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Initiatives: Unified Retail Commerce for Digital Business Execution

Multiple rapid shifts in retail are leaving retailers struggling to create a unified user experience that traverses online and offline channels. CIOs should create customer behavior models and remove barriers to real-time data migration to profit from unified retail commerce investments.

Overview

Key Findings

- Regardless of touchpoint, customers expect retailers to operate a unified commerce strategy to sustain excellent experiences through flexible and rapidly composable interactions.
- Retailers are struggling to create a unified user experience that traverses easily between traditional online and offline channels.
- Barriers to accessing rich real-time data to optimize operational decisions are negatively impacting retailers' profitability.

Recommendations

To effectively unify the front- and back-ends of organizations, retail CIOs should:

- Define unified retail commerce (URC) by developing a customer process framework that facilitates seamless convergence of digital and physical channels, and provides deep levels of immersion across all touchpoints.
- Collaborate with executive management to create customer behavior models that inform business outcomes and technology investments by cataloging available data sources and leveraging AI-led processes and techniques.

- Remove barriers to rich real-time inventory data by reorganizing business structure to enable faster data sharing across the enterprise, improving data feeds into automated systems, protecting master data and making clean inventory data visible to both the enterprise and customers.

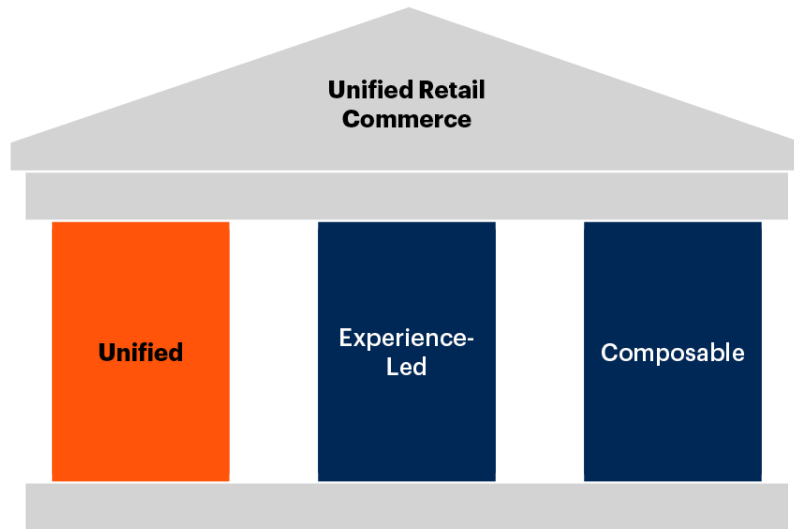
Introduction

In the face of rapidly shifting market conditions, retailers must quickly and accurately execute URC processes in order to keep pace with new and emerging customer expectations.

Over the past three years, the COVID-19 pandemic as well as macroeconomic, geopolitical and climate change disruptions have resulted in retailers experiencing escalated costs, whittled margins and tight labor markets. Customer experience (CX) and business agility for resilience have, therefore, become principal competitive differentiators in the execution of a URC strategy. For most retailers, the adoption and execution of URC will be challenging as it will impact the entire enterprise and has a high degree of complexity. This is exacerbated by a lack of clarity on what elements the URC strategy comprises and how to prioritize delivery. Retailers that don't transform the business in line with the URC strategy will not only find it extremely difficult to deliver a cohesive view of the customer's interactions, their view on how consumers interact overall with the brand will also be severely limited.

URC is now firmly established as the dominant modern retail strategy, and requires swift and accurate execution. The strategy provides retail customers with a composable experience as they browse, transact, acquire and consume, regardless of touchpoint. (See [Quick Answer: What Is Unified Retail Commerce, and Why Does It Matter?](#))

URC strategy relies on three core pillars to support the business (see [Figure 1](#)). A successful approach to implementing URC includes unification of the front- and back-end, prioritizing experience-led initiatives and creating a composable business model that can keep pace with rapid change. (For more on composable business models see [Quick Answer: What Is Composable Business Architecture?](#))

Figure 1: Three Pillars Supporting Unified Retail Commerce**Three Pillars Supporting Unified Retail Commerce**

Source: Gartner
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This research contains three top practices focused on the “unified” pillar, which calls for the unification of front-end (customer facing) and back-end (retail facing) systems, processes and operations.

Analysis

Target the Four Key Front-End Customer Processes to Deliver a Unified Experience

Gartner describes URC as a strategy to provide “composable” customer-centric experiences based on how customers approach shopping, with no limitations by channel. Four major customer processes provide the fundamental components of unified customer-centric experiences — browse, transact, acquire and consume (see Table 1).





These processes, through which customers engage with a retailer, are not linear but rather composable. In any given shopping experience, customers can participate in one or more of them in any order.

Retail CIOs must help the business develop a customer process framework that facilitates the seamless convergence of digital and physical channels that customers expect. This must also include deep levels of immersion across all touchpoints for a highly engaging customer experience.

Develop Customer Process Frameworks by Identifying Four Key Customer Processes

Table 1: Four Key Customer Processes

(Enlarged table in Appendix)

<p>Browse</p> 	<ul style="list-style-type: none"> ■ Enables customers to find what they need, as well as discover new and different products and services that will enhance their lifestyles. ■ Provided by stores, associates and digital channels as well as mobile, social and IoT-enabled devices, AI, and augmented reality working together to deliver an immersive shopping experience.
<p>Transact</p> 	<ul style="list-style-type: none"> ■ Enables the customer to transact within and across channels, regardless of the product or the combination of products and services, without inconvenience or delays. ■ Provided through modern, interconnected point of sale (POS) applications, mobile applications and the customer-facing execution of processes.
<p>Acquire</p> 	<ul style="list-style-type: none"> ■ Enables the customer to acquire goods and services with a variety of methods, including physical shopping, click and collect, in-home delivery, automated replenishment, lockers, and store-based microfulfillment as well as through partnerships with external organizations. ■ Provided by executing highly flexible fulfillment models including traditional, in-store shopping and many last-mile delivery options.
<p>Consume</p> 	<ul style="list-style-type: none"> ■ Enables customers' enjoyment and enhances their consumption experience. ■ Provided through enhanced information and services, connected devices, autoreplenishment and voice-enabled interactions.

Source: Gartner

Having the ability to compose their shopping experience means that customers can start and end at any touchpoint, regardless of when, where or how they want to shop. There must, therefore, be synchronization between the customer-facing frontend and retailer backend. To do this, retailers must build interconnected and unified systems which have the ability to combine and recombine the back-end processes to “mirror” the shopping experiences the customer is composing at the frontend. For more on customer framework processes and how to prioritize technologies to enable URC, see Toolkit: Create a Strategic Technology Map for Unified Retail Commerce.

Use Customer Behavior Analysis to Design and Deliver Customer-Centric Back-End Retailer Processes

Understanding consumer buying behavior leads to a greater understanding of both customers and their expectations. To this end, customer behavior analysis — a qualitative and quantitative observation of how customers interact with the business — will enable retailers to engage customers more effectively.

In particular, the future of retailers depends on them gaining as comprehensive an understanding as possible of how customers behave when they browse, transact, acquire and consume products and services in or across any touchpoint. A prominent characteristic of a successful URC strategy is the integration between digital and physical touchpoints, with the store as the executional hub that can support immersive experiences for growth.

Prioritize a Customer-Centric Merchandising Approach

To meet both current and emerging customer expectations for seamless and unified experiences, retail CIOs must prioritize a customer-centric approach to back-end merchandising functions, processes and platforms. This additionally means transitioning away from basing merchandise planning on traditional structures and product hierarchies. In order to prepare for business process and technology realignment from linear product-centric to circular customer-centric merchandising processes, retail CIOs should:

- Increase investment significantly to add analytical tools that can accommodate new types of customer data, for example, data visualization tools.
- Budget funding for core merchandising and merchandise optimization technologies, in addition to business intelligence (BI) applications.
- Work with multichannel business leaders to evaluate current process capabilities to support and respond to customer data input.

For more on the current merchandising transition from product hierarchy to customer centricity, see [Retail Merchandising Propels Toward a Once-in-a-Lifetime Transformation](#).

Establish a Customer Behavior Hierarchy

The increasing democratization of and easy access to information has dramatically shifted shopping power away from the retailer and into the hands of the consumer. Retailers must now move away from existing product hierarchies and establish a new hierarchy model based on customer behavior.

The change will be complex but retailers must bear short-term pain for long-term survival. Forming such a model will require enormous amounts of relevant data, complex analytic models and AI-enabled intelligent automation support.

Retail CIOs must deliver customer behavioral insights to key stakeholders highlighting new KPIs that demonstrate customer understanding through behavioral segmentation. For this, they should:

- Develop advanced customer behavioral segmentation capable of incorporating customer personas and motivators based on a wide variety of information sources, including transactions, social media, location and proximity, and brand affinity.
- Utilize consistent customer behavioral data across all functional areas in support of customer centricity.
- Obey all personal privacy laws such as General Data Protection Regulation (GDPR) from the EU and the California Consumer Privacy Act (CCPA) of 2018. Develop clear, easy-to-understand policies for customer data management. Look to the strictest laws on customer information as a guide.

Create an Algorithmic Merchandising Plan

Algorithmic retailing is the application of complex data through advanced analytics and algorithms across an expanding URC structure to provide business value and produce intellectual property, knowledge and insight in a reusable form to meet customer expectations.

To grow revenue, retailers must create and execute a merchandising plan that delivers optimally priced customer-centric assortments available across every touchpoint. However, current merchandising processes are still largely antiquated, overly manual and prone to human error. Slow response times and the inability to reach accurate as well as granular levels of analysis means retailers are missing huge opportunities to grow profit. It is, therefore, imperative that retail CIOs develop an algorithmic merchandising approach to gain valuable insights into customer behavior. (See [Retailers Must Drive Customer-Centric Merchandising With an AI Core](#) for further guidance in accomplishing this.)

Gelling operational insights from in-store technology endpoints with AI-enabled customer-centric insights will allow the retailer to both deliver excellent operational execution (to optimize costs). This also supports intelligent decision making for more precisely targeted prices, more attractive promotions and relevant assortments (to grow revenue). This combination will deliver strong margin optimization as well as revenue growth for increased profitability.

Prioritize Tech Investments That Optimize Cost, Reduce Risk

Retail CIOs can lay the groundwork for creating customer behavior models by prioritizing strategic technology investments that grow revenue, optimize cost and reduce risk. Prioritization of technology investments must take into account customer expectations as well as retailers' struggle to balance operational cost optimization with the ability to deliver excellent URC experiences to customers for long-term growth and survival.

Determining how to prioritize technologies to enable composable URC experiences is a mandatory, complex and challenging imperative. (See Toolkit: Create a Strategic Technology Map for Unified Retail Commerce.)

Connect Data and Analytics to Business Metrics

According to the 2023 Gartner Board of Directors Survey on Business Strategy in an Uncertain World, ¹ 89% of nonexecutive board of directors report that digital is no longer seen as a separate strategy but is an implicit part of all business growth strategies. CIOs are therefore under increasing pressure to use D&A to deliver the results expected by their CEOs and boards of directors.

In order to successfully form customer behavior models, focus the organization's D&A governance around:

- **Value and outcomes** as the focus for creating customer value as well as governance through measurable organizational outcomes.
- **Accountability and decision rights** to enable achievement of these business outcomes.
- **Trust** allowing governance of information asset types, based on materiality, lineage and curation. This is especially important given the rise of large language models and generative AI.
- **Transparency and ethics** tracing clear decision-making processes and ethical foundations.

- **Risk and security** as inherent aspects of a governance framework, not afterthoughts.
- **Education and training** and the role they play in communicating required behavioral changes.
- **Collaboration and culture** promoting governance outcomes through community and innovation.

(For further reading, see [7 Must-Have Foundations to Build a Modern Data and Analytics Governance Program](#).)

Improve Collaboration to Remove Barriers and Enable Real-Time Data to Unify the Enterprise

One of the most relevant elements to forming an effective URC strategy is having access to rich and accurate real-time data across the enterprise. To do so, retail CIOs should follow the following four steps.

Reorganize Business Structure to Enable Faster Data Sharing Across the Enterprise

Customers' demands for URC experiences that allow for seamless interactions across all touchpoints require that retailers break down not only external channel silos but also internal functional silos. For most retailers, the ideal starting point could be the merchandising function.

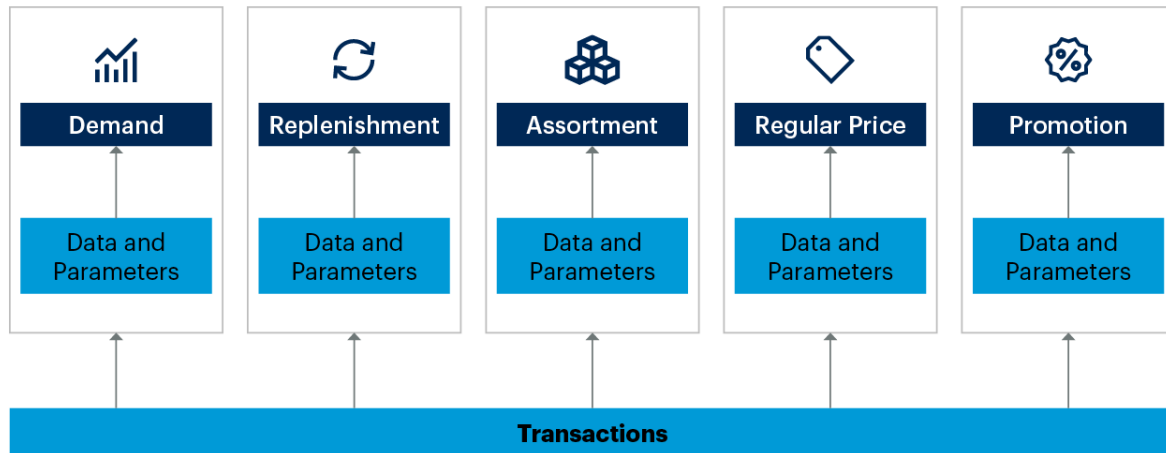
One way to achieve this is to flatten hierarchical organizations and restructure to form business fusion teams. Retailers also need to make sure that cross-functional collaborative processes are implemented to encourage sharing of creative ideas and data to fuel innovation.

Improve Data Feeds Into Automated Systems

According to the 2023 Gartner CIO and Technology Executive Survey, 65% of retail respondents plan to increase investments in business intelligence and data analytics in 2023. ² Improved data insights gathered through in-store endpoint (IoT) technology will enable empowered in-store associates, augmented by automation, to execute product and customer-facing operations with efficiency gains while optimizing cost. Even automated systems can be compromised by data anomalies (see Figure 2). (See [Top 5 Technology Trends in Retail Merchandising for the 2020s](#).)

Figure 2: How Automated Systems Are Compromised by Data Anomalies

How Automated Systems Are Compromised by Data Anomalies



Source: Gartner
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Follow Best Practices to Identify, Manage and Protect Master Data

Retail CIOs must minimize the risk of automated systems becoming compromised by data anomalies across multiple detection methods and develop an internal approach for accurate data governance across all channels and environments. For most, machine learning (ML) is likely to be used to automate real-time anomaly detection and make it more effective, especially when large datasets are involved. The ability of ML systems to learn by their own experience, and therefore, further refine analytical and predictive capacity, is now a critical requirement for retailers. (For more on effective data quality programs, see *Data and Analytics Essentials: Data Quality*.)

Retailers attempting to transform their business through the implementation and adoption of new applications often have poor or limited strategies for managing the attendant master data changes. According to the 2021 Gartner ERP, Procurement, HCM and Finance Survey, close to 70% of respondents responsible for ERP decision making said their organization's ERP strategy was not well aligned (less than or equal to 75% alignment) with their business strategy.³

Large multichannel retailers pursuing a unified retail commerce strategy usually have a "patchwork quilt" of a huge number of applications. These include heavily customized enterprise resource planning (ERP) applications as well as customized "off-the-shelf" stand-alone applications that need to be integrated.

They also almost always have to contend with homegrown applications. The master data feeding these applications invariably comes from multiple and disparate sources. The inherent problems that come with this approach, such as maintaining data integrity, are compounded through woefully inadequate management practices, including the inability to identify the single source of truth for each master data domain.

To address data management pain points in order to support a single source of truth for each business domain, CIOs need to ensure that master data, of all flavors, is properly and robustly managed.

(For further reading, see 4 Master Data Best Practices for ERP.)

Make Clean Inventory Data Visible for Both Enterprise and Customers

In retail, trust depends heavily on a retailer's ability to deliver value. High-quality inventory management represents a huge trust-building opportunity. This makes excellent inventory management processes and real-time inventory visibility across fulfillment nodes a basic requirement for retailers to build trust. This is particularly important today as retailers seek to maintain customers' loyalty by responding agilely to their needs in the face of significant and persistent market disruptions. URC execution for competitive advantage demands that inventory data is highly accurate, clean, rich and available to both customer and retailer decision makers in real time.

This will enable retailers to meet consumers' expectations of the right product in the right place at the right time as well as the ability to get it into their hands through their chosen fulfillment method. Excellence in inventory management can help the retailer improve operational efficiency and implement well-targeted customer offers to build loyalty, increase trust and drive more profitability.

Evidence

This research is drawn from extensive interviews with hundreds of retail CIOs, previously published Gartner research and assessments made by Gartner analysts.

¹ **2023 Gartner Board of Directors Survey on Business Strategy in an Uncertain World:**

This survey was conducted to understand the new approaches adopted by nonexecutive boards of directors (BoDs) to drive growth in a rapidly changing business environment. The survey also sought to understand the BoDs' focus on investments in digital acceleration; sustainability; and diversity, equity and inclusion. The survey was conducted online from June through July 2022 among 281 respondents from North America, Latin America, Europe and Asia/Pacific. Respondents came from all industries, except governments, nonprofits, charities and NGOs, and from organizations with \$50 million or more in annual revenue. Respondents were required to be a board director or a member of a corporate board of directors. If respondents served on multiple boards, they answered for the largest company, defined by its annual revenue, for which they are a board member.

Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

² **2023 Gartner CIO and Technology Executive Survey:**

This survey was conducted to help CIOs and technology executives overcome digital execution gaps by empowering and enabling an ecosystem of internal and external digital technology producers. It was conducted online from 2 May through 25 June 2022 among Gartner Executive Programs members and other CIOs. Qualified respondents are each the most senior IT leader (e.g., CIO) for their overall organization or some part of their organization (for example, a business unit or region). The total sample is 2,203 respondents, with representation from all geographies and industry sectors (public and private), including 79 from retail.

Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

³ **2021 Gartner ERP, Procurement, HCM and Finance Survey:**

This survey was conducted to understand the level of performance and drivers of ERP strategy and applications in supporting the growing complexities of business requirements. The survey further aimed to understand the vendor strategy approach, modernization and cloud adoption plans, and challenges associated with each. The research was conducted online from September through November 2021 among 245 respondents from North America (n = 114), Western Europe (n = 81) and Latin America (n = 50). Respondents were screened to be managers and above, responsible for ERP decision making at organizations of \$50 million and more in worldwide revenue across organizations from all industries. The survey was asked to a population that had been custom recruited after following strict screening criteria, ensuring impeccable accuracy on the target population and high-quality data.

Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

Acronym Key and Glossary Terms

URC	Unified retail commerce
ERP	Enterprise resource planning
Algorithmic Retailing	Algorithmic retailing is the application of complex data through advanced analytics and algorithms across an expanding, URC structure to provide business value and produce intellectual property, knowledge and insight in a reusable form to meet customer expectations.
ML	Machine learning
IoT	Internet of Things
D&A	Data and analytics
CCPA	California Consumer Privacy Act
GDPR	General Data Protection Regulation
BI	Business intelligence

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[Quick Answer: What Is Unified Retail Commerce, and Why Does It Matter?](#)

[Create Value Through Hyperimmersive Retail Experiences](#)

[Top Unified Retail Commerce Execution Trends for CIOs 2023](#)

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