Digital transformation is underway and retailers' digital efforts are overwhelmingly focused on customer experience. Retail CIOs can use this 2017 Gartner CIO Survey analysis to compare their organizations and evaluate their digital business readiness.

Key Findings
- Only 2% of retailers surveyed indicate their digital efforts have reached a harvesting stage, where the digital initiative is mature and delivering business benefits.
- Customer engagement is by far the area where retailers believe they will receive the most benefit from digital.
- Advanced analytics is the technology most retailers (88%) believe will change their organizations over the next five years.
- More retail CIOs are focused on delivering innovation and digital transformation over IT cost optimization.

Recommendations
Retail CIOs establishing and mastering the CIO role:
- Evaluate the present state of your digital business strategy by comparing your individual company against the retailers surveyed and, in some cases, the broader business ecosystem.
- Focus on using digital technologies to give customers one view of the retailer by ensuring that pricing, promotions and offers are consistent across channels, or by using IoT to develop automated replenishment of consumables in customers' homes.
- Change your approaches to developing the necessary digital business acumen/talent on your teams by using new and alternative actions to developing talent such as offering lateral moves and business IT mentoring.
- Educate the business community about the anticipated dramatic impact of digital moments on the retail marketplace by using Gartner business moments and encouraging the business to develop its own potential business moments.
Survey Objective

Every year, Gartner surveys CIOs and IT executives drawn from the membership of its executive program and other sources to identify key priorities, opportunities and issues. The 2017 Gartner CIO Survey includes responses from 2,598 overall participants. This research examines the specifics of the retail segment of the 2017 CIO survey results from 133 retail participants from 33 countries accounting for $513 billion in revenue and $11 billion in IT spending. For context and benchmarking, some results have been compared to the greater survey population.

The 2017 CIO Agenda divides survey respondents into three categories based on self-reported IT and enterprise performance:
Top performers — a self-reported score of 6 or 7 (out of 7) on the question, "How effective is your company at factoring digital considerations into strategy and planning?" These performers answered "scaling" or "harvesting" (the top two categories) to the question, "Which of these best describes the stage of your organization's digital initiative?" Top performers have reached "digital escape velocity" to outperform their peers.

Typical performers — the cohort that performed too well to be included in trailing performers, yet not well enough to be included in top performers.

Trailing performers — a self-reported score of 1 or 2 (out of 7) on the question, "How effective is your company at factoring digital considerations into strategy and planning?" These performers answered "none" or "desired" (the bottom two categories) to the question, "Which of these best describes the stage of your organization's digital initiative?"

These performance segments will be presented to show how the retail industry compares.

Data Insights

Retailers' High Expectations for Digital Initiatives Depend on Addressing Lack of Skills, Funding and Leadership

The conductor has called "all aboard," the train is ready to leave the station and retailers need to jump on now. Currently, only 2% of retailers surveyed indicate their digital efforts have reached a harvesting stage. However, the expectation for harvesting results in the next year is high as more than half of retailers surveyed are in the delivering or scaling (expanding on delivery to achieve business scale) phase of their digital initiatives. Figure 1 shows the status of digital initiatives among those surveyed.
The percentage of retailers delivering and scaling is outpacing the greater survey respondent pool rather significantly. The pace of change in technology is allowing consumers unprecedented control and choice in how they search, purchase and fulfill their consumption. Presumably, the nature of direct consumer commerce causes retailers to move forward faster than some other industries. For the other half of retailers that are not yet delivering on a digital strategy, the future is in fact significantly more uncertain. Competitive pressures require significant action.

A fairly wide variety of issues hinder success for retail CIOs. As Figure 2 shows, there are many issues and some significant variations in impact on retail CIOs.
Lack of leadership is the third highest barrier for retail CIOs at 10%, indicating that this is seen as a larger issue in retail. Gartner’s interactions with retailers confirm that leadership can be a significant impediment. This may be driven by the complexity of the retail organization structure, as well as turnover in key positions such as the chief marketing officer (CMO) or chief merchant. The impact of digital on traditional retail business models is so pervasive that success is improbable without strong, long-term leadership. Funding (15%) remains a significant barrier but retail appears to fare slightly better than the overall (17%) and even stronger when compared to the top performers in the survey (19%).

Many CIOs surveyed indicated that skills/resources are the top obstacle. For retail this was also true, however, to a slightly lesser degree. This can be further investigated by looking at the talent gap that may be interfering with digital progress. Figure 3 shows major talent gaps exist in business intelligence and analytics (34%) and in digital business and digital marketing (16%).
Figure 3. Retailers’ Biggest Talent Gaps

<table>
<thead>
<tr>
<th>Category</th>
<th>Retail (n = 116)</th>
<th>Top Performers (n = 153)</th>
<th>Typical Performers (n = 1,863)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information/Analytics/Data Science/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Intelligence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security and Risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital Business/Digital Marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Lack of Skills/Knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project/Program Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Knowledge/Acumen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business/Systems Analysts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programmers/Developers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation/Creativity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Technical Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What would you say is the biggest talent gap (i.e., lack of skills) related to information, technology or digital business your government or public entity/business unit/company is trying to fill at the moment? Showing top 10 responses mentioned in top three by overall respondents.

Up to three responses allowed.

Source: Gartner (February 2017)
Recommendations

Change management, budgeting and staffing remain concerns, and CIOs should actively communicate the urgency of digital business across the leadership of the retail organization. This year’s CIO survey shows that retail CIOs continue to face skills shortages. Therefore, CIOs should rethink their approaches to developing the necessary business acumen in their teams, possibly including new and alternative actions to developing talent such as offering lateral moves and business IT mentoring. Retailers should also be evolving to a digital workplace strategy in conjunction with the technology changes.

Recent Gartner research describes why traditional change management is insufficient in a digital era of uncertainty and constant change. It describes the ESCAPE model, which builds on existing models and distills change leadership into six practical actions — Envision, Share, Compose, Attract, Permit and Enable — that will help CIOs establish guardrails for an uncertain future and create an environment for new behaviors and ways of working (see "ESCAPE the Past: Six Steps to Successful Change Leadership").

Customer Engagement Is Where Retailers Expect to Get the Most Benefit From Digital

Retailers of all types must engage in digital business transformation built on a foundation of customer understanding. Reinventing the customer experience is critical for multichannel retailers as they transform from multichannel to unified retail commerce to enable exceptional customer experience. Figure 4 shows that a clear majority of retailers surveyed expect digital to have the greatest impact on customer experience.
Rather than trying to create one view of the customer, retailers will benefit most from using digital technology to create one view of the retailer for their customers. In this way, customers can confidently transact across retailers' channels without any artificial boundaries. Regardless of the number of retail channels, customer expectations of consistent and flexible shopping between and across channels will require that all of a retailer's customer-facing processes must be unified. These processes should be defined in their most basic terms: consume, search, purchase, and fulfill. Retailers of all types must engage in digital business transformation built on a foundation of customer understanding to facilitate a unified retail commerce experience.

The store will continue to be the leading channel for multichannel retailers, and must function as the hub of multichannel activity. Retailers will use a variety of digital technologies as they enhance the customer experience. These include advanced analytics, IoT, business algorithms, digital security and virtual customer assistants (VCAs). Gartner's retail Predicts 2017 included this prediction for VCAs: By 2020, 50% of retail customer service requests will be conducted, at least partially, through conversational artificial intelligence (AI) applications (see "Predicts 2017: Digital Business Elevates the Customer Experience Well Beyond Current Retail Multichannel Capabilities").
Recommendations

Retail CIOs should focus on digital technologies that will help facilitate one view of the retailer. For example, ensuring that pricing, promotions and offers are consistent across channels for individual consumers, or using IoT to develop automated replenishment of consumables in customers’ homes. Use your understanding of these technologies to engage the business in developing customer-centric retail strategies that can be enabled through technology.

Most Retailers (88%) Believe Advanced Analytics Will Change Their Organizations Over the Next Five Years

Advanced analytics technologies that enable big data discovery and execution through algorithms can reinvent retail. Their importance increases exponentially with the expansion of IoT. As Figure 5 shows, retailers surveyed agreed that advanced analytics, IoT and business algorithms have the most potential to change their organizations.

Figure 5. Technologies With the Most Potential to Change the Organization

The most difficult challenge here is well-aligned to the earlier observations on skills deficits. Facilitating changes based on advanced analytics requires business users to go where the data leads. Today’s retail organizations continue to be heavily reliant on history and gut driving go-forward decisions. However, due to customer control of the shopping process through digital
technologies, a gap is growing between what the business users think is true about customers versus what is actually true. For example, consumers' use of mobile technologies to research product pricing, quality and availability has changed purchase behavior patterns and requires changes to typical retail strategies.

The impact of digital business and the IoT will require advanced analytics to support real-time decision making to take advantage of momentary business opportunities. These opportunities will demand a different approach to marketing, merchandising, pricing, distribution, store operations and every other internal process. Ultimately, the retailer will need the ability to decide in a split second if an opportunity is potentially desirable or should be passed up in favor of the next momentary opportunity. Retailers will leverage big data, advanced analytics and algorithms through applied AI to enable these decisions with greater accuracy and timely execution of customer-facing processes. Success will require retailers to use a combination of knowledge, innovation, speed and strategy to maintain and grow market share in the digital economy.

**Recommendations**

Retail CIOs can use Gartner business moments research such as "Business Moment: Reconstructing the Retail Consumer Experience" to educate the business community about the anticipated dramatic impact of digital moments on the retail marketplace. Encourage the business to develop its own examples of potential business moments for the retail industry segment.

**Retail IT Is Focused on Delivering Innovation and Digital Transformation Over IT Cost Optimization**

IT cost optimization is not a priority for retail CIOs across the research sample. In fact, retailers’ results closely mirrored the top performers' results for three choice pairings. This may be driven by the reinvention of retailing models by companies such as Amazon, where profitability continues to take a back seat to top-line revenue growth. When asked to compare two choices, as Figure 6 shows, support for digital business initiatives, innovation delivery and business cost optimization far outpace support for IT cost optimization.
Conversations with our retail clients indicate that in some geographies, and for some retailers, IT cost optimization is taking a forward role at this time. Optimizing business costs remains an important consideration; however, the competitive environment in the developed economies is forcing more of a top-line focus.

This focus on innovation and digital business is critical to improving the competitive standing of retailers in this dynamic business environment. The recent examples of Amazon Go or Walmart Pickup and Fuel illustrate just how dramatically technology innovations can impact the physical retail experience for consumers (see "Amazon’s Go Stores Set to Disrupt the Retail Market").
Recommendations

Retail CIOs should use these numbers to benchmark their current status and to evaluate their own focus, priorities, and performance against business goals. Innovation and digitalization of the retail customer experience must include the development of unified retail commerce capabilities. CIOs must keep their eyes on costs and optimize as appropriate while ensuring their businesses have the technology to move the customer experience to the next level.

Methodology

The 2017 Gartner CIO Survey was conducted during 2016 based on a number of hypotheses developed by the Gartner CIO research community. The results of the 2017 Gartner CIO Survey have formed the basis for the 2017 CIO Agenda (see Gartner Recommended Reading section). This research uses the results of the 2017 survey and explores the areas where the responses from the retail industry segment lead to additional observations — either contradicting or supporting the global findings.

The purpose of this research, therefore, is not to comment on the entire survey, but rather to serve as a supplement that highlights special areas of interest for retail CIOs and other stakeholders with an interest in the retail industry. The findings from the total dataset were published in their entirety as "The 2017 CIO Agenda: Seize the Digital Ecosystem Opportunity."

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Business Moment: Reconstructing the Retail Consumer Experience"

"ESCAPE the Past: Six Steps to Successful Change Leadership"

"Amazon's Go Stores Set to Disrupt the Retail Market"

"Predicts 2017: Digital Business Elevates the Customer Experience Well Beyond Current Retail Multichannel Capabilities"

"Industry Vision: Less Physical Retail Selling Space and Greater Retailer-Manufacturer Collaboration"

"Using Algorithmic Retailing to Drive Competitive Advantage"

"Algorithmic Retail; Merchandising Leads the Way"

"Digital Business Requires an Excellent Associate Experience to Drive Retailer Success"

"IoT in Retail — Understand the Benefits of the IoT for Digital Business Success"

"IoT in Retail — Understand the Costs of the Challenges Below the Tip of the IoT Cost Iceberg"
"The 2017 CIO Agenda: Seize the Digital Ecosystem Opportunity"

"Implications of Customer Expectations on Retail Business Strategies and Technology Investments for Digital Business and Beyond"

"Hints and Tips on Using Gartner Numbers When Reviewing IT Spending Plans"

Evidence
This research is based on the 2017 Gartner CIO Survey conducted between 8 May 2016 and 9 July 2016, when 133 CIOs from the retail industry responded to the 2017 Gartner CIO Survey, out of the global total of 2,598. The respondents were members of Gartner executive programs and other IT leaders. The survey is published in its entirety in "The 2017 CIO Agenda: Seize the Digital Ecosystem Opportunity."

More on This Topic
This is part of an in-depth collection of research. See the collection:

- 2017 CIO Agenda: Global Perspectives on Seizing the Digital Ecosystem Opportunity
GARTNER HEADQUARTERS

Corporate Headquarters
56 Top Gallant Road
Stamford, CT 06902-7700
USA
+1 203 964 0096

Regional Headquarters
AUSTRALIA
BRAZIL
JAPAN
UNITED KINGDOM

For a complete list of worldwide locations, visit http://www.gartner.com/technology/about.jsp