

ADVANCING MOBILE PAYMENTS ADVANCING COMMERCE



USD 670 billion

JUNIPER RESEARCH FORECASTS THAT WORLDWIDE MOBILE PAYMENTS WILL GROW TO USD 670 BILLION BY 2015.¹

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.

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 2015,² and 85 percent of all POS terminals shipped will have contactless functionality in 2016, up from 10 percent in 2010.³ Mobile *PayPass* leverages the security and global interoperability of EMVTM, 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/ChipTM 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

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 **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

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 – Mobileoptimized 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.

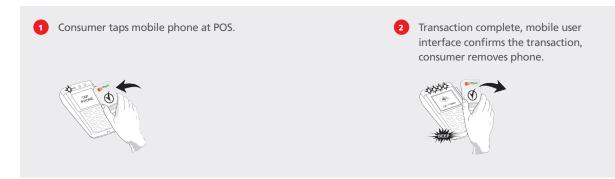


HOW IT WORKS

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:



High-Value Transactions

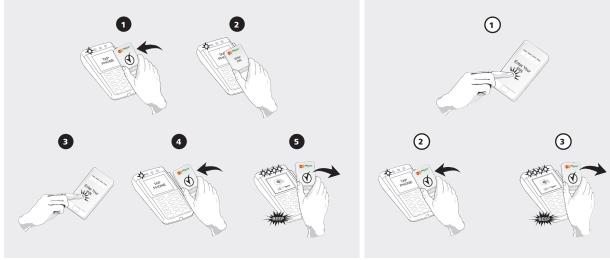
For high-value transactions, additional security helps reduce fraud risk with one of two methods: consumer enters a PIN first, or the consumer taps first, then enters PIN, followed by a second tap:

Two Tap

The consumer taps their mobile phone at the POS, and the terminal requests the customer to enter their PIN. Then the consumer taps the mobile phone a second time to complete the transaction and the mobile user interface confirms the transaction.

Enter PIN First

When the consumer learns the transaction will require PIN entry, they can speed up the transaction by entering their PIN first, then tapping the mobile phone, completing the transaction quickly without needing a second tap. The mobile user interface confirms the transaction.







Mobile *PayPass* Delivers an Integrated Payment Solution

- Compatible with existing *PayPass* magnetic stripe and *PayPass* M/Chip profiles
- Acknowledgement allows consumer to actively authorize transactions
- mPIN enables high-value transactions in offline PIN markets
- 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. MasterCard can also help you arrange for simple, secure transfer of your customers' card credentials onto their mobile smartphones. Our proven process helps ensure a smooth, successful deployment.



For more information, contact your MasterCard relationship manager or email 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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