

- Era of Intentional Innovation
- Breaking with the Past
- Anywhere Retailing
- Earthquakes Shake the Back Office
- Fueling the Analytics Engine



PRESENTED BY



TITLE SPONSOR





## "THE FUTURE OF RETAIL TECHNOLOGY IS REAL-TIME AND EVENT DRIVEN."

CIO, Leading Retailer



Real-timecross sell/upsell

Learn how to monitor and modify inventory and create and adjust offers to match the needs and behaviors of your customers, in real time.







David Weinand 904.374.8590 dweinand@edgellmail.com

### FDITORIAL

Group Editor-in-Chief Joe Skorupa jskorupa@edgellmail.com

Senior Editor Timothy Denman tdenman@edgellmail.com

Managing Editor Nicole Giannopoulos ngiannopoulos@edgellmail.com

CHIEF RESEARCH ANALYSTS
Jeff Roster

### SALES

Associate Publisher Catherine J. Marder 603.672.2796 cmarder@edgellmail.com Senior Account Director Tom Buckley 512.520.5370 tbucley@edgellmail.com Senior Account Director Ashlely Ramirez 904.834.2248 aramirez@edgellmail.com Assistant to the Publisher Jen Johnson jjohnson@edgellmail.com

### ONLINE

VP of Online Media Robert Keenan rkeenan@edgellmail.com Web Development Manager Scott Ernst sernst@edgellmail.com Director of Lead Generation Jason Ward jward@edgellmail.com

## MARKETING/EVENTS/CIRCULATION

Director, Event Planning Pat Benkner pbenkner@edgellmail.com Director, Event Content John Hall jhall@edgellmail.com Circulation Manager Jeffrey Zabe izabe@edgellmail.com

### PRODUCTION

Senior Production Manager Pat Wisser pwisser@edgellmail.com

Subscriptions 978.671.0449 Reprints: edgellreprints@parsintl.com 212.221.9595

### CORPORATE

CEO/Chairman Gabriele A. Edgell gedgell@edgellmail.com President Gerald. C. Ryerson gryerson@edgellmail.com Vice President John Chiego jchiego@edgellmail.com

## CORPORATE OFFICE

Edgell Communications 4 Middlebury Blvd, Randolph, NJ 07869 973.607.1300 FAX: 973.607.1395

> FOUNDER Douglas C. Edgell 1951-1998





## STUDY METHODOLOGY

**THE STUDY** is based on input from 119 retailers who filled out an exhaustive questionnaire that takes 20-25 minutes to complete. The respondents are senior-level executives that have significant responsibility for making technology decisions. All are headquarters-level executives. No field-level staff — store managers or regional managers, for example — were invited to respond. Also, all are from national chains or large regionals. The insights from these executives represent the views of retailers who have the authority to set and execute IT agendas and help shape business outcomes.

Of the respondents, a third (33.6%) are from the C-suite — 16.8% are CxOs and 16.8% are ClOs. More than half (53.8%) are directly responsible for IT — 37% are directors of IT and 16.8% are ClOs. We see a growing number of high-level marketing executives appearing in the respondent pool — 7% are CMOs or VPs of marketing. Clearly, the study has a bias toward top-level headquarters staff, which gives the findings a high degree of validity since they represent the views of executives who know what they are talking about.

Since the focus is on national chains and large regionals, the percentage of big retailers is high — 31.9% have annual revenue greater than \$1 billion and of these, 10.1% have revenue greater than \$10 billion. However, small-to mid-size retailers are also well represented — 37.8% have revenue less than \$250 million. Many of the technologies covered in the study are expensive investments and the respondent profile indicates that the views represented are by retailers who can afford to make sizable investments.

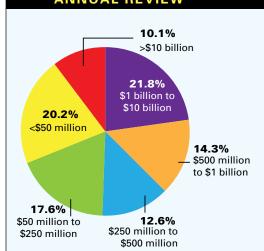
Finally, the respondent pool reflects a snapshot of the primary segments in retail. The largest segments are apparel/footwear/accessories (34.5%), hard goods (19.3%), C-store/drug/grocery (18.5%) and specialty (17.6%). Each of these segments is broad in itself, but within the segments the retailers share many commonalities.

## **ABOUT GARTNER**

Gartner Research is a leading provider of research and analysis about the global information technology industry. It worked with *RIS News* to produce this study, which was conducted during the first two months of 2014. In conjunction with the *RIS* editorial team, Gartner created the survey and posted in online. Gartner performed the analysis of the data and was then interviewed by *RIS* on the meaning of the data. Gartner was not paid for its involvement and *RIS* did not involve any of the advertisers in the report during the preparation or analysis phases.

# 7.0% CMO/VP, Marketing 21.8% Departmental Mgt. 16.8% CXO CIO







## **ERA OF INTENTIONAL INNOVATION**

FAILURE IS NOT ONLY AN OPTION, IT IS A REQUIREMENT TO GAIN COMPETITIVE ADVANTAGE

BY JEFF ROSTER

I'VE SPENT THE LAST 15 YEARS observing the retail landscape as a Gartner analyst and years before that as a retail practitioner. I've had a seat on the 50 yard line watching the ebbs and flows of this industry. Historically, the industry was described as risk averse with some justification, but in the era of Amazon speculating about delivering packages via drones and Walmart buying technology companies by the truckload, the risk-aversion quotient has to charge. That's why at Gartner's Sunrise Breakfast presentation at the recent NRF Big Show I declared the most important trend in 2014 was that the "Era of Intentional Innovation has arrived."

Intentional innovation is an interesting phrase but what does it mean? I argue that innovation has always been a risky business for an executive to pursue. Everything was all fine and dandy if a skunk works operation turned out to be a success, but what if it didn't? Would everyone get branded by the failure? Probably. That is not the right approach and it has to change.

In the Era of Intentional Innovation business executives must be empowered to take risks, to experiment with mobile and social engagement and to achieve relevancy with the millennial generation in new ways. Failure is not only an option in this era, it's a requirement to learn ways to gain competitive advantage.

## **MAJOR ACTION ITEMS**

Expanding multichannel initiatives (chosen by 30.3% of respondents) has risen to the top of the major action items list this year, which looks at key initiatives that retailers will focus on for the next 18 months. This is exactly what I would expect from retailers that are active in the process of transforming their businesses. (See Figure 1.)

New to the top five, but not surprising given the number of recent data breaches and the resulting tsunami of negative press coverage, we find network and IT systems security was chosen by 24.4%. When retailers create completely new customer engagement models they must pro-



## FIGURE 2 TOP TECHNOLOGIES FOR 2014

1. Social media analytics	35.4%
2. POS software	33.6%
2. Mobile POS	33.6%
<b>3.</b> Campaign analysis & forecasting	32.8%
<b>4.</b> Education & training	31.9%
<b>5.</b> Order management systems	31.1%
<b>5.</b> Multichannel fulfillment	31.1%
<b>6.</b> Forecasting & planning	30.3%
<b>7.</b> POS terminals	29.4%
7. Predictive analytics	29.4%

tect (at all costs) the trust that customers have placed in them at the time of a transaction, which happens to include access to the shopper's most sensitive data.

I expect to see dramatic development around social media analytics this year, cited as the top technology for



deployment in 2014. There is legitimate debate as to which role will ultimately gain the responsibility for sifting through the terabytes of tweets, Snapchats, Facebook posts and Instragram photos, but my bet falls clearly on the CMO.

Retailers have long realized that consumers were using their store inventory as Amazon's product showroom. But what has frustrated me as an industry observer is the rather pedestrian response by retailers to this clear and present danger. This situation finally appears to be changing. Retailers tell us that developing a mobile enterprise/store strategy is now one of their top three initiatives, which is a good sign. Amazon isn't the only one that can play the mobile game and the fact that retailers are fighting fire with fire is a good sign for the industry.

### PAINS TO OVERCOME

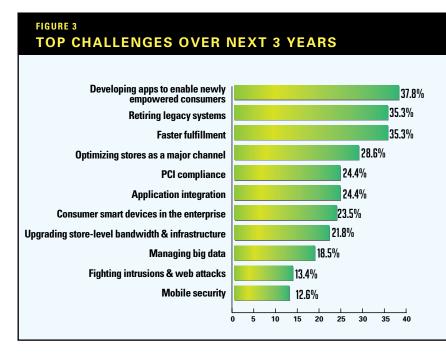
"Power has shifted to the customer." This has become one of the most overused retail phrases in 2014. It is also, perhaps, one of the most accurate. However, it is important for retailers to understand what this shift means and how to respond to it.

For example, the top challenge retailers say they will devote significant resources to in 2014 is developing applications to enable the newly empowered consumer. This datapoint more than any other illustrates the best reason for accelerating innovation in the retail universe — successfully dealing with empowered customers. (See Figure 3.)

Faster fulfillment has suddenly become a top-three challenge for retailers. This is clearly a response to Amazon's aggressive push to achieve same-day delivery as well as its successful Amazon Prime program.

The datapoint "Retiring legacy systems" is always a fun one to present to my vendor clients who see this as a significant opportunity for them. However, some fail to realize that their software is, in fact, the legacy system retailers want to retire. My advice to vendors is that now is a very good time to get close to your clients and provide the products and insights they are looking for or risk being thrown off the bus as unwanted baggage during the hyper innovation cycle retail is now operating in.

To me the most optimistic datapoint in the study is the high ranking given to optimizing stores as a major channel. It is called out as a challenge, but the good news is that most retailers now realize that physical stores are not a weakness but a valuable asset. However, this knowledge comes with the caveat that stores need to be transformed to deliver effective services to tech-savvy shoppers, especially millennials.



To convert stores from being a weakness into becoming valuable assets will likely require a technology makeover that includes such items as mobile loyalty apps, beacons, digital signage and a host of other solutions that are now emerging and being experimented with.

## CONCLUSION

The year ahead for many retail practitioners will be filled with tough decisions, bold experimentation and probably the exit of several venerable businesses. CEOs will need to empower their teams with an innovation DNA that many might not have dreamed possible as recently as last year. Mistakes will be made. That's a given. If something doesn't work, admit it, fix it and move forward with the next innovation. The pursuit of honesty and transparency are highly desired characteristics of millennial shoppers and the businesses they support. If you fight to earn the trust of millennials you might be surprised to learn how loyal these fickle shoppers actually turn out to be! •



Jeff Roster is vice president industry market strategies, retail for Gartner. This is the 13th year he has been the chief analyst for the Retail Tech Trends Study.



## **BREAKING WITH THE PAST**

## TODAY'S COMPETITIVE LANDSCAPE REQUIRES INVESTMENTS FOR INNOVATION AND DIFFERENTIATION

BY JOE SKORUPA

**MANY ANALYSTS** believe that retail tech is underfunded, that a kind of systemic inertia locks retailers into low levels of investment compared to other industries. This view is shaped by the widely used metric of pegging tech investment to a percentage of revenue. However, there are unique characteristics in the retail business model that render this traditional yardstick inaccurate.

Two of the unique characteristics are the gigantic amounts of inventory that many retailers carry and the massive real estate portfolios required to support a national chain of stores. The amount of capital tied up in these essential pillars of business and the portion of revenue needed to service them is large compared to other industries and they should be weighed when calculating tech investment levels.

For example, when Safeway was recently acquired its annual revenue was in the \$40 billion range, but the acquisition price was only \$9 billion. Clearly, a large part of Safeway's revenue was tied up in the cost of doing business and only a small percentage was available for making capital investments. That percentage of revenue appears to be in the 25% range for Safeway. This is a rough guess, but it indicates that instead of calculating IT spending as a percentage of total revenue it should be calculated as a percentage of revenue available for IT investment.

The point is that in retail it's not about the percentage of revenue set aside for making tech investments, because it will be different for every retailer. It is about making smart decisions with the capital that is available.

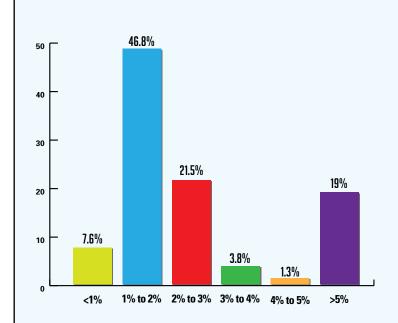
## MIXED BUDGET MESSAGE

In this year's survey we kept the percentage-of-revenue datapoint in the questionnaire to preserve year-overyear analysis, but next year we will search for a different (or at least additional) metrics to determine overall industry investment trends. (See Figure 1.)

The most interesting trend we see in this datapoint (which is universally used throughout the industry as an accepted standard) is that more dollars are flowing into IT budgets this year. This year, 19% of retailers said their IT budgets are greater than 5% of total revenue, which more than doubles the 7.5% figure of last year.

So, nearly one fifth of retailers are investing in technology at a rate that approaches the average of the top tier of industries regularly cited as spending the most on IT. This select group includes financial services, telecommunications and education.

## FIGURE 1 IT BUDGETS AS A PERCENT OF TOTAL REVENUE





However, looked at in a more direct way — i.e., change in year-over-year IT budget — a more cautious picture emerges. (See Figure 2.)

Despite signs of an improving economy heading into 2014, we find that "no change in year over year IT budget" jumped to 41.5% from 28.3% last year. This big jump was fueled by retailers who last year said their IT budgets were increasing.

Why the shift? Several reasons. One is that over the last three years retailers have poured a lot of money into projects that had been postponed during the great recession. Many of these projects have now been completed. Also, retailers have become more comfortable at deploying cloud solutions, which can be implemented without high upfront costs. This enables retailers to de-

ploy technologies at lower costs for any given year, although the ongoing costs may even out after several years.

Two other possible reasons are that retailers are doing more outsourcing than ever before and they are purchasing tech companies (or labs) to deliver much needed innovation. These strategies tend to shift costs to different line items in the budget.

The overarching finding is that IT budgets are not decreasing. Instead they are growing at a slower pace than the last several years.

## 19%

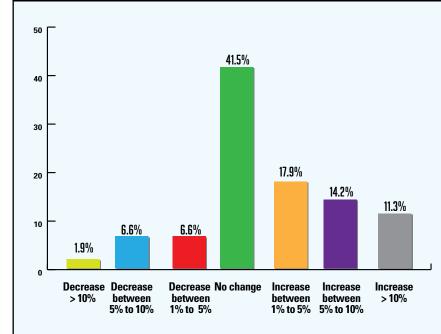
Retailers who say their IT budgets are greater than 5% of total revenue

## IT STRATEGY

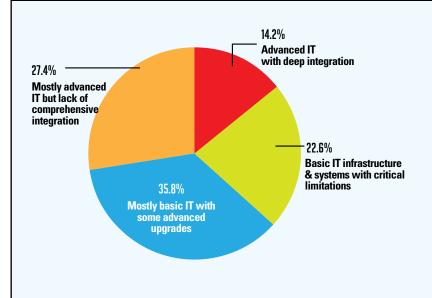
As noted above, outsourcing tech services is a trend that retailers are increasingly adopting and each year we track the top 10 IT service providers that retailers seek for strategic insights. This year it is interesting that three companies on the list are in the area of network expertise — Cisco, Verizon and AT&T. In an era where cloud applications and platforms are becoming prevalent it is essential that infrastructure is absolutely bullet proof. Hence the reason Cisco, Verizon and AT&T make the list. (See Figure 5.)

With so many transformative shifts taking place in retail technology it often must feel to CIOs like they are paddling against the current. Even if projects are getting

## FIGURE 2 CHANGE IN YEAR OVER YEAR IT BUDGET



MATURITY OF IT ARCHITECTURE





**Every time** 

out a new

innovation

the rest of

far behind

it is.

the industry

realizes how

Amazon rolls

done and progress is being made, the to-do list keeps getting longer.

We can see this effect in response to our maturity model question. After several years of seeing retailers gradually climb the ladder from basic up the rungs to advanced, we suddenly see a reversal of the trend. This year, those who say they have basic IT infrastructure and systems with critical limitations (the lowest rung on the ladder) jumped to 22.6% from 13% last year. All higher rungs on the ladder decreased.

Why the backslide? Call it the Amazon effect. Every time Amazon rolls out a new innovation — Sunday delivery, same-day delivery, high-speed fulfillment, dynamic pricing, subscription orders, home delivery of groceries

— the rest of the industry realizes how far behind it is and how much effort it needs to make to catch up. (See figure 3.)

One final point and a big one: the best-of-breed approach to software, long the dominant architecture approach, is in a state of flux. It is not going away any time soon, and, in fact, it is not being supplanted by any alternative, such as integrated solutions suites or software as a service. (See Figure 4.)

However, evidence indicates it may no longer remain the dominant force it has been for the last two decades. This year, 38.1% of retailers chose best-of-breed software to describe their architectural approach to software, a nearly

20-point drop from last year's 57%. Conversely, using in-house IT resources to develop software jumped to 44.1% and first place on the list, which is up from 31% and last place in 2013.

Why the dramatic year-over-year swings? Call it the innovation effect. If you can buy a best-of-breed solution off the shelf, so can all of your competitors. Today's competitive landscape requires innovation and differentiation. These are business essentials that cannot be pulled off a shelf and instead have to be nurtured and developed with a high degree of skill from within.

## ARCHITECTURE APPROACH TO SOFTWARE

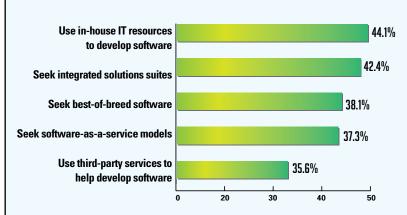
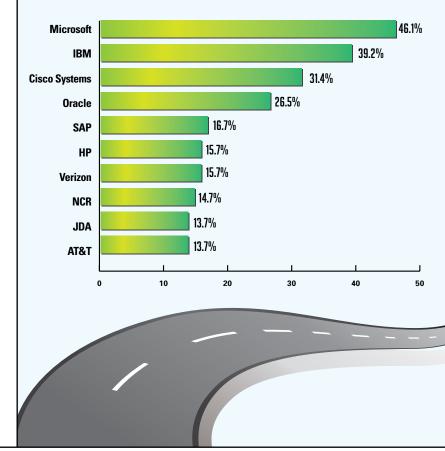


FIGURE 5
TOP 10 IT SERVICE PROVIDERS RETAILERS SEEK





## **ANYWHERE RETAILING**

## HOWEVER, WHEREVER AND WHENEVER YOU TOUCH A SHOPPER IT IS A POINT OF SERVICE

**BY JOE SKORUPA** 

**FROM AN IT PERSPECTIVE,** store systems are inextricably linked to checkout. Dozens of functions are directly tied to it to ensure every transaction is accurately recorded in the store, saved in one or more databases, and published to other systems throughout the enterprise. Checkout is so pivotal that it is rightfully considered a signature pillar of the retail industry.

Computerized checkout has been around for 40 years and yet during this time it has never become fully mature, or at least it hasn't in the sense that it has plateaued. Instead, POS software and hardware have been in a constant state of evolution. To the bane of retail CFOs and IT budget planners, no deployment ever lasts long without becoming out of date. Frequent updates, and even rip-and-replace upgrades, are needed virtually as soon as POS investments are amortized, although some retailers try to extend the life of their POS long after the normal duty cycle has been reached, usually with negative consequences.

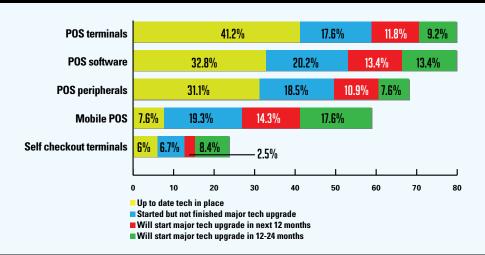
Today, there are many drivers forcing retailers to upgrade their POS technology and expand it beyond the

traditional functions required for fixed-terminal checkout. Stores are becoming digital hubs of technology and as a result POS must be capable of managing a wide range of applications that serve shoppers anywhere in the store and connect associates to digital or online enhancements that improve the in-store experience.

This shift has been underway for at least three years and during this time it has steadily fueled POS upgrade plans, especially for software. (See Figure 1.) As in previous years, we find between 15% and 20% of retailers are currently underway with a major tech upgrade and another 20% to 30% are planning to begin POS projects within two years. A percentage of the latter group will postpone their rollouts, so the number of actual starts remains fairly steady year over year.

The same pattern and percentages hold true for peripherals, however this may be about to change due to the accelerated rollout of credit cards embedded with computer chips, which require new credit-card authorization hardware in stores. Retailers can thank the recent

## FIGURE 1 POS TECHNOLOGY UPGRADE PLANS





massive security breach at Target and others for this shift, although any technology that improves security is a smart investment today.

U.S.-based retailers have long resisted investing in peripherals capable of reading credit cards with chipand-pin or EMV (Eurocard, Mastercard and Visa) technology even though much of the world has been using it for several years. The days of resistance appear to be over thanks to the notoriety of the Target breach and the public endorsement of chip-and-pin technology by the NRF.

## THE FUTURE OF MOBILE POS

Aside from

untethering POS

from fixed termi-

nals and adding

serve customers

anywhere in the

store, a cost-cut-

ting component is

driving the rollout

of mobile POS.

the ability to

While we see steady investment plans for deploying mobile POS, it is important to note that in-store mobility is still bypassing nearly half the industry. Specifically, 36.1% say they have no mobile POS plans and another 10.9% do not know if mobile POS will be part of their future. (See Figure 2.)

Despite this finding the salient point is that there is a huge amount of activity going on across the industry in

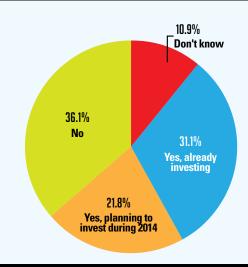
the area of mobile POS - 31.1% say they are already investing in it and another 21.8% say they will begin investing by the end of the year.

Aside from untethering POS from fixed terminals and adding the ability to serve customers anywhere in the store, a cost-cutting component is driving the rollout of mobile POS. Fixed POS stations are three times higher than mobile POS devices at a bare minimum. For this reason alone, replacing fixed POS terminals with mobile POS is an appealing alternative. As a result, more than a quarter of retailers (25.4%) say they plan to decrease the number of fixed POS terminals in their stores due to mobile POS rollouts. (See Figure 3.)

This group is dwarfed by the 60.3% who say they have no plans

to decrease fixed POS terminals in their stores, so it is important to note that traditional cash-wrap stations will not be disappearing in stores any time soon. For good reason, because fixed POS stations have a number of advantages that mobile POS cannot easily replicate. These

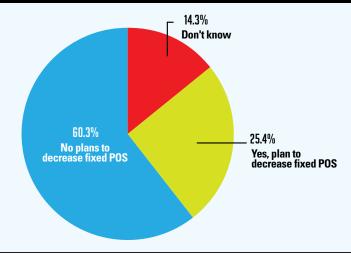
FIGURE 2
PLANS FOR INVESTING IN MOBILE POS



25.4%

Retailers planning to decrease fixed POS investments and replace with mobile POS to cut costs and free up valuable store space

FIGURE 3
PLANNING TO DECREASE FIXED POS INVESTMENTS





include: easy access to cash to make change, ability to remove electronic-surveillance tags, space to hold a full shopping basket of purchases, bags to aid shopper convenience, video tracking, establishing easy identifiable proof of purchase, and more.

No doubt there is a bright future for mobile POS, but not all retail formats are ideal candidates for adoption (think grocery, convenience or discounters). And even those where mobile POS makes sense (think apparel, footwear, electronics and niches that depend on millennial shoppers) the leading POS strategy appears to be a hybrid that deploys both mobile and fixed POS.

## **OMNICHANNEL: SEEKING A BETTER WORD**

There is much angst among some analysts, vendors and retailers about using the term omnichannel. Despite some inherent problems with the definition and usage of the term, omnichannel has become the number one buzz word in the retail industry. Why all the angst?

The reason can't be because the word "channel" is offensive, since it has been used for years in such phrases as distribution channel, sales channel, channel conflict and channel partner, to name a few. The problem must be in the prefix "omni," which is a Latin word for all, as in "all channels." It implies an ideal state of retail execution where all sales and supply chain channels are merged into a unified whole. In the real world this is difficult to achieve and the roadmap for deployment is different for every retailer depending on retail segment, tech stack, organization structure and resources. Maybe that is the source of the problem — it cannot be mapped out in a way that can be universally applied to all retailers.

Regardless of which side of the argument you are on it is clear retailers are continually upgrading their omnichannel capabilities. For example, 29.8% say they are currently upgrading their e-commerce platform and another 22.1% say they will upgrade within 12 months. (See Figure 4.) Roughly 50% of retailers have reported they were upgrading or planning to upgrade their e-commerce platforms since the first time we asked the question. This pattern is not likely to change and indicates that e-commerce platforms have a two-year life cycle and need to be loosely coupled (as opposed to tightly integrated) to accommodate frequent replacement.

Although still low in dollar volume, the growing role of mobile commerce is a fact of retail life. The interesting finding in this year's study is that a quarter of retailers re-

FIGURE 4
E-COMMERCE PLATFORM INVESTMENT PLANS

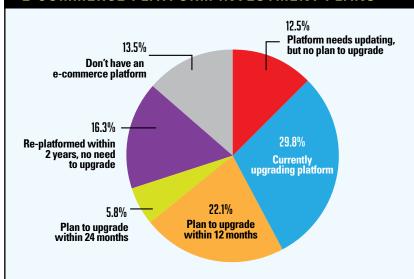
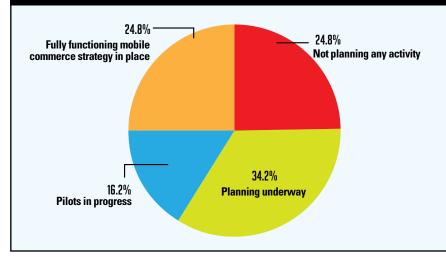


FIGURE 5
CUSTOMER-FACING MOBILE CHANNEL DEVELOPMENT



port they have a fully functioning mobile commerce strategy in place. This is roughly double the figure captured in the last three years, so mobile commerce has been a front-burner investment that is on the road to becoming a mainstream component.

Whatever you call it, the data shows there is significant amount of investment taking place in the digital retailing channel in 2014.



## EARTHQUAKES SHAKE THE BACK OFFICE

## TREMORS SPREAD FROM EPICENTERS IN MERCHANDISING AND THE SUPPLY CHAIN

**BY JOE SKORUPA** 

MERCHANDISE PLANNING and supply chain management are back-office capabilities and as such they are one step removed from earthquake-like forces shaking the ground beneath more customer-facing functions. This is not to say that tremors don't radiate through all departments in the retail enterprise nor that the age of anxiety about fast-moving customer trends is not felt at headquarters. However, last time I checked there were no customers walking up to merchandisers or supply chain executives wielding smartphones and threatening to buy from the competition unless their demands were met.

Still, there is absolutely no doubt that merchandising and supply chain departments feel the heat from demanding consumers who are essentially challenging retailers to stay relevant in the 24/7-connected world. In fact, it has never been more important for merchandisers to sharpen assortments and localize product mixes right down to the store level, which are not easy tasks for national chains.

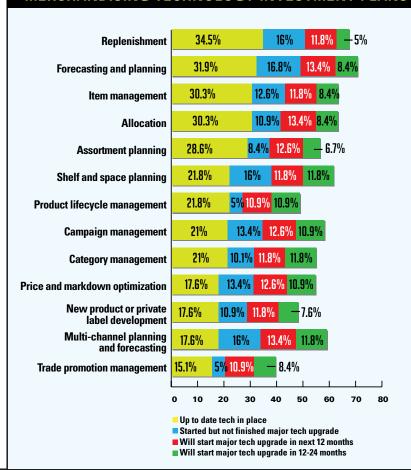
Some would argue that localization, hard as it is, is not going far enough in a world dominated by standards set by Amazon. What will ultimately be required is a personalized relationship with customers that uses merchandising and supply chain tools to reach down to individual shoppers. In practice, this may be fundamentally impossible, but it is a worthy stretch goal to shoot for.

## **MASTERING MERCHANDISING**

For retailers to achieve sustainable success, the merchandisers need to operate at the highest level of performance. As a result, smart retailers always put investment in merchandising tools at the top of the priority list. If they don't, the pain of updating an obsolete merchandising system on a rush schedule has been compared to undergoing a heart and lungs transplant. To avoid such pain, most retailers undergo what amounts to regularly scheduled checkups, tune ups and upgrades.

Nearly a third of retailers say they are up-to-date with tools used for replenishment (34.5%), forecasting and planning (31.9%) and allocation (30.3%). Interestingly, these three core functions are also the top three where the greatest amount of current investment is flowing, which can be seen in the numbers for projects that have started but not yet finished. Once this cycle of major upgrades is complete we can expect to see other functions

## FIGURE 1 MERCHANDISING TECHNOLOGY INVESTMENT PLANS





within merchandising to get higher levels of attention. (See Figure 1.)

Not surprisingly, one area where a great deal of work still needs to be done is multichannel planning and forecasting. Today, just 17.6% say they are up-to-date with multichannel planning and forecasting. However, 23.5% say they will be working on it within two years. It would come as no surprise if this figure increases once all the work on forecasting and planning, replenishment and allocation is complete.

## STREAMLINING THE SUPPLY CHAIN

Like the merchandising department, earthquakes in the retail world are shaking the supply chain. Evidence of this can be found in two key datapoints — order management and multi-channel fulfillment.

Supply chain systems are often located near the top of retail priority list (although not quite as high as merchandising) when funds are reserved for capital improvements. The reason is simple — if you have products in stores to sell you make money, if you don't you do not make money.

Sophisticated order management applications need to operate on top of centralized product and transaction databases, and they need to operate in near real-time. Also, they need to deliver bullet-proof accuracy so that they can be counted on to support a variety of fast-moving, revenue-generating, customer-facing services, i.e., the not-so-simple task of enabling order online and pickup in-store, a central tenet of digital shopping.

To enable services like order online and pickup in-store, a great deal of work needs to be done to consolidate databases, update data in real-time to a variety of applications, and ultimately provide rock-solid visibility to all sales channels and customers. Yes, customers.

Today, 32.3% of retailers say they have up-to-date order management systems in place, which is no doubt due to several years of steady work and investment. However, a great deal of activity is currently under way (16.8%) and planned to begin in the next 12 months (14.3%) and within 24 months (8.4%). This high level of activity confirms that order management has be-

**SUPPLY CHAIN TECHNOLOGY INVESTMENTS** Warehouse management systems 37.8% 32.8% 16.8% **Order management systems** 30.3% 11.8% **Returns management Sourcing** 27.7% 10.9% Real time inventory visibility (SCIV) 26.1% 14.3% 25.2% 10.9% 10.1 **Transportation management systems** Multichannel fulfillment 20.2% 20.2% RFID case/pallet 10.1% 5.99 10 20 Up to date tech in place Started but not finished major tech upgrade ■ Will start major tech upgrade in next 12 months ■ Will start major tech upgrade in 12-24 months

come a front-burner technology. (See Figure 2.)

Joining order management on the front burner is multichannel fulfillment, which is also slated for significant investment in a large number of retail organizations. With Amazon threatening to use drones to fulfill future orders (probably a joke) and already rolling out same-day delivery in major markets, flexible fulfillment has suddenly become a major differentiator.

Today we see that only a fifth of retailers (20.2%) say they are up-to-date with their multichannel systems, but an equal number say they are currently underway with a major upgrade. In addition, another fifth say they will begin major upgrades within the next two years (10.9% will begin within the next 12 months and 8.4% will begin within the next 24 months.).

Shoppers are crunched for time and crave convenience. Fast and flexible fulfillment options play into these needs. Retailers that master these functions will win sales today and have a chance to earn loyalty tomorrow. •

Today, just
17.6% say
they are upto-date with
multichannel planning
and forecasting. However,
23.5% say
they will be
working on
it within
two years.



## FUELING THE ANALYTICS ENGINE

**CUSTOMER INSIGHT DRIVES SALES, IMPROVES OUTCOMES AND BEATS THE COMPETITION** 

BY JOE SKORUPA

IF ANYONE WAS UNCERTAIN about the exploding importance of analytics in retail, then findings in this chapter will provide clear evidence that retailers are investing in analytic tools like never before. The data shows that planned analytic investment activity in the next two years is higher than any other technology tracked in the study.

A great deal of this activity has shifted from traditional areas that have benefitted most from analytic capabilities in the past, such as finance, supply chain and merchandising. These areas are not being neglected, but the focus today has shifted from business information to customer insight.

Knowing customers better than the competition enables retailers to orchestrate marketing, promotions, loyalty and personalization strategies that drive sales and improve outcomes. Beyond these traditional metrics, sophisticated analytic tools allow retailers to move one step closer to the holy grail of customer-centricity—interactive engagement and informed relevancy.

## THINK SOCIAL

As seen in the Top Technologies for 2014 chart in the "Executive Summary" chapter, social media analytics heads the list of IT tools that retailers are focusing on this year. In this chapter we see that only 13.4% of retailers say they have up-do-date tech in place for social media analytics, which is low compared to a more mature technology like frequent shopper or loyalty programs, where nearly a third (31.1%) say they are up to date.

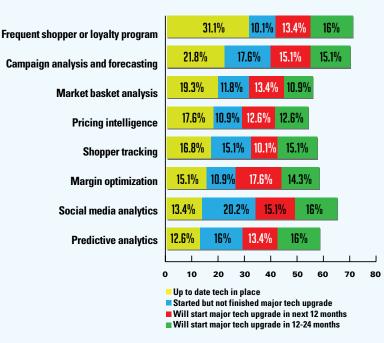
The big finding is that a fifth (20.2%) of retailers say they are currently in the process of deployment, which makes it the number one area tracked among analytic tools. This figure also places it among the leading technologies tracked in the study for current activity underway.

Looking ahead to future investment plans, we see

that 15.1% say they plan to invest in social media analytics within 12 months and 16% say they plan to begin in 24 months. Both figures are among the highest tracked in the 12-month to 24-month categories in the study.

The interesting thing about social media analytics is that it is a learn-as-you-go technology. It is new to retailing and therefore there are no best practices. However, the goal is clear: retailers want to gain a deeper understanding of customer behavior, needs and preferences to improve marketing effectiveness and drive sales. There is no better way to do this than through social media analytics, which is able to follow the digital bread crumbs shoppers leave behind as they travel around and interact with the worldwide web.







### RISE OF THE CMO

While it is fair to say that just about every analytic tool tracked in this section adds some value to the marketing department, none has a more direct impact than campaign analysis and forecasting. Since marketing campaigns are so central to retail (think of all the coupons and circulars that drop out of the Sunday paper) a significant portion of retailers say they are up-to-date with the technology (21.8%), This is the second highest up-to-date technology on the list, but it still means that four of five retailers are not caught up. Why?

Until recently, broad and deep expansion of customer-oriented analytics has been slow to develop in retail primarily due to a giant obstacle — the need to normalize disparate databases.

The ugly truth is that customer data is found in separate silos — transaction logs, loyalty programs, e-commerce platforms, third-party sources and social networks, to name a few. These databases are rarely organized with common attributes. As a result, a great deal of grunt work needs to be done prior to deploying analytic tools, which go on top of the normalized customer database.

However, leading retailers have made an effort to complete this work, which means that marketers are finally able to roll out advanced tools for things like cam-

about social media analytics today is that it is a learnas-you-go technology. It is new to retailing and there are no best practices. \*\*

G4.70/0
Retailers who will have invested in social media analytics by 2016

paign analysis and forecasting. Evidence of this shows up in the finding that 17.6% of retailers say they are currently underway with a campaign and forecasting deployment. Adding to the evidence is the 30.2% who say they plan a deployment in two years (15.1% plan to deploy in 12 months and another 15.1% plan to deploy within 24 months).

Other analytic technologies that have big numbers for future deployments include: margin optimization

at 31.9% (17.6% planning to deploy in 12 months and 14.3% in 24 months), frequent shopper or loyalty programs at 29.4% (13.4% planning to deploy in 12 months and 16% in 24 months), and predictive analytics at 29.4% (13.4% planning to deploy in 12 months and 16% in 24 months).

To ensure retailers are able to act on the insights they get from advanced analytic tools, a number of steps need to be taken. First, as noted above, databases need to be consolidated and normalized. How hard is this task? As one CIO put it, whatever time and money your company has set aside to accomplish the task the best bet is to double it.

Next steps include: training current executives in using advanced analytic tools, hiring new executives that are already trained, adding new data sources to enrich the depth of customer databases, consolidating scattered analytic resources (databases, applications and staff) from separate silos into a dedicated department, and, finally, building analytic models that are unique to your organization and then aligning them with the overall business strategy.

Despite the myriad challenges facing retailers today, the best way forward will likely be found in insights provided by the smart and inspired use of analytics. •



TITLE SPONSOR













**STARMOUNT** 



## THANK YOU TO OUR SPONSORS

**TIBCO Software Inc.** (NASDAQ: TIBX) is a global leader in infrastructure and business intelligence software. Whether it's optimizing inventory, cross-selling products, or averting crisis before it happens, TIBCO uniquely delivers the Two-Second Advantage® – the ability to capture the right information at the right time and act on it preemptively for a competitive advantage. With a broad mix of innovative products and services, TIBCO is the strategic technology partner trusted by businesses around the world. Learn more about TIBCO at **www.tibco.com** 

**AT&T Inc.** is a premier communications holding company. Retailers look to AT&T to provide consultation, design, installation, and managed service of integrated suites of solutions to solve complex challenges in areas of the business including: providing an omnichannel experience, optimizing the supply chain and secure global expansion. **www.att.com/retailbusiness** 

**CradlePoint** is the global leader in cloud-managed 3G/4G networking solutions, providing business grade, secure connectivity to distributed enterprises. Specializing in business continuity, advanced edge routing, machine-to-machine (M2M), and primary connections, CradlePoint's award-winning solutions are purpose built for PCI-compliant networks and the first to pioneer and fully enable high-speed LTE solutions to maximize the potential of the cloud for businesses worldwide. **www.cradlepoint.com** 

**Epicor** provides advanced solutions for retailers seeking to streamline processes, integratechannels, leverage intelligence and inspire customers, to maximize profitability. They are designed to meet the evolving merchandise and service expectations of today's connected, mobile shoppers and the business requirements of the most demanding retail environments. For more information, contact Epicor at **retailinfo@epicor.com** or 800.992.9160.

**Hewlett-Packard Co** (HP) For more than 50 years, HP's collaborative relationships have allowed retailers to focus their IT investments to better engage with customers, manage risk, tackle the explosion of data, and prepare for their transition to a new style of IT. We help you achieve the outcomes that matter most. Learn more **www.hp.com/go/retail** 

**Hughes** provides Retailers with solutions to enhance your customer experience and increase employee satisfaction while reducing store operations costs and increasing revenue. Hughes delivers PCI compliant, high capacity secure networks, with strong QoS, and optimized performance for communications, training, digital signage, Wi-Fi, and more, powering your store of the future. **www.business.hughes.com** 

Leading retailers use **MicroStrategy**, the global leader in enterprise software platforms, for enabling rapid decisions and immediate action anytime, anywhere. Retailers deploy MicroStrategy to analyze vast amounts of data, to distribute actionable business insight, and to improve operating efficiency and the customer's shopping experience with our mobile and loyalty solutions. **www.microstrategy.com** 

**Starmount software** solutions bring the richness of the web and the power of mobile into the store, where retailers can create more personalized, relevant and dynamic interactions with customers. Our in-store mobile selling and omnichannel data platform solutions transform the store environment into a more connected, engaging shopping experience. **www.starmount.com** 

**Sensormatic. Tyco Retail Solutions** is a global provider of integrated retail performance and security solutions serving single-store boutiques, global retail enterprises and everything in between. By providing customers with real-time visibility into their inventory and customers, Tyco Retail Solutions can help retailers improve operations, optimize profitability, and create memorable shopper experiences. **www.tycoretailsolutions.com**