



**The 2017 Retail
Technology Report:**
An Analysis of Trends,
Buying Behaviors and
Future Opportunities

TotalRetail

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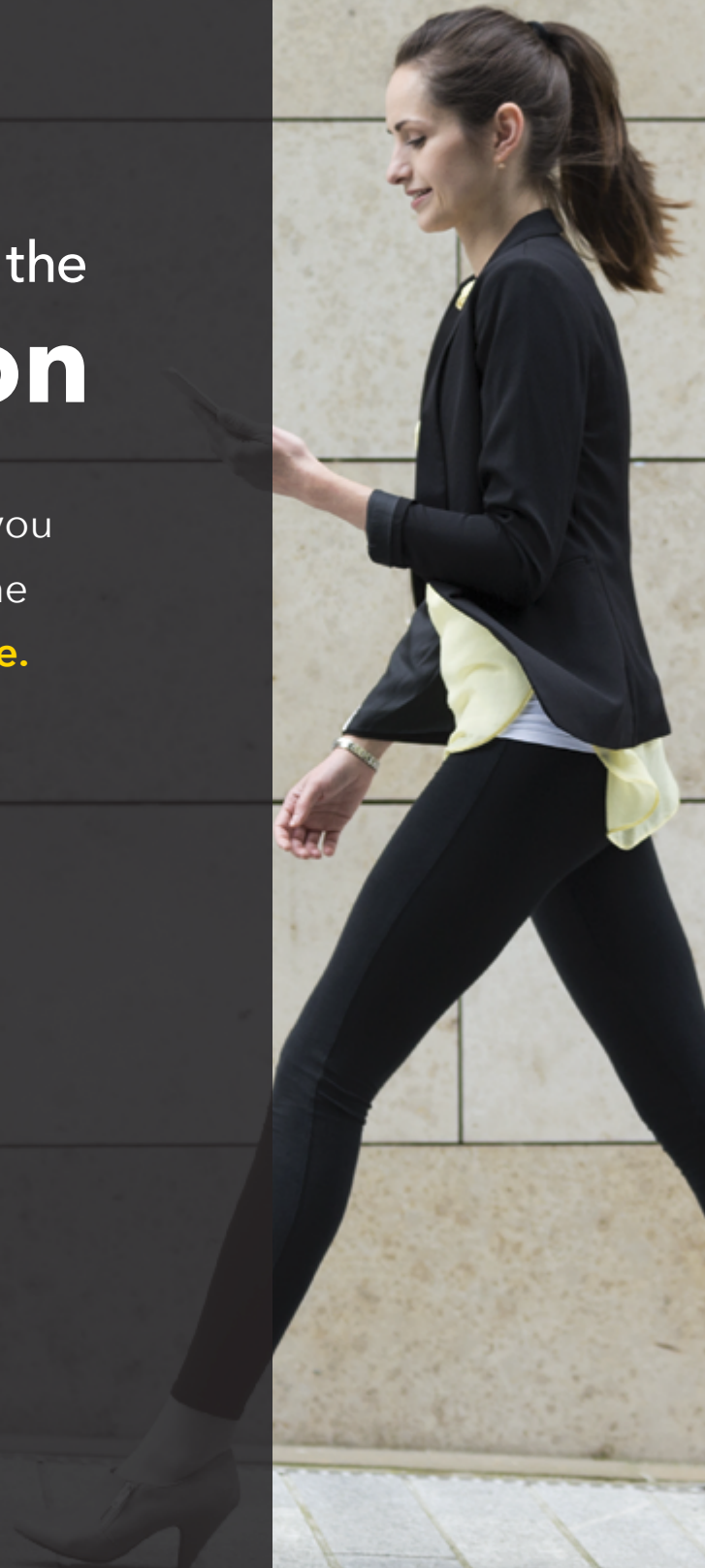
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Executive Summary

While emerging technologies such as augmented and virtual reality, chatbots (artificial intelligence), and drones get a lot of media attention for how they're going to disrupt the retail industry — and they very well may in the near future — it's more basic solutions like marketing automation software, video, and mobile websites that currently have retailers' attention. The theory that you have to learn to walk before you can run certainly applies to the retail executives that participated in *Total Retail's* survey on technology trends and buying behaviors.

To get a better understanding of retailers' current and future technology strategies and needs, as well as their internal processes for evaluating and purchasing technology, Total Retail surveyed its audience in August. We wanted to know what are the technologies they're currently using; how spending on those technologies will change in the next 12 months; their opinions on the emerging technologies that will have the biggest impact on the retail industry in 2018; and how they go about buying technology, from who in their organization is involved in the decision-making process to how many vendors they typically consider to how long the entire process typically takes.

What we found is that retailers are moving slower to adopt new technologies than perceived. Consider that only half (50.8) of respondents said they currently have a mobile commerce site. Talk about a missed opportunity for the other 50 percent, as studies show that more than half of all internet traffic is coming from mobile devices. Likewise, less than 40 percent of respondents (39.36 percent) said they plan to increase their spending on personalization technology in the next 12 months. Most industry analysts would agree that personalizing customers' shopping experiences has become table stakes in the competitive retail industry, yet our results don't seem to show the same sense of urgency among brands.

In terms of the technology buying process, the approach that retailers seem to have adopted is the easier the better. While more departments seem to be involved in the decision-making process — led by IT, C-Suite executives, and marketing — that hasn't things slowed. Retailers prefer to evaluate just two to three service providers for a moderate to major technology purchase, and most are have made their purchase within three months. With the large price tags accompanying new technology solutions, the buying process from start to finish seems to be expedited more than we might have expected.

This report serves as a valuable resource for retailers looking to learn more about the technology landscape within their industry, offering them the chance to benchmark themselves against their competition. In addition, technology providers serving the retail industry will find value in this exclusive data, which will help them better serve their existing clients as well as recruit new ones.

Key Findings

51% of respondents will be increasing their spending on marketing automation technology in the next 12 months.

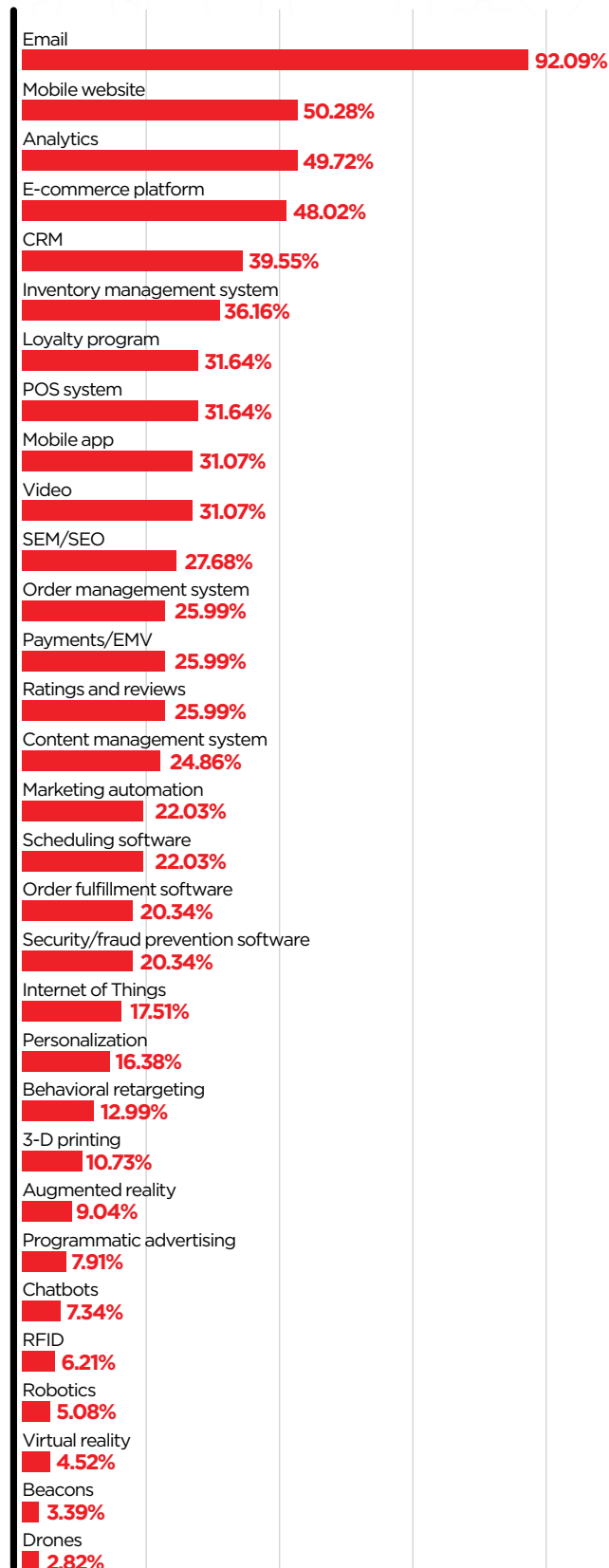
37% of respondents believe the Internet of Things is the emerging technology that will have the greatest impact on the retail industry in 2018.

67% percent of respondents most often discover new technology through self-driven research.

30% of respondents said their omnichannel departments/teams have no involvement in the technology buying process.

CHART 1

Which technologies is your company currently using?




It makes sense that email, the channel often credited with providing the best return on investment of any of its digital marketing counterparts, is far and away the most popular technology used by retailers. Ninety-percent respondents of currently using email in some form to communicate with their customers, nearly twice as much as the No. 2 technology on the list, mobile website, which 50 percent of respondents said they're using. Technologies three and four on the list, analytics and e-commerce platform, coming in at 49 percent and 48 percent, respectively, are bunched closely with mobile website before a drop-off to No. 5, CRM (39 percent).

Some of the much-hyped newer technologies, including virtual reality (4.52 percent), chatbots (7.34 percent), and 3-D printing (10.73 percent) have clearly yet to see widespread adoption among retailers. Perhaps most surprising from the chart above is that just 16.38 percent of respondents said they're currently using some form of personalization technology. As much as retailers talk about creating one-to-one relationships with their customers to foster long-term loyalty, they're not following their own advice.

CHART 2

For all of the technologies chosen in question 1, indicate whether your spending on each will increase, decrease or remain the same in the next 12 months.

	INCREASE	DECREASE	REMAIN THE SAME
3-D printing	22.62%	4.76%	72.62%
Analytics	46.28%	1.65%	52.07%
Augmented reality	28.57%	8.33%	63.10%
Beacons	20.73%	6.10%	73.17%
Behavioral retargeting	41.18%	3.53%	55.29%
Chatbots	28.92%	4.82%	66.27%
Content management system	38.54%	3.13%	58.33%
CRM	36.44%	5.93%	57.63%
Drones	13.16%	5.26%	81.58%
E-commerce platform	47.15%	5.69%	47.15%
Email	42.17%	4.22%	53.61%
Internet of Things	36.96%	2.17%	60.87%
Inventory management system	39.81%	4.63%	55.56%
Loyalty program	41.67%	3.13%	55.21%
Marketing automation	51.58%	1.05%	47.37%
Mobile app	37.38%	6.54%	56.07%
Mobile website	41.32%	5.79%	52.89%
Order fulfillment software	34.04%	6.38%	59.57%
Order management system	36.36%	5.05%	58.59%
Payments/EMV	31.96%	4.12%	63.92%
Personalization	39.36%	2.13%	58.51%
POS system	27.88%	6.73%	65.38%
Programmatic advertising	23.46%	4.94%	71.60%
Ratings and reviews	36.36%	5.05%	58.59%
RFID	14.63%	6.10%	79.27%
Robotics	14.47%	5.26%	80.26%
Scheduling software	28.41%	6.82%	64.77%
Security/fraud prevention software	40.00%	1.18%	58.82%
SEM/SEO	40.40%	6.06%	53.54%
Video	45.37%	2.78%	51.85%
Virtual reality	22.37%	1.32%	76.32%



Retailers are most likely to increase their technology budgets on marketing automation software in 2018, with more than half of respondents (51.58 percent) saying they plan to increase spending in this area. The ability to streamline, automate, measure and improve marketing tasks and workflows holds great appeal to retailers as they seek to increase operational efficiency and grow revenues and profits. In addition to marketing automation, retailers will be opening up their wallets more for e-commerce platforms (47.15 percent), analytics software (46.28 percent), video (45.37 percent), and email (42.17 percent).

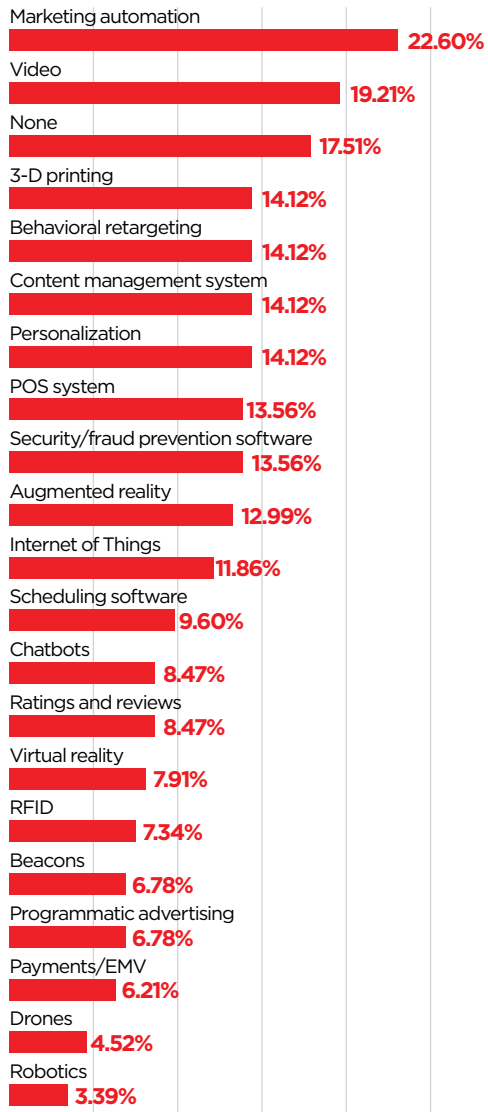
Conversely, the technologies that are most likely to have their budgets cut in the next 12 months include augmented reality (8.33 percent will be decreasing spending on the technology); scheduling software (6.82 percent); point-of-sale system (6.73 percent); mobile apps (6.54 percent); and order fulfillment software (6.38 percent).

For the vast majority of technologies, retailers are going to keep spending flat, opting for a wait-and-see approach before determining where to increase or decrease spending as necessary.

The positive news for service providers is that the majority of retailers are either planning to increase or keep their tech budget the same in 2018. As traditional brick-and-mortar retailers battle with Amazon.com and other online competition for share of consumers' wallets, they've committed themselves to spending on technology that will enable them to keep pace with digital-native brands. In many cases, if you're standing still from a technology perspective, your competitors are passing you.

CHART 3

For the emerging technologies listed below, choose up to three that you're either currently investing in or planning to invest in over the next 12 months.

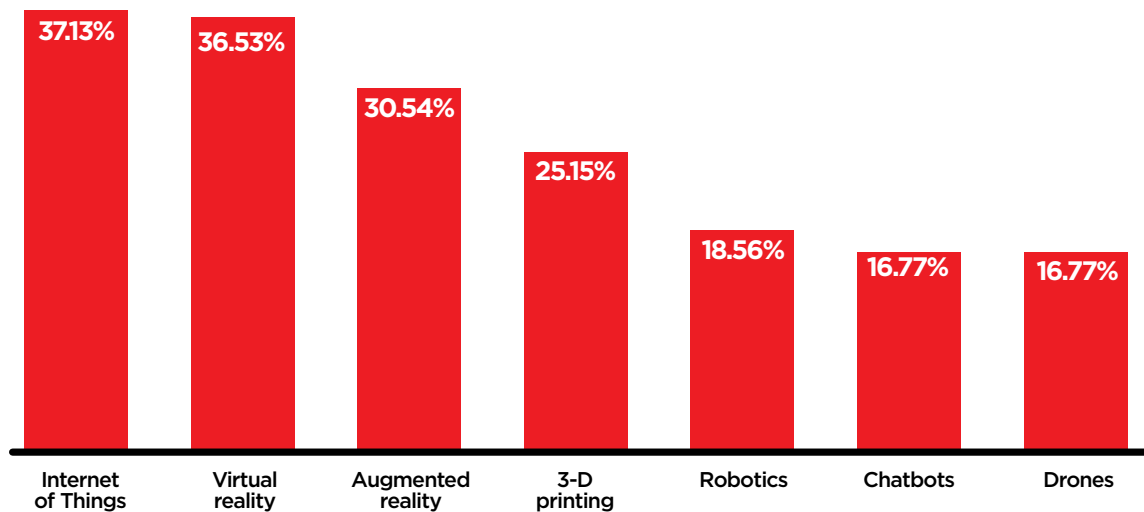


When it comes to emerging technologies, retailers are hesitant to commit budget to them — at least right now. It's telling that "None" was the third most popular choice when retailers were asked which emerging technologies they were currently investing in or planning to invest in over the next 12 months, trailing only marketing automation (22.60 percent of respondents) and video (19.21 percent of respondents).

Surprisingly, just 6.21 percent of respondents cited payments/EMV as a technology they were currently investing in or planning to invest in over the next 12 months. That makes sense when you see that only 13.56 percent of retailers chose security/fraud prevention software — again, a disturbingly low number — as a technology they're currently investing in or plan to invest in over the next 12 months. With all of the high-profile data breaches that have taken place recently, many involving retail companies, it's surprising to see that there aren't more retailers prioritizing data security when evaluating their technology budgets.

CHART 4

Which of the following emerging technologies do you believe will have the biggest impact on the retail industry in 2018?



Retailers believe in the viability of the Internet of Things (IoT), choosing it as the emerging technology that will have the biggest impact on the industry in 2018. Closely behind Internet of Things was virtual reality, followed by a larger gap to No. 3, augmented reality.

Applications for the Internet of Things in the retail space include new services and products, improved customer experiences (more transparent view of inventory), and more efficient supply chains (e.g., smart shelves that detect when inventory is low; smart robots for product restocking).

Respondents to the survey were less bullish on the future of drones (perhaps believing these were only realistic for the largest of retailers like Amazon and Wal-Mart) and chatbots. Artificial intelligence (AI) has gotten a lot of attention as a potential game-changing customer service tool for retailers, but as of right now most retailers aren't buying the hype.

More product-focused technologies — IoT, virtual reality — seem to be top of mind for retailers as we move into 2018, while more fulfillment-focused solutions — drones, robotics — are less of a priority. As e-commerce continues to grow and account for a larger percentage of total retail sales, it will be interesting to see how these numbers change. My thought is that we'll more fulfillment-based technologies at the top of retailers' priority lists.

CHART 5

Rank the level of involvement for departments within your organization in the technology buying process.

	SIGNIFICANT INVOLVEMENT	MODERATE INVOLVEMENT	LITTLE INVOLVEMENT	NO INVOLVEMENT
Marketing	56.44%	27.61%	10.43%	5.52%
Information technology	58.39%	28.57%	10.56%	2.48%
Merchandising	32.50%	27.50%	23.13%	16.88%
Omnichannel	24.34%	25.66%	20.39%	29.61%
Customer service	42.50%	25.62%	21.88%	10.00%
Stores	25.95%	19.62%	24.68%	29.75%
Supply chain	27.10%	26.45%	20.00%	26.45%
General management	57.86%	31.45%	5.66%	5.03%

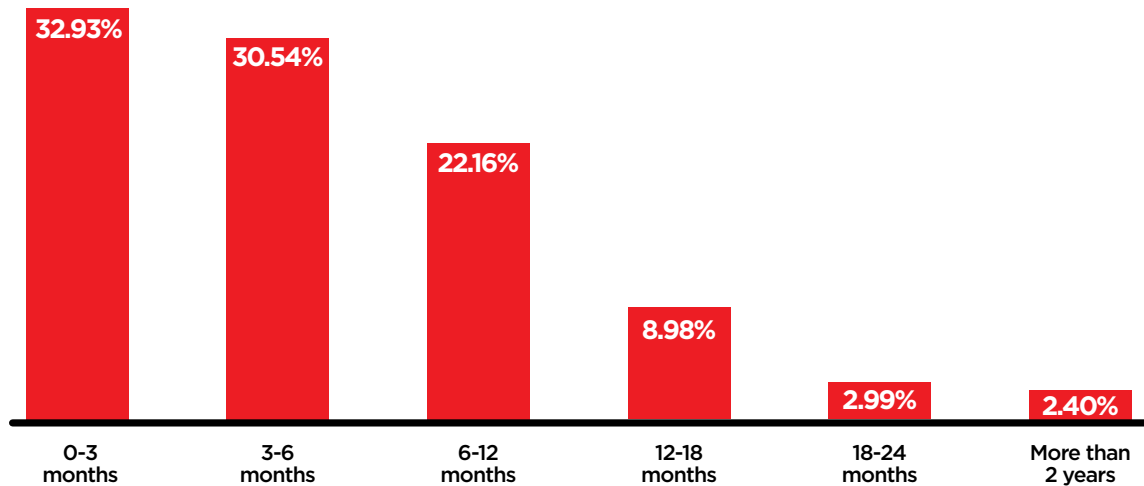
In the past, the information technology (IT) department and general management (CEO, COO, CTO, etc.) at retail businesses were responsible for all technology purchases — customer-facing or not. But now that retailers are focusing more closely on the needs and wants of consumers, and how best to engage them across multiple touchpoints, companies are increasingly adding the marketing department to the mix when making technology purchasing decisions.

This shift in internal behavior was reflected in the chart above. More than 58 percent of the retailers surveyed said their IT department is “significantly involved” in the technology buying process, followed closely by general management (57.86 percent) and marketing (56.44 percent).

Surprisingly, despite the growing omnichannel nature of today’s consumers, only 24.34 percent of retailers said their omnichannel executives are involved in the technology buying process. Perhaps this is due to the fact that organizations haven’t yet broken out specific teams dedicated to omnichannel, but rather see it as function of another department.

CHART 6

Thinking about a moderate to major technology purchase at your company, how long on average does the vendor selection process take?

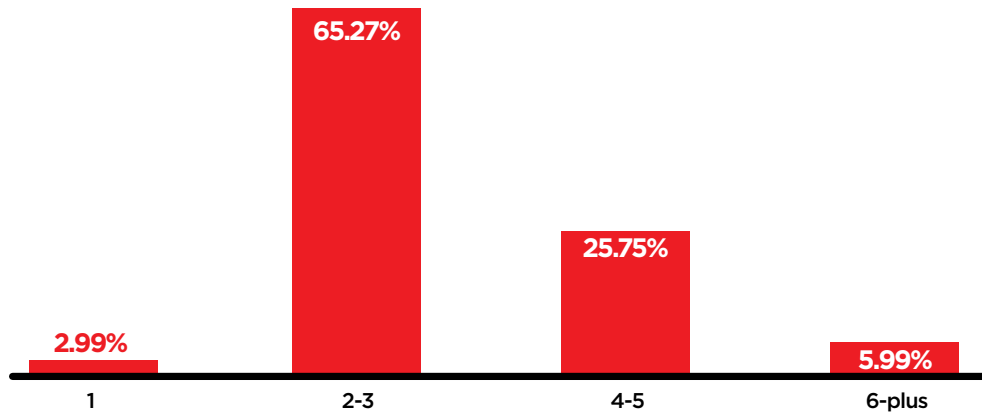


Sometimes choosing a new service provider is as simple as asking a trusted peer who they use in their business. Other times it involves a formal proposal, consideration and selection process. Regardless, the process is going to take some time out of your already busy schedule. But how long should the process take? How long is too long? For most, the shorter the better.

Well, according to our survey, it takes most retail executives zero to three months, on average, to select a vendor for a moderate to major technology purchase at their companies, with nearly one-third of respondents choosing that time frame. The next most popular answer was three months to six months, with 30.54 percent of respondents reporting that this is how long they need to select a vendor. The third most popular answer was six months to 12 months (22.16 percent), before a significant drop-off to retailers that take more than a year.

CHART 7

Thinking about a moderate to major technology purchase at your company, on average how many service providers does your company consider?



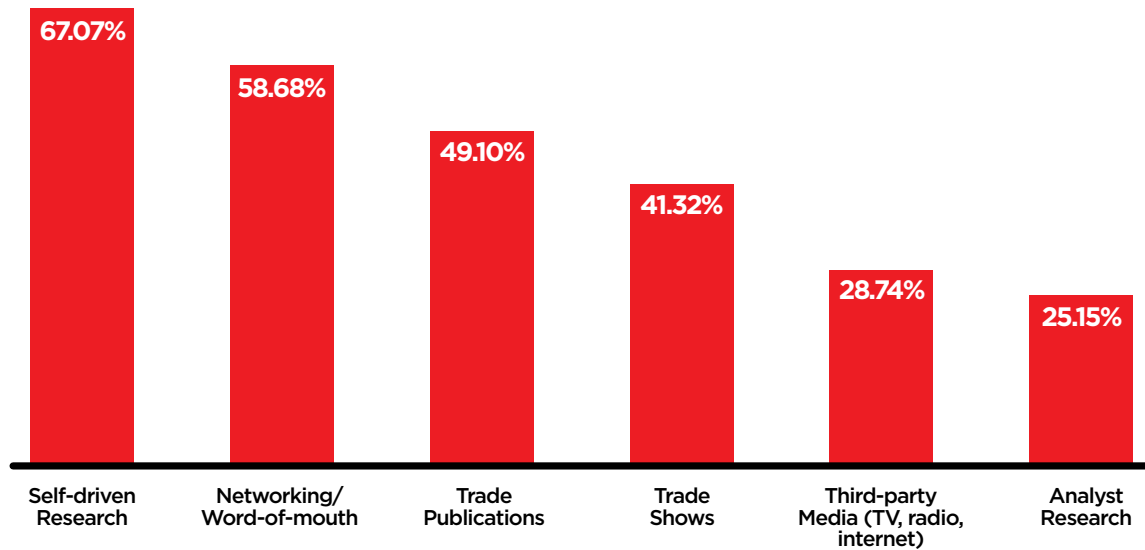
Most retail executives consider two to three service providers, on average, when making a moderate to major technology purchase at their companies. Four to five service providers ranked second among the answer options, but significantly fewer respondents chose this vs. two to three (25.75 percent vs. 65.27 percent, respectively).

It's not surprising that retailers try to limit the number of service providers they consider for a moderate to major technology purchase, as time is a commodity for most retailers today — i.e., the more vendors being evaluated, the longer it takes.

However, only 2.99 percent of respondents said they evaluate just one service provider. This makes sense, as most retailers like to compare vendors against each other on criteria such as features, clients they've worked with, support during and after implementation, and, of course, price.

CHART 8

How does your organization most often discover new technology?

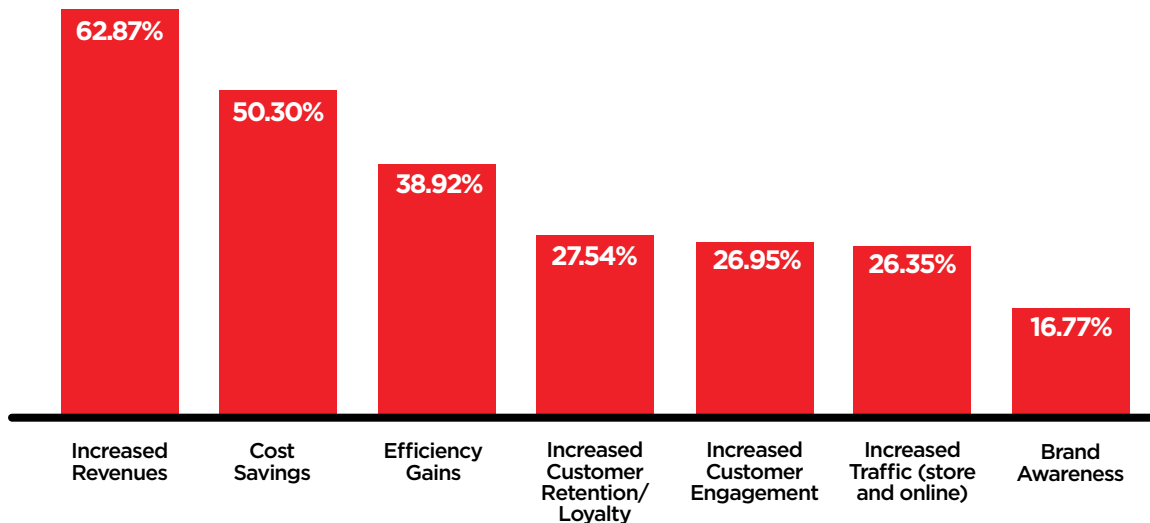


Retail executives are discovering new technology in multiple ways. Self-driven research, for example, is the most popular way retail execs learn about the latest and greatest technology in the industry. Self-driven research can include everything from Google searches to conversations with vendors. The second and third most popular ways retail executives discover new technology is through networking/word-of-mouth (58.68 percent) and trade publications.

In a bit of a surprise, tradeshow ranked as the fourth most cited channel in which retailers learned of new technology. Nearly 42 percent of respondents said they discover new technology at industry events, despite retailers' concerns that these types of gatherings receive an unmanageable onslaught of sales pitches.

CHART 9

Thinking about how your company evaluates the success of a technology investment, choose the two metrics that are most important to the evaluation process.



As one would expect, increased revenue (62.87 percent) and cost savings (50.30 percent) are the top two metrics respondents believe are most important when evaluating the success of a technology investment. Actually, it's surprising that these numbers aren't higher. What impacts the bottom line is going to hold the greatest weight.

What's interesting about the responses to this question is the order of priority for the other metrics on the list. For example, efficiency gains were the third most-cited metric (38.92 percent), followed by increased customer engagement (26.95 percent), increased customer retention/loyalty (27.54 percent), increased traffic (26.35 percent), and brand awareness (16.77 percent).

METHODOLOGY

This online survey was conducted over a two-week period in August 2017. A total of 177 respondents completed the survey. Those respondents comprised a portion of the Total Retail audience, including small to mid-sized retail organizations as well as enterprise brands, representing a multitude of retail verticals, including apparel/accessories, consumer electronics, home improvement, sporting goods and more.

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TotalRetail

Total Retail is the go-to source for retail executives looking for the latest news and analysis on the retail industry. Featuring a quarterly print magazine, daily e-newsletter (*Total Retail Report*), daily-updated website, podcast channel, virtual and in-person events, and research reports, *Total Retail* offers retail executives the information they need to do their jobs more effectively and grow their professional careers.

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Radial is the leader in omnichannel commerce technology and operations, enabling brands and retailers to profitably exceed retail customer expectations. Radial's technical, powerful omnichannel solutions connect supply and demand through efficient fulfillment and transportation options, intelligent fraud, payments, and tax systems and personalized customer care services.

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