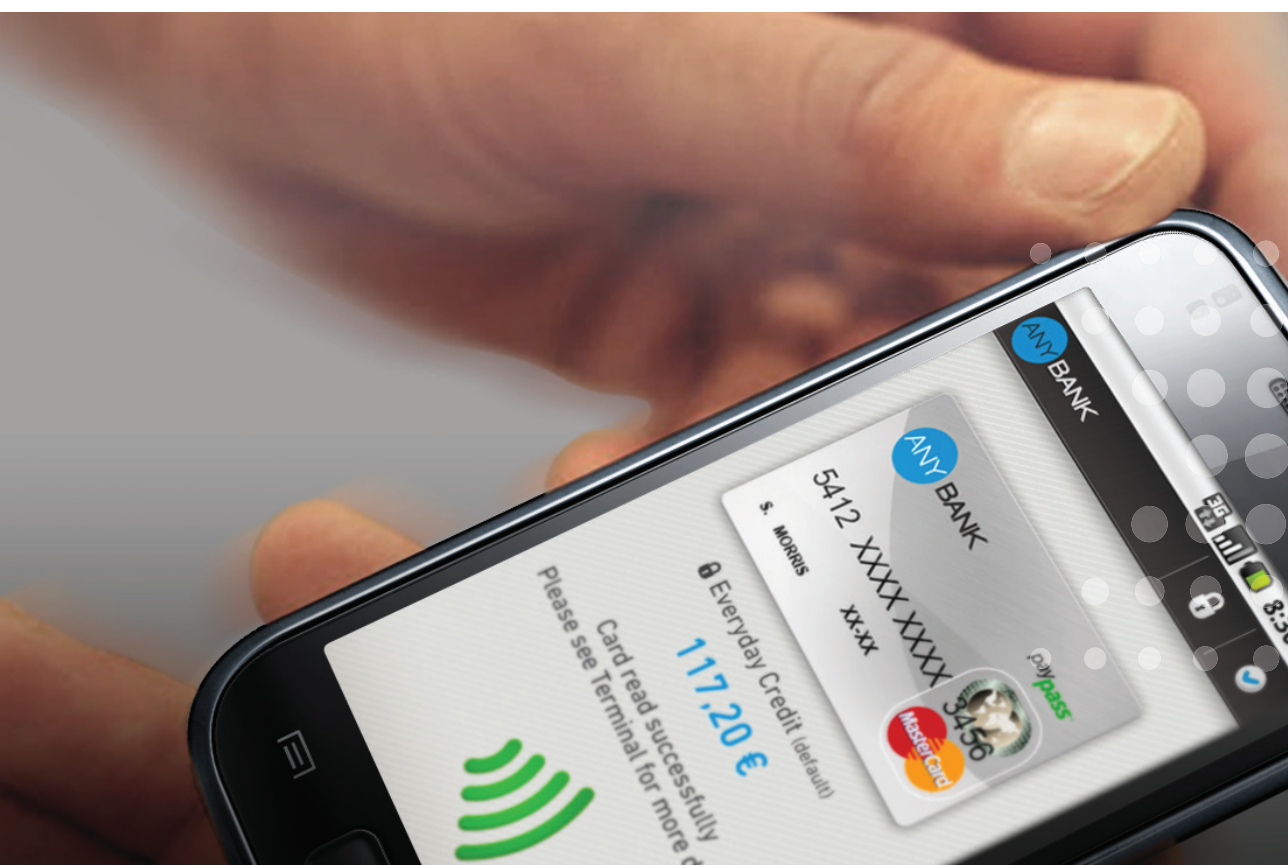


# ADVANCING MOBILE PAYMENTS

ADVANCING COMMERCE



**USD 670 billion**

JUNIPER RESEARCH FORECASTS THAT  
WORLDWIDE MOBILE PAYMENTS WILL  
GROW TO USD 670 BILLION BY 2015.<sup>1</sup>

The mobile phone is rapidly becoming the consumer device of choice for making purchases and managing their money.

MasterCard has the expertise, technology, applications, industry alliances, and proven processes to help you provide your customers a safe, simple, smart way to make Tap & Go™ payments—on any compatible device, with any payment type, for any amount.

1. Juniper Research, Mobile Payment Strategies – Opportunities & Markets (2011–2015), May 2011.

MasterCard pioneered contactless payments, and with Mobile PayPass MasterCard is again leading the way with the next generation of consumer payment solutions to expand your payments revenue to mobile NFC channels. Mobile PayPass is an application you can readily deploy—making mobile payments simple, safe, and smart for your customers—to capture more spend in more places.

**MasterCard enables NFC PayPass payments on your customers' mobile devices, anywhere, with any payment type, for any amount.**

Consumers want to transact when, where, and how they choose. Worldwide, near field communications (NFC) payments are on a high-growth path: NFC will facilitate USD 74 billion in transactions by 2015,<sup>2</sup> and 85 percent of all POS terminals shipped will have contactless functionality in 2016, up from 10 percent in 2010.<sup>3</sup> Mobile PayPass leverages the security and global interoperability of EMV™, plus the leading NFC PayPass technology, to fast track mobile payments for all players in the industry. This flexible application can be tailored easily to offer a differentiated mobile payment experience, bringing the speed and convenience of Tap & Go contactless transactions to both low- and high-value transactions, at both PayPass M/Chip™ 4 and PayPass magnetic stripe terminals in markets across the world.

#### How issuers benefit:

**More revenue** – With multi-channel convenience and the speed of PayPass, you capture more spend

**Competitive advantage** – Offer a new payments mode that consumers want, and will soon demand

**Multi-channel strategy** – Employ an integrated solution differentiated from alternative payment providers

**Improved risk management** – Benefit from multi-tiered security controls, including cardholder authentication and fraud scoring

**Higher average spend** – Mobile PayPass accepts higher transaction value with tap and PIN in some markets

**Speedier checkout at POS** – Boost customer satisfaction and sales with Tap & Go payments

**Safe and secure platform for mobile payments** – Built on PayPass and M/Chip 4 for the security and control of EMV

**Easy implementation** – All-in-one, proven, global and flexible platform offers all the elements needed

**Higher-value relationships** – Enhance relationships and loyalty with greater convenience and an enhanced user experience

**Greater value** – Add search-to-purchase capability, geo-localized offers, loyalty programs, instant rebates, and more

#### How your customers benefit:

**Greater convenience and acceptance** – Make contactless payments anywhere, with multiple devices, with any payment type, for any amount

**Tap & Go checkout at POS** – Speeds checkout for busy, on-the-go consumers

**Added security** – Multi-tiered security controls and alerts, and confirmation of payments made, bring greater peace of mind to Internet and POS purchases

**Easy money management** – Easy-to-use billing and account management functions built in, providing access to transaction history, mini-statements, and more

**Richer, consistent user experience** – Mobile-optimized payment process is simple, secure, smart

**Greater value** – Stores coupons, recurring payments, loyalty, travel, and memberships in one place, and offers search-to-purchase capability, geo-localized offers

## USD 74 billion

NFC will facilitate USD 74 billion in transactions by 2015.

Juniper Research, March 2012.

## +30%

30% lift in overall spending across all spend segments is correlated with PayPass adoption.

Tap-active PayPass accounts vs. control, U.S. consumer credit, 12 months after adoption. MasterCard Advisors, U.S. PayPass Adoption Study, April 2012.

2. Juniper Research, March 2012.  
3. ABI Research, 2011.

## HOW IT WORKS

The Mobile PayPass Application secures the payment credential within a secure element on the mobile phone—enabling safe, simple, smart payments with a Tap & Go. There are three easy ways to make fast, secure payments with a mobile phone, using the Mobile PayPass application.

### Low-Value Transactions

For low-value transactions, consumers follow the same Tap & Go process they are familiar with when they use a PayPass-enabled card:

Consumer taps mobile phone at terminal. PayPass transaction complete, consumer removes phone and terminal confirms when the payment is authorized.



### High-Value Transactions

For high-value transactions, additional security helps reduce fraud risk. With mPIN one of two methods can be used: either consumer enters a PIN first, or the consumer taps first, then enters PIN, followed by a second tap:

#### Pre-PIN

Consumers can pre-enter their PIN in preparation for the transaction, then tap the mobile phone to complete the transaction quickly without needing a second tap. Consumer removes phone and the terminal confirms when the transaction is authorized.



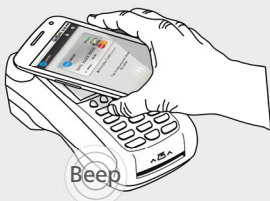
1. Enter PIN



2. Tap mobile phone on terminal

#### Two Tap

Consumer taps mobile phone at terminal. Phone requests consumer to enter their PIN. Then consumer taps the mobile phone a second time. Consumer removes phone and the terminal confirms when the transaction is authorized.



1. Tap mobile phone on terminal



2. Mobile phone requests PIN



3. Tap mobile phone on terminal again



Mobile *PayPass* delivers a rich, easy user experience

### Mobile *PayPass* Delivers an Integrated Payment Solution

- Compatible with existing *PayPass* magnetic stripe and *PayPass* M/Chip profiles
- Acknowledgement allows consumer to actively approve transactions
- mPIN enables high-value transactions
- Payment control and history integrated with mobile user interface
- Enhanced security features safeguard against fraudulent use after being lost or stolen
- Issuer and consumer PIN change and unlock features
- Issuer branding and card design embedded into the application
- Supports multiple secure element form factors

### A Powerful, Proven Solution

Mobile *PayPass* is designed to help issuers, merchants, and mobile network operators (MNOs) fast track mobile payments so they can meet the rising demand from consumers for safe, simple, smart payments. Employing the global EMV standard for high-security payments and the world's leading NFC *PayPass* technology for fast, contactless checkout, Mobile *PayPass* supports multiple payment types, including credit, debit, and prepaid, on multiple devices. Partnering with leading technology companies, mobile operators, handset manufacturers, and other providers, MasterCard has launched commercial-scale mobile payment propositions in every continent.

### The Fast Track to Mobile Payments

Work with the dedicated mobile team from MasterCard to receive years of experience implementing mobile, EMV, and contactless NFC around the globe. We offer expertise, training, business and technical support, and optional consulting services to maximize your mobile strategy. In addition to the Mobile *PayPass* application, MasterCard offers a User Interface Software Development Kit (Mobile *PayPass* Software Development Kit) that allows you to quickly provide your customers with a seamless mobile payment experience. Our proven process helps ensure a smooth, successful deployment.



**For more information, contact your MasterCard relationship manager or email [mobilepaypass@mastercard.com](mailto:mobilepaypass@mastercard.com).**

MasterCard Worldwide is at the heart of commerce. Our understanding of how and why commerce is conducted allows us to create more advanced methods of payment that fuel economic connections and drive real business value.

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