# Protecting the future: Biometrics lead the way

With the global digitalisation of payments, consumers have more choice than ever in how to pay. Safeguarding the most personal information, while offering an easier, faster payment experience, are the goals of biometric authentication – and consumers are responding.

### Identity authentication methods for payment transactions have advanced over time

**Passwords** User ID and password

**Browser fingerprinting** Browser and operating system

Hardware tokens USB or key fobs using one-time password

**Biometrics** Used individually or in combination

















fingerprinting ID'ing a particular device

Device

Multiple fingerprinting Browser, operating system, device, IP tracking, network log analysis

**Active device fingerprinting** Digital artifact deposited by institution into the device

Biometrics plus behavioral and contextual info

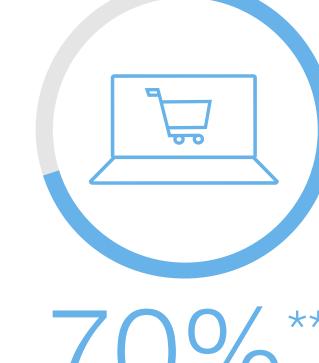
## The rise of biometrics poses challenges for both consumers and merchants

As technology advances, the use of biometrics is likely to soar

Biometrics authentication is expected to reach more than

£ 1.9 trillion\* in global payments by 2024





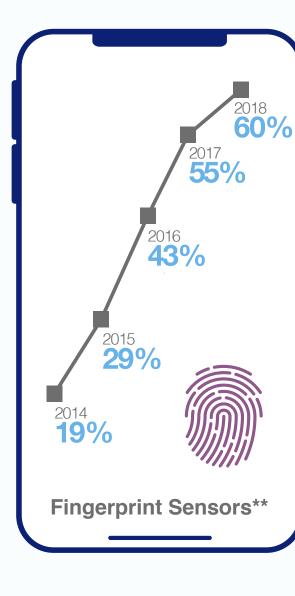
Many merchants see new technology, the rise of Big Data, and the need for advanced security driving change in their business

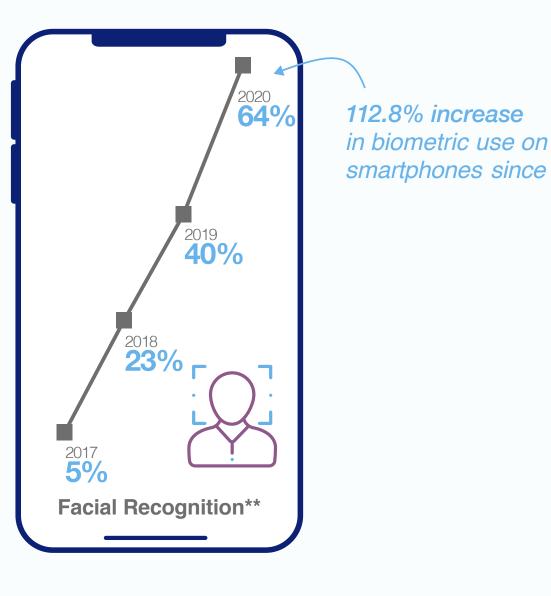
of online businesses admit they have

struggled to find a balance between improving security processes and keeping the customer journey quick and easy

## As technology spreads, consumers see benefits

**Smartphones shipped** with fingerprint sensors and facial recognition technologies see steady growth

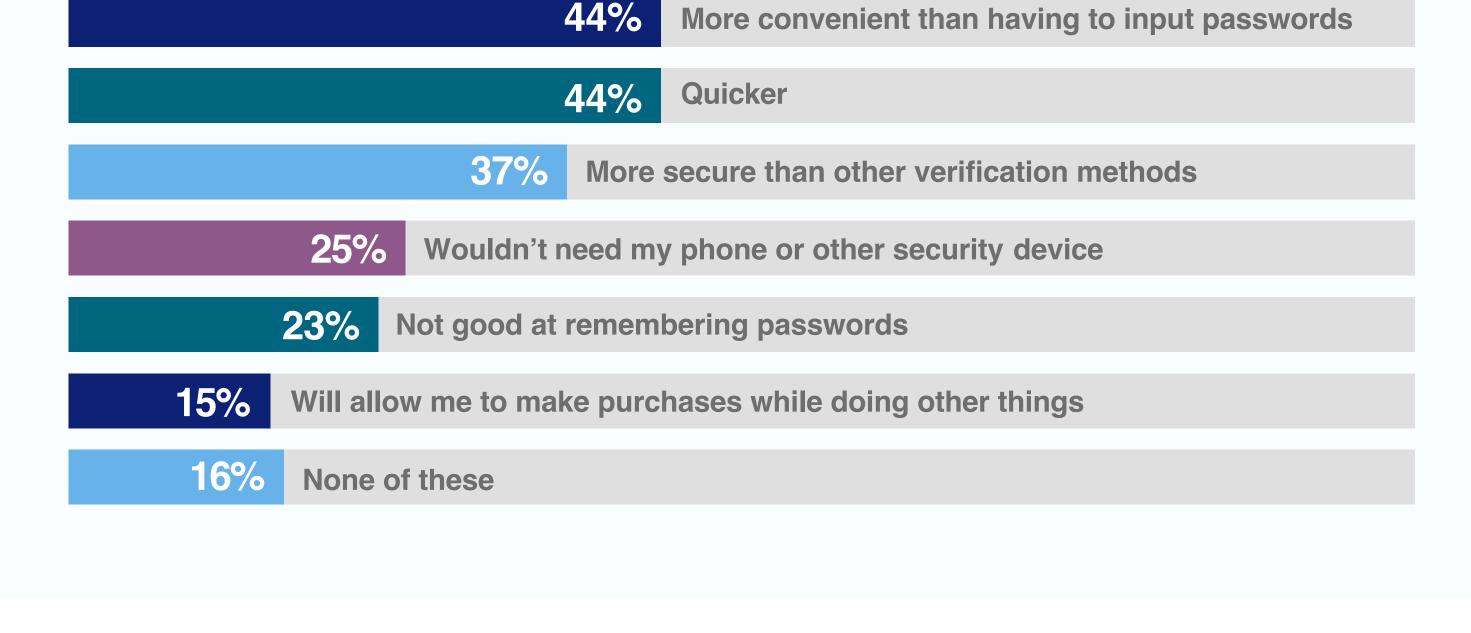




smartphones since 2017

using biometrics to confirm digital transactions\*\*

Internet users worldwide are discovering the benefits of

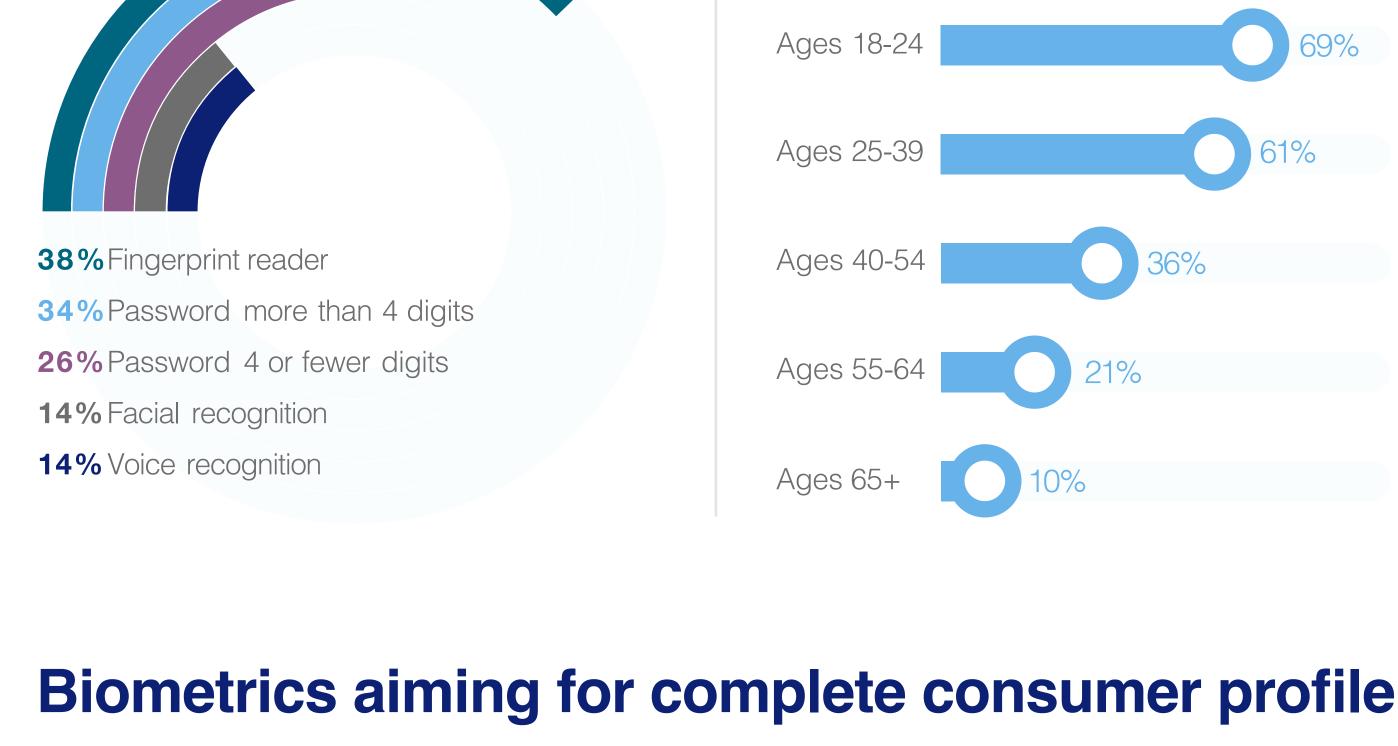


### While consumers are getting used to the But adoption can depend on age changes in mobile payments, they are Internet users worldwide are discovering the

transactions ...

Comfort levels vary by authorisation type and age\*\*

feeling most comfortable using ...



regulations, consumers, and merchants

## Ages 16-17 Ages 18-24

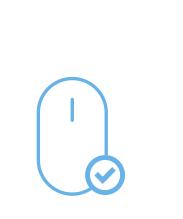
benefits of using biometrics to confirm digital

Ages 25-39 Ages 40-54 36% Ages 55-64 Ages 65+

69%

Today, the industry is looking forward to a range of biometric measures that are sure to affect

**Signature** Palms, hands, Voice Face, eyes,



**Behavioural** 

Keystroke dynamics,

mouse use, cognitive

analysis, gait, and

website behavior

recognition





and fingers

**Physiological** Left/right hand, finger size,

hand tremor



and ears

Cognitive Response to specific stimuli such as

heartbeat, brain

activity, skin alterations

or pulse





biometrics with device

ID, geolocation,

transaction and

navigation behaviours

recognition

# Persistent identity:

The ultimate weapon against fraud?

By recording a fixed set of identifiers for each individual, the creation of a persistent identity across

platforms – with biometrics and attestation of life – could deliver the ultimate fraud protection. Merchants considering implementing biometric authentication can educate consumers about the transaction and security benefits,

\*\* Sources: Mercator Advisory Group, Juniper Research, Aite Group, DFS Services LLC, Deloitte China Mobile Consumer Survey, Rachel L. German and

while dispelling concerns and myths about the new technology.

Content accredited to Discover® Global Network.

Regulation Authority. Details about the extent of our authorisation and regulation by the Prudential Regulation Authority,

K. Suzanne Barber, TrendForce, Counterpoint Research, LinkedIn Paysafe Group

\*2.5 trillion USD, 1 USD = 0.76294 GBP, www.oanda.com, October 23, 2020

and regulation by the Financial Conduct Authority are available from us on request.





