Achieving business success in payment innovations

MAKING PAYMENTS SAFE, SIMPLE & SMART
Introduction

In the last five years we have witnessed a revolution in payments, transforming both how consumers make purchases, as well as the opportunities available to retailers. However, with these opportunities come transformational changes in how retailers take payments. The options used to be simple: cash or card. But now, consumers and businesses alike have a myriad of options when it comes to making payments, and these are evolving and changing constantly. From wearables and biometrics, to all manner of mobile app payments, the choices are staggering.

Staying up to date with a constantly evolving payments landscape can be overwhelming for businesses, especially as companies compete by rapidly diversifying to maintain relevance in the market, without compromising on safety and security.

Additionally, today’s consumers are much more complex characters, with multiple personas dependent on the type of purchase they are making. However, regardless of the purchase being made, the payment experience provided by businesses must be seamless and frictionless.

Failure to meet consumer expectations can be detrimental to business, whether through brand loyalty or loss of sales.

Assessing the Payments Landscape

It’s clear that alternative payment technology innovations have the potential to dramatically enhance a consumer’s end-to-end retail experience, and we’re already seeing evidence of this in their growing popularity.

A record 27% of US smartphone users used mobile pay options such as Apple, Android or Samsung Pay at some point in early 20161. Forrester2 estimated that US consumers would spend $83bn via mobile in 2016 as a whole, tripling to $282.9bn by 2021.

While these are impressive figures, this only represents eight percent of total retail sales ($4.83trillion) in the U.S and adoption across markets varies dramatically. The key to improving these figures across multiple markets lies within the adoption of new and innovative payment methods.

However, with new payment innovations come various challenges. From too much choice to how to know what investment to back wisely, the options often seem endless and it’s therefore not surprising that retailers often suffer from a payment paralysis. Nonetheless, it is important to assess and overcome these challenges.

"Payments is an area that has been undergoing frenzied innovation in the last few years. We have reached a point where iterations of payments seems normal to us as pace of change has been dramatically increasing. The future of payments is to make it seamless and almost invisible.

As we start what will come to be known as the Internet of Things revolution, it’s important for us to help retailers on their journey towards new methods of payments.”

Raghav Prasad, EVP, Payment Gateway Services, Mastercard

As digital payments continue to proliferate and evolve, security remains a major priority. Retailers worry about data or payment issues taking place under the guise of their brand, which could ultimately damage their reputation and credibility. Security is always of primary concern for any merchant on behalf of their customers when adopting new and innovative technology – and now even more so.

Safety and security is at the heart of Mastercard business operations. The Mastercard Payment Gateway provides a variety of methods to enable merchants to securely accept payments without ever being exposed to sensitive payment credentials, significantly decreasing the retailer’s exposure in the case that their eCommerce or POS systems are breached.

Taking things even further, Mastercard Gatekeeper utilizes the latest technologies and innovations to help merchants detect consumer fraud with precision whilst protecting legitimate consumers. Gatekeeper as a solution enables retailers to benefit from significantly lowered level of chargebacks and increased revenues. The solution provides consumers with a superior experience due to minimizing false positives and in turn, retailers are given the confidence to expand into new markets and geographies.

It’s very clear that for retailers, achieving protection, innovation and profitability is a crucial balancing act. Retailers worry that implementation of new technologies to provide new forms of payment will be both costly and time consuming. There is also no guarantee they will see immediate value-add. Some payment innovations require a very simple merchant set up, connect a tablet as Point of Sale (PoS) and install the payment app, whereas others can be more complex. For retailers, navigating this landscape can be confusing. A survey by PWC\(^3\) in late 2016 of more than 350 global retailers’ CEOs suggests more than half of retailers haven’t started implementing and are struggling to define or don’t even have plans to develop a digital transformation strategy.

Customers value choice, especially when it comes to purchases. Yet for retailers, this presents a challenge. When there were two options of how to pay, this made things a lot simpler. However, with so many different platforms offering a vast number of ways to pay, from digital wallets to mobile payments, the process is more complex. What is more, retailers do not always have the infrastructure or bandwidth to accept all types of payments.

Retailers have to think about their entire supply chain and the impact a new payment method will have on the business. Future proofing payment methods is just one set of challenges facing retailers on a day to day basis. However, retailers must realize that they need to assess the full payments landscape and look to implement what will be of most benefit to the business on a short-term and longer-term basis.

Ultimately, retailers are also under pressure to create a better purchasing experience, improving the time and experience between the check out and the ‘back office’, all within a safe and secure environment. This, in turn, drives customer loyalty, proof of which can be found in the rate of shopping cart abandonment, which stands at over 70% globally. When the payment process isn’t seamless, consumers are quick to give up. This is especially the case on mobile devices. In the US, research suggests that shoppers are struggling to go beyond the shopping cart on their devices. Nearly a third of carts becomes a sale on desktops whilst just 19% reach a sale on mobile\(^4\). Of the reasons given, only 17% of consumers had no real intention of completing their purchase and a further 8% were scouting for a deal, so the payment process is certainly a significant factor. Results for Europe’s buyers followed a similar pattern.

\(^3\)http://jda.com/-/media/jda/knowledge-center/thought-leadership/ceo2017_executive-summary.ashx

Retailers are looking at ways to overcome shopping cart abandonment. According to Q1 2016 research, the digital shopping cart abandonment rate is high worldwide, at 74.3%.

Digital shopping cart abandonment rate for brands worldwide, by region, Q1 2016

<table>
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<th>Region</th>
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<tbody>
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<td>Asia Pacific</td>
<td>75.9%</td>
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<tr>
<td>Middle East &amp; Africa</td>
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</tr>
<tr>
<td>Latin America</td>
<td>75.4%</td>
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<td>Europe</td>
<td>71.5%</td>
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<tr>
<td>Worldwide</td>
<td>74.3%</td>
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Note: represents activity among SaleCycle clients, broader industry metrics may vary.
There is strong evidence to suggest that the adoption of new payment methods has a direct impact on revenue, helping retailers retain existing customers and attract new ones.

What is more, the cost of implementation is significantly decreasing with many systems no longer reliant on a new Point of Sale or back-end legacy systems, making for much smoother and quicker implementations.

Customers are also beginning to see new ways of paying as a real game changer between retailers. In fact, a 2016 survey found that 38% of Europeans abandon their shopping cart when their favorite method of payment is not supported.

Streamlining payments creates a better experience whether online or instore and significantly impacts customer retention. In fact, when looking globally at how business areas have improved due to e-commerce adoption, 66% reported customer average order value had increased, 63% reported new customer acquisition and 59% increased customer retention or loyalty.

The good news for retailers is that new payment technologies are constantly being brought to market, so there are multiple ways for retailers to take advantage of the latest innovations. Among these, there are a few key trends worth noting, which are beginning to gain lots of traction in the global market.

Business areas that have improved due to ecommerce solution adoption according to midmarket B2B ecommerce decision-makers worldwide”, May 2016

<table>
<thead>
<tr>
<th>Area</th>
<th>% of respondents</th>
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</thead>
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<tr>
<td>Customer average order value</td>
<td>66%</td>
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<tr>
<td>New customer acquisition</td>
<td>63%</td>
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<tr>
<td>Customer retention/loyalty</td>
<td>59%</td>
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<tr>
<td>Overall profitability per customer</td>
<td>58%</td>
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<tr>
<td>Upsell/cross-sell</td>
<td>52%</td>
</tr>
<tr>
<td>Shopping cart abandonment</td>
<td>43%</td>
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</tbody>
</table>

Note: n=352; responses of “significantly improved” or “improved” *companies with revenues of $25 million-$499 million; **Australia, Benelux, France, UK and US

1 E-marketer.com – Online Shopping Trends, July 26, 2016

“It’s clear that a strong combination of security, innovation and potential profitability are the foundational requirements of committing to new payments types.”

Raghav Prasad
In-app payment solutions are simply the process of allowing customers to pay within a retailer’s own app. Paying in-app is no longer necessarily new, but the user experience has definitely improved significantly since its inception. To begin with, unsure of the technology, retailers took the decision to simply translate merchant pages for desktop onto a smaller screen.

In 2015, Judo Payments identified that 76% of the top UK retailers didn’t offer a fully native payments experience - that is, one that is built for mobile rather than just squeezed in from web, but that also processes the payments within the app without redirecting customers to a third-party payments interface. In native apps, Judo Payments’ research found that conversion rates were around 30% higher than with web apps.

Retailers have discovered that apps can help increase customer loyalty as well as making the purchase process much more streamlined, providing value-add through initiatives such as loyalty points, budgeting and deal or location finders.

For example, PetroZone lets fuel companies develop mobile apps for customers to improve their experience when filling up. Customers can search for nearby gas stations and use navigation to find them, then use the app to make mobile payments either at the pump or in the convenience store. The app also gives users personalized offers for in-store purchases.

The app uses Masterpass payment function from the user’s wallet app and authorizes payment with a PIN number. They select the pump and fill up. A digital receipt is downloaded once they’re done.

Innovations in payment

6 http://hub.judopay.com/retail-native-vs-legacy/
One of the most well-recognized payment innovations worldwide, mobile wallets are gaining popularity among consumers. Juniper Research predicts that wallet use will rise 32% globally to $1.35 trillion.

They are the first step in bringing together payment, receipt and loyalty services under a single function. They have additional benefits, particularly when it comes to ticketing-based products.

One of the most widely used mobile payment aggregation services, Masterpass is a digital payment service that allows customers to pay with any payment card, anywhere, using any device. Casual fast-paced restaurant, Wagamama recently worked with Mastercard to create a quicker, more seamless payment experience. Instead of waiting to pay your bill during peak restaurant times, customers can use a simple swipe and click application for payment via mobile. The application also has the capability to add a tip or share the bill with your friends.

The influence of social media on retail, both ecommerce and bricks and mortar, cannot be underestimated. From its ability to find new customers using lookalike targeting to providing new customer service and communication channels, social media is a vital battleground for retailers.

It has been suggested (and this is already a reality in developing countries) that social media platforms will become the main ‘internet’ for most consumers. In the UK, customers spend 66 hours a month browsing on their smartphones. In the US, that increases to 87 hours. Mobile users in the US spend 19% of that time on Facebook, 2% on Snapchat and 12% on other social or messaging platforms. Gartner also estimates $2bn online sales are transacted through chatbots.

Mastercard is developing bots for both merchant and bank partners including Mastercard Chatbot Developer Platform, and in the US, the recently launched Masterpass-enabled bot via Facebook Messenger. The chatbot will encourage customers to order through the messenger platform for a frictionless shopping experience.

For many retailers in this space, however, the threat of fraud or data issues is a real concern. The same report above suggested that 92% of respondents felt fraud was their top concern. With a number of well-known, international banking brands entering the messaging/chatbot/social commerce arena, retailers are more likely to partner with a trusted brand that has a track record of taking a chance on a new platform.

Open loop systems are the most common payment systems and rely on processing payments through a third-party. Closed loop payments on the other hand, allow customers to pre-load funds into a spending account that is linked to a device.

The system is not new, prepaid cards have been around for a long time. However, the growing availability of devices from mobile phones to smart watches, wearables and even equipment sensors means closed loop is available literally at the touch of a button.

Closed loop payments have traditionally been used in either gift card scenarios or prepaid store cards. However, their use is prevalent with those previously unable to use traditional banking systems. This has typically been the case in developing countries where rural populations do not have access to largely city-based banks, for example, Kenya’s MPesa mobile scheme.

Similarly, as people travel extensively and cash becomes less attractive, the option to buy prepaid cards that operate in the same way as a traditional debit or credit card is highly attractive.

A great example is Paysafecard. It works just like a prepaid mobile phone card; these can be bought at a sales outlet and used to pay by entering a 16 digit PIN.

The card has the added benefit of needing no personal information or bank details, protecting customers’ financial privacy.

The card can be linked to an online payments account, my paysafecard, which allows users to pay using a username and password rather than the 16-digit PIN. It is also linked to a ‘my PLUS’ loyalty program, and the card can be used via the my paysafecard app.
The internet of things (IoT) means that far more devices have become connected beyond mobiles and computers. Fitted with sensors, items are capable of interacting with mobile or desktop devices – even if they don’t have their own built-in interface.

This development means that any number of devices can carry payment mechanisms, enabled by the single press of a button. In its most simplistic form, Amazon’s Dash buttons link to users’ accounts via home wifi. Available for a range of the most common household goods, users simply stick the small plastic button somewhere convenient – the bathroom mirror for example – and press it when they are about to run out.

More complex but still as simple to operate is IoT technology found on in-car telematics or via smartwatches. Linked to apps preloaded with payment options such as Masterpass mobile wallets, when customers want to buy they simply press a button and the order is placed.

In addition, in partnership with Samsung, Mastercard has created a ‘direct from refrigerator’ ordering system. The Samsung Family Hub refrigerator has a touch screen that connects customers to leading retailers in the US.

Customers can order items either direct from the unit or using the mobile app, meaning real time ordering can be achieved. The intelligent shopping cart learns shopping habits and makes personalized suggestions. Anyone in the family can add items, provided they have the secure PIN for access to the device.

Artificial Intelligence or AI isn’t just built into a single payments product. It is already a component of some of the innovations we have seen so far. It’s present in Social Payments where AI technologies ‘learn’ about consumers so product suggestions can be as accurate as possible. In addition to this, in April 2017, Mastercard unveiled the next generation biometric card, combining chip technology with fingerprints to conveniently and safely verify the cardholder’s identity for in-store purchases.

When shopping and paying in-store, the biometric card works like any other chip card. The cardholder simply dips the card into a retailer’s terminal while placing their finger on the embedded sensor. The fingerprint is verified against the template and – if the biometrics match – the cardholder is successfully authenticated and the transaction can then be approved with the card never leaving the consumer’s hand.

Using a fingerprint, and biometrics as a whole, confirms in a very unique way that the person using the card is the genuine cardholder. In this case, for retailers, it maximises the shopping experience without the need to deploy new infrastructure, as it works with existing EMV card terminal infrastructure and does not require any new hardware or software upgrades.

For issuers, the technology helps detect and prevent fraud, increase approval rates, reduce operational costs and foster customer loyalty. Additionally, a future version of the card will feature contactless technology, adding to the simplicity and convenience at checkout.

Mastercard’s biometric card for in-store authentication follows last year’s launch of Identity Check Mobile, a payment technology application that uses biometrics like fingerprints or facial recognition to verify a cardholder’s identity, simplifying online shopping and making payments even more secure.

But with biometric card and Identity Check Mobile, it’s not only about improving security. This technology is a critical turning point in the e-commerce customer experience. With the average consumer having to remember 27 different logins\(^\text{1}\), it’s clear that we are due for a change in the status quo – and that passwords are no longer convenient, or the most secure.

\(^\text{1}\)http://www.buzzfeed.com/josephbernstein/survey-says-people-have-way-too-many-passwords-to-remember
Adopting new technologies

“As innovation coupled with analytics and Artificial Intelligence (AI) drive the Internet of Things to the next level, it is crucial that retailers heavily invest in new payment methods.”

Raghav Prasad

Mastercard Impact of Innovation Study, conducted in September 2016, surveyed 23,000 consumers across 23 countries in Europe, the Middle East and Africa to get a sense of how quickly new payment technologies were being adopted and by which customer types.

The study found that only a third of consumers worldwide are adopting or close to adopting digital payments, but this number is growing all the time. Trends are being driven largely by developing nations with the exception of a handful of Scandinavian and Eastern European countries. Western Europe will continue to be the slowest to adopt, having a high-functioning, standardised payments infrastructure in place.

Other findings include the fact that digitization and innovation are rated more highly in the Middle East and Africa and in Emerging Markets, than in Western Europe and CEE. More consumers in MEA and CEE want more innovation in financial services than in Western Europe, and mobile payments are seen as having the highest potential across all countries. Finally, tablets score quite low while smart watches or ID cards are viewed as popular.

Globally, most ‘new’ payment innovations are still in their infancy when it comes to rates of adoption. The current mobile payments market will be worth an estimated $283bn by 2021, and it’s clear there’s huge scope across the board for retailers to invest in payment technologies and be part of the ‘payments revolution’.

Adoption is and will continue to gather speed and as we have seen the market changes fast and is different from nation to nation. It’s critical to get ahead of the game and start to invest now, to ensure that retailers are one step ahead of the competition.

Retailers are also understandably concerned about the security around managing huge volumes of customer data, and the financial security of new, non-traditional platforms. Partnering with a trusted solutions provider with security at the forefront of their business is therefore vital to ensure a smooth and seamless transition.

For retailers, working with a trusted partner who can enable their business to be agile and promote cross business collaboration is the key to success.

There are clearly an overwhelming amount of payments innovations being developed, but they are not a one size fits all for every businesses. Some will be better suited and more desirable to one business over another.

However, it’s also important that we ensure retailers know what is practical and desirable for their business. Deep knowledge and understanding of customer base enables retailers to make an informed decision and ensure new payments innovations contribute significant value-add to the business.

"It’s clear mobile is having a huge impact across the globe, but infrastructure and a country’s rate of development have a distinct impact on the rate of adoption in innovative payments in each market.

For developed markets, switching to a new method of payment is difficult as there is a significant impact on existing infrastructure, but at the same time a level of infrastructure is necessary to support any payment experience.”

Raghav Prasad

APPENDIX:

Analysis of Country Trends
Eastern Europe

Did you know?

Despite low levels of internet penetration 59.7%, Russia has the largest base of Internet users in Europe, indicating room for significant growth in eCommerce.

Russia

Preferred payment:

- **55.5%** cash
- **41.2%** Payment terminals
- **5.8%** eWallets

Highest adoption rate increase:

1/3 of digital payment users in Russia use an eWallet.

Mobile preference:

- **26.7%** eWallets market share
- **3.4%** PayPal
- **7.3%** Yandex

Middle East & Africa

Did you know?

Consumers in the Middle East and Africa state security concerns as their top reason they are not likely to use mobile payment technology.

UAE, Saudi Arabia

Preferred payment: UAE

- **59%** prefer mobile phones for payments

Mobile preference:

- **76%** Interested in alternative payments

Highest adoption rate increase:

Mobile payment accounts have DOUBLED SINCE 2015 TO OVER 5 MILLION in Egypt alone.

Asia Pacific

Did you know?

More than half of mobile wallet users in Asia-Pacific have used a mobile wallet to pay for food or drinks.

Australia, India, China, Japan

Preferred payment: Japan

- **69.9%** cash

Mobile preference: India

- **130%** by 2022 India's mobile wallet market is expected to reach $11.5 billion

Highest adoption rate increase: China

- **NOW 40%** shop via apps vs **37%** shop via website
- **2015 28%** vs **52%** NOW

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24 Mastercard, “Mastercard Impact of Innovation Study” conducted by Ipsos Research, September 2016
25 ArabNet, April 2016; GSMA, Oct 2016
26 Emarketer, Reasons that Mobile Device Owners Worldwide Are Not Likely to Conduct Mobile-Payment Activities, by Region, March 2016
27 Mastercard, “Mastercard Impact of Innovation Study” conducted by Ipsos Research, September 2016
28 Emarketer, “Mastercard Impact of Innovation Study” conducted by Ipsos Research, September 2016
29 Emarketer, Global Mobile Payments StatPack: Accessibility, Adoption and Usage Trends, January 2017
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42 Emarketer, Global Mobile Payments StatPack: Accessibility, Adoption and Usage Trends, January 2017
43 Emarketer, Global Mobile Payments StatPack: Accessibility, Adoption and Usage Trends, January 2017
North America - Canada and US

Preferred payment: US

- 71.5% prefer card payments
- 23.3% use mobile payments
- 17.5% use e-wallets

Highest adoption rate increase:

- Contactless mobile payments in US are expected to increase by over 480% by 2026

Latin America - Brazil and Mexico

Preferred payment: Mexico

- 72% use cards
- 28% use smartphones

Highest adoption rate increase:

- Debit and Prepaid Cards are increasingly being used to access services such as Uber and Facebook

Contact us

For more information about how Mastercard Payment Gateway Services can assist your business, contact us today.

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<thead>
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<th>Region</th>
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www.mastercard.com/gateway