



# EMPOWERING OMNI-CHANNEL THROUGH CHOICE

KEY TECHNOLOGIES TO CREATE A SEAMLESS CUSTOMER EXPERIENCE

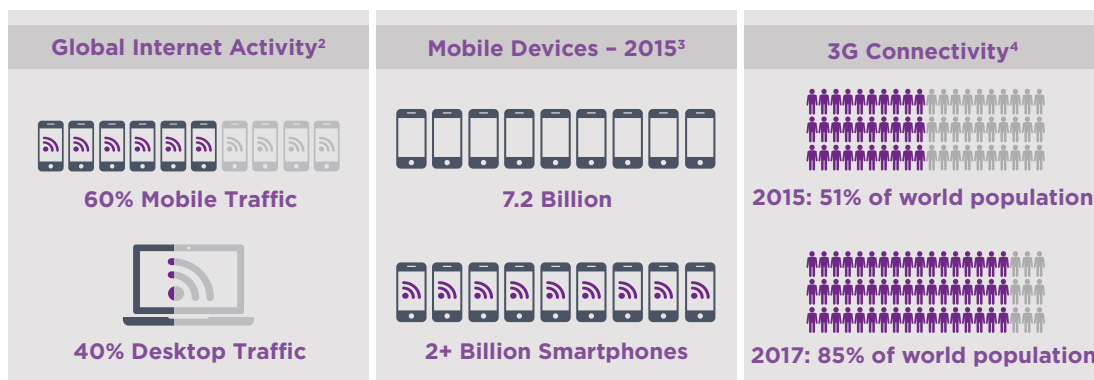
By Ray Wizbowski, Vice President, Financial Vertical Marketing



## INTRODUCTION

The rapid acceleration of mobile connectivity is dramatically changing consumer behaviors and engagement patterns in the financial world. Today, just six years after the first mobile banking apps appeared, financial consumers fully expect *anytime-anywhere* access to services and the ability to transact when, where and how it is most convenient for them — all while demanding the peace of mind of enhanced protection against the growing trend of data breaches. Today’s consumers eagerly and easily seek out services that meet these expectations. Connected technologies put innumerable competitive options — including a growing force of non-bank alternatives — literally at customers’ fingertips, and make switching allegiances as easy as clicking a button. In fact, more than 50 percent of financial customers have opened or closed accounts in the past year.<sup>1</sup>

These heightened expectations and new engagement patterns shift the playing field for financial institutions, making the need to establish and nurture customer loyalty more important than ever. To stand out in this new landscape, financial institutions know they must deliver what Ernst & Young calls the “omni-channel experience”: consistent quality and convenience — at home, on the go and in the branch.



1. Ernst & Young Global Banking Outlook 2015  
 2. comScore  
 3. eMarketer  
 4. econsultancy.com

## OMNI-CHANNEL: CHOICE BEYOND DIGITAL

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With the focus on *anytime-anywhere* service, it is tempting to isolate digital channels as the key to the omni-channel approach. Financial customers are progressively moving to digital channels for many of their interactions with financial institutions. However, a 2013 Nielsen study showed that customers' preferred channel is dependent on the type of transaction.<sup>5</sup> When customers want to check their balances or make a quick transfer, they turn to the mobile channel. When it's time to pay a bill, they are split: About 40 percent of customers have used their smartphones to pay a bill — and that number is growing rapidly — but the majority of consumers use an online bill pay option. To make a deposit, or when they're seeking account or investment advice, customers still prefer to visit a traditional branch location. The ATM remains the preferred method of obtaining cash, and for resolving basic account issues, Nielsen found that customers prefer to contact a call center.

These varied preferences grow more complex when comparing generations and demographics, but this variance only reinforces the underlying lesson for financial institutions: for financial customers, convenience doesn't always mean digital — it means having the choice of how to interact, and the assurance that the interaction will be simple and intuitive, no matter the channel.

**“The lesson for financial institutions is clear: for financial customers, convenience doesn't always mean digital — it means having the choice of how to interact, and the assurance that the interaction will be simple and intuitive, no matter the channel.”**

5. <http://www.nielsen.com/us/en/insights/news/2014/the-evolution-of-modern-banking.html>

## LEVERAGING KEY TECHNOLOGIES TO DRIVE SEAMLESS EXPERIENCES AND DEEPEN LOYALTY

For financial institutions, the insights of the Nielson report outline an opportunity for creating a stand-out omni-channel approach: connect with the customer where they are, provide a seamless choice of channels and ensure security throughout. This paper outlines a few key technologies that can empower this seamless experience to deepen customer loyalty.

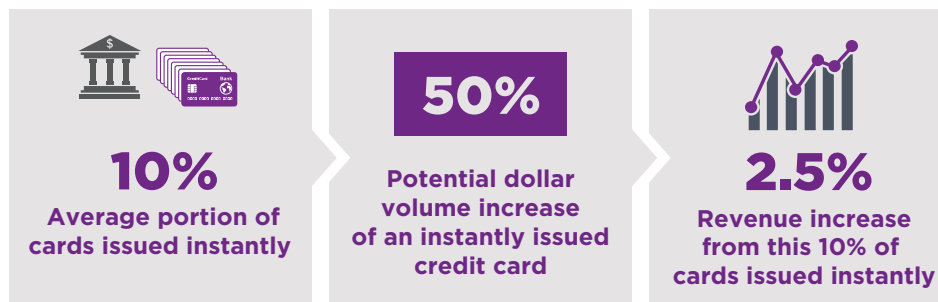
### Instant Issuance

Today’s mobile banking applications create expectations for hyper-convenient, real-time service. Aligning the branch experience with these increased expectations requires delivering the same instant service and satisfaction in the branch. To this end, the ability to issue new or replacement credit and debit cards on demand in the branch is a transformational technology for financial institutions. It directly addresses customers’ expectations with real-time response to customers’ needs — whether replacing a lost, stolen, damaged or compromised card, or providing a new customer with the instant purchasing power of a fully activated, ready-to-use card.

In the highly competitive financial world, instant issuance is a stand-out offering that deepens customer loyalty in a number of ways. New customers are drawn to the immediacy and convenience of receiving a card before walking out the door, while existing customers appreciate the outstanding service of urgent emergency replacement. Considering the global EMV transition and the increase in data breaches, instant issuance mitigates the inconvenience of card re-issuance to further deepen loyalty. Financial institutions consistently report higher customer retention rates following implementation of instant issuance programs.

Notably, the benefits go beyond loyalty-building and customer retention. The Aite Group reported that nearly half of U.S. consumers received a replacement card in the last year — and 29 percent of those consumers used that replacement card less than before the replacement incident.<sup>6</sup> Instant issuance combats this trend by encouraging top-of-wallet placement and driving a proven increase in card usage, revenue and overall card portfolio performance. The Aite Group demonstrated that issuing just 10 percent of cards via

### INSTANT ISSUANCE INSTANT IMPACT<sup>7</sup>



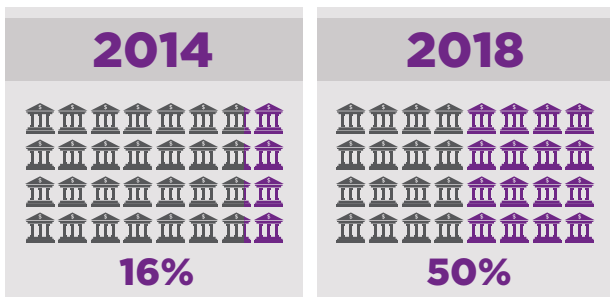
6. Aite Group, ACI Worldwide study of consumers in 20 countries, Q1 2014  
 7. Aite Group, Instant Gratification: The Case for Instant Card Issuance in the United States, 2014



instant issuance lifts purchase dollar volume and interchange revenue by 2.5 percent. Looking beyond this immediate lift, a 2014 study by the Aite Group found that instantly issued debit cards have the potential for 21 percent greater dollar volume, and instantly issued credit cards have the potential for as much as 50 percent greater dollar volume, when compared to cards issued centrally.<sup>8</sup>

Thanks to myriad advantages, instant issuance is rapidly becoming a competitive necessity in the financial world. In fact, almost 30 percent of cards issued in the U.S. are issued instantly — and that number is growing fast, with the number of financial branches offering instant issuance expected to nearly double by 2017.<sup>9</sup>

**U.S. BANKS OFFERING INSTANT ISSUANCE<sup>9</sup>**



**Self-Service Technologies**

For younger generations, the drive for instant satisfaction and real-time service leads to a desire for self-service options. The shift toward this self-service economy, starting with the first ATM in 1969, is accelerating across a range of

applications and consumer industries — from self-checkout at retailers, self-checking in transportation and the \$1.97 billion in annual revenue generated by the self-service movie giant Redbox. In fact, according to a recent study by Fast Company and Survey Sampling International, 40 percent of consumers today would prefer self-service to human contact for their future interactions with companies, leading Fast Company to advise that “not investing in self-service will become a competitive disadvantage” for businesses where a superior customer experience is a critical differentiator.<sup>10</sup> This warning could not be more relevant for the modern financial institution.

Financial customers already look to the ATM as the hallmark of self-service convenience and efficiency, and forward-thinking financial institutions are empowering the self-service economy by creating next-generation ATMs capable of delivering greatly expanded banking services and live customer service — on demand, 24/7. This next-generation ATM leverages remote video banking to provide one-to-one, live customer service and enable customers to conduct a much wider range of transactions via the 24/7 ATM. Integration with self-service instant card issuance technologies enables the next-generation ATM to securely issue new and replacement credit and debit cards instantly — capabilities which perfectly align with consumer expectations for secure, convenient, anytime services.

The State Bank of India (SBI) has successfully deployed remote video banking and self-service issuance technologies in its “digital branches” — showcasing this potential for transforming the customer experience. SBI’s digital branches cover the entire life cycle of the customer experience, even

**“Not investing in self-service will become a competitive disadvantage.”**

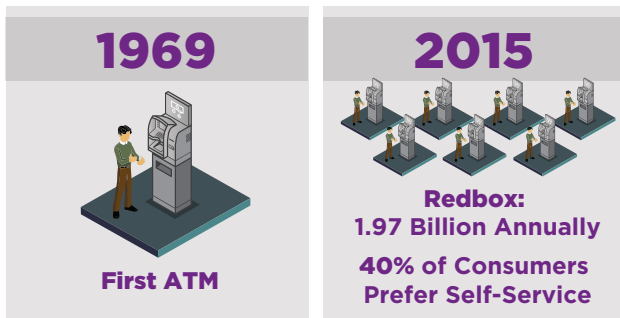
— Fast Company

8. Aite Group, Instant Gratification: The Case for Instant Card Issuance in the United States, 2014  
 9. Aite Group, Instant Card Issuance: U.S. Market Sizing and Deployment Guide, 2014  
 10. <http://www.fastcompany.com/3013177/creative-conversations/why-the-future-of-customer-service-is-self-service>

offering self-service account opening. The remote video banker enables live, personalized onboarding and drives critical cross-sell opportunities, while self-service issuance features provide new customers with an instantly issued, ready-to-use credit or debit card. An interactive “dream wall” aids customers in conceptualizing their journey toward realizing their financial goals, and SBI’s digital branches allow instant loan approval to capture customer opportunity at a critical point of interest.

Just as the first ATMs revolutionized convenience and customer empowerment in the financial world, today’s new ATM technology provides financial institutions with a standout differentiator in the competitive landscape. Combined with instant issuance, financial institutions can offer their customers an array of in-branch experiences, taking customer convenience and empowerment to a whole new level.

### THE EVOLUTION OF SELF-SERVICE



### Strong Authentication via Multi-Layer Identity Assurance

At the same time that instant issuance and next-generation ATMs are bringing the benefits of digital channels into the branch, financial institutions can also leverage key technologies to bring some of the benefits of the traditional branch interaction into the digital world. Chief among those are trust and security. While financial customers value the convenience and immediacy of digital channels, there is a growing privacy concern, with the average U.S. adult receiving three data breach notices in the past year, according to Experian. Consumer research shows that financial customers still trust the security of in-branch transactions, and are seeking the same peace of mind from their digital transactions. However, they also expect security that maintains seamless convenience throughout the customer experience — security that is seen but rarely felt.

This challenge of securing mobile connectivity — authenticating the identity of the device as well as the user behind that device — proves to be daunting for organizations in every industry. From the high-stakes world of defense and border security, to consumer industries, security-minded organizations are turning to advanced multi-layer identity assurance and authentication to address this challenge. Key elements of the multi-layer approach include:

- Authenticating the user to the device with biometrics and other advanced, non-repudiable credentials
- Authenticating the mobile device by leveraging digital certificates and device fingerprinting
- Authenticating users and securing transactions with innovative push notifications and advanced SSL solutions

“Financial customers want their digital transactions to come with the same peace of mind as their in-branch transactions. But they also expect seamless convenience throughout — security that is seen but rarely felt.”

For the financial institution, multi-layer identity assurance effectively mitigates the risk of breaches, making it extremely difficult to make unauthorized transactions or gain unauthorized access, as a cybercriminal would have to steal, hack or counterfeit these multiple unique credentials. For the banking customer, multi-layer identity assurance not only provides critical peace of mind, but also offers the convenience of choosing authentication factors and creating an authentication experience that best fits the customer and the situation. It is also important to note that this authentication architecture largely lives behind the scenes. Effective multi-layer authentication often simplifies and adds convenience for the customer, enabling faster login without the need to recall and input — or frequently update — multiple passwords and usernames.

To show how multi-layer authentication works the real world, here are three customer scenarios:

### Accessing Online Banking

A customer wants to pay a bill via online banking. Traditionally, layered authentication has complemented a strong username and password with factors such as picture authentication, security/challenge questions and hard tokens. Today, advanced multi-layer authentication leverages new technologies to enable a more secure, more streamlined user experience.

- **Push notifications to authenticate the session:** When logging into online banking, the customer is sent a push notification directly to their secure mobile device to authenticate the web session. The customer simply confirms with a click that they are, in fact, initiating a web session.
- **Push notifications to verify transactions:** When making an online transfer, a push notification is sent directly to the customer’s secure mobile device, enabling the customer to verify the transaction details. Customers receive

instant confirmation if a transaction is successful — and can immediately flag fraudulent transactions.

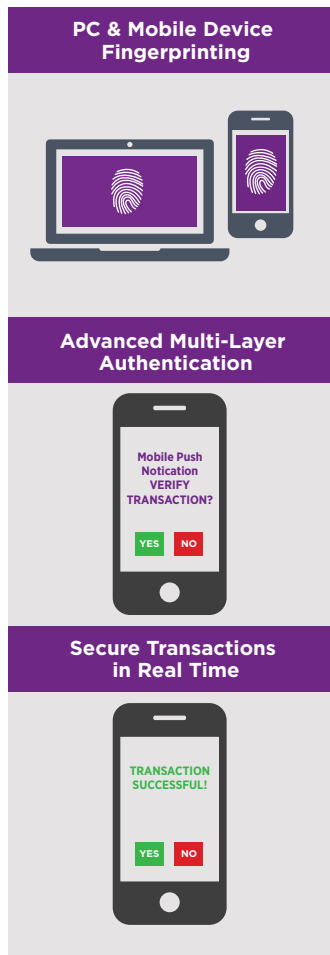
These mobile push notifications are far more secure than traditional SMS-based session and transaction verification, which are highly susceptible to SMS attack. In addition, push notification authentication requires just one click — eliminating the numerous keystrokes and switching between apps required for SMS-based authentication. This improved security and convenience adds significant value to a financial institution’s digital offering, and enhances the overall brand.

- **Device fingerprinting & IP Geo:** This technology eliminates the need to authenticate via push notification at each login. When a user attempts to login from a new device, they are redirected to complete a one-time device fingerprinting process. This verifies the identity of the device and

establishes a unique device fingerprint. The authentication technology automatically recognizes the fingerprint of the verified device for future logins.

### Accessing Mobile Banking

- **One-time passcode:** Traditional OTP protocols required the customer to obtain a unique OTP from a separate OTP app. Today, mobile banking technologies simplify this OTP step, embedding the OTP or certificate directly in the mobile banking application.
- **Mobile push notifications:** When logging into the mobile banking app, the customer is sent a push notification directly to their secure mobile device to authenticate the web session. The customer simply confirms with a click.



With an effective multi-layer authentication solution in place, financial institutions can provide customers with a convenient sense of choice on how they wish to authenticate their identity for digital transactions. More importantly, with this enhanced authentication in place, financial institutions can boost customer trust in the security of their digital channels, enabling the customer to confidently choose which channel is most convenient for that particular transaction at that particular time.

### Electronic Document Signing

With strong, multi-layer authentication boosting customers' confidence in the security of their digital transactions, financial institutions can continue to bridge the gap between digital and physical channels with new mobile functionality that enables transactions commonly reserved for the branch to occur digitally. Electronic document signing is one such offering — a simple, yet powerful technology that enables customers to sign critical documents directly from their mobile devices. Customers establish and authenticate their identity and the identity of their mobile device using the chosen multi-layer credentials, ensuring security and delivering peace of mind to the customer.

Electronic document signing enables a variety of convenient transactions, including:

- Completing loan applications from home or on-the-go
- Applying for a credit card mid-shopping trip
- Signing financial forms while traveling

This technology enables financial institutions to successfully connect with customers where they are, with underlying security that allows the customer to create their own convenient experience — transacting on-the-go or, if they prefer, waiting to visit a branch location. This differentiating convenience and choice defines the stand-out omni-channel experience that is necessary to establish and sustain customer loyalty.

### Fraud Detection and Consumer Notification

Despite the most advanced identity authentication, some forms of advanced fraud attacks and malware (e.g., man-in-the-browser or MITB) have proven difficult to defeat. To combat this type of fraud, institutions must implement real-time fraud detection that is “smart” enough to identify customer patterns and behaviors.

To further enhance security, real-time fraud detection can be coupled with real-time fraud notification, enabling customers to view and approve or escalate flagged transactions. For example, when a customer attempts to make a large transfer or pay a large bill via online or mobile banking, an alert is automatically sent to the customer's verified mobile device. The customer can review the details of the attempted transaction and verify its authenticity — or alert the financial institution of its fraudulence.

Mobile fraud alerts deliver dual value, boosting customer satisfaction by delivering immediate peace of mind and convenience, while also critically shortening the fraud response time for the institution.

**Technologies like electronic document signing continue to bridge the digital-physical gap, enabling transactions commonly reserved for the branch to safely occur on digital channels — bringing the customer new levels of convenience.**



## ENVISIONING THE OMNI-CHANNEL EXPERIENCE

While each of these key technologies holds the power to transform the customer experience, the greatest potential is found in the confluence of these technologies in a single, seamless customer experience — described below:

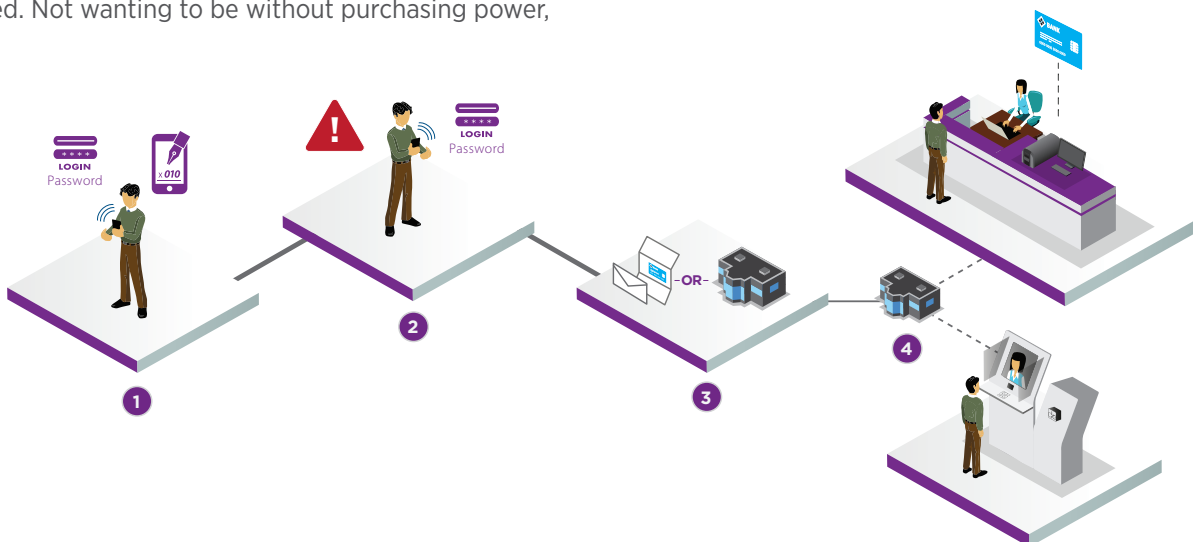
- 1) An on-the-go customer wants to apply for a new credit card. The customer logs into mobile banking, authenticating via push notifications. The application is completed and signed using secure electronic document signing.
- 2) Weeks later, the customer receives a mobile fraud alert, asking the customer to verify a large, atypical credit card transaction. The customer logs into online banking to review the complete transaction history, securely connecting via multi-layer authentication.
- 3) After confirming the fraudulent transaction via the mobile fraud alert, the customer calls the branch to cancel the card. The branch banker gives the customer the convenient choice of visiting the branch to get an instant replacement card, or having a replacement card home-delivered. Not wanting to be without purchasing power,

the customer chooses to visit the branch to receive an instant replacement card.

- 4) Arriving at the branch, the customer has another convenient choice: Visit the teller counter for an instantly issued replacement card, or visit the next-generation ATM for self-service issuance of the replacement card.

There are three continuous threads that weave this customer story.

- The first is connecting with the customer where they are, providing service that fits seamlessly into the customer's daily on-the-go life.
- The second is choice — offering the customer the convenient choice of proceeding with an interaction via the preferred channel.
- Finally, the underlying security is there at every step, providing peace of mind to the customer and protecting the financial institution as they proceed with their interactions.



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## CONCLUSION

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With *anytime-anywhere* connectivity driving consumer expectations, financial institutions must focus on connecting with customers where they are — at home or on-the-go — with enhanced online and mobile offerings. But financial institutions must recognize that customers still prefer traditional channels for many transactions. To deliver a successful omni-channel approach, financial institutions must bridge the gap between the digital and physical worlds, leveraging instant issuance, next-generation ATMs and other technologies to create a branch experience featuring the same empowering choice and convenience that customers expect from the mobile channel. At the same time, enhanced security features like strong multi-layered identity authentication and electronic document signing bring the trust and security of the branch into the mobile world. By delivering this seamless omni-channel experience of personalized services that fit customers' unique real-time needs, financial institutions can create stand-out convenience that effectively establishes and deepens customer loyalty.