

Evolution of Touch-free

Right now, pre-World War tech is shaping a payment revolution. Contactless and Touch-free has gone from novelty to necessity in no time at all thanks to accelerating innovation. Today, newer tech is changing how we live and work – who knows where tomorrow may lead.

One thing is clear. As time goes on, the right technology and the right partner will be more important than ever for merchants. Mastercard's white label solutions and digital enablement allow every business to ride the wave of innovation with minimal costs.

PAST

Smarter payments

The story of Touch-free starts nearly 50 years ago. Mastercard's founding helps create the EMV standards that allow secure payments worldwide. Meanwhile, the invention of RFID (radio frequency identification) enabled fast, contactless one-way communication, while "smart cards" with integrated circuits provided the right medium for a new generation of payments.

1966



Mastercard founded

1975



First smart card prototype created

1983



First patent for "RFID" granted

1993-1994



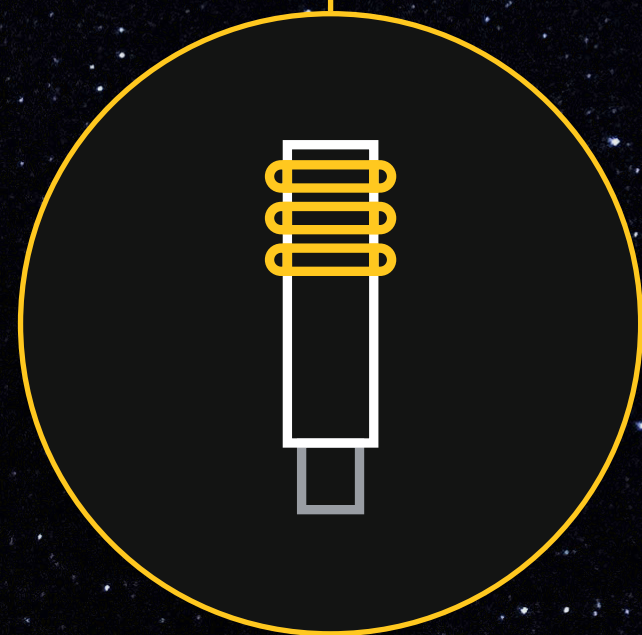
All French bank cards come with a chip, EMV standard introduced

PAST

Birth of Touch-free

Mobil creates Speedpass™, using RFID to let truckers rapidly pay for fuel and get back on the road. Following the first human RFID implants Mastercard investigates their use in payments, and RFID is refined into Near Field Communication: NFC is the core of modern contactless, allowing two-way chat between card, smartphone, wearable and payment terminal.

1997



Speedpass™
RFID payments
introduced in US

2001



RFID implanted
within humans

2003



Mastercard
investigates payment
by implant

2006



First
NFC-enabled
phone – Nokia
6131 NFC

2007



First UK contactless
payments card
launched –
Barclaycard OnePulse

PRESENT

Chasing convenience

Recognizing the opportunities of NFC, payment companies release their own contactless solutions using what people are already carrying. Payment moves from a wave of a card, to a wave of a phone, watch or bracelet. Still, companies look towards greater convenience with solutions like biometrics and implants – though greater concerns are soon to arrive.

2014



Apple Pay
US release

2015



Android Pay and
Samsung Pay release

2017



Fitbit Pay introduces
wearable payments
via RFID chips

2019



NatWest trials first
biometric payment card

PRESENT

A world of Touch-free

With the coronavirus pandemic arriving, the need for fast, secure and convenient payments had never been quite so obvious. Adoption of contactless increased massively, while innovation on biometrics and implants got us closer to truly Touch-free and convenient payments – with Mastercard, Amazon and others launching their solutions.

2020



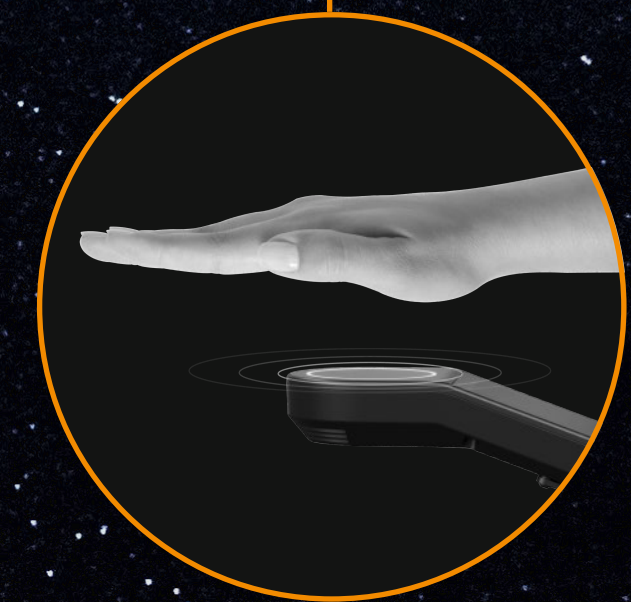
Spread of coronavirus



Contactless card limit increased in multiple countries



Business/merchant digitization accelerated



Amazon launches Amazon One – palm-based biometric payments and entry

PRESENT

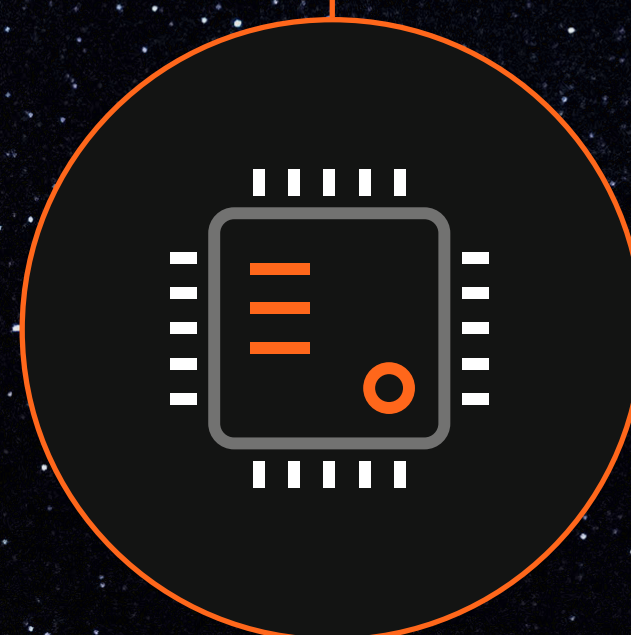
Technology meets desire

Payment Services Directive 2 (PSD2) allows enhanced data transfers, making new solutions possible. Right now, demand for convenient Touch-free payments has never been higher, and wearables and medical implants are increasingly common and able to read biometrics. With the right technology merchant-side and MPGS as a partner, completely invisible Touch-free payments will be possible soon.

2021



Mastercard launches
biometric payment cards



Swedish firm
develops implants for
worldwide payments



FCA consulting on increasing
contactless card limit



PSD2 deadline

FUTURE

Touch-free,
cash-free

2021-2029



Wearables allow biometric payments using your heartbeat



Merchant-side biometrics introduced



Smartwatches replace smartphones/wearables



Medical implant usage continues to rise

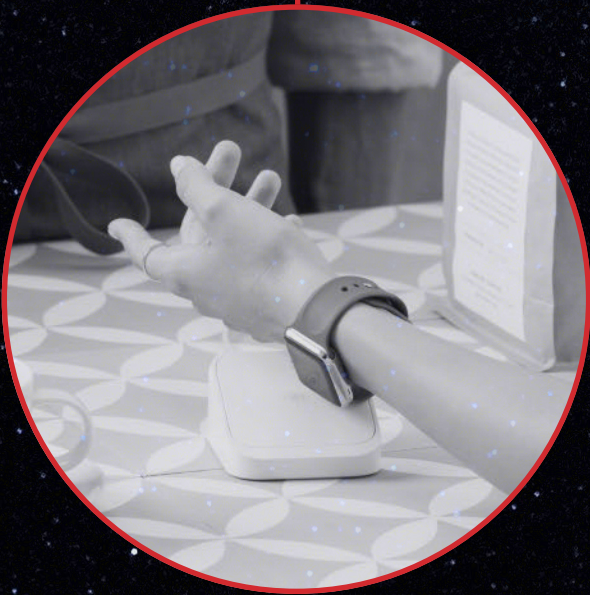
FUTURE

Convenience and security continue to improve for Touch-free payments, with technology allowing wearable and implant payments from further away, and authentication using biometrics getting smarter. Payment gateways and partners adapt to the new demand, meaning merchant terminals are compliant out of the box. Physical payments give way to a new Touch-free era.

2030-2039



Mastercard launches first invisible payments with implants



Wearables and biometrics become main way to pay

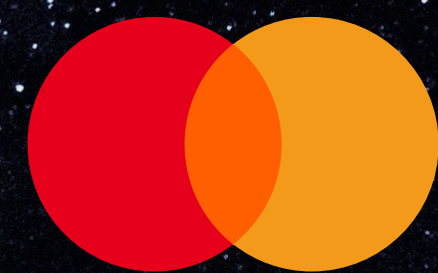
2040-2049



Enabled by the right payment partners, merchants worldwide accept Touch-free



Cash use drops to near-zero



payment gateway services