

# The 2018-2019 Retail Technology Report:

An Analysis of Trends, Buying Behaviors and Future Opportunities









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### **Executive Summary**

The majority of retailers are taking a wait-and-see approach when it comes to investing in emerging technologies that, while generating a lot of buzz, haven't yet proven their value to companies' bottom lines. That's just one of the key takeaways from Total Retail's 2018-2019 Retail Technology Report. In fact, it's tried-and-true technology systems such as e-commerce platforms, point-of-sale (POS) systems, and analytics solutions, to name a few, that are most likely to be capturing retailers' attention and budgets.

Total Retail surveyed its audience of retail executives to get a better understanding of their current usage of technology, as well as future technology needs and wants. Specifically, we wanted to know how their spending on technology was going to change — if at all — in 2019. In addition, we asked respondents to provide insights into the technology buying process within their organizations.

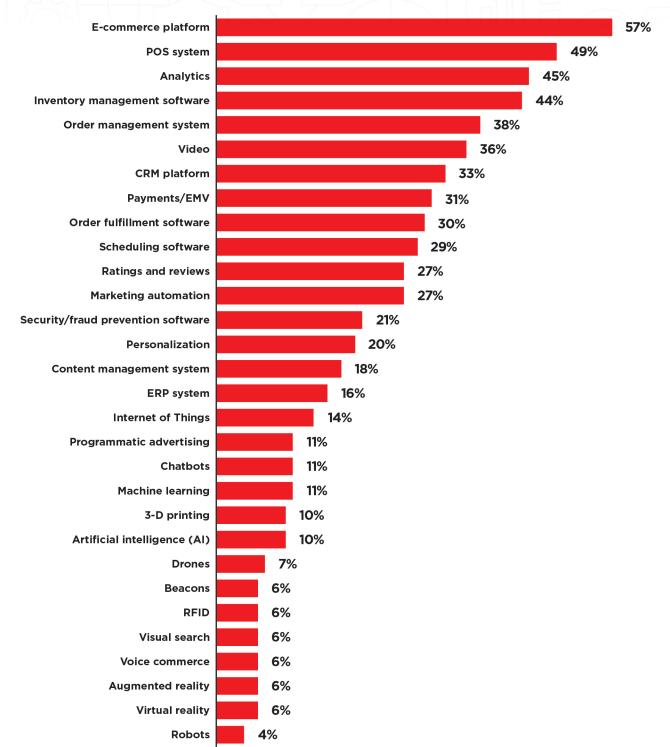
Here are some of the highlights from the data collected:

- A Reliance on the Basics: Technology adoption and spending by retailers is focused on established solutions e.g., e-commerce platforms, POS systems, analytics that have a proven return on investment.
- A Cautious Approach: A majority of respondents (37 percent) are not planning to spend on emerging tech within the next 12 months. This finding supports the narrative that retailers are focused on getting the basics right first before investing in new, emerging tech that may not have an easily measured ROI.
- Al is the Future: The emerging technology that is generating the most interest from retailers is artificial intelligence (AI). Nearly one-third of respondents (32 percent) believe AI is the emerging technology that will have the biggest impact on the retail industry in 2019. The next-closest answer was the Internet of Things (IoT), significantly less at 13 percent.
- A Trio of Decision Makers: General Management, IT and Marketing are the departments within retail organizations that have the most "significant involvement" in the tech buying process.
- Limiting the Field: As part of the technology buying process, 89 percent of respondents said they evaluate between two to five service providers for a moderate to major technology purchase.
- **Show Me the Money:** Sales/revenues gains are far and away the most important metric for retailers when evaluating the success of a technology investment (chosen by 57 percent of respondents). The next closest answer was cost savings at 40 percent.

This report provides valuable insights into the technology landscape within the retail industry, both where brands are at now and where they're headed in the future. For retailers, the data serves as a benchmarking tool to see how their technology stacks compare to their competitors, and perhaps where they might want to adjust their spending. And for technology service providers, the data surrounding the technology buying process provides a rare glimpse into how organizations are currently making budget decisions. Use this information to hone your pitches as you look to retain existing clients as well as acquire new clients.



#### **Emerging Tech Slow to Gain Adoption**

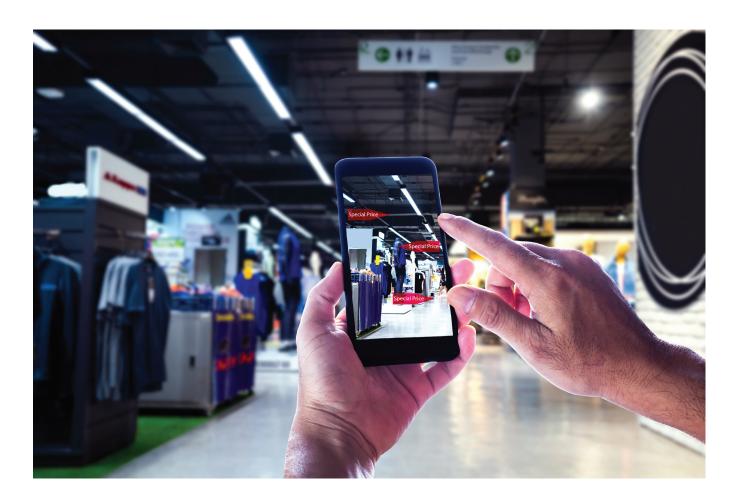








When asked to identify the technologies that their companies are currently using, the usual suspects are at the top of the list — e-commerce platform (albeit at a lower-than-expected 57 percent); POS system (49 percent); analytics (45 percent); and inventory management software (44 percent). What's perhaps most interesting about this chart, however, is the low levels of adoption among retailers of some of the most buzzed about emerging technologies. For example, virtual and augmented reality is being used currently by just 6 percent of respondents, the same percentage that are using voice commerce.



There is a slight bump in usage of AI (10 percent) and IoT (14 percent), but to date the hype surrounding emerging tech such as these has exceeded adoption levels. Why? For most retailers, any technology investment comes down to ROI. They want to see proven, quantifiable results before taking the plunge — and investing significant dollars. As technologies such as AI and voice commerce become more mainstream, and their impact to retailers' bottom lines proven, expect to see these numbers to increase.



## **Retailers Plan to Invest in Digital Commerce Systems**

	Increase	Decrease	Remain the Same	
E-commerce platform	49%	4% 47%		
Analytics	46%	2%	53%	
Mobile website	46%	5%	49%	
Mobile app	38%	4%	58%	
Video	35%	4%	61%	
Marketing automation	33%	5%	62%	
CRM platform	33%	5%	63%	
Content management system	31%	5%	64%	
Personalization	31%	4%	65%	
Inventory management software	30%	4%	66%	
Order management system	27%	3%	70%	
Security/fraud prevention software	27%	3%	70%	
POS system	26%	4%	70%	
Ratings and reviews	26%	4%	70%	
Order fulfillment software	25%	4%	71%	
Scheduling software	23%	5%	72%	
Internet of Things	22%	3%	75%	
Artificial intelligence (AI)	20%	4%	76%	
Payments/EMV	20%	6%	74%	
Chatbots	18%	4%	77%	
Machine learning	18%	4%	78%	
Programmatic advertising	17%	5%	77%	
ERP system	14%	6%	80%	
Visual search	14%	5%	81%	
Virtual reality	14%	6%	81%	
Voice commerce	12%	6%	82%	
3-D printing	12%	6%	83%	
Drones	11%	7%	81%	
Augmented reality	11%	6%	84%	
Beacons	10%	5%	85%	
RFID	9%	4%	4% 87%	
Robots	6%	5%	89%	

Figure 2

Q: Indicate whether your spending on each technology will increase, decrease or remain the same in the next 12 months.

N = 235





What technologies will be seeing the biggest increase in retailer spending in 2019? Conversely, which will see the biggest decrease? Much like our first chart, retailers indicated that they would be devoting more budget in 2019 to established technology solutions. The growth of e-commerce, including mobile, has retailers' attention, and as such that's where they plan to increase investments. Nearly half of respondents plan to increase tech spending on their e-commerce platform (49 percent) and mobile website (46 percent).

In their quest to develop one-to-one relationships with their customers, which in turn begets better experiences and, ultimately, long-term loyalty, retailers are turning to technology for help. Consider that 33 percent of respondents plan to increase spending on their CRM platform in the next 12 months, and 31 percent will be upping their budget on personalization solutions.

On the flip side, retailers indicated they're most likely to cut spending on drones (7 percent said they're decreasing spending on the technology) and other types of emerging technology, including virtual and augmented reality, 3-D printing, and voice search (all 6 percent).

For the vast majority of technologies listed, retailer spending year-over-year will remain flat. This likely means one of two things: the retailer has yet to invest any money into that technology and doesn't plan to do so within the next 12 months, or it doesn't have enough data to justify increasing or decreasing spending at this time.

#### **Spending Belies Emerging Tech Growth**

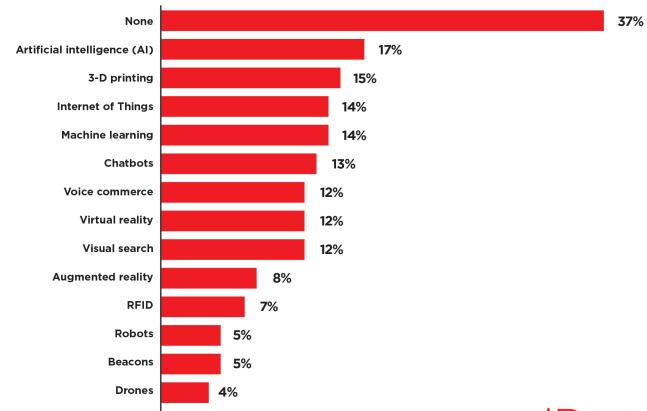


Figure 3 Q: For the emerging technologies listed below, choose up to three that you're not currently investing but plan to do so within the next 12 months. N = 235

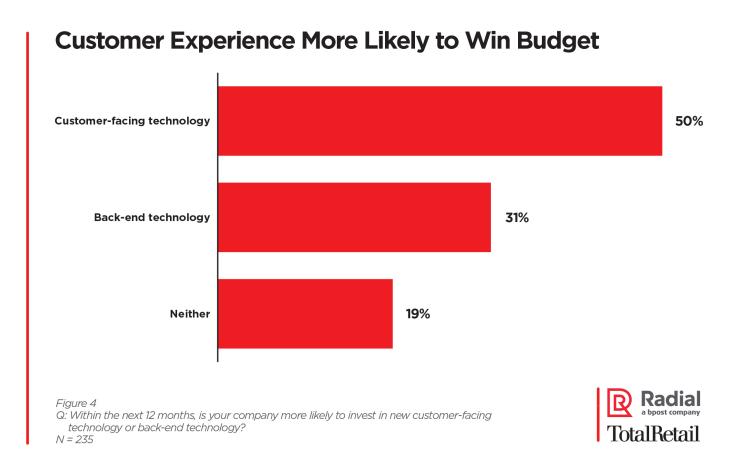




Inaction is the story here. When asked to choose up to three emerging technologies that they're not currently investing in but plan to do so in the next 12 months, the clear winner among respondents was "none." Whether that's an indictment on their lack of confidence in the technologies to positively impact their businesses or just a sign that retailers have limited funds to spend on new technology — or perhaps both — remains to be seen.

Are retailers missing an opportunity by not being early adopters of emerging technology? It's difficult to calculate the opportunity cost of being late to the party, so to speak, but the dynamic exists. Think about the growth of mobile commerce. If your website isn't yet optimized for mobile shoppers, it's missing out on significant potential revenue.

What's the next technology that's going to disrupt the retail industry? Figure 5 below provides some insight into what retailers are betting on.

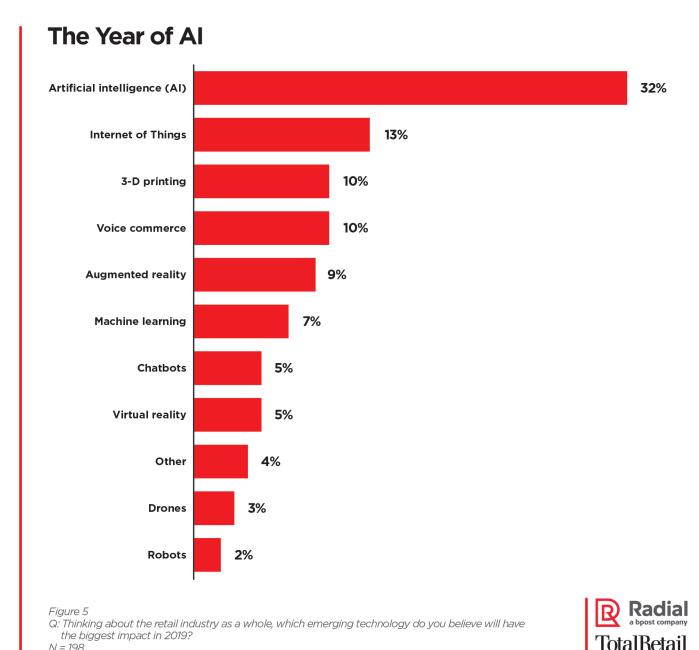


Retailers are more likely to invest in technology that customers can interact with — both in-store and online — during their purchase journeys than they are back-end solutions that operate in "somewhat" obscurity.

This chart tells us that retailers are prioritizing the customer experience above all else. Today's consumers have high expectations for every touchpoint they interact with retailers in, and they view technology as a tool to help make the shopping experience quicker, easier and more enjoyable. Brands recognize these demands, and are implementing solutions to meet them.



That's not to say that retailers don't value back-end technology systems. From inventory management systems that ensure the right amount of inventory is in the right places at the right times, to security/fraud prevention software that keeps customers' data safe, and more, behind-the-scenes technology systems can have as big as if not bigger impact on customer experience and customer satisfaction. The key is to identify the technology that matters to your customers' experiences, and then invest in it.



While retailers have demonstrated a cautious approach when it comes to adoption of new technology, one such tech that has piqued their interest is Al. Likely due to its multiple potential applications for a retail organization — e.g., personalized marketing, inventory management, logistics, customer service, etc. — Al was far and away the most popular choice when retailers were asked, "Thinking about the retail industry as a whole, which emerging technology do you believe will have the biggest impact in 2019?"



The impact of AI is already being felt, and figures to only grow. Business Insider Intelligence projects that AI will boost profitability in retail and wholesale by nearly 60 percent by 2035. This is a case where retailers would be wise to adopt AI technology into their businesses now, avoiding the risk of being left behind when the technology becomes more mainstream.

#### Management, IT Making Tech Purchase Decisions

	Significant involvement	Moderate involvement	Little involvement	No involvement
General management	57%	24%	12%	8%
Information technology (IT)	54%	26%	9%	12%
Marketing	49%	30%	14%	7%
Customer service	40%	24%	21%	15%
Omnichannel	29%	18%	17%	36%
Stores	26%	21%	15%	37%
Merchandising	25%	29%	24%	22%
Supply chain	22%	26%	22%	30%
Total Respondents: 198				

Figure 6
Q: Rank the level of involvement for departments within your organization in the technology buying process.



There are three departments that are the primary decision makers within retail organizations for technology buying: general management/C-suite; information technology (IT); and marketing. This mirrors the results from last year's survey, although the order was slightly different — IT was ranked No. 1 as having the most significant involvement in the technology buying process; this year general management took the top spot.

In today's omnichannel retail environment, in which consumers are shifting between channels, often in the same purchase journey, collaboration between departments is essential to success. Holistic data and technology systems are necessary to create the seamless shopping experiences customers have come to expect. It therefore makes sense that there's collaboration between departments when making technology buying decisions.

Teams no longer work in a vacuum. For example, marketing and merchandising teams need to work hand-in-hand to ensure the right products are being promoted at the right prices to the right people at the right times in the right channels. And IT is managing the technology systems enabling that collaboration to happen. Before making technology buying decisions, evaluate the impact such purchases will have across your organization and solicit feedback from team leaders in each department that will be impacted.



#### **Brands Taking Less Than a Year to Buy Tech**

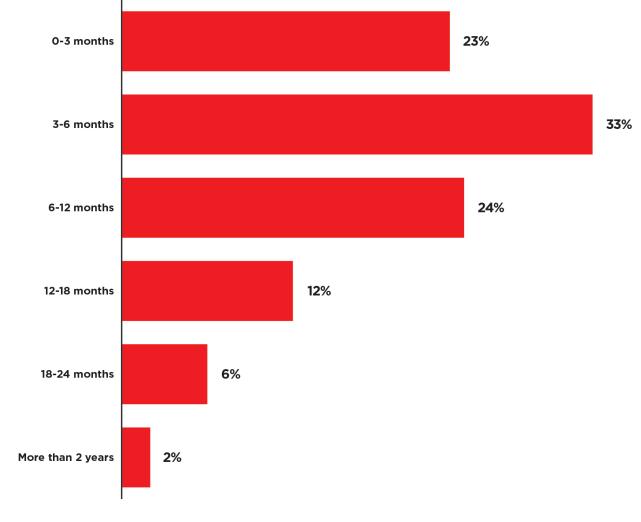


Figure 7
Q: Thinking about a moderate to major technology purchase at your company, how long on average does the vendor selection process take?
N = 198

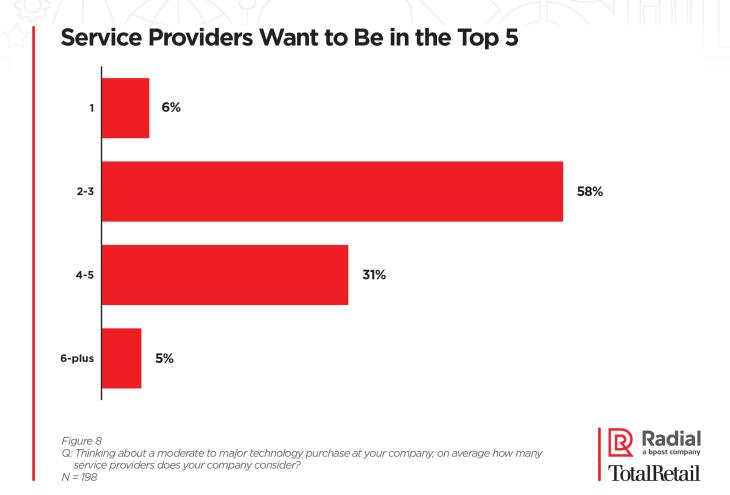


Eighty percent of respondents said they're making moderate to major technology purchases in less than a year, with one-third taking between three months to six months.

This chart is a testament to the speed at which the retail industry is evolving, particularly online. In order to keep pace with innovative, digital-native brands, including Amazon.com, traditional brick-and-mortar retailers have had to embrace change — and do so quickly. This extends to their technology buying processes.

Retailers are no longer afforded the luxury of an extended vetting process when buying technology. Their growing sets of competitors are introducing game-changing technologies on a continual basis, and in order to keep up decisions must be made swiftly. Wait and your competitors will pass you by.





Operating a retail business has become much more complex in recent years as consumer behaviors change, new technologies enter the marketplace, more data (customer, product, competitor) is collected than ever before, among a host of other variables. This complexity extends to purchasing technology.

When making a significant financial investment such as a moderate to major technology buy, it's required that you do your due diligence and properly vet the service providers you're potentially going to partner with. That involves product demos, site visits, talking to current clients, pilot programs, etc. As you can see, the process can take some time. Therefore, it's important that you identify a manageable number of potential partners — ideally, best-of-breed providers — before beginning the vetting process.

According to our survey, retailers believe that manageable number is between two to five service providers. Eighty-nine percent of respondents said that when evaluating a moderate to major technology purchase at their company, they consider between two to five service providers.



#### **Discovery Driven by Self-Research**

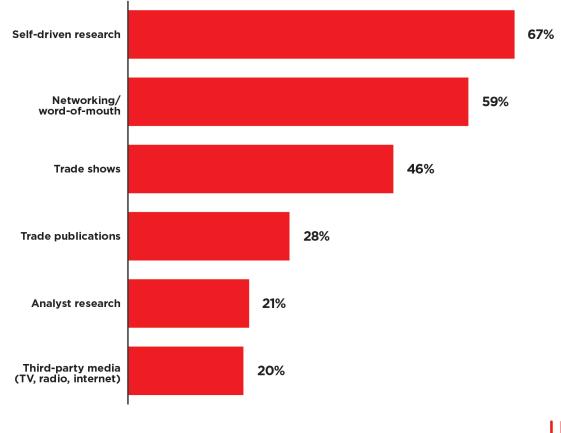


Figure 9 Q: How does your organization most often discover new technology? (Choose up to three answers.) N = 198



How are retailers learning about all of the new technologies that are being developed? They're doing the work themselves. When asked how their organization most often discovers new technology, 67 percent of respondents cited self-driven research. There's a steep drop-off between the top three choices (self-driven research, networking/word-of-mouth, trade shows) and the other answer options.

What's frequently most valuable for retail execs when learning about new technology solutions is to speak to a peer that has implemented the technology at their company. What was the implementation process like? How is the company using the technology? How does it integrate with other technology solutions? What challenges have come up? What are the benefits the company has realized since rolling out the technology? These are just some of the self-driven research questions that retailers should be asking themselves when learning about new technology.



#### **Revenue, Cost Savings Top Tech Success Metrics**

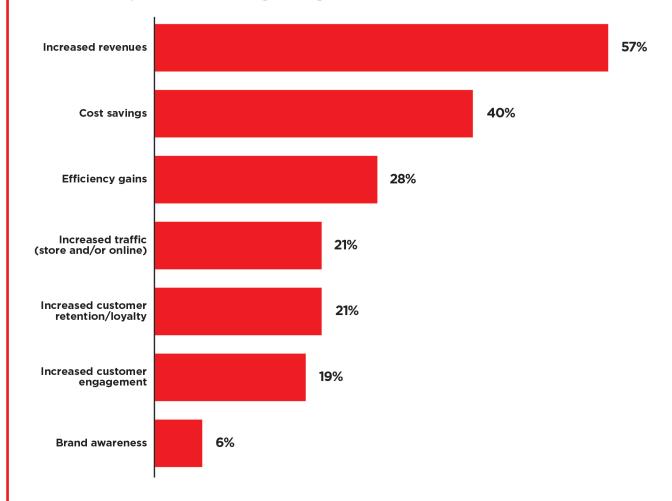


Figure 10
Q: Thinking about how your company evaluates the success of a technology investment, choose the two metrics that are most important to the evaluation process.
N = 198



At the end of the day, it all comes down to the impact on the bottom line. That was the key learning when retailers were asked to identify the two metrics that were most important to the evaluation process for a technology investment.

As one might expect, increased revenues was the top choice among respondents, with 57 percent naming it as their most important metric. Not far behind was cost savings (40 percent). Retailers have cited ROI as the driving force behind their technology investments, and this chart bears that out.

It's a bit surprising that increased customer retention/loyalty didn't rank higher on the list. Considering rising customer acquisition costs and the value in developing long-term relationships with customers that keeps them coming back to your brand to purchase again and again, one might have expected this answer to receive more support.



#### METHODOLOGY

This online survey was conducted over a four-week period in September 2018 and October 2018. A total of 235 respondents completed the survey. Those respondents comprised a portion of the Total Retail audience, from small and midsize to enterprise organizations. Respondents represented a wide variety of retail verticals, including apparel and accessories; consumer electronics; home goods; and more.

#### CONCLUSION

A familiar theme emerges upon analysis of the data: retailers are hesitant to go "all in" on new and emerging technologies until real, sustainable, incremental ROI can be proven. As such, they're more likely to be currently investing in or earmarking future dollars to established technology solutions that are essential to their survival, including e-commerce platforms, mobile (websites and apps), data analytics, POS systems, and inventory and order management systems. Adoption of emerging technologies, at least so far, hasn't lived up to the buzz they've received.

However, if there were one emerging technology that retailers are willing to bet on, it would be artificial intelligence. The multiple applications for AI within retail — marketing and product personalization, customer service, inventory management, logistics and delivery, among others — underscore its value to an organization. It's for that reason that respondents overwhelmingly chose AI as the emerging technology that will have the biggest impact on the retail industry in 2019.

With regards to technology buying, the vast majority of retailers are trying to simplify the process by limiting the number of service providers they consider — less than five for 95 percent of respondents. That's not to say that vetting multiple service providers and comparing their strengths and weaknesses against each other isn't smart — it is — but the point is to start with a manageable amount. More than five and managing the selection process becomes unwieldy at best.

Furthermore, retailers are making these high-leverage decisions (i.e., expensive) in a rather short amount of time. Most respondents (56 percent) said they're making moderate to major technology purchase decisions in less than six months. Considering how rapidly the retail industry, and e-commerce in particular, is evolving, perhaps that relatively short amount of time shouldn't be that surprising.

Lastly, retailers are looking to their bottom lines when evaluating technology investments. Increased revenues and cost savings were named as the top two metrics most important to the evaluation process, easily ahead of the third choice, efficiency gains. For the executives making technology buying decisions within retail organizations — C-suite, IT, Marketing — ROI is the ultimate determinant.



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