basic advertising segmentation:</strong> Static rules that only vary by high-level segments.</td>
<td><strong>Advertising targeting:</strong> Advertisements are served based on customer browsing history and external rules (e.g., brand guidelines).</td>
<td><strong>Advertising targeting:</strong> Content recognition and segmentation automatically prioritizes advertisements and serves the most effective advertisement to each customer.</td>
<td></td>
</tr>
<tr>
<td><strong>Basic reporting:</strong> Provide suppliers with a final performance report.</td>
<td><strong>Regular reporting:</strong> Periodic reporting provided to suppliers.</td>
<td><strong>Self-service reporting:</strong> Dashboards available for suppliers to see performance.</td>
<td></td>
</tr>
<tr>
<td><strong>Basic brand relationship:</strong> Transactional brand relationships to negotiate trade marketing funding.</td>
<td><strong>Close brand relationship:</strong> Work with suppliers to tailor trade marketing services.</td>
<td><strong>Collaborative brand relationship:</strong> Work with suppliers to plan and execute trade marketing.</td>
<td></td>
</tr>
<tr>
<td><strong>Executive sponsor:</strong> The media team has the support of at least one executive.</td>
<td></td>
<td><strong>Media function:</strong> An autonomous team is responsible for all media activities.</td>
<td></td>
</tr>
</tbody>
</table>

Case study

Supermarket, EMEA

A national supermarket based in EMEA is midway through its journey toward becoming a leading retailer. The supermarket already offers detailed segmentation and digital advertising targeting to suppliers, but it has now decided to provide dashboards to suppliers so they can track their quarter-to-quarter marketing performance. The retailer says it is confident that it will demonstrate the value of its trade marketing offering to suppliers by providing details on return on investment (ROI), as well as other KPIs. Management believes this will ultimately lead to suppliers increasing their trade marketing spend with the supermarket.
Customer and marketing teams must consider supplier-centric and customer-centric approaches to digital supplier-funded marketing. A supplier-centric approach will focus on satisfying the needs of suppliers by creating the segments they want to target. A customer-centric approach will focus on serving the supplier advertisements that will best appeal to the targeted customer segment.

The supplier account managers and advertising sales team must decide the level of transparency regarding campaign performance the retailer will share with suppliers. For example, some retailers choose to provide a real-time dashboard to suppliers, while others offer quarterly reporting. You must also consider the KPIs that you will share, such as click-through rate.

After defining your data strategy, you must design your approach to customer insight analysis. Focus segmentation and targeting efforts on grouping customers based on common characteristics. Initially, group customers using basic elements such as demographics (e.g., gender, age, geography, income) and interests (e.g., high-tech gadgets, travel, summer dresses) based on the products they browse and buy and the traffic source.

Prepare advertising sales and marketing teams and account managers to initiate conversations about suppliers’ needs, including:

1. How they target their advertising and what performance metrics they require. Advertising should be targeted based on customer segments, contextual information, and user experience implications.
2. How to improve their creative services to better appeal to customers. Use performance data to identify patterns between brands, messaging, and performance to better design future campaigns.

Work with suppliers to understand their strategic priorities and demand for certain customer segments. Enhance your existing segments by evaluating customer browsing and purchase measurement as a result of certain ad types, and augment your first-party data and segmentation with market research to uncover rich insights to support future campaign development.

Assuming you have already created the segments that your suppliers want to target, you can now deliver greater value-add by helping your suppliers refine their segments and identify new ones. When doing this, consider:

- The outcomes your suppliers want to drive
- How your customers behave, and how this changes over time
- The link between behavioral data and the outcomes your suppliers want to drive; this will help identify potentially valuable customers for your suppliers that would otherwise be missed.

Continually improve campaign development and execution through timely campaign analytics and reporting. Depending on the level of transparency you choose to share with suppliers, provide information that helps them improve future campaigns. The aim for everyone is to increase customer engagement, and ultimately increase spend.

### Five steps to activation

Activate this use case after you have properly developed your data foundations. Depending on your level of maturity, you may have mastered certain steps and should focus efforts on activities further along the journey.

1. **A. Set strategy - approach**
   - Customer and marketing teams must consider supplier-centric and customer-centric approaches to digital supplier-funded marketing. A supplier-centric approach will focus on satisfying the needs of suppliers by creating the segments they want to target. A customer-centric approach will focus on serving the supplier advertisements that will best appeal to the targeted customer segment.

2. **B. Set strategy - transparency**
   - The supplier account managers and advertising sales team must decide the level of transparency regarding campaign performance the retailer will share with suppliers. For example, some retailers choose to provide a real-time dashboard to suppliers, while others offer quarterly reporting. You must also consider the KPIs that you will share, such as click-through rate.

3. **Build segments**
   - After defining your data strategy, you must design your approach to customer insight analysis. Focus segmentation and targeting efforts on grouping customers based on common characteristics. Initially, group customers using basic elements such as demographics (e.g., gender, age, geography, income) and interests (e.g., high-tech gadgets, travel, summer dresses) based on the products they browse and buy and the traffic source.

4. **Engage suppliers (performance & creative)**
   - Prepare advertising sales and marketing teams and account managers to initiate conversations about suppliers’ needs, including:
     1. How they target their advertising and what performance metrics they require. Advertising should be targeted based on customer segments, contextual information, and user experience implications.
     2. How to improve their creative services to better appeal to customers. Use performance data to identify patterns between brands, messaging, and performance to better design future campaigns.

5. **Enhance segments**
   - Work with suppliers to understand their strategic priorities and demand for certain customer segments. Enhance your existing segments by evaluating customer browsing and purchase measurement as a result of certain ad types, and augment your first-party data and segmentation with market research to uncover rich insights to support future campaign development.

### Key teams to activate:
- Customer insights
- Supplier managers
- Campaign dev. and execution
- Advertising technology
- Campaign analytics

### Setting up a media business unit

Some leading retailers have set up media business units to focus on growing media revenue from advertising and supplier-funded marketing. These retailers reorganized their people and processes to establish autonomous media functions that have the authority to make decisions and take quick action. For businesses that lack the scale or capabilities to establish separate media teams, it is critical to secure an executive sponsor for the media business.

### Identifying high-value segments:
Assuming you have already created the segments that your suppliers want to target, you can now deliver greater value-add by helping your suppliers refine their segments and identify new ones. When doing this, consider:

- The outcomes your suppliers want to drive
- How your customers behave, and how this changes over time
- The link between behavioral data and the outcomes your suppliers want to drive; this will help identify potentially valuable customers for your suppliers that would otherwise be missed.

The aim for everyone is to increase customer engagement, and ultimately increase spend.
Non-Supplier Marketing

Utilize customer behavior analytics to monetize advertising inventory sold to non-suppliers through targeted advertising.

Master these data foundations

Leading retailers who excel in non-supplier marketing exhibit common characteristics that enable them to succeed with this use case.

<table>
<thead>
<tr>
<th>Culture</th>
<th>Skills</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>A willingness to collaborate with non-suppliers and use their content to create a more engaging customer experience.</td>
<td>Data analytics to continuously refine customer segments used by the sales team to articulate the value of those segments.</td>
<td>Integrate product tagging data with customer data to allow advertisers to better infer intent.</td>
</tr>
<tr>
<td>Ability to test the impact of product sales cannibalization from potentially unwanted or inappropriate advertisements.</td>
<td></td>
<td></td>
</tr>
</tbody>
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<tr>
<td>Basic advertising segmentation: Static rules that only vary by high-level segments.</td>
<td>Regular rate card adjustment: Routine updates to rate card based on performance and directional demand forecasting.</td>
<td>Advertising targeting: Advertisements are served based on customer browsing history and external rules (e.g., brand guidelines).</td>
<td>Dynamic advertising targeting: Content recognition and segmentation automatically prioritizes advertisements and serves the most effective advertisement to each customer.</td>
</tr>
<tr>
<td>Infrequent rate card adjustment: Periodic updates to rate card based on historical pricing.</td>
<td></td>
<td>Advanced advertising pricing strategy: Pricing models and discounts are regularly updated based on customer behavior patterns and demand predictions.</td>
<td>Dynamic advertising pricing strategy: Pricing models and discounts are automatically updated based on changing demands.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Executive sponsor: The media team has the support of at least one executive.</td>
<td>Media function: An autonomous team is responsible for all media activities.</td>
</tr>
</tbody>
</table>

Case study

Outdoor activity retailer, EMEA

An outdoor clothing and equipment retailer based in EMEA partnered with selected third parties to develop branded content that it markets through its website. The leading retailer sees its website as both an online sales channel and a media platform. The retailer monetizes its website in a broad sense by selling advertising space to third-party partners (e.g., national parks and activity centers) who develop branded content aimed at engaging and inspiring customers. The retailer uses its customer data to understand who its customers are and their interests. These insights can be shared with partners to help them develop high-impact content that will attract and engage customers.
Four steps to activation

Activate this use case after you have properly developed your data foundations. Depending on your level of maturity, you may have mastered certain steps and should focus efforts on activities further along the journey.

1. Define boundaries
   The sales and marketing team must develop rules that precisely define who and what can be advertised on the platform, as well as when it can happen in the customer journey. The IT and development team must consider the best way to enforce the rules based on your company’s risk appetite and willingness to permit non-supplier advertisements. You may choose to manually run the approval process based on a list of approved advertisers, or you may choose to automate the approval process.

2. Engage non-supplier advertisers
   There are two reasons for your conversations with non-supplier advertisers:
   1. To spread awareness that you offer non-supplier marketing opportunities. Retailers need a comprehensive communications plan, a network of advertising technology contacts, and an advertising sales team that understands the value of your ad targeting.
   2. To understand advertisers’ needs and the most effective way for you to serve them.

3. Leverage and tailor segments
   If you run digital supplier-funded marketing, you will be able to leverage your existing customer segments as a starting point for non-supplier advertisers. If you do not run supplier-funded marketing, please refer to steps 1-2 of that use case.

   Using your insights from conversations with non-supplier advertisers, adjust your customer segments to satisfy the needs and objectives of these advertisers as they will likely differ from suppliers.

4. Run campaign and review
   Run the campaign and closely monitor key metrics that assess campaign performance and impact on customer behavior.

   Campaign analytics should cover key metrics such as views and click-through rates to refine customer segmentation and provide performance reporting to advertisers. You also need to closely monitor the impact of non-supplier advertisements on the customer journey to ensure they are not reducing customer spend or loyalty.

ACTING AS A MEDIA PLATFORM

Non-supplier marketing represents a significant shift in how retailers think about their online assets. Retailers know their customers better than nearly anyone else and, crucially, they know customers’ intent to purchase (not just their interests). By knowing customers this well, retailers become very attractive to advertisers wanting to target their own content.

Retailers should think about their websites and other online assets more broadly and consider them to be both a sales channel and a media platform.

Non-supplier marketing is particularly successful for retailers, customers, and advertisers when the marketing content complements the core retail product. For example, a wedding dress retailer may choose to publish advertisements for wedding venues. Because the retailer can only service one component of the overall wedding planning process, they can improve the overall customer experience and monetize a new advertiser relationship without putting their own product sales at risk.
Online to offline

Direct customers toward in-store purchases when they are unlikely to buy online.

Master these data foundations

Leading retailers who excel in online to offline marketing exhibit common characteristics that enable them to succeed with this use case.

- **Teams share channel-agnostic KPIs and incentives to drive positive customer outcomes in any channel.**

- **Ability to track and compare customers and behaviors across and between channels.**

- **Connect online and offline purchasing data to understand the end-to-end customer journey and conversion.**

- **Teams can access a single view of the customer and use data to generate insights around customer motivations and triggers.**

Maturity scale (extended version in the Diagnostic Tool)

<table>
<thead>
<tr>
<th>Nascent</th>
<th>Developing</th>
<th>Mature</th>
<th>Leading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Limited customer profile:</strong> Limited online and offline customer data is captured or assigned to an individual customer.</td>
<td><strong>Basic customer profile:</strong> Online and offline customer profiles are siloed.</td>
<td><strong>Advanced customer profile:</strong> Online and offline customer profiles are integrated into a single customer profile.</td>
<td><strong>Dynamic customer profile:</strong> Customer profiles are updated immediately after every customer action across channels.</td>
</tr>
<tr>
<td><strong>Basic location-based communication:</strong> Systems accurately track the customer’s general location to provide basic store information.</td>
<td></td>
<td><strong>Detailed location-based communication:</strong> Location data is used to provide in-store information to customers (e.g., promotions).</td>
<td><strong>Advanced location-based communication:</strong> Integrated customer location and profile data provides specific in-store recommendations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Measurement:</strong> Basic measurement (but strong understanding) of online factors that lead to in-store foot traffic.</td>
<td><strong>Advanced measurement:</strong> Strong understanding and measurement of online factors that lead to in-store foot traffic.</td>
</tr>
</tbody>
</table>

Case study

**Multichannel furniture store, US**

A national furniture retailer found that, while its website attracted a lot of traffic, the majority of its sales happened in-store. The retailer wanted to **improve its maturity to leading to increase footfall in-store and improve sales conversion rates**. The retailer developed a quick response (QR) code model to track customers who move from online browsing to in-store shopping. The QR code offered a prize, which was only redeemable in-store. Customers were directed to the nearest store using location data from when they first scanned the QR code. When the customer then rescanned the QR code in-store, sales assistants could view what they browsed online and show them similar in-store furniture, thereby improving the customer experience.
Three steps to activation

Activate this use case after you have properly developed your data foundations. Depending on your level of maturity, you may have mastered certain steps and should focus efforts on activities further along the journey.

1. **Define objectives and plan data collection**
   Define your objectives for influencing online to offline behaviors. This typically includes understanding the total sales conversion rate, generating customer stickiness by driving purchasing behavior in multiple channels, and for some retailers, driving higher value purchases in a given channel. **Once your objectives are clearly defined, build a plan to collect the data and consider a proof of concept to test the impact of data on customer engagement.**

2. **Analyze behaviors**
   Analyze current and historic browsing and purchase behaviors, as well as descriptive data sets such as demographics to identify patterns and deviations with target outcomes. **Test initiatives to influence behaviors, for example, through targeted communications, specific offers, and tailored messaging around features that appeal to specific customer cohorts. Examples include focusing on in-store experts or customer service personnel to drive footfall for more complex or high-value purchases.**

   **TIP! Make your customers visible.** Effective online to offline initiatives require data on customer behaviors in offline channels. While this data is transparent and available in an e-commerce environment, customers shopping in-store are invisible and anonymous to retailers. Retailers are now focusing on encouraging customers to make themselves visible. In the past, this has focused on loyalty programs that allow retailers to connect purchases to individuals. The next wave of innovation in this area focuses on matching payment card details to online customers, where opt-ins are permitted.

3. **Propensity modeling**
   Use the outcome of the testing process to predict the likelihood of a single customer buying a product online or in-store through propensity modeling. Segment customers based on the product categories they are likely to purchase in-store versus online to enable the communications team to effectively engage with them. Use A/B testing to continuously improve your propensity modeling and messaging. The outputs should also feed into product assortment choices between online and in-store stock.

   **BEST-IN-CLASS EXAMPLE**
   A leading mass-market retailer enables global brands to effectively track, engage, and convert customers as they move between both digital and brick-and-mortar retail channels. This capability has been developed across all of the retailer’s channels and affords the business complete visibility into customer behaviors and spending patterns. The retailer can see a customer’s location, including when a customer enters a given store, and the retailer can use the data captured from previous shopping and buying behaviors to offer targeted promotions, information, or in-store experiences that trigger specific customer outcomes.
Appendix

Maturity scale

<table>
<thead>
<tr>
<th>Nascent</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Retailers have the basic tools to collect data and some insights, but they often face cultural challenges when embracing data and digital initiatives due to an emphasis on investing in brick-and-mortar stores by senior leadership. Their technical teams struggle to integrate all back-end data sources into one unified place, which limits access to useable customer data within the organization.</td>
<td>Retailers have some success deriving insights from data and using those insights to drive value in pockets of their business. Leadership understands that online retail is a priority, but it is unclear on how to unlock investment or where to invest time and resources to make the best near-term changes.</td>
<td>Retailers drive action based on data, and data-informed decision making is the standard across much of the business. The technology supports various use cases, but these are mostly on a project basis, not business as usual.</td>
<td>Retailers see data as an integral part of achieving their strategic objectives, and team members throughout the organization characterize their work as data-informed. The retailer tests innovative projects and technologies that optimize customer LTV and, ultimately, help drive the industry forward.</td>
</tr>
</tbody>
</table>

There are four dimensions of data maturity. These operational objectives define where retailers prioritize data efforts and distinguish leading retailers from nascent retailers:

**Strategic direction and ambition for data:**
Ensures data is understood consistently at all levels of the business and prioritizes data’s critical role in setting broad strategic direction and achieving business objectives.

**User experience:**
Reflects the understanding of critical customer segments and emphasizes the dedication of resources to digital platforms in service of satisfying customer preferences.

**Core sales activities:**
Represent the detailed understanding of what customers are interested in purchasing and the ability to tailor product catalogs and promotions to fulfill customer demands.

**Emerging monetization opportunities:**
Encompass the use of rich data sets that hone in on customer interest and intent throughout the customer journey to effectively deliver the best advertisement to specific customers at the right time.
## Glossary (1 of 2)

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/B Testing</td>
<td>An experiment in which two or more variants of a page are shown to users at random, and statistical analysis is used to determine which variation performs better for a given goal</td>
</tr>
<tr>
<td>Behavioral Data</td>
<td>Data elements, like time on-site or scroll length, that are captured from a customer’s engagement with a website / app</td>
</tr>
<tr>
<td>Content Analytics</td>
<td>Technology that processes how users consume and engage with digital content in order to adjust, enhance, or discontinue content production or marketing</td>
</tr>
<tr>
<td>Contextual Data</td>
<td>Metadata that is used to identify the context (e.g., time of day, platform) in which content is being consumed to provide a deeper understanding of customer behavior</td>
</tr>
<tr>
<td>Cross-platform</td>
<td>Ability to analyze and support customer interactions with mobile and web platforms</td>
</tr>
<tr>
<td>Customer Data</td>
<td>First-, second-, and third-party data collected on customer characteristics (such as location and demographic), customer behavior on their own sites (such as product views, add to basket, and bounce rate) and transaction history</td>
</tr>
<tr>
<td>Customer Insights</td>
<td>Translating data into an understanding of your customers’ needs, preferences, and behaviors, in order to inform business decisions</td>
</tr>
<tr>
<td>Customer Lifetime Value</td>
<td>Understanding and tracking the value of a customer across their entire relationship with the business (including acquisition, support, and retention) and making business decisions by taking a full view of the customer’s value as opposed to at a point in time</td>
</tr>
<tr>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>Customer Segments</td>
<td>Specific subsets of a broad market / population that have common needs and / or behaviors</td>
</tr>
<tr>
<td>Data Element</td>
<td>An atomic unit of data that has precise meaning</td>
</tr>
<tr>
<td>Data Governance</td>
<td>The organizational models, policies, procedures, and standards to effectively manage and sustain the quality of enterprise data</td>
</tr>
<tr>
<td>Data Maturity</td>
<td>The relative ability of an organization to collect, organize, and convert data into actionable business insights</td>
</tr>
<tr>
<td>Data Strategy</td>
<td>A set of choices that defines how data will be used in an organization as well as the systems and processes that will be required to store, maintain, and analyze data</td>
</tr>
<tr>
<td>Digital Transformation</td>
<td>The process by which an organization uses technology to incorporate data into decision-making processes with the intention of driving overall operational improvements, ultimately resulting in higher data maturity</td>
</tr>
</tbody>
</table>
### Glossary (2 of 2)

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digitally Native Vertical Brands</td>
<td>A brand born online with an intense focus on the customer experience; unlike typical e-commerce companies, digitally native vertical brands control their own distribution.</td>
</tr>
<tr>
<td>Machine Learning</td>
<td>The process in which a computer distills regularities from training data. An algorithm “learns” to identify patterns, like occurrence of certain elements (e.g., words, images) or combinations of elements, that determine or inform operational decisions.</td>
</tr>
<tr>
<td>Multivariate Testing</td>
<td>An experiment that compares multiple variables and configurations of variables to reveal information about how individual variables interact with one another in different scenarios.</td>
</tr>
<tr>
<td>Predictive Modeling</td>
<td>Utilizing data mining and probability to forecast outcomes; ability to create, test, and validate a model to best predict audience-focused outcomes (e.g., products viewed, promotions used).</td>
</tr>
<tr>
<td>Private Marketplace</td>
<td>An invitation-only auction environment for programmatic advertising that leverages companies’ online advertising inventory, typically to a select number of advertisers.</td>
</tr>
<tr>
<td>Product Tagging</td>
<td>The system by which a keyword or term is assigned to a stock keeping unit (SKU) or product to improve searchability of the product for future use.</td>
</tr>
<tr>
<td>Programmatic Advertising</td>
<td>The automated serving of digital ads in real-time based on individual advertising impression opportunities.</td>
</tr>
<tr>
<td>Propensity Modeling</td>
<td>The statistical practice of predicting the likelihood to purchase a product or service in a predefined time horizon in the future.</td>
</tr>
<tr>
<td>Segmentation and Targeting</td>
<td>Dividing a broad market/population into more specific subsets that have common needs and/or behaviors and using these identifiers to serve the most relevant content or message.</td>
</tr>
<tr>
<td>Trade Marketing</td>
<td>The basic idea of marketing products through the value chain and at the point of sale (i.e., the store), with a focus on increasing total demand for a brand or product.</td>
</tr>
</tbody>
</table>
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