Digital Trust is Transforming Online & Mobile Banking

Driving New Business, Boosting User Experience & Defeating Fraud
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>What is Digital Transformation?</td>
<td>2</td>
</tr>
<tr>
<td>What is Driving Digital Transformation in Banking Today?</td>
<td>2</td>
</tr>
<tr>
<td>The Millennial Make Over</td>
<td>3</td>
</tr>
<tr>
<td>Rethinking the Customer Journey</td>
<td>4</td>
</tr>
<tr>
<td>The Big Picture</td>
<td>5</td>
</tr>
<tr>
<td>What Customers Want from Banks Today</td>
<td>5</td>
</tr>
<tr>
<td>The Trust Factor</td>
<td>7</td>
</tr>
<tr>
<td>Where Do Banks Need Trust?</td>
<td>8</td>
</tr>
<tr>
<td>Digital Trust as The Future of Banking</td>
<td>8</td>
</tr>
<tr>
<td>Achieving Digital Trust</td>
<td>9</td>
</tr>
<tr>
<td>How VASCO Solutions Enable Digital Trust in Banking</td>
<td>10</td>
</tr>
<tr>
<td>Why Choose VASCO?</td>
<td>11</td>
</tr>
<tr>
<td>Sources</td>
<td>12</td>
</tr>
</tbody>
</table>

---

**Copyright**

© 2017 VASCO Data Security. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of VASCO Data Security Inc.

**Trademark**

MYDIGIPASS.com, DIGIPASS & VACMAN are registered trademarks of VASCO Data Security. All other trademarks or trade names are the property of their respective owners. Any trademark that is not owned by Vasco that appears in the document is only used to easily refer to applications that can be secured with authentication solutions such as the ones discussed in the document. Appearance of these trademarks in no way is intended to suggest any association between these trademarks and any Vasco product or any endorsement of any Vasco product by these trademarks' proprietors. VASCO reserves the right to make changes to specifications at any time and without notice. The information furnished by VASCO in this document is believed to be accurate and reliable. However, VASCO may not be held liable for its use, nor for infringement of patents or other rights of third parties resulting from its use.
Introduction

Banks are beginning to re-align their internal processes and external-facing products to take advantage of, and more fully realize, the potential of digital transformation. One of the biggest challenges they come up against in this pursuit is how to balance customer experience and security. In other words, implementing a framework that accounts for all the necessary safeguards while also ensuring a frictionless digital experience.

Make no mistake about it. This transformation — philosophically and practically — is all about achieving the highest customer adoption rates. As a bank you want to ensure that the consumers of your products and services not only get through the process in a way that’s easy and straightforward, but also with all the necessary security checks and balances in place so the underlying transactions are secure.

As this whitepaper suggests, that element of trust is integral to a bank’s ongoing digital transformation initiatives.

“One of the biggest challenges banks come up against is how to balance customer experience and security”
Many banks have a digital transformation project underway, that is, moving their traditional branch services to the online channel. With a singular focus on the customer, banks are finding that doing business “the old way” just isn’t sufficient to deliver the required value to customers who increasingly want to do business on their terms, where, when and how they want it - anytime, anywhere.

So, how do we define Digital Transformation?

As documented in the 2015 Digital Business Global Executive Study and Research Project by MIT Sloan Management Review and Deloitte, digital success isn’t all about technology. In fact, the research shows that maturing digital businesses are (already) focused on integrating digital technologies such as social, mobile, analytics and cloud, all in the name of transforming how their businesses work to enable new levels of competitive advantage.

What is Driving Digital Transformation in Banking Today?

The Competitive Driver

So, what is driving digital transformation in banking today? In a word, competition. According to research published by the Boston Consulting Group, the need for banks to improve their digital capabilities is becoming more immediate due to the emergence of new market entrants and services (such as Apple Pay) from the financial technology sectors, which are bent on attacking banks’ core businesses and reshaping those industries. In fact, where banks’ prior internal efforts were mostly focused on isolated initiatives such as the launch of new apps or enhancements to their online and mobile channels, today’s banks are changing the ways that they interact with customers in order to provide a wider range of choice and greater control over the interaction itself. For example, leveraging the online channel to offer value-added, digitally enabled functionalities, such as rapid validation of loan approvals and the ability to quickly open new accounts.

But it’s not only up and coming tech innovators that are driving digital transformation for banks. It’s the way an increasing number of us choose to do business with them.
The Millennial Make Over

A strong driver of change in the banking space are millennials who, unlike their parents who were content with driving to a branch and conducting their business face-to-face with a teller, want to do business with their banks on-the-fly with a single (or maybe multiple) clicks of a browser or tapping the keys of their mobile phone.

As a result, banks are being forced to re-imagine how these customers (and others, as the mobile revolution continues) want to interact with them and consume their services. Like many other industries that remake their customer interactions for digital consumption, millennials are quickly becoming bellwethers of the efficacy and future of digital transformation.

Consider these findings by Business Inside Intelligence, as reported by BBVA:

- More than one-third of millennials do not use physical offices
- The average number of monthly transactions has dropped over the past decade
- Smartphones, too, have had a profound impact on driving the future of digital transformation in banking and that’s true whether we’re talking about the population in general or millennials in particular. Consider:
  - 71% of millennials think bank applications are essential
  - 51% have used their smartphones to make purchases during the last month
  - 60% think having at least one payment app is essential
  - 91% use a smartphone to access their account
  - 41% chose their bank based on the convenience it offers (mobile features)

As the BBVA article concludes, with its ability to collect and synthesize user data at a big data level, the smartphone will become the foundational bank channel and those institutions that recognize and offer optimized smartphone services will certainly realize a far brighter and profitable future.
Rethinking the Customer Journey

Evaluation of new technologies, of course, is in the service of satisfying customer expectations, especially when those customers want to do business at any time and through any bank channel. As omnichannel banking becomes the norm, cloud-based and mobile systems are enabling banks to communicate with customers in ways that were previously unavailable, meeting the expectation that customer service, likewise, should be “always-on.”

That’s especially the case when it comes to the mobile banking channel, which accounts for nearly 60% of all digital traffic at some banks. As consumers’ expectations of mobile banking continues to change, 82% of retail bankers agree that mobile will become the number one channel for millennials and other younger consumers over the next five years.
The Big Picture

By acknowledging these collective drivers — competitive differentiation, millennial needs and new technology to optimize the customer journey — banks can embrace digital transformation to more fully and objectively understand their customers’ journey. That also means learning how to calibrate the strategic investment in digital transformation initiatives based on the ways customers choose to consume your services.

What Customers Want from Banks Today

Over the past 15 years many banks — anticipating the rise of the digital channel — have moved their traditional branch services to the online channel. This has often necessitated a realignment of resources and technology investment and, keenly, a shift in mindset from expanding branch networks to consolidating them while optimizing results that are responsive to a changing customer market.

Additionally, with nearly 80% of customers stating their interactions with their bank are transactional, rather than relationship driven, one to one visits by customers, to bank branches, are less the rule and now more the exception.

So, what do customers, doing business with your bank, actually want today?

• They want their bank to know them as a person, not an account number
• They want to be protected and secured
• They want banks to anticipate their needs
• They want banks to simplify their lives and make it easier to do business with them

71% of millennials think bank applications are essential
51% have used their smartphones to make purchases during the last month
60% think having at least one payment app is essential
91% use a smartphone to access their account
The common thread that runs through each of these inflection points is how banks initiate and then sustain customer loyalty for the long-term through TRUST and in particular, Digital Trust.

In the nexus of security and technology, trust is formed between:

- Users and Client Applications
- Client Applications and Server Applications
- Server Applications and Users

When trust exists between these components, users can be allowed to do more. For example, users can be trusted to access more features within mobile apps that would not be available to them otherwise for security reasons (e.g. signing mortgage paperwork, sending a wire transfer, or opening a bank account).

Simply put, if trust is the cornerstone of customer loyalty, digital trust is what secures it. In fact, with Digital Trust as the foundation of your digital transformation efforts, you can achieve trust that enables changes in technology as well as strategy to avoid any negative impact in your customer’s experience.
The Trust Factor

Not surprisingly, today’s bank customers see little to no value in spending time at a brick and mortar branch and further, as banks have extended branch products and services to the digital world, branches alone often cannot solve or be used as fallback mechanisms for customers or branch employees to correct errors.

Changing your strategy to serve these customers is challenging, but there is also a clear threat you must consider as part of your digital transformation strategy, fraud, the ugly disrupter of digital transformation and trust.

In fact, amidst the mobile banking revolution, hackers and their targeted malware have become an increasing threat to customers. According to industry research, \(^\text{80}%\) of successful breaches target the application layer, e.g. the user interface responsible for displaying information received by the user. An additional \(60\%\) of mobile malware specifically targets financial information.

Ultimately, banks need to leverage Digital Trust to better connect security to user experience.

VASCO has more than 1700 banking customers around the world, reflecting all stages of digital transformation. The following reflects a shared best practice from one of these customers:

In early 2014 this bank defined their digital transformation process, one that articulated its global reach, while also deploying solutions based on local regulations and customer needs. Like most banks they led with a deliberate strategy of being “customer-focused” in parallel with “mobile first” design and then moved quickly to transform their products and services to improve their customers’ journey.

In 2016, the bank started to realize the benefits of this process by improving the complete customer experience across all channels. Central to their success has been what they identified early as the “common denominator” to many of the bank’s products and services, customer identity and trust. Their model adapted to create a technology layer that doesn’t add complexity to the bank-customer relationship, but rather ensures an ongoing and persistent level of trust for customers, regardless of which channel they choose to utilize.

---

### DIGITAL TRANSFORMATION
Putting the Customer First - **Best Practice**

- **Digital Transformation Begins**
  - Goal: Simplified customer interactions
  - Customer focused
  - Mobile first

- **Product & Service Automation**
  - Goal: Improves productivity & optimized customer journeys

- **Channel Simplification**
  - Goal: Enhances customer experience by optimized omni-channel capabilities

- **React to customer feedback/social media**
- **Manage migrations across releases**
- **Agile methodology**
- **Omni - channel via Continuous Trust**
Where Do Banks Need Trust?

How do you leverage Digital Trust to connect security with user experience, and ultimately achieve trust across channels? First, peel back the layers involved with establishing trust in the digital world. You need to trust:

1. Your users
2. The bond of a user with a strong authentication credential
3. That the device(s) are secure
4. That the application is secure
5. The communication channel to/from your trusted identities, devices, and applications
6. Intent of the user, whether it’s a financial transaction or process assurance as information is exchanged
7. The user’s behavior on all their devices and across all of your channels

The benefit of achieving customer trust is dramatic. Banking customers that trust their banks are more likely to recommend them, use more of their products (e.g. increased share of wallet), remain loyal, be open to trying new products and, in some cases, even pay a premium for them.

Digital Trust as The Future of Banking

Today, we bank online, file our taxes online and even order vehicle transportation (e.g. Uber, Lyft), using our mobile devices. In fact, it’s not a stretch to suggest that every business today is a digital business and digital trust is its currency. This means creating and maintaining trusted experience between you and your customers, partners and employees, each of whom interact with each other, your products, as well as other third party digital services.

However, establishing trust in this type of interconnected environment is complex and difficult to manage because, inherently, it involves sensitive personal information that is highly valued by cybercriminals. As a result, safeguarding this information is job one, requiring a secure ecosystem where transactions flow across channels, devices and people that your business interacts with every day. In the end, poor trust or even worse, a breach of trust can quickly lead to customer churn, low adoption and brand erosion, which can permanently harm your business.
Achieving Digital Trust

Transactions that take place in the digital world are fraught with risk including fraudulent behavior and cyberattacks that can compromise your business, your operations and your customers. That’s why maintaining trust across your digital processes is extremely important.

As you plan your own bank’s digital transformation here are some key considerations to keep in mind:

**MULTI-FACTOR AUTHENTICATION**

Once you know who the user is, you’ll want to give that user a secure authentication credential. To do this, you’ll need multi-factor authentication, which includes:

► SOMETHING YOU HAVE — such as a token or mobile device that you can trust (trusted device)
► And combine that with: SOMETHING YOU KNOW: a PIN or a password for example (trusted user) and/or SOMETHING YOU ARE, such as biometric information like your fingerprint, face or even behavior.

**MOBILE APP SECURITY**

► As we move down the digital trust chain, we know that today, mobile is the central point in how users engage with businesses.
► Mobile devices and apps, in particular, are vulnerable to threats and can expose sensitive information that is part of your digital workflow.
► If your customers do business with you via a mobile app, you’ll want to secure the app and protect it from malware and other vulnerabilities.

**TRANSACTION MANAGEMENT**

► Whether customers are signing a contract, opening a new account, or transferring money electronically, the underlying digital transaction (including data, documents and signatures) needs to be trusted and secure across every channel — whether that’s face-to-face, online or mobile.

**RISK MANAGEMENT**

► Finally, digital trust is linked to the behavior of your users, including how they interact with your business.
► You want to be able to analyze risk throughout this digital process in real-time — and either allow, restrict or deny access to those users depending on the level of risk and exposure.

The key thing to remember here is that the success of your business, in the digital world, hinges on delivering trust, and it’s imperative to ensure this trust isn’t broken.
**How VASCO Solutions Enable Digital Trust in Banking**

**Mobile App Security and Frictionless Multi-Factor Authentication**

VASCO’s DIGIPASS for Apps® is a comprehensive software development kit (SDK) that natively integrates application security, frictionless multi-factor authentication and electronic signing into your mobile applications, enabling you to extend and strengthen application security, deliver unprecedented convenience to your users, and streamline application deployment and life cycle management processes.

Key Features include:

- **Runtime Application Self Protection (RASP)** — dynamically monitors application execution to detect and prevent attacks on mobile apps.
- **Geolocation** — utilizes the location of a mobile device as a key risk analysis element
- **Risk-based authentication** — real-time analysis that scores the risk profile of a transaction based on all the available data points and can dynamically step-up security when necessary.
- **One-time Password (OTP)** generation and validation by a central server.
- **Behavioral Authentication** — invisibly scores behaviors like keystroke, touch and mouse motion to authenticate users
- **Face Recognition** — utilizes facial data points and liveliness detection to quickly & accurately authenticate users.
- **Fingerprint** — scan to quickly and accurately authenticate users

**Real-Time Fraud Management**

IDENTIKEY Risk Manager combined with DIGIPASS for Apps ensures not only the most comprehensive, real-time fraud detection and prevention by utilizing vast client side data points within the risk analysis engine, it also provides enhanced data protection thanks to Secure Channel encryption (i.e. Communication between client and server) and in-app monitoring.

**Transaction Management**

eSign Live® is VASCO’s e-signature solution for secure digital document signing processes, designed with the following unique requirements of our banking clients:

- **Transform the in-branch and out-of-branch customer experience**
  - Complete account opening, lending and other transactions in one session
  - Strengthen legal and compliance position
  - Gather evidence of exactly what transpired during the signing process
  - Improve compliance with error-free e-transactions
- **Increase operational efficiency and cost savings**
  - Spend less time managing paper and reduce document handling costs
  - E-Signed documents can be easily indexed, archived and retrieved
- **Increase revenue**
  - Capture new demographics who prefer online/mobile banking
  - Close transactions immediately when the customer is ready
Why Choose VASCO?

VASCO is a global leader in trusted security with multi-factor authentication, transaction data signing, mobile application security, e-signature and identity management solutions designed for all businesses and government agencies. More than 10,000 customers in 100 countries, including over half of the world’s Top 100 banks and over 350 healthcare organizations rely on VASCO to secure access, manage identities, verify transactions, simplify document signing and protect high value assets and systems.

VASCO: The Preferred Choice for Global Financial Services Businesses

We enable banks and other financial services organizations to make a seamless shift from securing individual unconnected data elements to delivering a fully integrated digital trust solution that allows customers and banks alike to do more, with greater convenience and productivity.

Economic Benefits

- Growth through new and more online/mobile transactions
- Lower costs of online and mobile transactions

Improved Privacy

- Encrypted channels fully secure sensitive customer data
- Share minimal amount of information

Enhanced Security

- Defeat cybercrime and identity theft
- Increased customer confidence and loyalty

Compliance with Global, Federal & State Mandates

- PSD2, SecuRePay, FICAM, FFIEC, NIST

Balance Between Security and Usability

- Protect your network, especially remote access
- Secure sensitive transaction exchange (web and mobile)

As a global leader in authentication and risk-based security for the Financial Services industry, VASCO's proven capabilities have demonstrated the ability to fully secure the most sensitive transactions with a frictionless user experience by providing banks with the technology and services to drive the most successful digital transformation.
Sources

6. www.forbes.com/sites/gilpress/2016/05/16/the-3-mindset-shifts-you-need-for-a-successful-digital-transformation/#46b0656b7c9d
7. www2.trustwave.com/GSR2016.html
11. www.esignlive.com
About VASCO

VASCO is the world leader in providing two-factor authentication and digital signature solutions to financial institutions. More than half of the Top 100 global banks rely on VASCO solutions to enhance security, protect mobile applications and meet regulatory requirements. VASCO also secures access to data and applications in the cloud, and provides tools for application developers to easily integrate security functions into their web-based and mobile applications. VASCO enables more than 10,000 customers in 100 countries to secure access, manage identities, verify transactions, and protect assets across financial, enterprise, E-commerce, government and healthcare markets.

Learn more about VASCO at www.vasco.com or visit blog.vasco.com