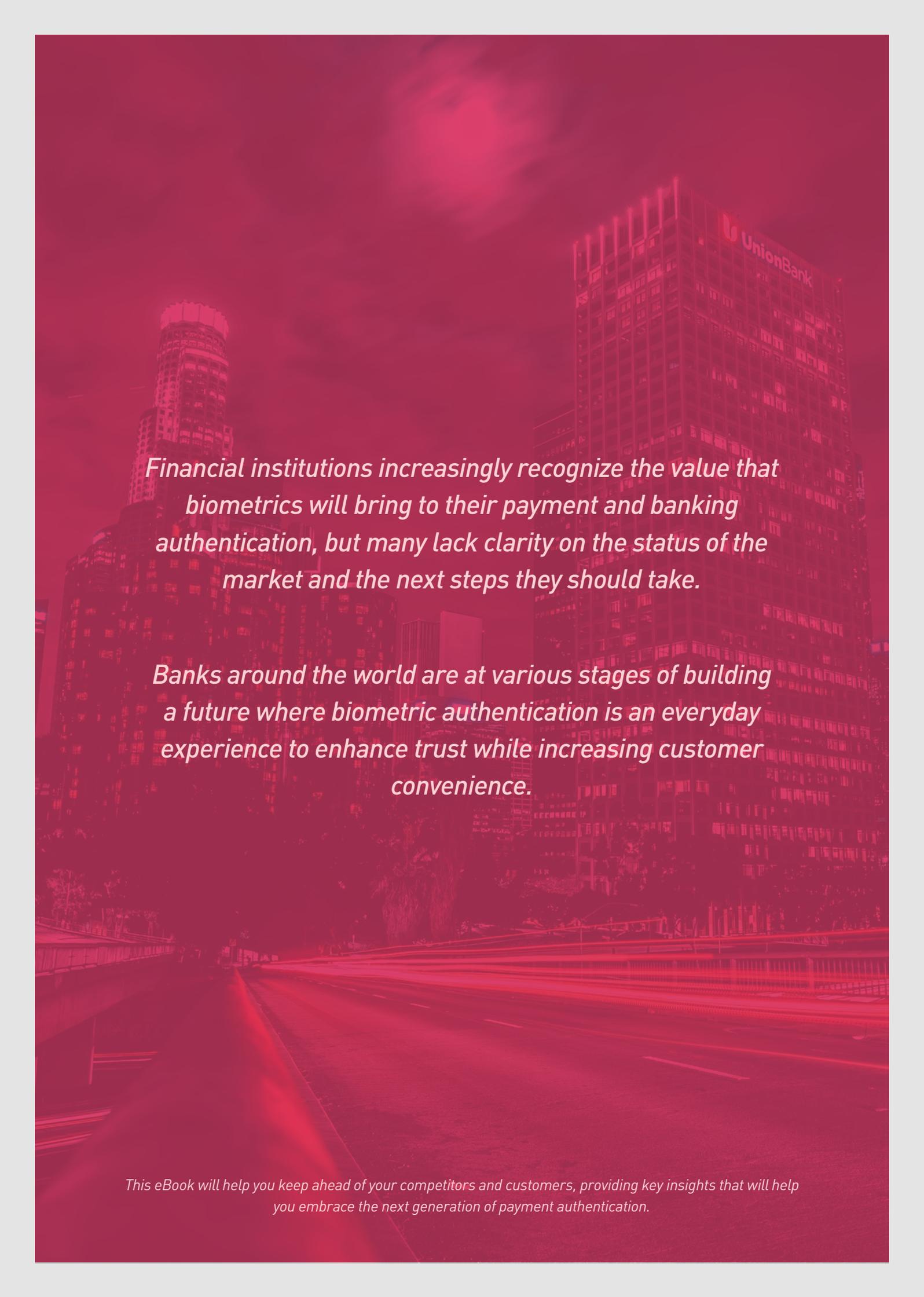




FINGERPRINTS

BANKING ON BIOMETRICS

WHAT ARE BANKS THINKING RIGHT NOW?



Financial institutions increasingly recognize the value that biometrics will bring to their payment and banking authentication, but many lack clarity on the status of the market and the next steps they should take.

Banks around the world are at various stages of building a future where biometric authentication is an everyday experience to enhance trust while increasing customer convenience.

This eBook will help you keep ahead of your competitors and customers, providing key insights that will help you embrace the next generation of payment authentication.

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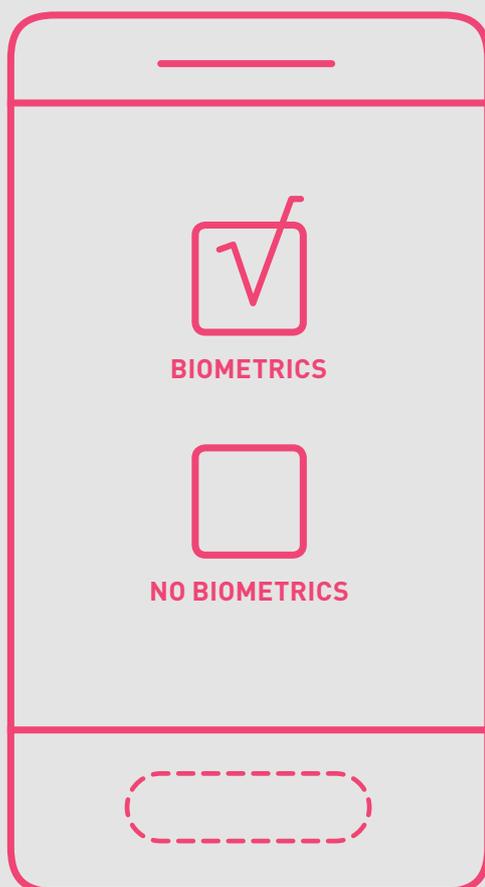
01



BELIEVE IN BIOMETRICS

In 2018 over **70%** of all smartphones shipped featured some form of biometric authentication capability, clearly demonstrating that biometric authentication has been embraced by both technologists and consumers.

The financial industry has been one of the first to respond and it is now commonplace to access banking apps and verify mobile payments with biometrics. What's more, initiatives like PSD2 are pushing the need for robust secure customer authentication and biometric payment cards are being trialed around the world, further driving biometric adoption.



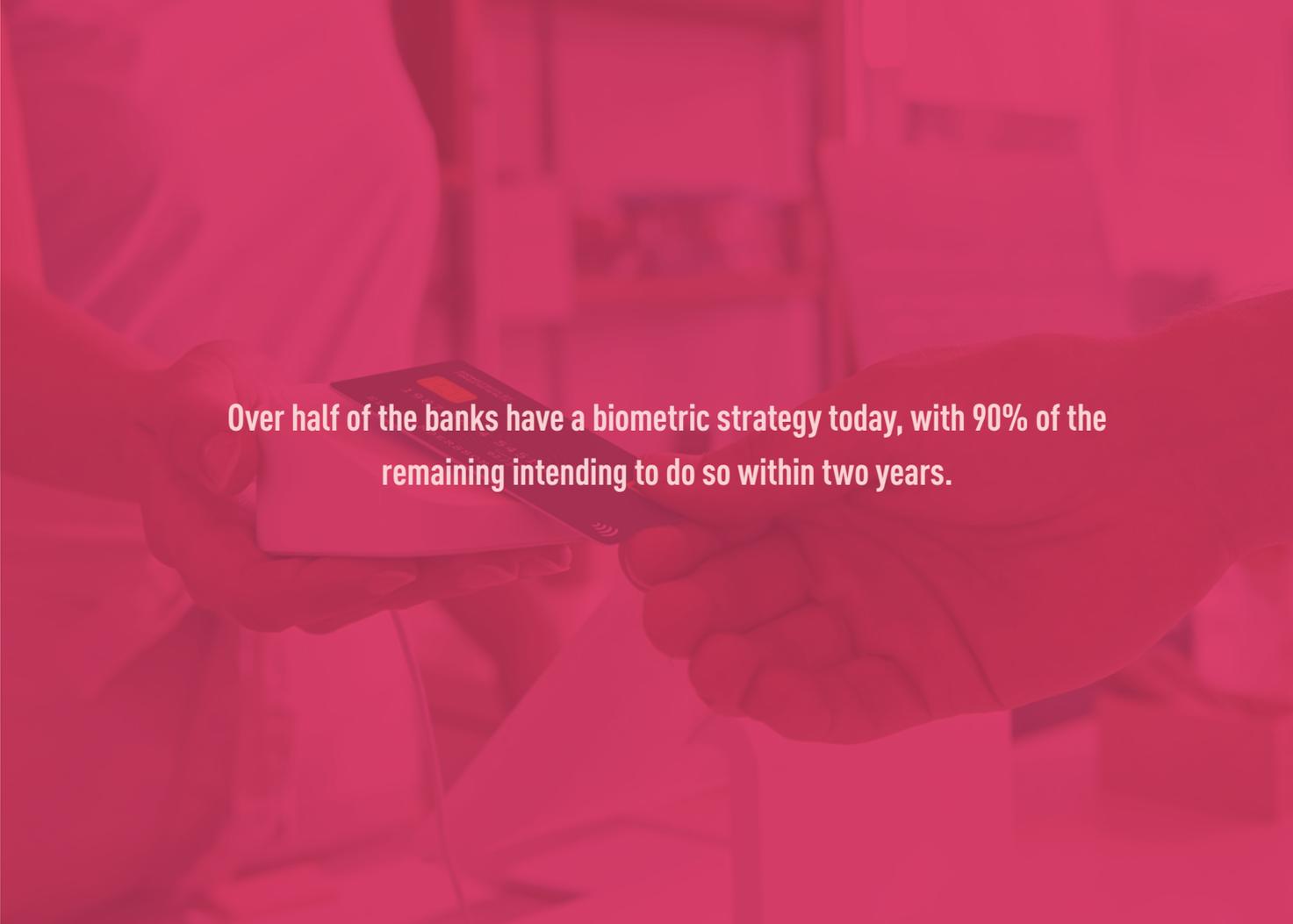
With biometrics' maturity, the financial industry has a unique opportunity to unify the customer authentication experience across all forms of payments and financial services. This will make life simpler and more secure for customers.

Working with PayTech, we set out to understand what banks globally are doing right now around biometrics, and delve into their strategy for the coming years. From UX to deployment, we spoke about the insights that matter with 26 banks, across seven countries on four continents, all representing significant issuers within their markets.

ENTHUSIASM TEMPERED WITH UNCERTAINTY

Our research shows a rapidly maturing market, with many banks already making large strides towards the research and deployment of biometric-authenticated payments. Over half have a biometric strategy today, with 90% of the remaining intending to do so within two years. Different countries are at varying stages of deployment, but all were set to prioritize biometrics in the next two years.

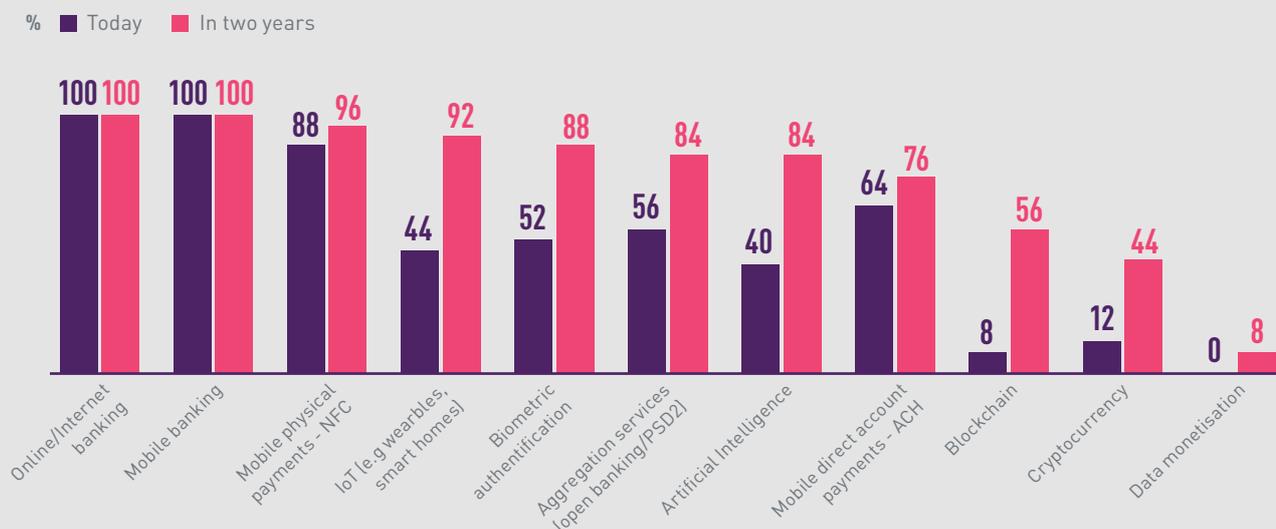
This ranks biometrics alongside mobile and IoT in banks' strategic priorities



Over half of the banks have a biometric strategy today, with 90% of the remaining intending to do so within two years.

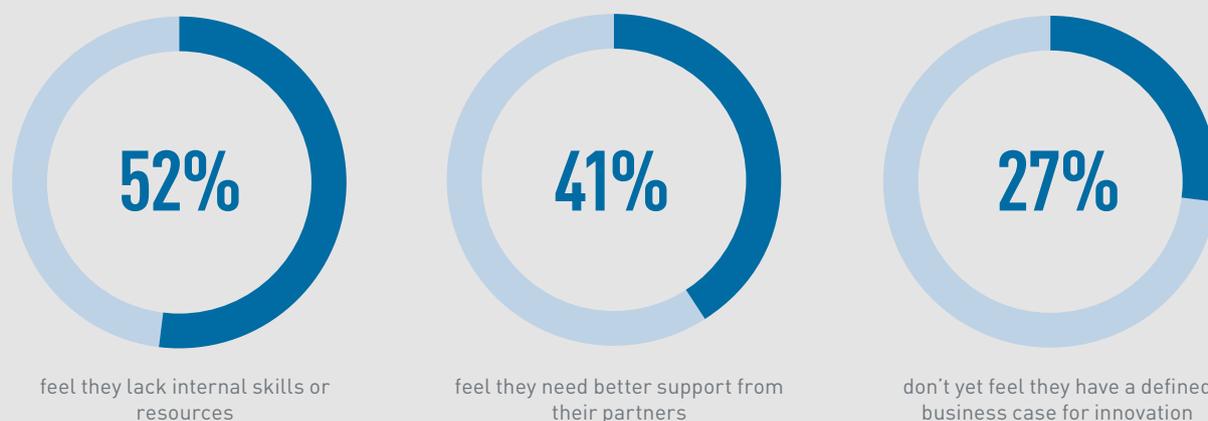
DOES YOUR BANK HAVE A DIGITAL STRATEGY?

Covering the following areas? How do you see this changing in the future



Despite the importance placed on having a biometric strategy, there are still some hurdles to overcome in moving to implementation. At the heart of this, only 24% feel confident today in their ability to deliver multi-factor authentication as part of their innovation roadmap.

Driving this lack of confidence is a series of barriers banks feel are impacting their ability to innovate.



UNDERSTANDING THE NEXT STEPS NEEDED

This eBook is designed to show you how banks globally are responding to the growing opportunities and prevalence of biometrics in payments, and where and how it sits within their strategic priorities.

This will be explored by identifying the opportunities that biometrics offer so that banks can identify the right ones for their business, while also highlighting what banks are doing to overcome barriers that stand in the way of a clear biometric payment strategy.

02

What are the opportunities for banks?



WHAT ARE THE OPPORTUNITIES FOR BANKS?

From UX to security, there's a range of benefits for those banks willing to embrace biometrics as a key tool within their innovation roadmap.



EASE AND STYLE

75% of respondents see fingerprint biometrics as the most user-friendly and slickest security method, while offering the best UX. As shown by the high rate of adoption in the smartphone market, consumers rate this method as well. Not having to remember or use a PIN code is a key benefit especially for the older segments that are at risk of being left behind in an increasingly digital and cashless world.

What's more, banks and fintechs are bringing out innovative and cool new card designs. From vertical orientation to gold inlays and metal cards; biometrics are the perfect accompaniment to ramp up the style

A PREMIUM OFFERING

When it comes to roll-out, 56% plan to introduce biometric payment cards as a paid service for premium customers. This offers the opportunity to increase revenue from payments, as well as adding a point of differentiation against competitors.

INCREASING THE VALUE OF TRANSACTIONS

As the motivation behind the trials like NatWest's in the UK and Société Générale in France shows, being able to remove the cap on contactless payments is a big selling point. 79% of banks we spoke to cited payment caps as the main limitation of contactless cards today. Biometric payment cards offer a secure solution to 'scrap the cap' and realize the true potential of contactless. The feedback from ongoing pilots also shows an increased transaction value when using biometric card.

GETTING ONE STEP AHEAD OF COMPETITORS

100% of the banks we spoke to are aware of biometric payment cards, however only 24% consider themselves fully informed. For those banks willing to invest in research and prioritize biometrics in their innovation roadmap, the opportunity to overtake competitors is there.

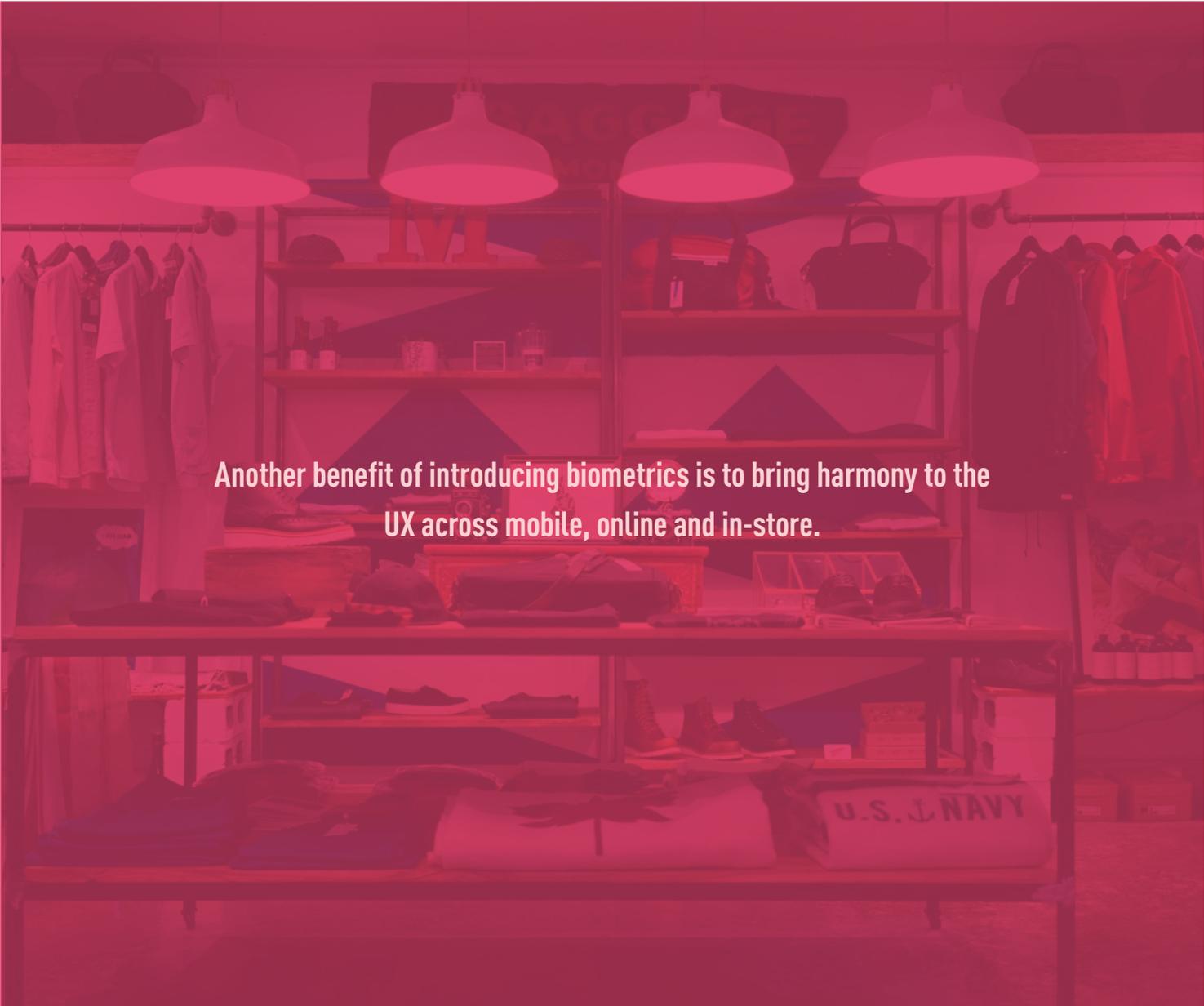
ADDRESSING CUSTOMER SECURITY CONCERNS

Contactless security is one area where banks and consumers disagree. Despite only 57% of banks consider security to be the main issue around contactless, this is consumers' primary concern. Biometric-authenticated payments across mobile and card are an effective solution to help build consumer confidence. Recent research by Gemalto, a Thales company, showed that 86% of respondents believe biometric payment cards are more secure than traditional Chip and PIN.

UNIFY THE JOURNEY

Another benefit of introducing biometrics is to bring harmony to the UX across mobile, online and in-store. As the focus on the customer journey has shown over the past few years, delivering clunky and frustrating shopping journeys is a sure-fire way to lose customers and revenues. This is seen by respondents as particularly important for addressing the younger and more tech savvy consumer segments, seeing the latest coolest innovative biometric card as a great companion with mobile wallets and other payment devices.

Significant opportunities exist for banks who work proactively with their partners to define and deploy a unified biometrics strategy.



Another benefit of introducing biometrics is to bring harmony to the UX across mobile, online and in-store.

03

What can banks do to define their biometric strategy?



WHAT CAN BANKS DO TO DEFINE THEIR BIOMETRIC STRATEGY?

There's no one-size-fits-all solution for banks – each has unique internal and external requirements. An individualized strategy that relates to your market, your customers' concerns and your own ambitions is therefore key.

So, here's some advice on where to start, using biometric payment cards as an example.

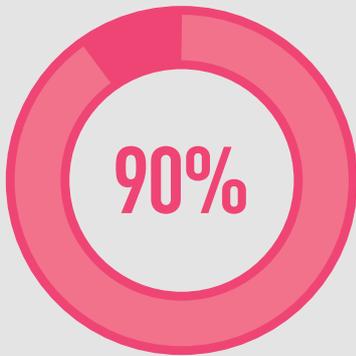
UNDERSTAND YOUR MARKET!

There's no point in deploying technologies that your customers don't want, or your infrastructure is not ready for.

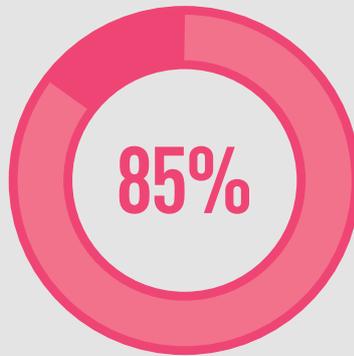
What do your customers think about biometric payments? Do they want secure contactless or the latest cool technology, an easy-to-use payment experience or just higher limits? Do you already have contactless POS infrastructure that you can build on top of, or are you still getting your contactless strategy in place?

The answers to these questions and more need to be considered as part of your strategy to ensure return on investment.

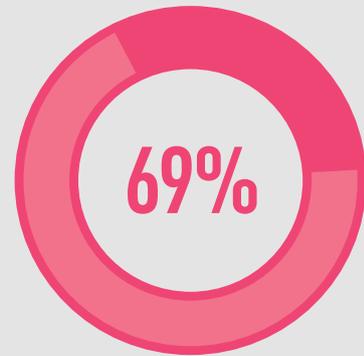
Here's banks current motivations for deploying biometric-enabled cards.



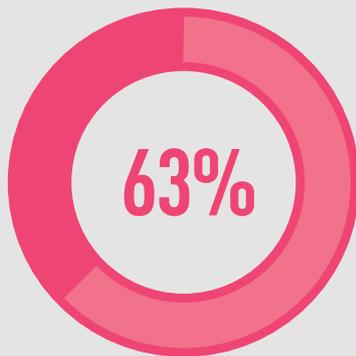
Ease of use - no more need for PIN's and passwords



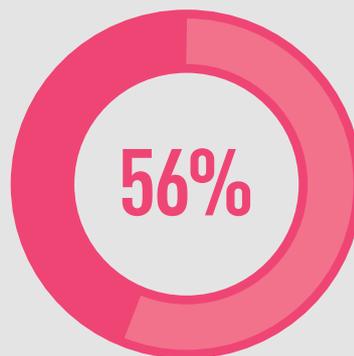
Added security if card lost / stolen
- reduce concern for cardholder



Payment cap - no confusion over "allowable" payment value at POS



Added security if card lost/stolen -
reduce risk for bank



Extension of contactless
transactions at retail in-store POS

MAKE THE BUSINESS CASE

Access to the latest innovation is a key motivator for many consumers. The "wow" factor supplied by biometrics will help many feel ahead of the curve with cutting-edge of technology adding a little flash to their wallets.



01

01. MILLENNIALS

Cool, innovative card, a great companion with mobile wallets and other payment devices (IoT).

02. AFFLUENTS

Premium and exclusive card that is secure, fast and accepted around the world.



03

03. BUSINESS

Card for loyalty, cash-back programs, peer-to-peer, ensuring the bonus or money transfer goes to the right person.

04. MAINSTREAM

Proven technology for speedy and easy everyday contactless shopping, with added security.



04

05. FINANCIAL INCLUSION

Elderly: Helping people keeping up with the transition to cashless societies with proven and easy to use technology, no need to remember or use PIN.

Underbanked: Payments and ID combined for welfare and financial inclusion that can be used by all, also the illiterate.



02



05

Security is one of consumers' biggest contactless concerns. Think about lost and stolen cards. Consumers' valid questions in this area can make it difficult for banks to promote the adoption of contactless in some markets and to some demographics.

Biometrics provide a clear solution to this, through reassurance that only the cardholder can use the card and that there's no need to worry if the card gets or stolen.

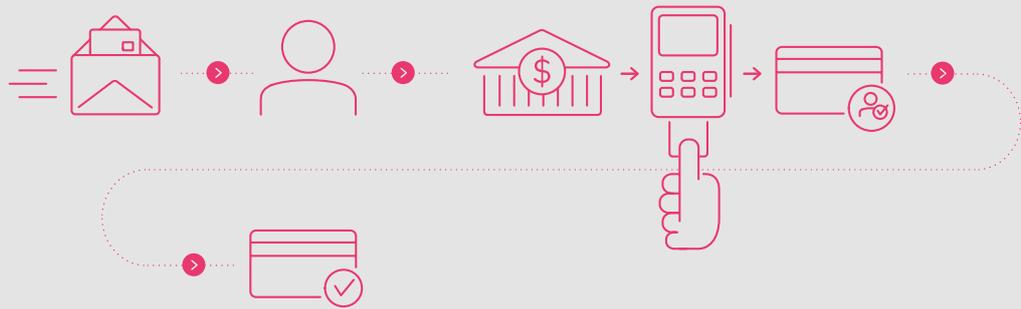
Additionally, as banks develop their PSD2 strategy, biometrics offer a fast-track way to deliver secure customer authentication. In terms of GDPR, solutions such as on-card biometrics mean there's no need for a database of customer data, as all biometric data is securely stored on the card itself, while guaranteeing transactions can only be made by the cardholder.

KNOW THAT ENROLMENT COMES IN MANY FORMS

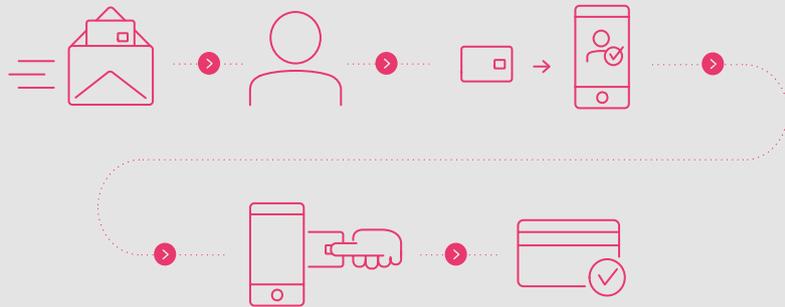
With enrolment a key concern for banks and cardholders, it's important to explore the different options and be open to deploying the right solution for your different markets. From our research, it's clear that an on-the-go / at home enrolment is seen as the most likely to succeed, but additional options are still seen as valid, depending on the consumer demographic. What's most important is that the solution(s) are seamless, user-friendly and intuitive.

The following graphic outlines some of the suggested options.

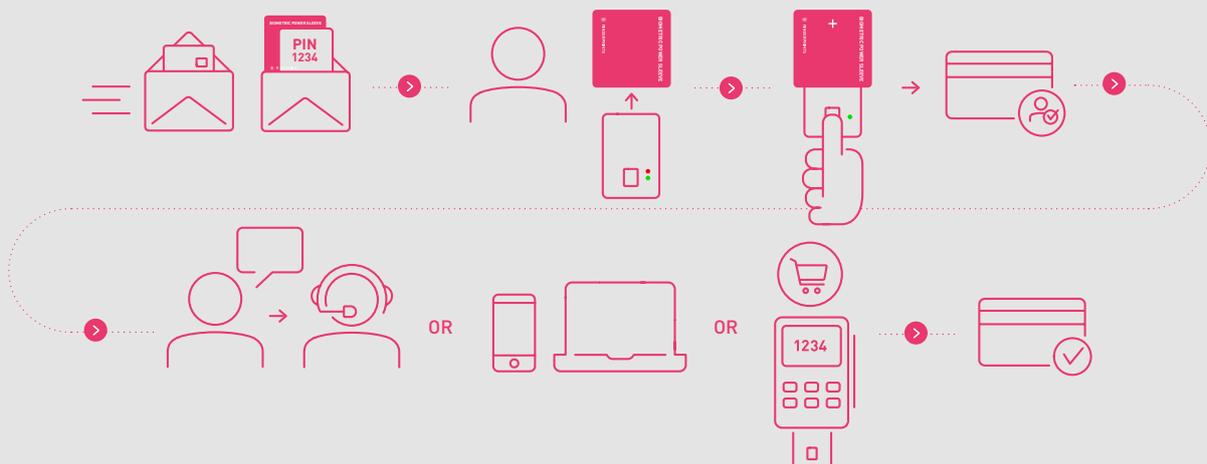
AT LOCAL BANK

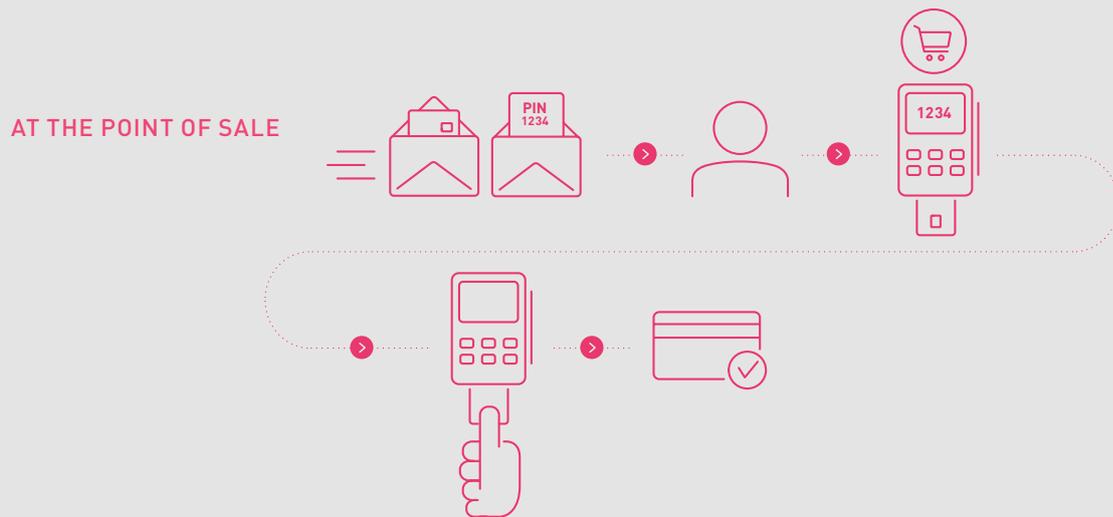


USING SMARTPHONE



USING A POWER SLEEVE





TALK YOUR CUSTOMERS' LANGUAGE

It's clear that you need to approach both the UX and education programs differently depending on your customers.

For those worried about security, be sure to address common concerns. Explain how biometrics work, why they boost security, how personal data is secured and how the user experience is being enhanced.

For your premium users who want the latest technology and want to spend without limits, it might be better to focus your marketing on bringing an end to contactless payment limits, enabling the ability to travel the world using the latest tech that ensures privacy, and maybe bundle it together with other premium services.

For the younger and mobile savvy user who wants a holistic experience across their devices, those already familiar with and using biometrics, positioning it as a cool new card that brings a seamless experience across digital and real world payments and with companionship between the mobile banking app and card might be the right way.

WORK WITH THE RIGHT PARTNERS

Flying solo on this will not help you, nor will a piecemeal approach. You need a holistic strategy that works alongside the right technology providers to tackle everything from infrastructure to deployment. So, speak to your card manufacturer and technology partners. Ask where their biometric technologies come from and why they work with them. The technology is out there to help your biometric strategy succeed.

Whether defining or refining a biometrics strategy, the technology is now in place to deliver value to you and your customers.

04



IN REVIEW

This eBook has equipped you with insights from banks around the world. We've shared the current thinking on biometrics, deployment status, challenges and future plans. Importantly, biometrics is no longer confined to specific silos in banks' thinking. Many are now seeing biometrics as a core enabling technology for greater trust and increased convenience across their business.

THE NEXT STEP

is planning what you are going to do about them. Remember the following:



WHAT?

Biometrics is making moves across financial services, bringing strong authentication to mobile, in-store and online payments, and digital banking.



WHY?

If you haven't already considered it, biometrics can be an integral tool to enable new business models and strategic considerations. Even if you have considered it, new innovations, regulations and market needs mean it can likely complement other areas of your roadmap.



WHEN?

If biometrics is on your agenda, what are your next steps? Moving quickly will help ensure you're ahead of the competition. Challenge your technology partners – you don't have to figure it out alone.



WONDERFUL!

With so many pilots already announced, we can expect biometric smartcards to be the next payments innovation to make banks' and consumers' lives easier – and soon!



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AND KEEP AN EYE ON THE FUTURE! additional interesting takeaways from the research also found that, while in-store, high value transactions are seen as the primary opportunity for biometric payments and that 56% see connected cars and homes as a key driver for the future. There are significant opportunities in getting ahead of the curve.



Players like Fingerprints are at the center of this innovation, working with all stakeholders – card manufacturers, payments schemes, industry bodies (such as EMVCo) and banks – to find the perfect balance between security and convenience. Get in touch to learn more and ensure you're best informed to decide your next steps.

ABOUT US & OUR PARTNERS

Leading the charge



LEADING THE CHARGE

Fingerprints is at the forefront of biometrics across the world. Our solutions are found in billions of devices and are used billions of times every day, providing safe, convenient identification and authentication with a human touch.

FROM SMARTPHONE TO PAYMENT CARD

Over 30 leading brands have integrated our sensors in over 350 smartphone models. We've adapted this hugely successful technology with our unique T-shaped sensor, tailor-made for payment cards. Thin and flexible, it offers optimized biometric performance for smaller surface areas such as a payment card. And with unprecedentedly low-power consumption it enables authentication without a battery.

Our sensors can be made cost-effectively and at high volumes with standard card production processes. They can also be covered, so there's no compromise to a card's design.



BIOMETRICS LEADERS

Like Fingerprints are leading the way. Using our expertise with high-volume smartphone sensors, we're driving forward innovations to take biometric payment cards to the mass market.



SOLUTION LEADERS

Like NXP, Zwipe, Linxens and Card-Lab are adapting and developing components including secure elements, prelams and inlays to fit the new requirements.



CARD MANUFACTURERS

Like Gemalto (a Thales company), IDEMIA, Feitian and Konal are developing and manufacturing biometric payment cards and other smart cards, and are working with card issuers.



PAYMENT SCHEMES...

Like Visa, Mastercard and JCB, alongside bodies like EMVco and Eurosmart are working to ensure technologies are interoperable, secure and stable for a standardized, sustainable industry.



ISSUING BANKS & LARGE RETAILERS...

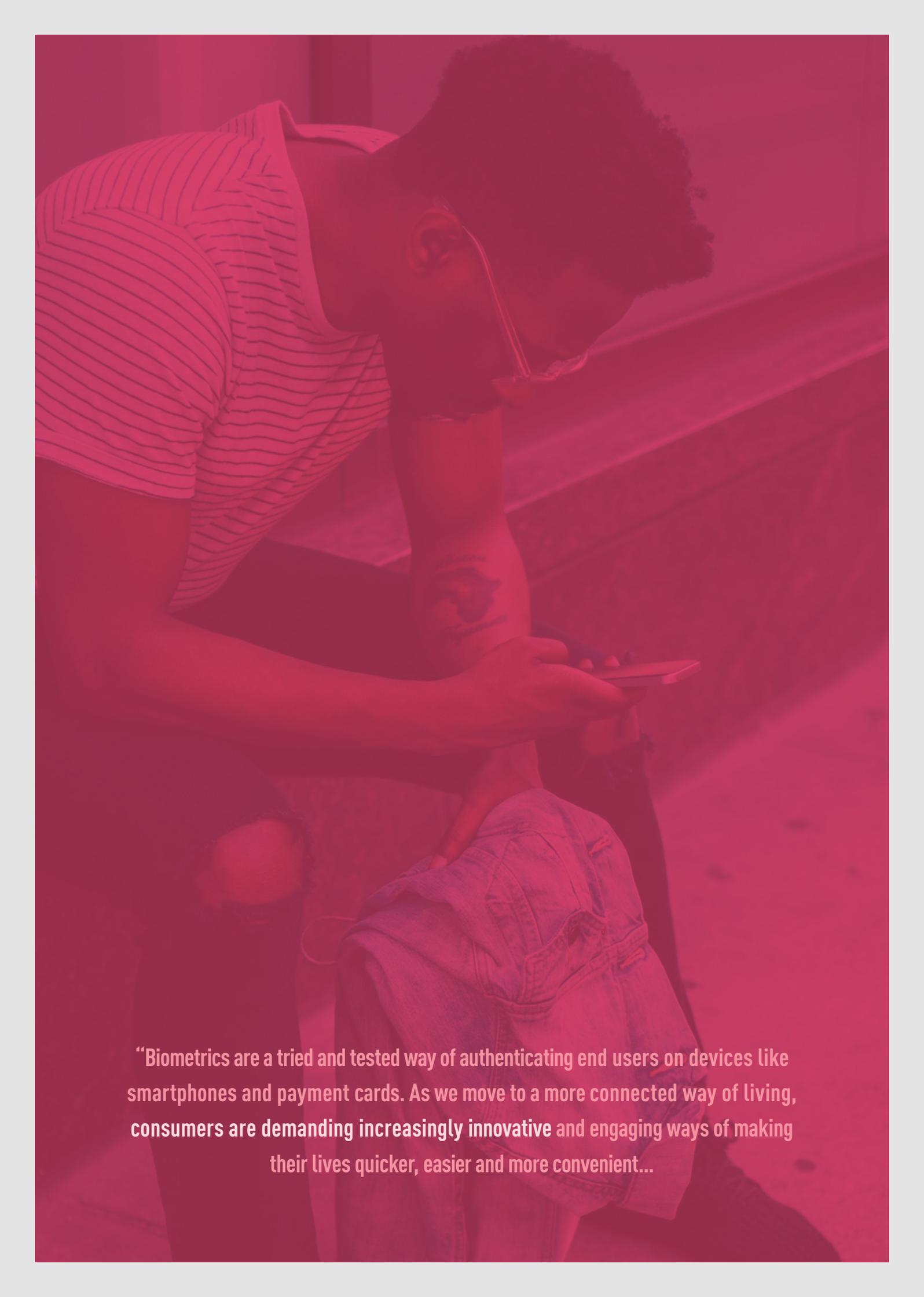
Like Crédit Agricole, Société Générale, RBS, NatWest and many others are sharing their requirements to ensure they have the right product for their customers.



CONSUMERS...

Are using biometrics increasingly more in daily life* and are looking for the same level of authentication for payment cards, without compromising on speed or convenience.

* An average smartphone user unlocks the phone about 100 times per day, for many biometrics has replaced the PIN already

A photograph of a man with short dark hair and glasses, wearing a white and black striped t-shirt. He is looking down at a smartphone held in his right hand. A denim jacket is slung over his left shoulder. The background is a blurred outdoor setting. The entire image has a red color overlay.

“Biometrics are a tried and tested way of authenticating end users on devices like smartphones and payment cards. As we move to a more connected way of living, consumers are demanding increasingly innovative and engaging ways of making their lives quicker, easier and more convenient...”

...now is the time
for banks to
capitalize on this
and prepare for
the future”

Thomas Rex, SVP Business Line Smartcards at Fingerprints

