



**A Monthly Recap of the Developments Within the Omnichannel
Ecosystem**

October 2014 Edition

About this Report

In a retail environment where traditional consumer shopping norms and habits are being disrupted by the rapid adoption of new technologies, retailers are now, more than ever, looking for alternative strategies to ensure the future viability of their businesses. Some merchants are progressively adopting Omnichannel solutions that create a seamless shopping experience for their customers, allowing them to shop for all products and services whenever and wherever they wish.

This report will, on a monthly basis, document the moves these progressive retailers are making to enable Omnichannel across three critical lenses:

Engage the Customer – strategies merchants are enacting to drive customers into their store or online including loyalty programs, contextually relevant offers, and leveraging data to make relevant product recommendations.

Enable the Customer – tools merchants are deploying to arm customers with the ability to shop and buy whenever and wherever they want including apps, enabling payment within the app, location-based services, and the ability to shop and fulfill purchases regardless of channel.

Serve the Customer – ways in which merchants are stepping out from behind the counter to deliver enhanced shopping experiences such as mobile-point-of-sale, ability to check inventory in real-time, etc.

The report will also feature industry-spanning research curated by **Vantiv, whose solutions help merchants make that transition a bit easier**. These insights will help to arm retailers (and those who power them) with data to make smarter decisions when considering various options for enabling Omnichannel commerce.

PYMNTS Viewpoint

Apple's launch of the new iPads yesterday is a timely reminder of the role and influence of tablets on the retail purchase experience. Research suggests that in the next two years, the web will influence \$2 trillion of retail spend in the US, or about half of all retail transactions. That growth is fueled by the phenomenal growth in app and table usage, which have exploded over the last two years growing 115 percent and 141 percent, respectively. Increasingly, the shopper's journey starts online via a tablet or a mobile device and ends in a store somehow, either to transact or pick up an item that has been purchased online. It's surely not hard to imagine that as payments methods such as Apple Pay, PayPal, Amazon, Visa Checkout and others remove the friction from transacting online, digital channels will capture even more of the spend, even if the products and services that are being purchased are consumed in a physical setting.

One of the new features that the new iPad has is TouchID, which of course, in conjunction with Apple Pay, enables a secure commerce experience when shopping in a mobile app. Now, no one expects that consumers are going to tote their iPads into a physical store and whack them on a terminal to check out, but there is something truly transformational about Apple Pay that will move us closer to a secure omnichannel commerce experience. That something is tokens.

Tokens are not a new concept but what Apple Pay brought to life is an entirely new use case for them. The tokenization protocol that is being used in Apple Pay, in the first instance, digitizes and secures consumer credentials, which are a consumer's personal account number. The PAN becomes an encrypted artifact stored on any device that a consumer wishes to enable for commerce. But this digital enablement protocol does more than that – it creates a number that's unique to each device, so tablets, wearables, phones, cars, appliances – you name it – all get a specific and encrypted card number that is specific and secure to that device. Issuers, as always, are in control of the authorizing the account when transactions are initiated, but the notion that a consumer's personal account number can be tokenized and provisioned and kept secure across multiple devices not only makes omnichannel a reality, it makes transacting across those devices and channels frictionless – and super secure.

Visa and MasterCard came together to develop a standard for how this would all happen not just for Apple Pay, but so that there could be a secure backbone in place for transacting in a digital world. In the case of Apple Pay, as we all know by now, this protocol uses TouchID to initiate payments in store or in app. Other use cases from Apple and others will surely emerge for browser-based shopping.

PYMNTS Viewpoint

Since 4 in 5 smartphone/tablet users already use mobile devices shopping, and those devices are with us about 90 percent of the time, the ability to leverage this new standard could be as important to enabling omnichannel shopping as the mag stripe is now for shopping in store. And, the shopping and buying experiences that will emerge that can now leverage a secure way to provision and authorize a consumer's identify and transacting could be the catalyst that will make omnicommerce more than just an aspirational goal.

Until next time!

Karen

Karen Webster
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President | PYMNTS.com

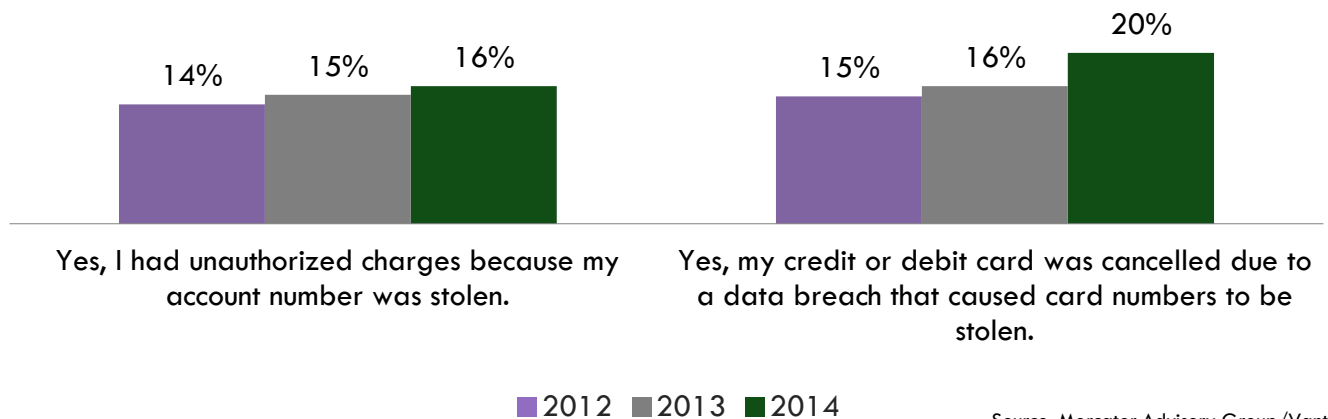
1: Engage the customer

vantiv[™] Insight

While many retailers are bullish on using data they can capture and store about their customers to drive more engagement and, ultimately, sales across channels, many consumers are fearful to provide this data as a result of recent high-profile security breaches.

20% of consumers say that they had a personal credit or debit card cancelled and reissued as the result of a data breach in the last year. 16% say that they have experienced unauthorized charges to one of their credit or debit cards as the result of the card number being stolen. 38% say that, as a result of the above, they think about payment security at every transaction.

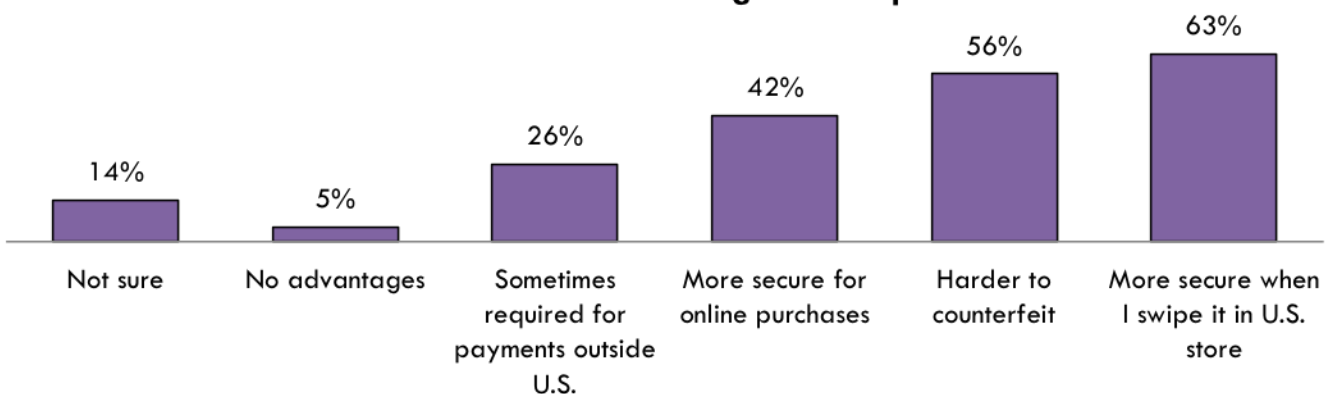
Consumer Reported Security Issues Occurred in Past Year



Source: Mercator Advisory Group/Vantiv

Many consumers are bullish on chip-based, or EMV, cards to ensure that their data remains safe when making payments. Most chip card owners (63%) believe that their chip cards are more secure than payment cards without chips even when swiping it like any other payment card in a terminal in a U.S. store. The next most common advantage that chip card owners cite, noted by 56% of them is that it is harder to counterfeit. While chip cards are not more secure for online purchases, 42% of chip card owners think they are.

Consumer Perceived Advantages of Chip Cards



Source: Mercator Advisory Group/Vantiv

1: Engage the customer

Top Stories

New Breed of Hackers No Match for Banks and Retailers. Several [hacks](#) have hit retailers, major banks and more since December. Over 100 million customers saw their credit cards boosted by cyber thieves, as well as home addresses, SS numbers, and other types of personal data. Target, Home Depot, JP Morgan, and Jimmy Johns were among those whose systems were victims of complex malware. These days, according to President and co-founder of cloud security outfit Hytrust Eric Chiu, “hackers clearly have the upper hand on retailers. Not only because retailers aren’t being proactive about security, but worse, they’re not even being reactive to put the right safeguards in place.” Among cyber fraudsters, there’s increasing sophistication, careful planning, and an ability to perform the same types of breaches over and over, “vacuuming customer data like credit card numbers.”

In early September, [Home Depot](#) announced that its payments data systems were breached, impacting customers using payment cards at its U.S. and Canadian stores. Around 56 million payment cards were likely compromised in the cyber attack, suggesting an even larger attack than last year’s Target breach. The data breach led to fraudulent transactions across the U.S., according to the Wall Street Journal, with criminals using stolen card information to buy prepaid cards, electronics and groceries.

While gathering more data through more channels can be beneficial in better understanding changing consumer behavior, making the shopping experience more personal and engaging, and upping store revenue, it also can mean more vulnerability and more fraud – something stakeholders are seeing an increasing need to address alongside implementing consumer engagement strategies.

Apple Pay and Mobile Payments’ Secret Weapon. September made for a monumental month in payments with the introduction of [Apple Pay](#), something that has stirred up a lot of conversation about winners and losers in the mobile payments space, according to MPD CEO Karen Webster. For one, she said, the fact that Apple Pay launched with an NFC payments capability for in-store payments “has everyone high-fiving over the notion of an NFC dominated mobile payments scheme becoming the de-facto standard for how payments are done in store using a mobile device.” But that’s not necessarily where we should focus – instead, it’s on the fact that Apple is introducing these digital accounts that will allow merchants to open up acceptance on their sites and inside of their physical stores all day long for that method of payment.

These digital accounts, however, are just the first step. The next is to get consumers in the habit of using that payment method – that means “breaking a decades-old habit of reliably and conveniently using credit and debit cards.” That suggests that winners, says Webster, in the mobile payments space should be laser focused on getting lots of digital accounts AND getting consumers to use them. In addition, in year one, Apple Pay will have minimal acceptance at brick and mortar stores, which will “neither set the world on fire nor ignite Apple Pay,” as these changes will take some time. So while Apple is an influential global player that could significantly transform the payments ecosystem, time will tell just how much of an impact it will have as more consumers do (or don’t) jump on board and merchants follow suit.

1: Engage the customer

In Other News...

With the growth of digital consumption comes a new [set of rules](#), according to the Huffington Post, that breeds marketers that understand experience and how consumers are seeking ubiquity.

Social media platform [Tumblr](#) could make for an e-commerce powerhouse, as its young and urban user base is somewhat richer on average than platforms like Twitter and Facebook.

[Stripe](#) partnered with Facebook to help develop its “Buy” button to potentially help solidify its status as a go-to payments power behind social media e-commerce.

[Twitter](#) began testing a “Buy” button with a small number of U.S. retailers, aiming to eventually roll out Twitter-based ecommerce for all of its users.

Online retailers are worrying less about infrastructure and more about [marketing](#) and customer service this holiday season, said an eBay Enterprise survey.

A [report](#) released by consulting firm Capgemini indicated that shoppers aren’t using social media to interact with brands as much as they once did.

Malicious software was found at [UPS](#) store locations in 51 states, and 105k may have been compromised.

UK e-commerce intelligence startup [Ometria](#) raised \$500k to help online retailers compete with Amazon.

Grocery retailer [Supervalu](#) discovered a second data breach in its customer payment system just weeks after the first one hit its grocery stores in the summer.

Food retailer [Waitrose](#) revealed lower profits in the first half of the year due to its investment in its online channel Waitrose.com and its loyalty card program.

Australian retailer [Woolworths](#) is using its 50% stake in data analytics company Quantum and information about consumer shopping habits to identify growth opportunities for its online and physical stores.

QSR Web suggested that what restaurant [loyalty](#) marketers could learn most from Apple Pay it’s a common factor that ties together its key components: reduced friction.

[Macy’s](#) announced the largest deployment of beacon technology in retail, with more than 4,000 ShopKick devices planned for installation across all stores in the U.S.

[7-Eleven](#) expanded its Belly loyalty program to 2,600 stores in the US and Vancouver.

eBay Inc. announced that it will launch an in-app mobile [advertisement network](#) in the 4th quarter of 2014.

Clothing retailer [Chico’s](#) could become “the omnichannel customer’s dream,” as it plans to invest in omnichannel through automation, cloud, new POS systems, RFID, customer engagement and mobile apps.

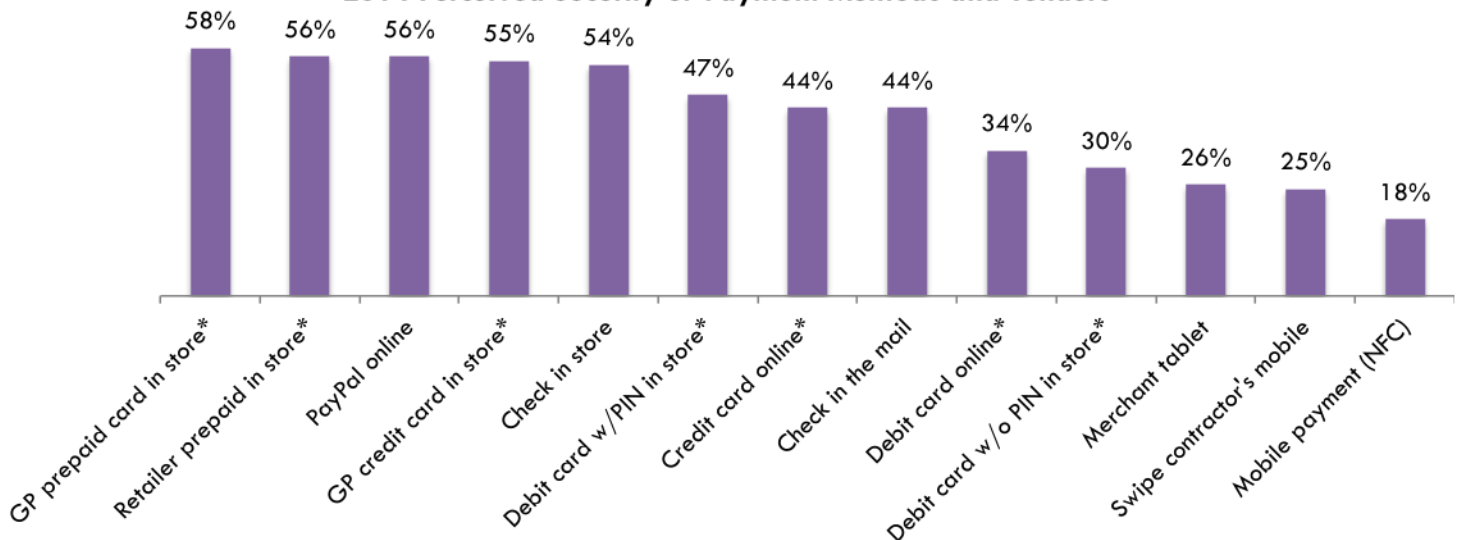
2: Enable the customer

vantiv[™] Insight

While many industry experts believe that mobile payments offer an opportunity for increased payment security, consumers believe that more tried and true payment tenders are the safer way to pay. Prepaid cards, both general purpose (58%) and store branded (56%) are still considered the most secure. Amongst online payment options, PayPal (59%) is rated more secure than credit card online (44%) and debit card online (34%).

18% think that using NFC is secure, 25% think tablet-based POS is secure, and 26% think card-reader-based POS is secure. Mobile payments are still considered the least secure payment form, trailing merchant tablets and dongles on a contractor's mobile devices. Time will tell how Apple Pay can affect these perceptions, especially with their tokenized approach to processing transactions

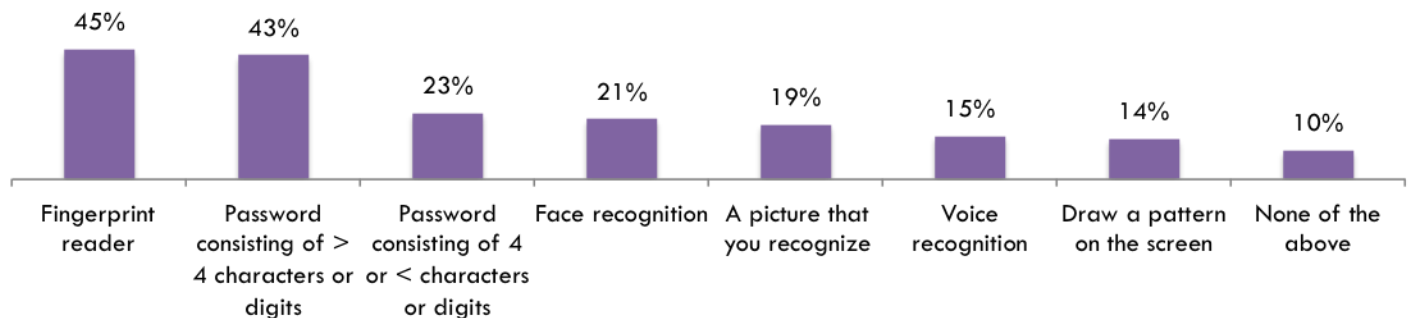
2014 Perceived Security of Payment Methods and Tenders



Source: Mercator Advisory Group/Vantiv

When it comes to the specific technologies that consumers believe will make mobile payments more secure, fingerprint readers (45%) are the most preferred, followed closely by more traditional PIN-type technologies (43%). Virtually all consumers agree, however, that passwords on smartphones are necessary. 70% have some kind of password or security on their mobile phone.

2014 Preferred Security Codes for Mobile Devices



Source: Mercator Advisory Group/Vantiv

2: Enable the customer

Top Stories

Apple Pay's Effect on Mobile Payment Security. For Apple to truly ignite [Apple Pay](#), and spark more consumers to get digital accounts and use it frequently, it needs to guarantee mobile payment security. As data breaches at major retailers have become the norm, implementing layered, effective security measures is a top priority for merchants. And Apple Pay is launching at a time when the U.S. is moving toward the EMV payment system which is now implemented using NFC – as retailers are buying new terminals, they're often getting NFC in the process. [NFC](#) is a crucial enabling technology in the Apple Pay system that enables the chip in an iPhone to pass payment card data to the store terminal, eliminating the need for a shopper to swipe his or her card. As more [functionality](#) is added, NFC will improve customer stickiness and help enhance the relationship between consumers and merchants, said Marc Massar, Chase Paymentech Senior Vice President and Group Manager for Enterprise Product.

According to James Anderson, group head of Mobile Product Development at MasterCard, "Apple wanted to deploy the safest and most secure payment option, and saw an opportunity in that space." Cards are tokenized so that the real number on the card is different than that stored on the Secure Element chip on the iPhone. In addition, Apple's use of Touch ID provides a robust way to identify consumers with biometrics, an extra layer of authentication.

In addition to the iPhone, Apple has also made moves to secure other products like its [smart watch](#), hoping to attract consumers with its seamless security. The smart watch will be able to recognize the proximity of a wearer's iPhone as a security check. After confirming the presence of the right iPhone, both devices would connect to a merchant's POS. Once recognized, a notification would appear on the phone and, with either a tap or a verbal command, the transaction would be approved. By making wearables more convenient for wearers on-the-go, Apple could potentially bridge the ease-of-use/security gap that can leave some questioning the desirability of mobile payments.

Alibaba Enables Biometric Technology in Mobile Payment App, Continues to Grow. The Chinese e-commerce giant [Alibaba](#), alongside raising a record \$25 billion for its initial public offering, has entered into the world of mobile payments – and has implemented a way to secure them. The company announced on their blog that they would be using biometric technology, adding the fingerprint recognizing option into their Alipay Wallet mobile app. The Alipay Wallet is currently available for Android phones, and the biometric technology will be included first into Chinese technology company Huawei's new Mate 7 smartphone. Other smartphones are also likely to use the feature, according to Retail Solutions Online. According to Alipay, which currently has over 100 million users, the amount of money the wireless payment system received increased by 546% in 2012 alone, compared to numbers in 2011. Alibaba founder Jack Ma, China's wealthiest person, expressed his goals to become "bigger than Walmart," predicting that the company could surpass Walmart as the world's largest retailer by 2016.

2: Enable the customer

eBay Splits Off PayPal As Mobile Payments Surge. [eBay](#) announced that it is spinning off its PayPal division, throwing the business into competition with Apple and Google as consumers up their use of smartphones and other digital devices to pay for things, according to Business Week. eBay bought PayPal in 2002 to add online payment services, but the business of online payments is moving more and more toward mobile devices, where PayPal isn't dominant – especially now that Apple Pay has been added into the mix. An independent PayPal, however, could value \$47 billion based on valuations in the industry, and would have “more latitude to forge alliances with retailers and other financial firms as Google and Apple seek to turn their products into tools for digital payments.”

“The PayPal/eBay split makes a lot of sense for PayPal,” said Denee Carrington, an analyst at Forrester Inc., in the article. “The payments landscape is hyper-competitive, the pace of change is accelerating and everyone is gunning for PayPal. The split will give PayPal greater agility to help it achieve its full potential.” Mobile payments in the U.S. are projected to total \$118 billion by 2018, up from \$3.5 billion this year, according to EMarketer Inc.

In Other News...

[Walmart](#) is taking a step into the banking business, preparing to offer low-cost checking accounts by the end of October thanks to a partnership with Green Dot.

[Macy's](#) unveiled its plans to include Bluetooth beacons in all stores, new mPOS terminals, support for Apple Pay, and a mobile wallet app.

Analysts [predict](#) that mobile shopping (especially beacon technology) and e-commerce will boost sales this holiday season.

Loyalty and CRM services company Brierley+Partners announced [Google Wallet](#) support, allowing customers to better organize their various loyalty programs.

Merchants are falling short in meeting online consumers' expectations, according to a new [Vantiv](#) Insight Series research report “From E-commerce to Omncommerce.”

[Kmart](#) announced that it is wrapping up a no-down-payment layaway promotion for loyalty customers that “appears specifically designed to undercut Walmart's layaway.”

Whole Foods is testing a [loyalty program](#) starting in Princeton, NJ and expanding to Philadelphia later this year, planning to introduce the program nationwide by the end of 2015.

[Staples](#) launched its first iPad app to offer tablet shoppers a more differentiated and dynamic experience.

Teen retailer American Eagle Outfitters is upping its [mobile commerce](#) game before the holidays, adding the “pinch and zoom” feature to images of their clothing and accessories, and more in-depth product descriptions.

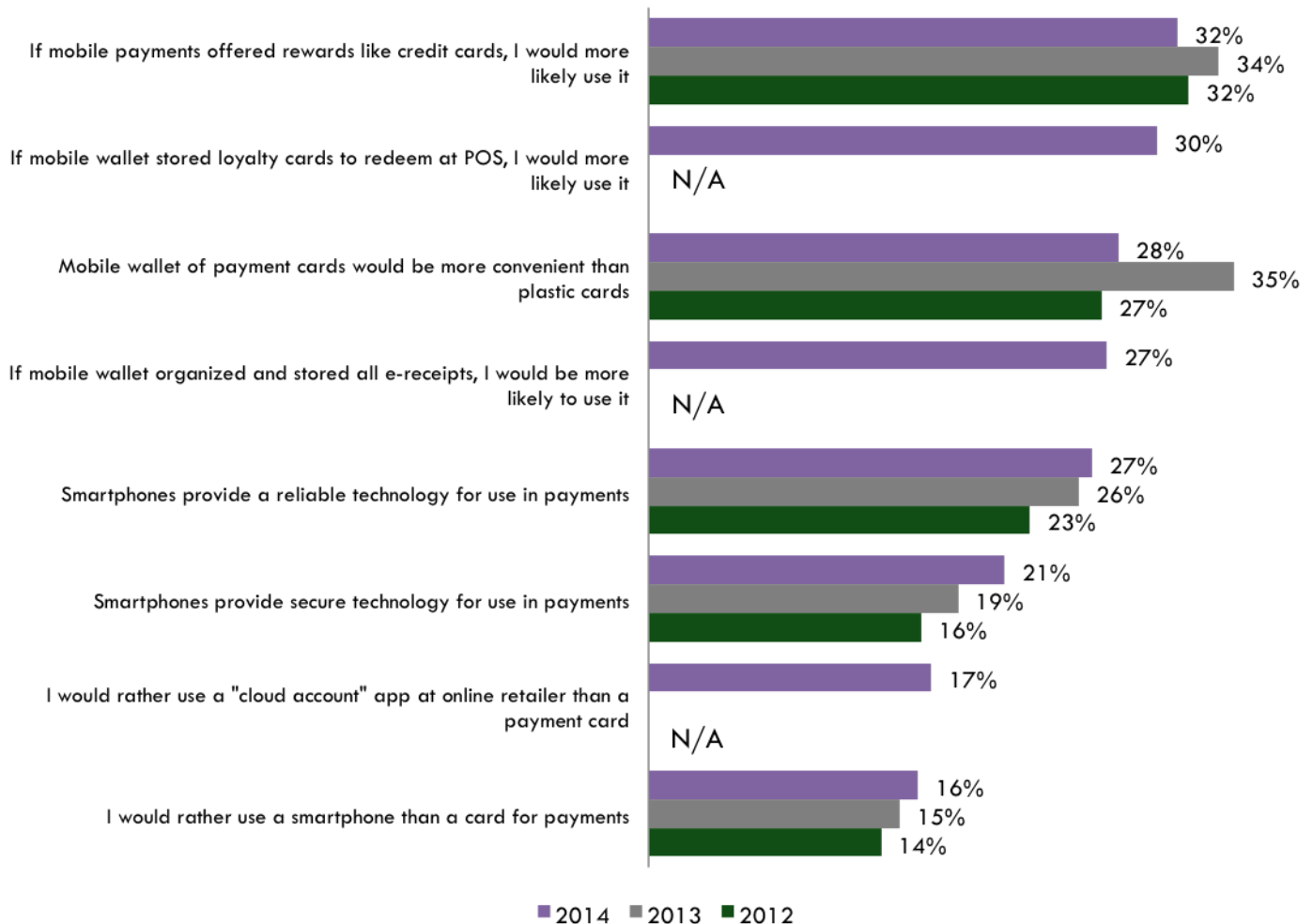
3: Serve the customer

vantiv™ Insight

Apple Pay has put the idea of using mobile to enhance the shopping experience squarely into the strategic crosshairs for many customers. Surprisingly consumers don't rate security isn't at the top of the list when it comes to motivating their shift away from traditional plastic.

Consumers report they are more likely to use mobile wallets if it offers them rewards (32%) or makes it easier to redeem rewards from loyalty programs at POS (30%). Young adults (47%) and smartphone and tablet owners (49%) are especially motivated to use mobile wallets by rewards or loyalty program organization (mentioned by 48% of both). When asked if they would rather use a mobile device than plastic cards, half as many (16%) preferred to use a mobile device in an of itself. Mobile wallets need to be useful.

Changes in Consumer Attitudes toward Mobile Payments



Source: Mercator Advisory Group/Vantiv

3: Serve the customer

Top Stories

New Anti-Breach Technology Deployed on Market-Leading POS System. The largest integrated POS integrator and reseller in the U.S. Retail Data Systems [deployed](#) the “first ever in the world” end-to-end encryption and tokenization with EMV ready devices on the NCR Aloha POS, using First Data Corporation’s security solution Transarmor. The solution was deployed on the NCR Aloha POS system at RedRossa Napoli Pizza in IA.

According to Point of Sale News, the Aloha POS is a leader in serving professional restaurant operators with a comprehensive suite of solutions and integrations to third party providers that “protect the customer’s investment.” General Manager of Retail Data Systems Payment Services Division Jeff Barrett said that the security solution “removes card data from the customer environment” and reduces merchant liability, “lowering PCI reporting effort requirements while introducing token technology that can increase sales and customer loyalty.”

TransArmor uses a tamper-proof connected terminal encryption device integrated through the Aloha POS, and collaborates with vault decryption technology at First Data. The data, according to POS News, is therefore of no use to fraudsters from the time of swipe through authorization and token issuance.

Data Breaches Driving Retailers to Update Payment Systems. After 56 million cards were compromised during the Home Depot breach, American [retailers](#) now have more reason than ever to update their payment systems to include the appropriate security measures to combat such attacks, according to Law360. As part of this initiative, merchants are looking into investing in layered security solutions, while at the same time weighing the legal risks of not taking action. After its April data breach, Target announced it would issue branded credit and debit cards via MasterCard-provided chip and PIN smart cards. Two months later, Walmart offered its own MasterCard co-branded microchip-embedded card, and the company plans to roll out the technology to all locations by the end of the year.

There has been a significant push for retailers to adopt tokenization, a process that doesn’t require significant changes to their existing payment acceptance systems as does the chip card enablement process. In July of this year, the Merchant Advisory Group, as well as a group of grocers, restaurants and convenience stores, issued a joint statement to call for an “open process for the creation of security standards to better protect the U.S. consumers and businesses from cybercriminal activity,” including the adoption of tokenization throughout the U.S. The letter recognizes the three instances where retail customer information could be compromised: 1) where the payment card is swiped or card number is entered, 2) where the card information is stored, 3) during transmittal. At the same time, there’s the lurking October 2015 deadline for merchants to install EMV-compatible terminals before they become liable for fraud attacks.

To best serve their customers and dodge hefty fraud price tags, especially will the potential loss of loyal customers, merchants need to stay abreast of the emerging security standards and solutions available. “Failure to do so will increase the risk that the retailer suffers a data breach, with its attendant remediation, litigation and reputation costs,” says Law360.

3: Serve the customer

In Other News...

A Dark Reading [report](#) indicated that fraudsters can create software to spoof a user's whole iPhone, fingerprint included – raising concerns about how secure Apple Pay really is.

[Talbots](#) announced that it is upgrading its core merchandising and inventory management systems to streamline processes, reclassify products and centrally manage inventory across all channels.

Zoho announced the launch of [inventory management](#) features in its online accounting software, Zoho Books, a solution for small businesses to track stock and manage finances.

[Manhattan Associates](#) announced a unique capability within its market-leading omnichannel Order Management app for retailers.

Cloud-based financials provider [NetSuite Inc.](#) announced a partnership with the outdoor retail market as manufacturers, distributors and retailers in the space turn to cloud business management for growth.

Retail software startup [LightSpeed](#) raised \$35 million from iNovia Capital to provide software and services to help brick-and-mortar retailers increase sales.

iPad POS solution provider [Revel Systems](#) made its e-commerce platform available to all via its open-source code, making it easier for businesses to offer e-commerce and web ordering.

US-CERT updated its warning to retailers about "[Backoff](#)" POS malware, which represents a "very real threat to the security of cardholder data in all organizations," urging companies to check with their antivirus vendor to ensure they can detect the malware.

[Ingram Micro Inc.](#) revealed that its data capture/POS business is expanding its channel partner value-add on five technology pillars: payments, mobility, networking, omnichannel retailing, and Software-as-a-Service (SaaS) solutions.

Omnichannel platform provider [UniteU](#) introduced UMO, a fully integrated mobile POS solution for multi-location retailers, in conjunction with the National Retail Federation's Shop.org Summit in Seattle.

Indonesian mPOS startup [Moka](#) received seed funding from East Ventures to make mPOS capabilities accessible to more vendors in the country.

POS solution designer and provider [DataXstream](#) completed its implementation of its POS system for Fruit Growers Supply Company.

3: Serve the customer

Amazon's 1-million-square-foot warehouse [fulfillment center](#) in Ruskin was completed, making it the second Amazon fulfillment center in Florida.

A StellaService report showed that [Target](#) shaved three days off its delivery times, leading the competition with an average fulfillment time of one day and 13 hours in the month of August.

[Pier 1 Imports](#) laid out six key guideposts in creating operation and financial models to support omnichannel, including brand traffic conversion, customer experience centers, fulfillment and home delivery, and more.

National family footwear retailer [Shoe Carnival Inc.](#) partnered with eBay Enterprise to implement a new omnichannel operational foundation including eBay Enterprises's Retail Order Management, Payments, and Fraud Protection solutions.

[Toys 'R' Us](#) announced plans to double its workforce at stores and fulfillment centers across the country this holiday season, making sure every customer is satisfied with their in-store and online shopping experience.

About PYMNTS

PYMNTS.com is reinventing the way in which companies in payments share relevant information about the initiatives that shape the future of payments and commerce and make news.

This powerful B2B platform is the #1 site for the payments and broader commerce ecosystem by traffic and the premier source of information about “what’s next” in payments. C-suite and VP level executives turn to it daily for these insights, making the PYMNTS.com audience the most valuable in the industry. It provides an interactive platform for companies to demonstrate thought leadership, popularize products and, most importantly, capture the mindshare of global decision-makers. PYMNTS.com where the best minds and best content meet on the web to learn “What’s Next” in Payments and Commerce.

About Vantiv

Vantiv, Inc. (NYSE: VNTV) is a leading, integrated payment processor differentiated by a single, proprietary technology platform. Vantiv offers a comprehensive suite of traditional and innovative payment processing and technology solutions to merchants and financial institutions of all sizes in the U.S., enabling them to address their payment processing needs through a single provider. We build strong relationships with our customers, helping them become more efficient, more secure and more successful. Vantiv is the third largest merchant acquirer and the largest PIN debit acquirer based on number of transactions in the U.S. The company's growth strategy includes expanding further into high growth payment segments, such as integrated payments, payment facilitation (PayFac™), mobile, prepaid and information solutions, and attractive industry verticals such as business-to-business, ecommerce, healthcare, gaming, government and education. For more information, visit www.vantiv.com.