Forrester Study Finds Customer Experience Focus is Critical to Retail Success in the Direct-to-Consumer Age

Start Improving Applications Today - Tomorrow is Too Late

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Executive summary
A new Forrester Consulting study found 83 percent of retail executives surveyed believe that improving their app portfolios would enhance their customer experience—and in turn, increase overall revenues. As retailers pivot to address new market realities, focusing on the customer experience will continue to be critical to success.

These are some of the key results from the recent global survey of 110 retail CIOs and SVPs by Forrester Consulting. The study, commissioned by VMware, was designed to evaluate executive sentiment about the state of current application portfolios, technology leaders’ ability to create terrific customer experiences, and the connection between the two.

Some key findings include:

- **Eighty-six percent of respondents** say promoting better customer experience through improved apps is “very” or “extremely” important.
- **More than eight in ten retail tech executives** surveyed say implementing an Agile software development methodology is “very” or “extremely” important to their companies.
- **Seventy-eight percent of executives** say putting DevOps in place is “very” or “extremely” important to them.

It provides insight into how entrenched attitudes and technical debt—old technology that is too costly to replace—are dragging down retail organizations’ ability to modernize apps; and how emerging technologies and tech partners can help address challenges.
As consumers are forced online, experience matters more than ever

Recent global conditions have accelerated retailers’ journey to the direct-to-consumer model of retail. Retailers have experienced an exponential shift in the way consumers shop. Traditional brick and mortar experiences have been transformed to include online, curb-side, and home delivery channels overnight. As consumers’ needs have shifted to digital experiences, retailers have felt pressure in all aspects of operations from supply chains, to fulfillment requests, and delivery logistics. All having a direct impact and putting more emphasis than ever on the customer experience.

This is not necessarily a new concept for retailers as senior retail executives know this. But in what may be a new acceleration, they also realize that customer experience during trying times is significantly driven by the quality of their software applications and digital engagements.

This makes sense. Leading retailers realize that the ease with which consumers can search, browse, check out, and get after-sales support using their applications—both mobile and web—will drive the overall brand experience.

In today’s warehouses and distribution centers, apps are working overtime to serve customers’ buy online and pick-up-in-store experiences. As physical stores reopen, retail workers, too, will be empowered by applications that let them easily identify, track, monitor, recommend, and otherwise care for consumers. Internet of Things (IoT) devices will sense the presence of a specific customer’s smartphone in the vicinity of a brick-and-mortar store, and serve up customized offers based on location.

Given all this, the expectation would be that retail organizations prioritize investing in new development frameworks and methodologies proven to boost the quality and timeliness of applications. That there would be a sense of urgency to move to an Agile development methodology, for example, or to a DevOps team structure, as well as to containers using technologies like Kubernetes. Especially since an overwhelming majority (82 percent) of retail CIOs and SVPs say improving their application portfolio is now a top business priority.

The truth is, there is urgency. Yet there also appear to be significant barriers holding retail CIOs back from making the changes they know they must.
Customer experience tightly coupled with app portfolio quality

It’s now widely accepted that customer experience in retail is positively tied to revenue growth. A large majority, 85 percent, of retail technology executives surveyed by Forrester agree with this statement, which has been bolstered by other industry studies. This makes customer experience a top three consideration for most CIO and SVP respondents (52 percent), who either already are responsible for revenues—or will have that responsibility in one to two years.

CIOs with revenue responsibility are making customer experience a top priority

This isn’t necessarily news. Retail CIOs have known for some time that delivering innovative experiences that delight customers are the best way to win customer loyalty and attract new shoppers. But the Forrester survey turned up an interesting link. Nearly all CIOs and SVPs across all industries tie modernizing their application portfolios to improved customer experiences.

Retail executives are slightly behind their peers in other industries in this regard—84 percent of retail CIOs and SVPs surveyed agreed with this linkage, compared to 88 percent on average across the six industries surveyed, including financial services, healthcare, and manufacturing.

Apps directly drive success in the business of retail.

Given that revenue growth is a top business priority for retail executives, it explains why 86 percent of retail CIOs and SVPs surveyed agree that promoting better customer experience through modernizing apps is “very” or “extremely” important to them.

More retail tech executives are focused on improving customer experience than gaining market share, growing revenues and customers, or reducing costs.

Agreement on the importance of improving experience is reflected throughout the survey. More retail CIOs and SVPs—56 percent—surveyed are focused on improving experience than entering new markets (50 percent), improving products or services (48 percent), or even reducing costs (45 percent).
Flexible and innovative environments
scale technology innovation

Unfortunately, retail technology leaders are being forced to spend too much time and too many resources maintaining legacy infrastructures. This gives them less time to focus on improving their application portfolios.

When asked which technology challenges hindered them from improving their software applications, answers cluster around technical limitations.

Moreover, as retail organizations adopt cloud—and in many cases, multiple clouds—application environments are becoming more distributed and complex. Today’s retail senior executives are balancing an eclectic mix of public clouds, private clouds, and edge environments. This complexity is only expected to increase within the next three years.

In 3 years, 92% of retail technology leaders expect to be managing more than 3 separate environments (public cloud, private clouds/data centers, and edge) and 67% of those will be managing more than 6.

Senior retail technology leaders know they need to move from complex and inflexible, monolithic legacy environments. Slightly less than half (46 percent) surveyed rate their organization’s ability to innovate as “excellent” or “above average” for that reason.

One way to change this is through Agile software development methodology, which is centered around the concept of iterative development. Requirements and solutions evolve through collaboration between self-organizing, cross-functional teams and the users they serve. In this way, apps are developed faster, meet users’ needs more precisely, and have fewer errors. More than eight in ten (86 percent) of retail tech executives surveyed say implementing an Agile software development methodology is “very” or “extremely” important to their companies.

Organizing app development around a DevOps structure is another priority. DevOps combines software development and operations—the IT employees responsible for keeping apps available—with the goal of shortened app development lifecycle and making possible the continuous delivery of higher-quality software. More than three-fourths of retail CIOs (78 percent) say putting DevOps in place is “very” or “extremely” important to them.
Keeping in touch with customers and increasing app investments

Retail technology executives also understand the importance of being in close touch with their customers to understand how investments in technology, specifically app development, impact their experience. *Sixty-two percent surveyed say spending at least 10 percent of their work weeks interacting directly with customers is a “very” or “extremely” important priority.*

Moreover, IT leaders across the board who were surveyed seem willing to spend the money to modernize their applications. Three years ago, most organizations surveyed were spending less than $1 million improving their application portfolios. Today, the average amount is between $500,000 and $5 million. And 3 years from now, most IT executives surveyed intend to spend a minimum of $1 million and as much as $10 million, with 10 percent spending more than $10 million, to develop superior apps.

“Today, there’s very little that happens with our customers online or our associates in store, that doesn’t have a direct tie to technology. It’s the commitment to actually helping you be successful with the technology that I think makes [them] unique.”

CHRIS HJELM, EXECUTIVE VICE PRESIDENT & CIO, KROGER, IN AN INTERVIEW WITH VMWARE
With change comes challenges

Despite focus on experience—and prioritizing technology investments to improve application development—senior retail executives are concerned about roadblocks that lie ahead.

A number of goals retail executives cite as critical are also ranked as “very” or “extremely” challenging:

- **85%** Choosing the right platform for each application (on premises, private cloud, public cloud, or hybrid cloud)
- **76%** Gaining market share through improving applications
- **75%** Achieving better customer experiences through improving applications
- **66%** Implementing a DevOps team structure
- **62%** Implementing Agile software development

But they need to actually commit the funds. **More than four in ten (41 percent) of retail IT executives surveyed haven’t made any improvements to their app portfolio in at least a year.**

From a business perspective, senior tech leaders in retail agree two main barriers prevent funding and buy-in to improve applications: first, they are frequently asked to prove that investing in apps will indeed positively impact customer experience. This type of quantifying can be difficult. Second, most face intense resistance to change from their own internal IT teams—especially when it comes to the significant moves to Agile or DevOps cultures.
Emerging tech and partners can help

The good news is more than six out of 10 CIOs and SVPs in retail surveyed (61 percent) say they have already started modernizing their application portfolios.

A first step is improving underlying infrastructures. Senior retail technology executives are turning to partners to help them identify which apps can be migrated to public or private clouds fastest, easiest, and without compromising security.

Moving to containers and services will also help. More than half (56 percent) of retail respondents agree containers are a key technology to improve their app portfolio modernization efforts.

How will retail CIOs and SVPs prioritize investment, choosing the technologies and infrastructure for investment? More than six in ten (63 percent) surveyed say that how an application will impact the customer experience plays a “major” or “critical” role in helping them prioritize.

But that’s not the whole story. Retail CIOs, more than senior technology executives from any other industry, look internally and to competitors for guidance on where to make technology investments. Almost four in ten surveyed rely on partners (35 percent).

Retail CIOs also rank a number of emerging technologies that are “urgently” needed to improve their application portfolios:

- Internet of Things: 67%
- Artificial Intelligence: 66%
- Machine Learning: 59%
- Edge Computing: 45%
- Blockchain: 45%

Some retail organizations are already seeing success. Of those surveyed that have embarked on improving their app portfolios, almost half (48 percent) have already seen increased revenues.
Action is needed now for best returns

This Forrester study shows that retail CIOs and SVPs are indeed passionate about their consumers. It identifies a strong link between modernizing application portfolios and enhancing customer experience.

Acknowledging this, senior retail technology executives say they are willing to invest the money and have prioritized what they need to do—both technically and organizationally—to succeed. But many challenges—including technical debt—stand in the way of success. Emerging technology and the right technology partner they believe can help break the impasse.

In addition to deploying newer technologies like AI, IoT, and ML, most retail CIOs and SVPs are asking partners for “discovery services,” maturity assessments, and application inventory analyses.

Which of the following consulting or professional services would be most useful in helping you improve your application portfolio?

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<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Discovery services</td>
<td>58%</td>
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<tr>
<td>Application inventory analysis</td>
<td>56%</td>
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<tr>
<td>Security and compliance assessment</td>
<td>51%</td>
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<tr>
<td>Maturity assessment</td>
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<tr>
<td>Staff training</td>
<td>45%</td>
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<tr>
<td>Migration services</td>
<td>39%</td>
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With the help of trusted partners, retail organizations will jumpstart the boosting of customer experience that begins with better apps and ends in higher consumer satisfaction and loyalty—along with ultimately, increased revenues.