Better Banking Experiences Start With Strong Authentication and Face Biometric

INTRODUCTION

Banking should be easy and safe. Financial institutions need to meet increasing customer demand for accessibility and convenience while ensuring that their assets are protected. With the ongoing wave of digital transformation amplified by an accelerating need for remote and mobile channels, the bars for both convenience and security have been raised.

Fraud is on the rise, and it is taking its toll on the bottom line. Meanwhile, retaining customer loyalty has become a competition to provide the widest reaching omnichannel experience with the least amount of user friction. **Biometric technologies offer a solution by empowering financial services providers to level up security, expand mobile capabilities and improve the customer journey.**

This executive brief will outline the state of strong authentication in banking and introduce a new biometric multi-factor authentication (MFA) solution aimed specifically at satisfying customers and defending against fraud using facial recognition and fingerprint biometrics.

HID

Strong Authentication and the Banking Experience

In the digital era, strong authentication is critical for financial services providers. That's because as more financial activities have moved into digital channels, fraudsters have followed and they have tended to target the weakest links in the security chain — customer and employee passwords.

The costs of digital fraud are high, with the value of fraudulent transactions compounded by costs including fines, liabilities and investigation costs. LexisNexis Risk Solutions estimates that for every dollar lost to fraud in 2019, U.S. financial services providers spent $3.78. In its Fraud Trends to Watch in 2021 report, the firm highlighted a 38 percent increase in bot attacks and a 48 percent increase in mobile device fraud attacks, pointing to identity proofing as "the number one challenge" for financial services providers to overcome.

The Latin American market is not exempt from these fraud trends. McKinsey identified Latin America as the world growth leader in banking. That position was further boosted as the coronavirus pandemic saw an explosion of fresh banking activity with millions of Latin Americans opening new accounts, and even more returning to dormant ones after having become cash-dependent. With more banking activity online and at the branch, there is a higher risk of fraud — especially among a growing population of new bank account users.

Strong authentication can effectively combat these threats. **With biometrics and second-factor authentication options, the technology offers far superior security in comparison to passwords alone. These authentication tools are necessary not only to fight fraud, but also to attract and retain customers.**

*According to a recent report from Experian, 60% of consumers now have higher expectations for their online experience than they had before the COVID-19 pandemic, **and 74% flag biometric authentication as their preferred security method.***

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Fingerprint Biometric is Just the Beginning

HID Global has long been a leading provider of fingerprint biometric authentication to the Latin American banking industry. **Offering a robust line of fingerprint sensors, including the lauded Lumidigm® multispectral readers, HID is doing its part to curb fraud and provide a safe, secure and convenient banking experience throughout the region — securing a billion ATM transactions each year in Brazil alone.**

HID's established fingerprint leadership is just the beginning of a transformative banking experience being ushered in by a new end-to-end authentication platform that adds facial recognition to the equation.

Face Biometric For The Ultimate Customer Experience and Security

For many financial services providers, **facial recognition offers a particularly compelling biometric solution with respect to both security and customer convenience.** Facial recognition can be leveraged through virtually any smartphone or PC camera, enabling end users to verify their identity with a selfie photo and images of their official identity documents.

It can be used to streamline ATM access through contactless customer verification and to automatically recognize customers at a bank branch. It can also be combined with other biometric modalities as multi-factor authentication, such as a fingerprint scan, to confirm sensitive transactions.

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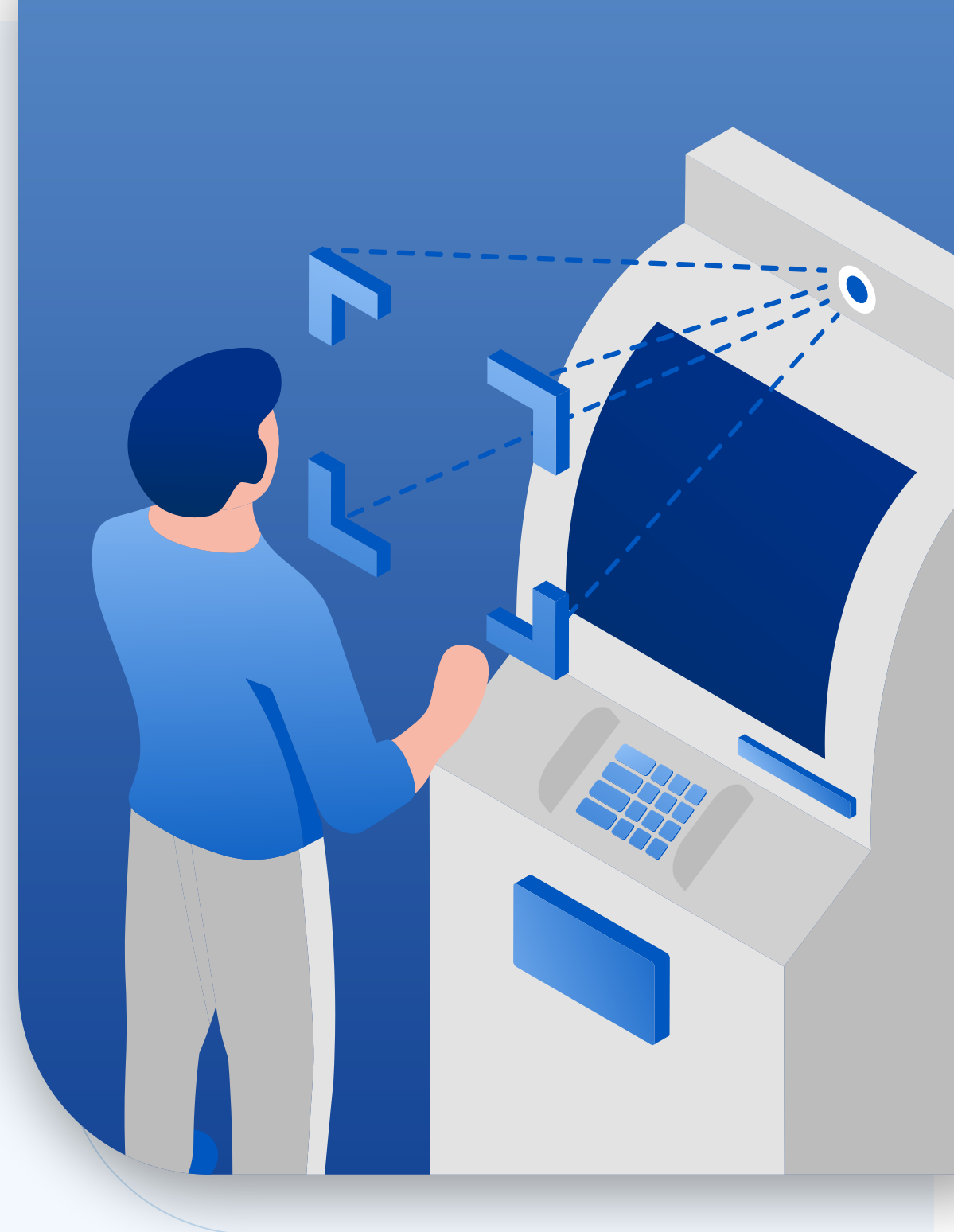
Anatomy of Security and Convenience

HID Global knows that when it comes to authentication there is no best biometric. Fingerprint and face biometrics each have their own strengths, and HID's banking platform leverages those high-performance areas to provide a luxurious customer experience while ensuring the utmost fraud protection and regulatory compliance.
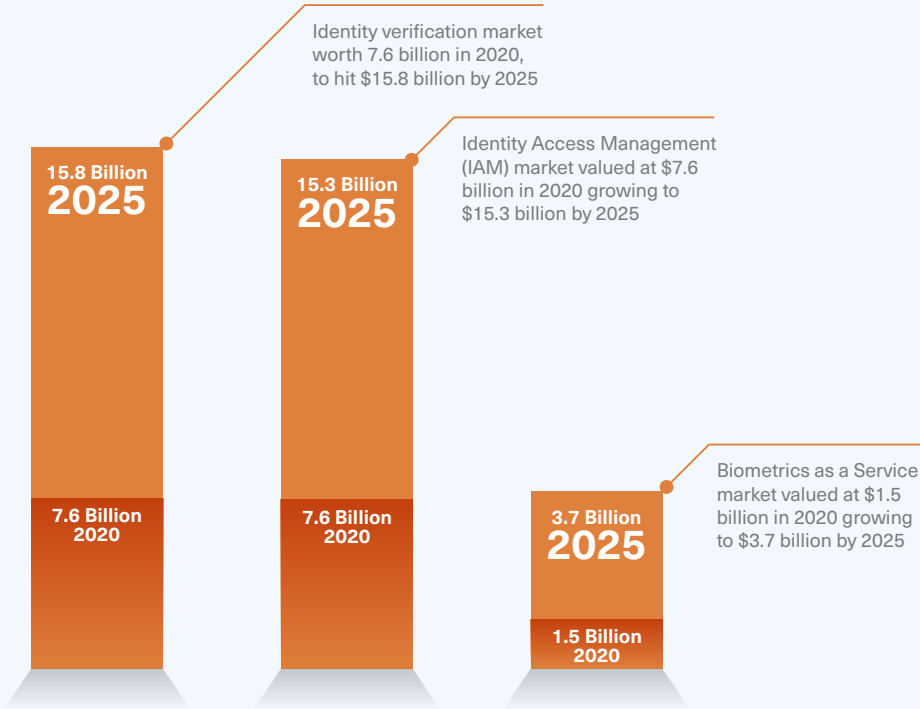
HID's platform-based approach is comprehensive and omnichannel with a variety of elements working in concert.

eKYC

Biometrics with a Modular Solution Approach

Fingerprint Recognition

Facial Recognition

HID
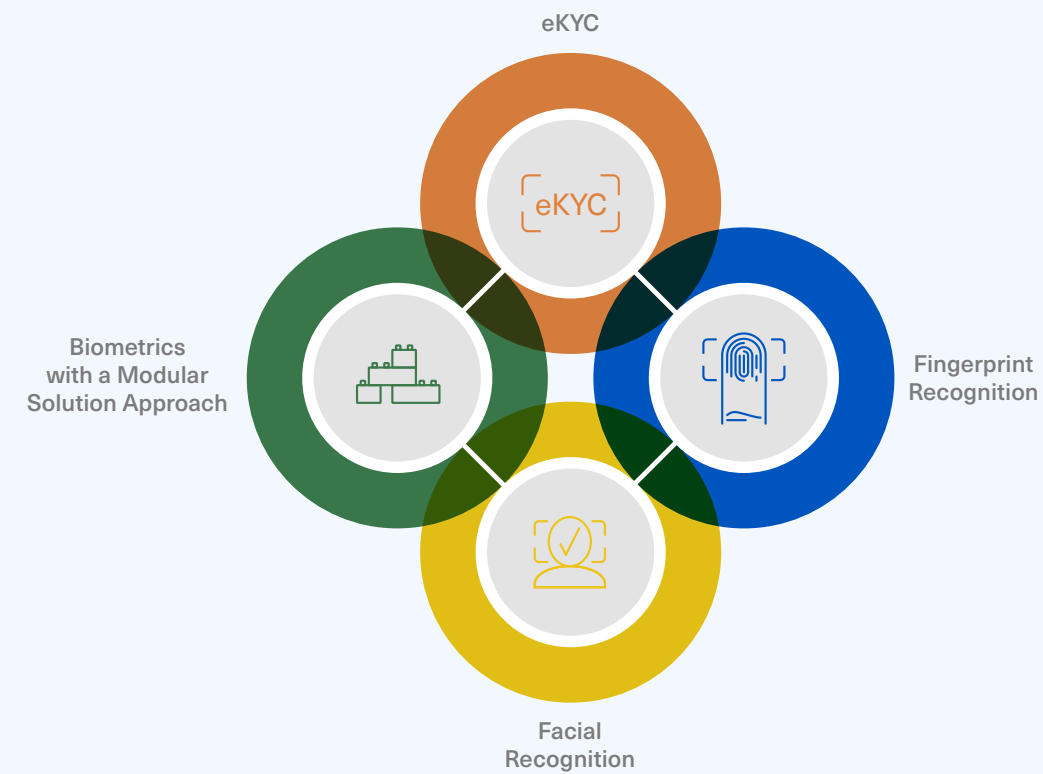
eKYC

Today, banking is remote first, and that means financial institutions must offer customers the option to open accounts and onboard via a mobile device. **HID's mobile onboarding technology leverages face biometric and document recognition to allow users to enroll at a bank by taking a selfie and a picture of a government-issued ID.**

The onboarding process is a critical opportunity to build trust with new customers, and HID allows for the enrollment system to be easily integrated into your existing mobile offering, enhancing your brand with convenience and industry-leading security.

Identity verification market worth 7.6 billion in 2020, to hit $15.8 billion by 2025

Identity Access Management (IAM) market valued at $7.6 billion in 2020 growing to $15.3 billion by 2025

Biometrics as a Service market valued at $1.5 billion in 2020 growing to $3.7 billion by 2025

15.8 Billion
2025

7.6 Billion
2020

15.3 Billion
2025

7.6 Billion
2020

3.7 Billion
2025

1.5 Billion
2020

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DEEPER IDENTITY WITH MULTISPECTRAL IMAGING TECHNOLOGY

Not all biometric technologies are created equal, and that's especially true of fingerprint readers. Most fingerprint sensors just scan the surface of a user's skin, but HID Lumidigm® readers use multispectral imaging (MSI) technology to look deeper by scanning the surface and subsurface of a finger's skin. That means greater accuracy, especially when detecting fake fingers. It also means greater versatility — **MSI technology can successfully authenticate users with wet or dirty fingertips, in rain or extreme heat, and it can even work for customers with worn fingertips.** That's the multispectral advantage you get with HID.

Fingerprint Recognition

Fingerprint readers offer strong security at the branch or ATM. HID's fingerprint readers are fast and accurate, ensuring customers can authenticate and approve transactions with greater convenience and security than with a card and PIN.

HID PATENTED MSI WORKS ON THE MOST DIFFICULT FINGER TYPES

Extra Dry

Extra Oily or Wet

Damaged

Aged

Dirty

Cold

HID MSI ensures users have a fast, single-touch experience and authorized users are not falsely rejected.

HID

Facial Recognition

The face biometric technology leveraged by HID is device agnostic, meaning it can operate on off-the-shelf cameras, mobile devices from any manufacturer or HID's own multispectral cameras designed to perform in the harshest lighting conditions.

Combining facial recognition with artificial intelligence (AI) and machine learning algorithms, HID delivers one of the most accurate and fastest performing facial recognition solutions in the market today, as tested and verified in the National Institute of Standards and Technology (NIST) Face Recognition Vendor Test (FRVT).

FACE BIOMETRICS GET A MULTISPECTRAL UPGRADE

HID Global has expanded its patented multispectral imaging (MSI) technology to include face biometric. Combining MSI with sophisticated presentation attack detection (PAD) technology that meets ISO 30107-1 standard, HID delivers resilient passive liveness detection and will thwart spoofing attempts in which fraudsters use photos or even realistic masks to try to imitate genuine customers.

Multispectral facial recognition sees more than the average camera, and that's the key to providing the ultimate security and customer experience at the bank branch or the ATM.

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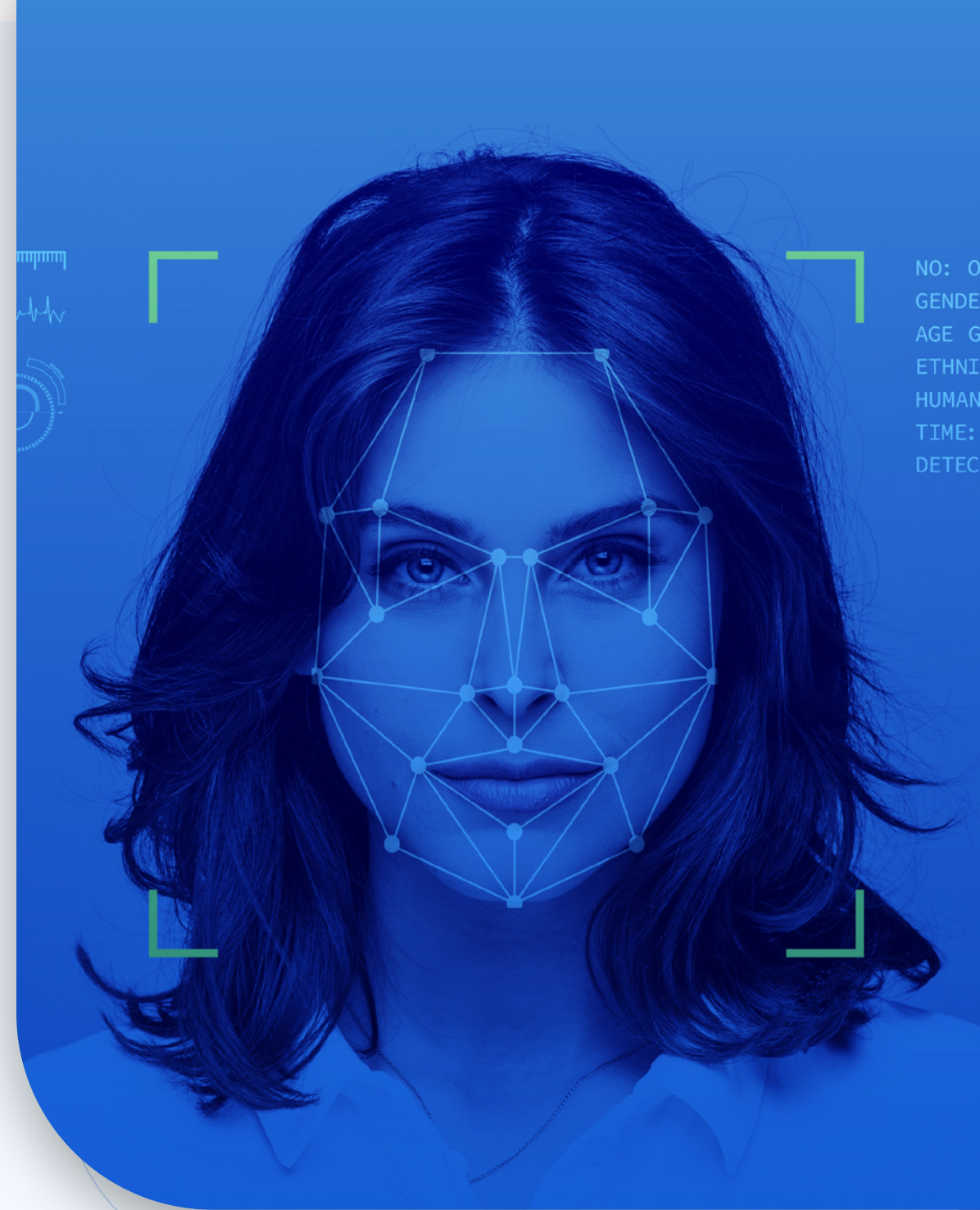
No matter where you are on your roadmap to providing better customer service through strong identity services, HID Global is ready to help you achieve the next level. Our **Modular Solution Approach** is interoperable and standards compliant, allowing for the easy integration of fingerprint or facial recognition without the need to rip-and-replace, or migrate to a new platform altogether.

Whether you are looking for just the hardware devices, identity servers, mobile SDKs that can be easily integrated into your existing systems or a complete end-to-end biometric solution, we have an option to meet your budget and requirements. **HID makes implementing biometric multi-factor authentication a natural and easy next step on your path to offering better customer experience and cutting down fraud.**

Biometrics with a Modular Solution Approach

Device Management

· Manage the provisioning, update & security of distributed camera hardware

· Monitor the hardware status & reporting

SDK

· Face capture & quality assessment

· Matching (1:1, 1:N): matching at the edge

· Mobile SDK

· Presentation attack detection (PAD)

· Document scanning & authentication

Modular Solution Approach

Biometric Server

· Presentation attack detection (PAD)

· Template extraction

· Matching (1:1, 1:N)

· Storage of galleries

· Connectors to other identity management applications or databases

· Deduplication

· Document scanning & authentication

On-Premise or Cloud Deployment

Camera Hardware

· HID patented multispectral imaging (MSI) technology with fusion AI

· Advanced presentation attack detection (PAD) that meets ISO 30107-1 standard

· Performing in challenging lighting conditions - in total darkness or bright light environments

· Face capture & quality assessment

· Matching (1:1, 1:N): matching at the edge

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Balancing Convenience and Security at Every Customer Touchpoint

HID Global's multifaceted approach to authentication offers compelling benefits for financial services providers and customers alike throughout the customer banking journey.

Mobile Onboarding → **At the Branch** → **At the ATM** → **Mobile Banking**

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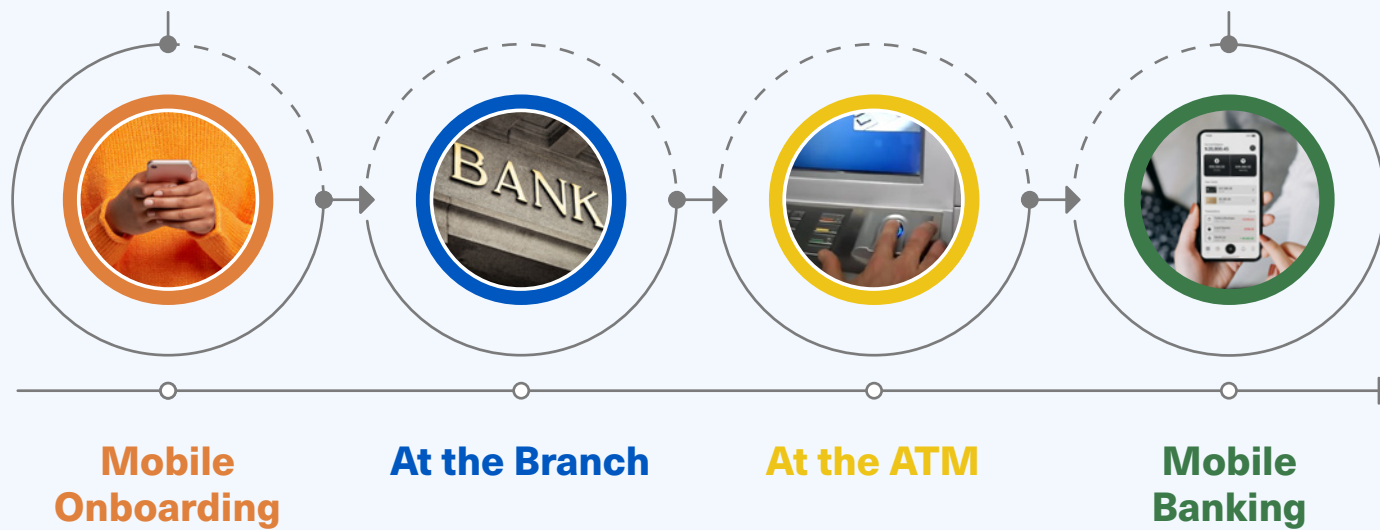
MOBILE ONBOARDING

The customer journey begins at account opening, and HID has it covered. Users download the banking app, take a selfie and a picture of their official ID for authentication. During their next visit to the branch, they enroll their fingerprint, which connects the second biometric to the account for ultimate security.

AT THE BRANCH

Once enrolled, a customer can be identified immediately and seamlessly upon entry to the bank with facial recognition. The customer's face is compared to the bank's customer database. If it's a positive match, the associated account information is pulled up before the customer steps up to the bank teller, and the customer can be greeted by name.

Of course, identification is one thing but authorization is another. Once at the desk, any transaction that needs to be authenticated and authorized can be done with the easy press of a finger. The customer scans their fingerprint, which is matched to the template associated with their account in the bank's database. It's the biometric equivalent of a signature, offering total assurance that the customer has authorized the transaction. The only difference is that, unlike signatures, biometrics can't be easily forged.

What's more, these biometric authentication capabilities negate the need for the customer to present a physical bank card. So even if the customer left his/her wallet at home, he/she could still perform a full suite of banking activities at the branch.

AT THE ATM

Multi-factor authentication using facial recognition and fingerprints also lets the customer enjoy **cardless and passwordless banking at the ATM.**

Combining fingerprint and facial recognition provides the MFA that allows customers to access ATMs much faster by eliminating the need to insert a card and type a PIN. This reduces the time spent at the ATM and improves the user experience because there is no PIN entry that can be seen, and no card being used that can be skimmed — all while retaining a high level of security.

MOBILE BANKING

Facial recognition also enables the customer to take advantage of convenient mobile banking using facial and document authentication technology to remotely verify the end user and offer a full suite of services through the mobile channel. Customers can securely open an account, make a transfer and even collect pension — all from the comfort of home, on the road for business or wherever else the customer might be.

The everyday user experience is vastly improved, with the customer able to easily access the online account using a mobile device, yet with the confidence that no one else will be able to do so.

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Keeping Compliant and Enhancing Privacy

User identity is sensitive stuff, requiring the highest levels of care. Financial institutions know that as banking becomes more convenient across a variety of channels, the need to be compliant with Know Your Customer (KYC) becomes even more important.

Thanks to the dual biometric nature of accounts protected by HID Global's solutions, the threat of fraudulent accounts is nullified. **Biometrics are unique to each individual, making the use of duplicate accounts for fraud impossible.** Meanwhile, having fingerprint biometric sign off on every major transaction creates an unimpeachable audit trail.

For the customer, privacy is not only guaranteed, but enhanced. Biometrics are fundamentally different from access card numbers and secret PINs — they are physical characteristics that can't be shared, stolen or lost. When an account is secured by biometrics, it can't be fully reduced to contextual or biographical data.

Security questions, passwords, PINs and access card numbers are all vulnerable to phishing, data breaches and brute force hacking. Biometrics are the only security measures that require a rightful user's physical presence for authentication.

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Security and Convenience: No Longer a Balancing Act

The convenience of face recognition and the consent-based approach of fingerprint biometric make for a powerful combination of security factors that center customer service while enhancing security. HID Global's end-to-end platform offers a foundation on which to build your fraud-free, customer-first financial offering.

Learn more about facial recognition and strong authentication for banking:

▶ **Website** | <u>Biometrics Banking Revolution</u>

▶ **Infographic** | <u>Facial Recognition Making Its Way in Banking</u>

▶ **Infographic** | <u>Here's Why Your Bank Needs Facial Recognition</u>

▶ **Blogs** | <u>HID's Blog Posts for Banking</u>

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