



A MASTERCARD MARKET INTELLIGENCE REPORT

Accelerating digital commerce

Meeting evolving consumer expectations in a digital world



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Executive overview

Fostering consumer trust in the digital world

As people increasingly turn to their smartphones and other devices to shop, the distinction between physical and digital payments is blurred. It is already common for consumers to shop online and pick up in-store, and use their mobile to hire a car on demand. The Internet of Things (IoT) and connected homes and cars are bringing the digital and physical even closer.

The acceleration of digital adoption is creating new complexity, but also opportunities to greatly increase revenue, deepen customer engagement, reduce fraud, and increase consumer trust.

All payments stakeholders are working to deliver outstanding consumer experiences—simple, secure, transparent digital payments both online and in store. Just as payments in the physical world have become more convenient and secure with EMV and contactless technology, EMVCo Secure Remote Commerce (SRC) standards are being developed to create a framework for the best payment experience in the digital ecosystem.

Digital first

89%

of U.S. consumers own a mobile phone, and most are smart phones¹

Remote commerce

3x

U.S. eCommerce spending is growing more than 3X faster than retail sales overall²

Security fears

20%

of consumers switch their bank after experiencing fraud³

Digital fraud

4x

Digital fraud is 4X higher than point-of-sale (POS) fraud⁴



EMV SRC

EMVCo Secure Remote Commerce standards deliver security, convenience, and interoperability to streamline remote digital payments for consumers and scale adoption for all market participants.

¹ Deloitte, Global mobile consumer trends, 2nd edition, 2017.

² Ecommerce Retail Sales Grew 16.4% Yoy In Q1 2018 Vs 4.5% For Total Retail Sales. U.S. Dept. of Commerce, Quarterly Retail E-commerce Sales 1st Quarter 2018.

³ Aite Group, 2016 Global Consumer Card Fraud: Where Card Fraud Is Coming From.

⁴ Mastercard, Jan.-Nov. 2017 data across all card types, 2017.



State of the market

Consumers expect a streamlined digital shopping experience

To earn their loyalty and grow revenue, consumers expect better digital experiences

In consumers' minds, the shopping experience is no longer divided into "physical" and "digital." Indeed, 58% of in-store sales will be influenced by digital devices during consumers' purchase journey by 2022.¹

Benefitting from the enhanced security of EMV chip and growing use of tokenization at the physical POS, consumers expect the same level of security and convenience with their digital payments. By supporting new EMVCo SRC payments standards, Mastercard is calling on the industry to improve the consistency and bring chip-like security to all online payments wherever consumers want to pay. Doing so will raise the scale and expand the reach of digital commerce.

Growth in eCommerce

1 in 5

Digital commerce equals nearly 1 in 5 discretionary dollars spent by consumers²

Through more devices

30.7B

By the end of 2020, 30.7 billion IoT connected devices will be in use worldwide³



¹ Forrester, *Digital-Influenced Retail Sales Forecast, 2018 to 2022 (US)*, March 2018.

² comScore Q417.

³ <https://www.statista.com/statistics/471264/iot-number-of-connected-devices-worldwide/>



Urgency

A single digital standard offers greater simplicity and security across experiences

Consumers are demanding a simpler, safe digital experience, especially now that mobile is becoming their preferred interface. Yet security concerns lead them to worry where cards are stored, making them reluctant to store cards on file with merchants, and to seek security solutions stronger than passwords. At the same time, they are faced with multiple steps at checkout, with varying experiences. Digital commerce cannot scale unless these points of friction are addressed.

Barriers to growing the digital economy

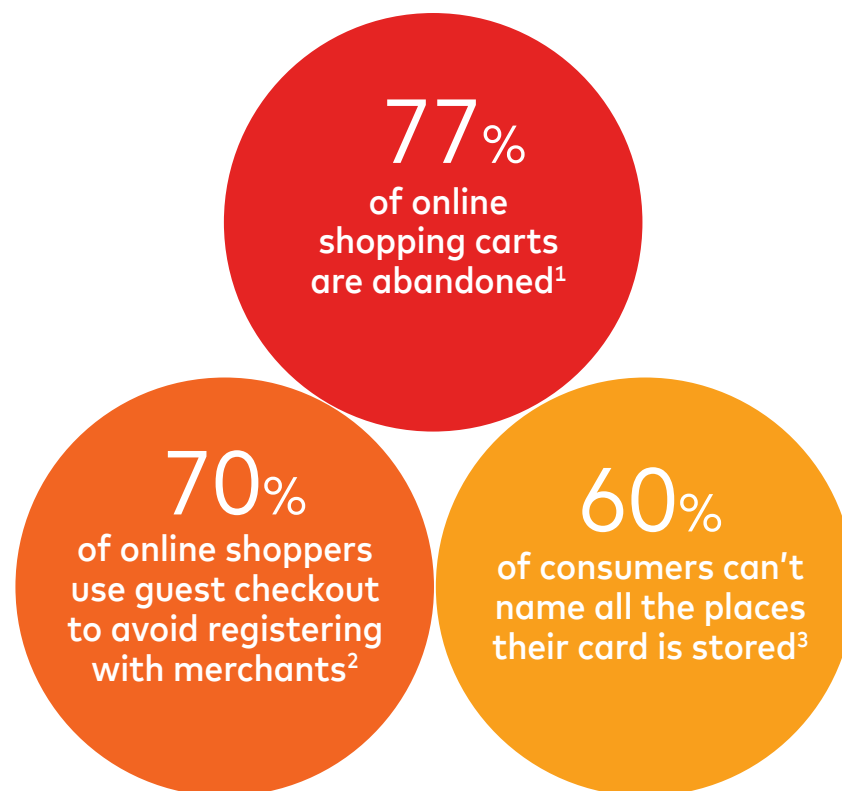
Inconsistent shopping journey: Consumers are frustrated by the current digital purchasing experience, which is time-consuming, inconsistent, and often confusing.

Lack of trust: As fraud migrates from the POS to digital and as security breaches grow more frequent, consumers fear that their personal and payment information may be compromised.

Lack of transparency: Many consumers forget which merchants have their cards stored on file, and security concerns discourage them from storing information.

Fragmentation: Lacking holistic solutions from their banks, which consumers prefer, they look to fintechs and other new holistic solutions.

By leveraging SRC standards, the purchase experience across all digital devices will become as consistent and as ubiquitous as terminals at the POS. All participants will gain the ability and scale to connect the physical and digital and create new business models. Consumers will gain greater transparency and control with advanced biometric and AI-based authentication solutions delivering speed and security.



¹ Global rate 2016. <https://www.barilliance.com/cart-abandonment-rate-statistics/>

² Phoenix, Consumer Payments Monitor, U.S., 2017.

³ Mastercard Omnibus Study, October 2017.



Opportunity

More rapid innovation, security, and a consistent UX to offer differentiating new services to consumers

Digital payments are the largest opportunity for Mastercard and our customers, and enabling the full consumer journey is the winning strategy, built upon on five pillars: delivering the best digital experience everywhere; securing every transaction; digitizing all forms of personal and business payments; simplifying access to and integration of digital assets; and thinking beyond the payment.

This framework, inclusive of EMVCo digital payment standards, will ensure interoperability across the payments ecosystem, enhance security with tokenization and biometrics, standardize the merchant interface, put our customers at the center of every user experience, and simplify adoption for all market participants.

The opportunities of seamless, ubiquitous payments across channels, devices, and other points-of-interaction are nearly endless



WeWork's members can buy snacks and beverages at the shared office space kiosk without having to pull out a wallet for payments



Starbucks' trail-blazing mobile order-ahead option is spurring growth across the QSR industry, projected to be \$38B within 2 years¹



Millions of New York commuters now pay their train fare with the **MTA eTix** app from Mastercard and partner Masabi



Ally Bank integrates data from different sources for such services as "Splurge Alerts" as users get close to locations where they tend to overspend

¹ <https://www.merchact.com/mobile-order-ahead-heat-2018/>



Implications

Industry standards require the participation and developments of all parties involved

EMVCo standards provide a framework for how merchants, issuers, and networks can partner together to create an enhanced consumer experience.

Global decisioning and authentication standards will ensure that all merchants send the same data to issuers. This will simplify merchant implementation, make fraud management easier for both issuers and merchants, and result in more approvals.

Because nearly 75 percent of all Mastercard cards worldwide are ready to be tokenized, extending network tokenization and standards can be readily implemented. For merchants, tokenization not only improves security of guest checkout through an SRC framework, but enhances and drives usage of the card-on-file experience, while reducing the risk of storing payment details. For issuers, tokenization continues to reduce fraud across more transactions and maintains top-of-wallet position in combination with Automatic Billing Updater.



EMVCo's SRC Framework and Specification¹

- 01 **Define interfaces** to enable secure exchanges of data between participating entities, which include merchants and issuers.
- 02 Outline methods to help **protect transactions** with dynamic data (for example, the transmission of transaction-unique data or a unique cryptogram for each transaction).
- 03 Enable **consistent integration** of new technologies such as EMV Payment Tokenization and EMV 3-D Secure.
- 04 Facilitate the delivery of a **consistent user experience**, indicated by an SRC Mark, which conveys an SRC-enabled merchant environment for the consumer.

¹ EMVCo Statement – EMV® Secure Remote Commerce.



Solutions

A suite of digital capabilities enable all parties to participate

We have built Digital Commerce Solutions, encompassing all digital use cases, as the foundation for the digital-first economy.



Security

Securing cardholders and credentials in devices, with merchants and in IoT use cases, complemented by 3DS 2.0 authentication

Mastercard Identity Check (3DS) – Mastercard Identity Check leverages 3DS 2.0 to provide an enhanced and standardized authentication experience

MDES for Merchants – Manages credentials via tokens instead of PANs for best-in-class security and lifecycle management, both in SRC and CoF



Simplicity

Seamless payments made possible with platform-level credential management and engagement with Masterpass

Masterpass™ – It is an intuitive and secure way to pay with a substantial acceptance network, and a migration path to the SRC environment

Automatic Billing Updater – Supports lifecycle management for token and card-on-file in recurring payments and eCommerce



Transparency

Transparency and convenience with account credential controls and spend controls

Consumer Control APIs – Cardholders can push credentials into digital environments like SRC for faster scale, and they will have a unified view of their credentials across merchants and devices



Value-added services

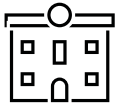
Value-added services such as rewards and consulting services to drive transactions, fraud strategies, and customer acquisition

Pay with Rewards – Enables cardholders to transact using their rewards points at the digital point-of-sale to drive top-of-wallet behavior



Outcomes

Adoption of standards will enable new innovation across digital commerce to benefit everyone



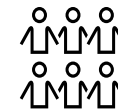
For issuers

Issuers will be at the center of their consumers' digital experiences across all channels and devices, and able to provide innovative, differentiated services across the consumer journey.



For merchants

With industry-wide standards and solutions, merchants can spend less time on payments and fraud, and focus on creating seamless experiences and building their business.



For consumers

Consumers will benefit from a consistent experience across merchants, devices, and browsers, giving them the confidence and simplicity they enjoy in the physical world, with the trust they prefer from their bank.

Seamless UX

81%

of consumers say they love being able to check out with one click¹

Card on file

↑ 88%

A cardholder that has a card stored at just 3 merchants spends 88% more than average²

Digital wallets

↑ 23%

Consumers using digital wallets spend 23% more overall³

Lower costs

33%

of consumers would make fewer calls to their bank's customer service if the UX were easier⁴

¹ Mastercard Glenbrook Consumer Control Research, among 21-34 year olds, January 2018.

² Mastercard Advisors.

³ Mastercard Advisors, Impact of Digital Wallets.

⁴ Incite Market Planning, Growing In Control: consumer needs and issuer benefits, 2016.



Key takeaways

1. Consumers expect the same consistent experience and security on digital channels that they have come to expect from the physical POS.
2. Mastercard is calling on the industry to support new EMVCo Secure Remote Commerce standards to help secure, streamline, and scale digital payments online and in-app.
3. We will continue to offer a set of solutions and services that align with this standard in combination with our 4 key principles for digital payments:



We develop **partner-centric** solutions



to create **seamless and consistent** experiences



that are **secure and maintain trust**



and provide **consumer transparency** to control their data





For more information on Secure Remote Commerce, contact your Mastercard account representative.



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