THE PAYPERS

Insights into Payments

Payment Methods Report 2019

Innovations in the Way We Pay

Endorsement partners:

Ecommerce FOUNDATION

MRC Building Better Commerce Fraud & Payments Professionals

Key media partner:

mpe Merchant Payments Ecosystem

THE PAYPERS

Payment Methods Report 2019

Innovations in the Way We Pay

Contact us

For inquiries on editorial opportunities please contact:
Email: **editor@thepaypers.com**

To subscribe to our newsletters, click **here**

For general advertising information, contact:
Mihaela Mihaila
Email: **mihaela@thepaypers.com**

RELEASE VERSION 1.0
JUNE 2019

TEL: +31 20 893 4315
FAX: +31 20 658 0671
MAIL: EDITOR@THEPAYPERS.COM

Management Summary

The fourth edition of our Payment Methods Report presents the latest updates, trends, and innovations in the way people pay in an omnichannel world. By providing insightful content, we aim to keep our readers updated with the latest dynamics of the payments industry, an industry that is continually evolving at a rapid pace.

There is a lot of interest into what is new in (e)commerce payments, and the results of a **Worldpay report** show it clearly: overall, ecommerce is expected to surpass USD 4.6 trillion globally by 2022, with 140 online payment methods in use today. According to the report, e-wallets have gained a lot of popularity thanks to the seamless experience they provide. Online banking payments are also in the spotlight, as they are convenient for both consumers and merchants, while cash is still king at the POS. As more studies like this have appeared, it has become clear to us that an in-depth approach to the status of payment methods and innovations in the way people pay would be useful.

Furthermore, besides innovation, the commerce world has been feeling the need to make a smooth transition from global to local and vice versa, as well as to provide a multitude of payment methods, personalised according to the customers' preferences, both online and in store. The need for more customised experiences is driven by large numbers of tourists moving from one continent to another and expecting to meet convenient ways of paying on vacation. Safecharge has conducted a 2017 **study** on the impact of Chinese tourists on the European market, revealing that on average, a Chinese tourist from China spent USD 3,754 in Europe – so it is fascinating to see how customers from one country may play a significant role for another country when it comes to adapting and innovating payments.

If we look at recent events, we see that companies are increasingly open to collaborating in order to expand their footholds and gear their services towards the consumers' needs. The partnership between Alipay, Adyen, and Klarna is an example of the industry's ambition to expand into new markets. The collaboration enables shoppers from Germany, the Netherlands, Austria, and Finland to use Klarna's 'Pay Later' solution at AliExpress, the global retail online marketplace under Alibaba Group. Furthermore, with regard to expansions, the 'Pays', such as Google Pay, Apple Pay, Samsung Pay, or Wechat Pay, have extended their services in multiple countries, thus bringing diversity in payment options.

Key trends

As the payments industry is constantly evolving, this edition goes beyond the basics of payment methods, and additionally reports on the most significant methods that have shaped the customer's behaviour and preferences, as well as with long ongoing trends that continue to have an impact on the payment world.

Payment methods 301

Keeping pace with the latest trends, we have created an extensive overview of the key developments for each type of payment – credit and debit cards, prepaid cards, e-wallets, online banking ePayments, direct debit, pay later, cash, direct carrier billing, and cryptocurrencies. We have analysed their relevance and usage in different markets across the globe, their applicability in various ecommerce verticals, while also looking into what is in store when it comes to innovation. Furthermore, we have commented on the events that shook the payments industry this year. On the cryptocurrencies part, for instance, we have given our views on J.P. Morgan Chase's launch of JPM Coin, Facebook's Libracoin, and the impact these initiatives might have on the payments and commerce industry.

Apart from our own review of the market, we have also invited several experts to share their insights into current and future trends and developments. The regulatory aspect is also discussed; Andrew Cregan, the Head of Payment Policy at British Retail Consortium, addresses the impact of Strong Customer Authentication over card payments, with a case study on the UK market.

Online banking epayments (OBePs) have gained momentum within the European market. Luke Flomo, Trustly's Head of Commerce, reveals their approach regarding OBeP features, explaining the way this method can eliminate cart abandonment and increase conversions, while →

Management Summary

unlocking the data potential for all involved parties. In the US, OBeP is an emerging payment method, and here, Trustly has merged with PayWithMyBank to cover this market, seeking to create a seamless connection between Europe and the US.

The actual competitive business environment has opened doors for new opportunities. The Pay Later solution has gained a lot of popularity by eliminating the need for a credit card. A **Divido study** explains the need for more convenient option of paying, as, for instance, 17% of UK-based consumers stress on the availability of different finance options as the most important factor, with 36% admitting they would shop again at a retailer offering it. At the same time, retailers are seeing benefits such as increased customer loyalty and repeat purchases, increased basket conversions, and sales uplifts of up to 30% by implementing customer finance. And this popularity has prompted partnerships across the industry, like the one mentioned above between Adyen, Klarna, and AliExpress. In addition, machine learning has gained a well-deserved role in initiatives to help lenders check and approve loans with smaller risks. Furthermore, both established and new companies are looking for new ways to innovate and add value to this growing business. Splitit is one of them, and they reveal for us the way they tapped into this process by considering two factors: ubiquity and simplicity. A lot of effort is expended to build a user-friendly ecosystem for the consumers, and sometimes these efforts are even more impactful in emerging markets, such as India. Here, the Unified Payments Interface (UPI), an instant real-time payment system has facilitated 799.54 million inter-bank transactions and a value of USD 19 billion as of March 2019, with 142 banks live on this interface.

Looking into Latin America, Pierre-Claude Blaise of Asociación Mexicana de Venta Online (AMVO) tells us that 'Mexico has to face various challenges in ecommerce, a multifactorial process where financial inclusion is one of the areas that has shown a before and after effect.' He also shares the preferred payment methods in the country, as well as payment acceptance rate.

The e-wallets ecosystem is continuously expanding across the globe, especially Alipay and WeChat Pay, which originally started in China. For more insights into Alipay's development, we have invited Ant Financial to offer their perspective on building a digital ecosystem from China to the rest of the world.

Until now, some experts believed there was more hype than actual implementations of technology and strategy – Andy Mulcahy, Strategy and Insight Director at IMRG, points out there is a big potential for blockchain and social selling, however, he says 'the urgency of new technology often gets overstated before people are ready to respond to it.' So 'technology is never urgent until its use-case becomes clear, and people start to understand how to apply it in ways that make their lives more convenient.'

Ecommerce verticals – retail, travel, gaming, and automotive snapshots

We have chosen to dig into these particular verticals, as there is an evident need for an improved customer experience in all these areas. Online retailers are urged to invest in their customer experience, as **89% of customers stop doing business with a brand after a bad experience**. On the other hand, the in-store payment experience is also highly important, and leading retailers to consider the seamless checkout that a SmartPOS may provide. Ron van Wezel of Aite Group provides insights into how to best review the evolution of payments and leverage the latest technology such as the NextGen POS.

Providing a seamless customer experience is crucial for gaming companies too, if they want to keep and further consolidate a base of loyal customers, and a seamless experience starts with an optimised onboarding strategy. Successful customer onboarding and retention depend on factors such as having the right payment methods for each region/country, enabling cross-border payments, staying compliant, and considering the ethical aspect of dealing with addictive consumers, as loyalty is not synonymous with addiction. To address all these matters, Jens Bader, the co-founder of MuchBetter, recommends approaching the e-wallets payments as a way of 'fixing the payment plumbing.' In any case, iGaming operators are advised to align their payment strategy with trusted payment partners, and carefully regard the regulations in place. Furthermore, 'they will also want to work with acquirers with the lowest fraud ratings, else they will have to jump through more KYC hoops.' →

Management Summary

Convenience is key for customers in the iGaming industry, but the gamers are also looking for entertainment, so integrating a payment method into something fun could be a great opportunity for payments services providers. Trustly, for example, has designed a service that enables consumers to pay by simply clicking a banner that advertises a product. The company's Director of Partner Sales Adam Bowman depicts this solution and other services made available for ecommerce merchants, including online gaming operators, in his contribution.

In travelling, although the price is highly important, the payment options are actually **leading the customers' choice of an Online Travel Agency** (OTA). Travel companies should consider expanding their payment methods in the front-end; for instance, accepting pay later options seems to be a strategic option for high ticket prices (higher than EUR 400). Moreover, besides the latest trends in travel payments, this section also depicts major partnerships that have contributed to simplifying the airline payments – like the partnership between **Amazon and Cleartrip**, **Barclaycard and Amadeus**, and several others.

We have asked several seasoned payment managers to share their expertise in these verticals, in a bid to further support peer-to-peer knowledge and provide our readers with an informative perspective over the payments strategy that merchants apply. Carlos Madrona, Payment Methods and Fraud Director at MANGO, depicts some strategies of driving customer loyalty via the right payment methods across channels. Vincent Minier, payments manager at Ubisoft, outlines five aspects to consider when evaluating which PSP they are going to work with, related to pricing transparency, payment methods coverage, technology, payment expertise, and corporate customer support. In the matter of payment management, Kinguin's head of payments, Faheem Bakshi, has presented an informative picture of the stages of payment management, as well as key factors to consider when implementing local payment methods. Amy Wei, CEO of International Train Ticketing at Ctrip, the largest OTA in China, shares valuable insights into the key challenges for an OTA when expanding in Europe and in several Asian countries. She explains why certain payment methods are popular among travellers, and what is the difference between Europe and Asia in terms of the profile of the typical traveller.

We couldn't miss the in-car payments trend that has become a topic of interest for an industry that aims to build an innovative payment eco-system, but also a sustainable one. Partnerships like the one between Visa and Honda or the one between Mastercard, General Motors, and IBM prove that connected cars and in-car payments are opening moves towards creating new and secure payment systems.

Quantitative information – insights into e-wallets

We have created a mapping and an infographic of e-wallets including their specific functionalities, instruments, regional coverage, transactional volumes, and more. The overview of regional and global e-wallets covers India, China, MENA, and Latin America, featuring data from companies like Google Pay, Apple Pay, Yandex.Money, Fitbit, Samsung Pay, Alipay, and many more.

We have chosen to offer information related to the e-wallets market because it shows a lot of promise, considering that **2.1 billion consumers worldwide will use a mobile wallet to make a payment or send money in 2019**. Mobile wallets also represent a good opportunity for reducing financial exclusion in underserved markets, so like any disruptive initiative, this payment method will remain of high interest for both online and offline commerce environments. →

We invite you to explore our Payment Methods Report 2019 and find the data and insights to help you figure out the payment landscape of today. It is a must-read report, and any merchant, payment service provider, or enterprise leader is sure to gain the knowledge they require to get ahead. Read on to find out what the keys to payment are in 2019!

Anda Kania | **Senior Editor** | **The Paypers**

Table of Contents

Table of Contents

(Alternative) Payment Methods

Trends, Developments, and Innovation in the Way We Pay

(Alternative) Payment Methods

The payments industry players have broken new ground in the last few years, with many improvements regarding the way people pay in different regions, verticals, environments, and circumstances. This chapter outlines the latest developments within the existing payment methods covered both worldwide and locally, as well as contributions from experts and thought leaders in the industry. Readers will find insights into:

Credit and debit cards

The section offers an overview of the current credit and debit cards' usage rate in India, China, the US, and Latin America, and the adoption of rewards cards, Apple card, biometric payments, and tokenization. From a broader to a narrower angle, Andrew Cregan, the Head of Payment Policy at British Retail Consortium, addresses the impact of Strong Customer Authentication over card payments, with a focus on the UK market, where most online purchases in the UK are made by credit or debit cards. Nevertheless, the 'readiness' for SCA cannot be considered near the 'ready' level just yet, so BRC urges the implementation of several actions that the Financial Conduct Authority, the financial regulatory body in the UK, should undertake in order to provide businesses with a clear direction of the purpose and implementation of this PSD2-related initiative.

Wallets, mobile wallets and P2P payments

The e-wallets ecosystem is continuously expanding worldwide, especially Alipay and WeChat Pay, who have initially started with a remarkable footprint in China. The reports cited in this section show that the 'pays' dominate more than half of the global supermarket transactions, with mobile payments being made mostly via Apple Pay, Google Pay, and Samsung Pay globally. Markus Bergthaler of MRC confirms not only the high adoption of mobile payments, but also the fusion of smartphones and payment that suggests after all, the technological evolution.
For a more personalised standpoint, we have invited Ant Financial to offer their perspective on building a digital ecosystem of payment for an underserved market. Ecommerce Foundation approaches the security feature, with best practices on how to make the mobile ecommerce payments convenient and safe.

As regards the B2C payments, Jens Bader, the co-founder of MuchBetter, explains the important role that digital wallets play in this environment, emphasizing on the convenience that brings to the consumer. As the author states, 'wallets also introduce additional features and services to the benefit of customers and merchants alike such as real-time cross-border peer-to-peer transactions or the ability to stretch payment acceptance across different shopping channels.'

Moreover, Sally Baptiste of Consultant Payment Operations Group discusses peer-to-peer payments, stating that, in the US, this might be the next ecommerce trend, based on the consumers.

The subchapter ends with a mapping of e-wallets, their regional coverage and functionalities, aiming to offer a comprehensive view of what the e-wallets ecosystem means and involves.

Online Banking ePayments

Online banking payments have become very popular within the European market, with a great focus on customer experience, Luke Flomo, Trustly's head of commerce, endorses the online banking ePayments as a good option for both retailers and consumer, by explaining the way this method can eliminate cart abandonment, increase conversions, while unlocking the data potential for all involved parties.
iDeal offers insights into the Dutch market, outlining their roadmap and expansion beyond the Netherlands, and their services that can be used both online and offline. The company further confirms that the Netherlands market comes with great opportunities in the commerce space and with an appropriate testing ground for new ideas to implement.

The section also includes an interview with Javier Santamaría, the Chair of European Payments Council, discussing the latest updates concerning the adoption of the SEPA Credit Transfer Inst scheme among banks and PSPs, and how companies involved in the online banking ePayments space are expected to innovate in the upcoming years. ➔

(Alternative) Payment Methods

Direct debit

This is perhaps one of the most frictionless payment methods, being at hand for the consumers' recurrent payments when it comes to subscriptions and bills. It is now a great opportunity for merchants as well, as instead of connecting with a bank or Direct Debit bureau, they can partner with a debit provider and connect with the direct debit scheme via an API. SlimPay is a good example in this matter, and Jerome Traisnel, the company's CEO discusses in his interview the benefits of a subscription-based business, the paint points these businesses struggle with, and the best approach to deal with both advantages and challenges of this model.

Invoice and pay later solutions

The pay later and instalments options have become widely popular, offering consumers a convenient way to pay. In addition, machine learning has gained a well-deserved spot and role in these initiatives, to help lenders check and approve loans with no risks. Furthermore, both established and new companies are looking for new ways to innovate and add value to this growing business. Splitit is one of them, and they reveal for us the way they tapped into this process by considering two factors: ubiquity and simplicity.

Cash payments

Are we moving towards a cashless society? Based on a global overview of cash in commerce, our research suggests that, with all the innovation in place to facilitate digital payments, cash is still the leading payment method at the checkout. The takeaway here is that retailers are still enabled to handle cash efficiently and safely, and this is something that will increase even more the attractiveness of accepting cash.

Cryptocurrencies

The cryptocurrencies space is a wellspring of novelty and controversial elements. On one side, crypto payments have gained a good reputation among consumers, however, on the other side, it has also been subjected to many regulatory discussions. Today, cryptocurrencies are somewhere in the middle of convenience and compliance, taking big steps into becoming a trusted currency for all parties involved. Mirela Ciobanu, our senior editor at The Paypers has created a complete overview of the current state of affairs into the crypto world, with updates and trends to watch in 2019 and beyond.

To further promote the convenient use of cryptocurrencies, PumaPay has created a solution that enable businesses to accept cryptopayments without worrying about volatility and liquidity, these two things being sometimes a trust issue among users. Tapping into blockchain technology gave PumaPay the opportunity to create a flexible environment for both businesses and consumers that make crypto transactions.

Trends and developments – industry's POVs on the newest wrinkle

The personalisation of payment methods for customers is one of the key aspects considered by PSPs and merchants at present, given the competitive environment. The right tool in this process is none other than machine learning. With a large amount of transactional data collected through various Big Data technologies and cloud solution, there is a lot of opportunity in optimising the customer journey. The customised experience is an act of improvement, also an impulse provided by a significant volume of demanding customers. According to Jasmine Glasheen from Payment Depot, the millennials are placing the user experience and rewards programs on top of everything. The article mainly depicts the preferred payment methods among millennials, and the reason this generation is particularly of high interest.

With all the talk around payments innovation, now is the time to look further and envision what's next in this space and what's in store for the next five years, at least. Until now, some experts believed there was more hype rather than actual implementations of technology and strategy – Andy Mulcahy, Strategy and Insight Director at IMRG, believes there is a big potential for blockchain and social selling. However, it is just as important to understand how the technology can be applied in order to achieve great results.

Payconiq

Becoming a European Payments Method: What We've Learned Along the Journey

About Duke Prins: Duke Prins became CEO of Payconiq in 2016, when the company transitioned from a startup with an MVP to an international scale-up. He has over 20 years of experience in international management, corporate finance, and advisory. Duke was also co-founder of bunq, a European neo-bank and transaction platform.

Duke Prins ▪ *CEO* ▪ Payconiq

It was the best of times and we had everything before us

In 2014, Sony, Samsung, Apple, and Google were launching their first NFC-based mobile payment solutions in the US and other countries. The big tech players were starting to flex their muscle and reach entirely new markets, such as the mobile payments one. At the same time, the European Commission was putting forward its proposal for a revised PSD, opening the access of third-party providers to bank resources – what we know today as PSD2.

Therefore, European banks were starting to understand that their competitive position was about to change. Some of them, ING included, were looking for a new edge to keep them on top of the game, and incubators were flourishing all over Europe. This is when Payconiq was created, as a strategic initiative of ING's incubator. The goal was to build a pan-European, multi-channel, mobile payments solution. This got the attention of another large bank, KBC, which joined the project in 2016.

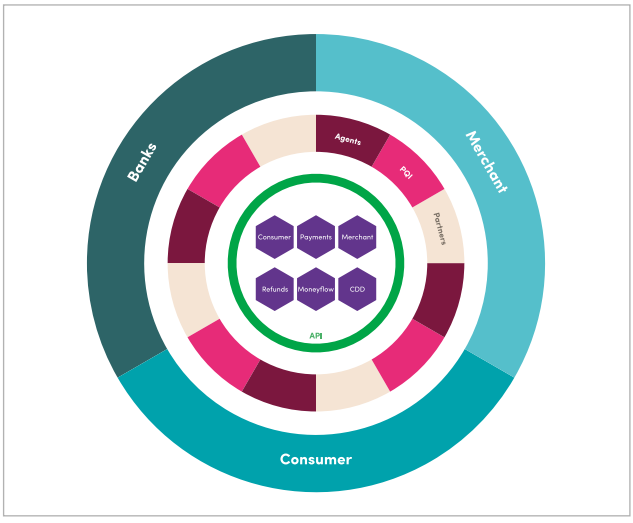
Five years later, we're a self-standing, international fintech, headquartered in Luxembourg and active in the entire Benelux area. How have we got here and what lessons have we learnt along the journey?

It takes two flints to make a fire

Banks and fintech companies complement each other. Banks bring their credibility, high security standards, and a strong customer base, and the fintechs come with the latest technology, a great user experience, and the agility to respond to changing market trends. Despite predictions that fintechs will disrupt the banking industry, what we see in practice is that they act as enablers for financial institutions. We're witnessing an evolution, rather than a transformation, of business models and market approaches.

For us, the best choice was to work with the banks. Surely, in the mobile payments market in Europe, there are several players that position themselves as challengers to traditional banks. They are based on credit cards, or 'credits' stored and exchanged between users.

We wanted to keep it simple and safe, so we found a way of doing it while using existing rails. Thanks to the SEPA SCT, we're using banks' secure infrastructure to provide everyone in Europe with a simple, mobile solution for payments. We believe that every person owning a bank account and a smartphone should be part of the digital journey – no need for a credit card or a specific smartphone for that. →



Payconiq's payments platform at a glance

To banks, we offer a sustainable ecosystem through an open-API approach and flexible microservices. To merchants, we offer a scalable, secure plug and play payments platform and an independent hardware for simple onboarding, integration, and app development. Consumers get a seamless and secure SCT-based omnichannel payment service (on-line, in-store, invoice, P2P), with international interoperability.

Go big or go home

Payments companies are busy clubbing together to increase their coverage and offerings. Size matters when it comes to payments, due to investments in systems, security, and compliance. Acquisitions are one way to get bigger quickly – that's also one of the risks for local payment schemes, which could end up being bought or outcompeted by European or global players.

We learnt that the power of the network is essential to win the battle for European coverage, and decided to go for it. When you start as a small project financed by a single bank, you get a label. If you want to go big, you must overcome it and build your own credibility. Getting several banks behind us was not easy, but it was worth the effort.

In three years, we entered three markets in three different ways. There's no secret recipe for success and no one-size-fits-all. Our market research indicated that we should start by targeting the Benelux countries and so we did. We took the opportunities as they came up and we're still working on making the most of them.

We acquired Digicash, a Luxembourg-based mobile payments solution, in 2017. A year later, **we merged with Bancontact**, the leading provider of debit cards and payments in the Belgian market, and completed their offer with our mobile platform. In the Netherlands, we opted for a greenfield venture, which we launched in early 2019.

With every expansion decision we made, we tried to consider the specificities of the markets we were targeting, such as: consumer behaviour, concerns around security, the appetite for mobile solutions, the local competition, and so on. In addition, it was important for us to team up with the right partners, who share our vision and ambitions and are willing to take the extra mile with us.

Today, we have the support of 12 European banks: ASN Bank, Axa Bank, BCEE, Belfius, BNP Paribas, BIL, ING, KBC, Post Luxembourg, Rabobank, Regio Bank, and SNS. We operate across three countries and aim to lead the transformation of the payment industry in Europe.

About Payconiq: Payconiq is a European payments fintech active in Benelux. With the support of major European banks, Payconiq leads the transformation of the payment industry through an open-API approach and flexible microservices. 60,000 merchants across Belgium, Luxembourg, and the Netherlands trust Payconiq's secure, plug-and-play platform. 600,000 consumers use our app for P2P, invoices, in-stores, or online payments.

www.payconiq.com

Click here for the company profile

payconiq

Type of payment method	Omnichannel digital mobile payments
Active since	2014
Operational Area	Belgium, Netherlands, Luxembourg
Industries	Mobile payments/FinTech
How it works	Payments app
Potential reach	N/A
Market Share	N/A
Acceptance	Merchants, P2P
Chargeback Risk	N/A
Facts	N/A
Settlement currency	EUR
Processing currrency	EUR
Currency available for consumer	EUR
Transaction volume	N/A
Implementation requirements (non technical)	Bank account, smartphone
Reconciliation	N/A
Pricing	N/A
Link to the APM Database for more details	https://onlinepayments.thepaypers.com/alternative-payment-method/Payconiq/company/650
Channels (POS/ecommerce)	POS, ecommerce, invoice, P2P, in-app, app2app

IMRG

Payments and the Technology Adoption Lag

About Andy Mulcahy: Andy has worked at the heart of the online retail industry since 2010 – researching and producing reports on trends and developments affecting the sector. During that time, Andy has developed strong knowledge in multiple areas, with particular expertise in Black Friday.

Andy Mulcahy ▪ *Strategy and Insight Director* ▪ IMRG

Technology, perhaps more than any other concept, has the capacity to both excite and frighten us in equal measure. It often brings promises of making our lives smarter, safer, more convenient; enhanced to an extent whereby we look back and wonder how we ever survived without it.

But it's also a concept that provokes anxiety, as some of the changes it introduces can seem little short of magic. On the one hand, there's the disbelief – the simple lack of understanding that what it enables can be possible – and then there's the other side; FOMO (fear of missing out).

FOMO can be very powerful from the business perspective as the technology vendors mobilise it as a sales technique, claiming that shoppers are screaming out for all the benefits their solutions promise. 'If you build it, they will come' might be the mantra.

Yet offering a technology solution, and people actually using it are two very different things. It's easy to get swept up in the buzz around new technologies, but a healthy scepticism is always advisable when it comes to such matters.

Are we ready?

Where and how we complete payments is a classic example of this. With all the convenient, quick, digital transfers we're able to make now, particularly through our smartphones, you'd be forgiven for assuming that's how we all do it. But how many of us still receive cheques in birthday cards? From people who have smartphone devices in their pockets when signing them?

We are creatures of habit, and those habits can change slowly. It can also be difficult to predict when the inflection point for adoption is dawning. Take Klarna; the 'buy now, pay later' solution is nothing new, there have been multiple attempts at bringing something similar to market over the past decade or so. For whatever reason, it seems that shoppers are ready for this kind of option now, and it seems to be gaining traction in the UK.

By contrast, voice assistants appear to be at the bottom of the adoption mound at the moment. Despite the much-quoted, little-researched quote 'half of web traffic will come through voice by 2020,' earlier in 2019 a leaked email from Amazon revealed that just 2% of users had bought something through their Echo device. It may be touted as the 'voice revolution,' but perhaps 'gradual voice transition' would be more accurate.

The smartphone takeover

Another promise made by marketers was that we would manage our entire lives through smartphones. While it's certainly true that it's possible to undertake almost any activity using these devices, it took time for it to become genuinely prominent in retail.

Consider the difference between two devices. The iPad came out in 2010; by 2013, 25% of online sales were being completed through mobile devices (which is smartphones and tablets combined, but it was overwhelmingly tablets back then). The original iPhone came out in 2007. It took until the second half of 2015 for sales growth to really kick in so that the devices accounted for a significant share of online sales. ➔

The fact is that, while the hardware was in place, it took a while for retail sites to be properly optimised for the devices and for confidence in using them to catch up. When it comes to in-store technology, sometimes a device (giant tablet etc) is installed with the expectation that lots of people will use them but they sit there gathering dust. Perhaps they will become a major factor in retail one day, or perhaps the smartphones we all carry are powerful enough to do whatever it can offer anyway.

Where next for payments?

Obviously, one answer is blockchain. The problem is that most people have no idea what it actually is or how it works, no matter how many times they read about it. Solutions will be developed using the technology, but confidence in using anything promoted overtly as being 'blockchain' may take a while to get traction amongst a confused public.

Social selling is another area of hype. For a long-time now, businesses have tried to work out how to use social platforms, with their enormous audiences, for overt commercial opportunities. This was a failure initially (remember Facebook Stores?), but paid advertising has been found to be effective for some. The current thinking relates to buying buttons directly within platforms, with the expectation that this is where behaviour will gravitate – particularly among younger demographics.

However, it may be that the role of social in the selling process has been exaggerated. A survey of 10,000 respondents by Shift found that 68% thought social media engagement from a brand is not important.

Nor is that the only study I've seen recently that came to a similar conclusion. A point worthy of consideration, given that some are lauding the need to communicate with shoppers through WhatsApp over more traditional means (email, telephone etc).

So where should you invest?

The purpose of this article has been to state that the urgency of new technology often gets overstated before people are ready to respond to it. Not necessarily in a misleading way; things can sometimes seem ready to gain wide-ranging traction, but then people just stick to the old ways of doing things that they understand.

Let's be clear – most of the technologies mentioned here (voice, social selling etc) probably have a big role to play in the future. But technology is never urgent until its use-case becomes clear, and people start to understand how to apply it in ways that make their lives more convenient.

Until that point, it's just hype.

Payment Depot

Popular Payment Methods for Millennial Customers

About Jasmine Glasheen: Jasmine Glasheen has first-hand supply chain insights and a passion for helping modern retailers bridge the generation gap to reach young consumers. As contributing editor at Retail Wire and contributor to Payment Depot Jasmine has a unique perspective on the big conversations happening in and surrounding the retail industry.

Jasmine Glasheen ▪ *Contributing Editor* ▪ Payment Depot

Business owners often make the mistake of judging millennials as a generation that is bad with money simply because they have less funds to work with than their predecessors did. But the reality is that millennials don't mess around when it comes to their finances, especially when it comes to utilising the payment methods that maximise rewards. Millennials are a trend-setting generation, and they are known for being demanding and discerning consumers. They demand creative payment options that offer increased control, security, and rewards such as cashback or free merchandise – and they are willing to shop around until they find the right platform.

Millennials are more willing than other generations to take a risk on new payment trends if they promise a better user experience or financial rewards down the line. However, brands need to offer a strong value proposition to pique their interest. Below we will take a look at five of the most popular payment methods amongst millennial consumers, as well as how growing companies can afford to offer them.

1. Digital payments

Digital payments such as virtual wallets and third-party payment arbiters like Zelle and Venmo are on the rise across demographics, but they are especially popular amongst millennials. In a 2017 survey by **U.S. Bank**, 49% of millennials said that they prefer digital payments to cash – which is why millennial and Gen Z-focused companies such as Abercrombie and Fitch are beginning to adopt **platforms like Venmo** or virtual wallets like Apple Pay to increase traffic. Payment Depot reports that the virtual card number is a single-use string of digits, and the customer enters it online or shares it over the phone. It can also be typed in manually with a POS – and the charges are applied to the same account as the main physical card.

2. Branded credit cards

Lately there has been a lot of press about millennials destroying the credit card industry (along with just about every other industry imaginable). However, millennials do use credit cards for transactions on a regular basis, they just use fewer cards than other generations and they're a lot more selective about the cards they use. In Deloitte's recent millennial banking study, **80%** of all transactions by millennials were actually on credit cards. However, most of the cards used were issued by a brand instead of a traditional credit card provider – and all of these cards came with rewards. →

3. Cashback rewards

There's no avoiding it: loyalty programmes are now a necessity. Millennial consumers are particularly inclined to pick a provider based on the rewards they offer and many Gen Y consumers will put **elaborate plans** in place to make the most of their loyalty perks and cashback rewards. In light of this, companies need to find the sweet spot between offering millennial consumers enough rewards to incentivise them to purchase and losing a significant amount of profits trying to create a competitive value proposition. This means shopping around for the right provider that would help them save money on credit card processing, thus gaining the ability to offer millennial customers the cashback rewards (as well as swag) that they demand.

4. In-app checkout

Convenience is a prime motivator for millennial consumers, and app providers are realising the necessity of eliminating friction points along their customers' path-to-purchase in order to increase conversion. As a result, many of today's most popular apps – some of which weren't even built to facilitate shopping, **such as Instagram** – are launching in-app checkout so that consumers don't have to open a new page just to purchase a product. When it comes to millennials, in-app checkout is even more popular than traditional payment methods, such as cash. Deloitte's **millennial payment report** found that 15% of transactions were done with in-app payment methods (such as PayPal, Venmo, and Apple Pay), while only 10% were made with cash or checks.

5. Fintech startups

Millennials are a trendsetting generation that is easily bored, and this translates into a willingness to experiment with new currencies and payment platforms like blockchain – especially when there aren't any fees or investment minimums to get started. Millennials are leaders in cryptocurrency adoption, and they significantly outrank other generations, with **17% of millennials** owning crypto, compared with 9% of Gen X and 2% of Boomers. However, Gen Y's amenability to taking financial sector disruptors out for a test drive isn't limited to cryptocurrency.

It comes down to agility

Millennial consumers demand more from payment providers: more creativity, more cashback, more rewards, and a more interesting user experience. As such, business owners need to save wherever possible on credit card processing – which means researching the top payment solution providers and finding savings to pass along to their customers in the form of cashback rewards, loyalty points, or increased functionality. Since millennial consumers are constantly researching how to get the best possible deal from their payment solutions, businesses that also do their due diligence will be the ones that succeed with this discerning demographic.

MERCHANT PAYMENTS ECOSYSTEM

18-20 February 2020 | Berlin

30% EARLY BIRD | REGISTER NOW WITH BEST RATES

JOIN 1000+ Merchants & Payment providers @ MPE 2020!

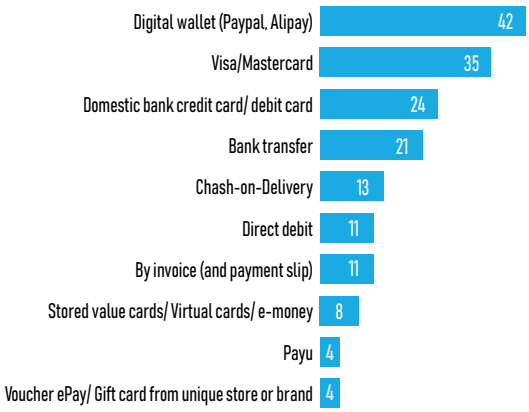
Europe's Largest Merchant Payments Conference

MISSED THE CONFERENCE THIS YEAR?

Did you know? **The right mix of payment options is critical for merchants in 2019?**

Speakers at MPE 2019 highlighted that ...

Alternative Payment Methods in Europe are expected to reach **20%**



PREFERRED EUROPEAN PAYMENT METHODS

50% of consumers end a transaction if their preferred payment option is not available

NEW PAYMENT METHODS: ROLLOUT OF DIGITAL, NON CARD & OVERLAY SERVICES

READ MORE ABOUT EUROPEAN MERCHANT PAYMENT TOP TRENDS & CHALLENGES IN MPE 2019 REPORT BY AITE Group @ **www.merchantpaymentsecosystem.com**

1250+ ATTENDEES

350+ C-LEVEL EXECS

140+ SPEAKERS

75+ SPONSORS & EXHIBITORS

300+ FINTECH PEERS

45 COUNTRIES

Credit and Debit Cards

Trends and Updates

Ana Păstrăvanu | Content Editor | The Paypers

As the latest report by **Edgar, Dunn & Company** suggests, the death of payment cards (credit, debit, prepaid, and other types) has been greatly exaggerated, their usage being expected to grow over the next five years. Globally, with a 37% share, payment cards remained the most popular payment method for ecommerce purchases in 2018, according to **Global Payments Report** by Worldpay. Moreover, in 2018, there were 6.3 billion cards, while payment cards in circulation on a global basis were forecasted to reach 11.7 billion by 2023 (8.4 billion are estimated to be debit cards). While slow growth is expected in mature markets, in emerging markets payment cards are expected to grow **significantly**.

Globally, we witness a rapidly expanding modern card issuing market, with players such as Galileo Processing, Synchrony and the likes. Companies are in need of modern payment solutions and are not necessarily turning to their banks as their primary issuers anymore, and require new platforms built for their needs. The global market for card issuing volume accounts for **over USD 45 trillion**, with new entrants disrupting this space that has been traditionally dominated by banks. Open APIs allow a new generation of businesses to build innovative payment programs and experiences, allowing companies like Square, Affirm, DoorDash, Kabbage, Instacart, and others to customise payment cards to meet the needs of their customers.

The reductions in interchange fees have largely been driven by direct regulatory intervention in 2019. However, in US, Visa and Mastercard shared at the beginning of 2019 their plans to raise interchange fees on card transactions in the US, where we see the highest **interchange fees in the world**. Visa announced the new fees in April 2019. →

Also, the cost of card acceptance continues to rise for businesses in the US. From 2012 to 2018, the total interchange fees levied by Visa and Mastercard in the US **went up by 77%**. On the other side, the European Commission, the first competition authority to take action against Visa and Mastercard for their excessive inter-regional interchange fees, announced in January 2019 that non-EU Mastercard and Visa cards used in European stores would have the same rates of interchange fees as European **cards**.

Credit and debit card usage globally

In developed markets, like the US and Europe, according to the **latest statistics**, cards still dominate the ecommerce market, while in emerging economies, cards have found a good ally in digital wallets. For example, payments interfaces like UPI in India make it easier for consumers to link their cards with their e-wallets account. In the Americas and Europe, payment cards dominate with a share of 53% and 49%, **respectively**. Card infrastructure is not very well established in certain emerging economies from APAC, LATAM, and Africa, where there is also a high percentage of unbanked consumers. In addition, lack of consumer confidence and growing concern around card fraud has restricted the growth of payment card usage for ecommerce purchases in these countries.

China and India are leading ecommerce expansion, but low penetration of debit and credit cards has made it challenging for merchants to access these markets. As in other emerging economies, here merchants need to work with PSP that offer local payment methods. In Singapore, more than 50% of online payments go through credit and debit cards, in China 50% of ecommerce is accounted for by e-wallets, while in the Philippines, cash still accounts for the majority of online purchases.

India

Debit cards are still the most preferred payment method for online shoppers, according to a report by Financial Software and Systems (**FSS**), one of the largest payment processors in India. In June 2018, the number of debit cards increased to 944.3 million, with 19.2 million new cardholders, while a total of 39.37 million credit cards were in operation, with the addition of 0.76 million cards, according to the Reserve Bank of India. Between October 2018 and January 2019, a total of 67 million debit cards went out of circulation due to RBI's direction to replace old magnetic-strip debit and credit cards with the more secure, chip-based EMV cards. Certain government initiatives (like smart city projects, for example **Smart Cities Mission**, launched in 2015) offer significant potential for card networks such as Visa and Mastercard, which can tap the transit opportunity. In December 2018, **Visa issued more than 20 million Visa contactless cards in the country**, with nearly 1.1 million of the 3.6 million POS terminals accepting contactless payments. Later in May 2019, Visa partnered with Paytm Payments Bank to launch Visa debit cards.

In India, credit and debit cards compete with Unified Payments Interface (UPI) payments in terms of usage. UPI is an instant real-time payment system developed by National Payments Corporation of India aimed to facilitate inter-bank transactions. The interface is regulated by the Reserve Bank of India, and works by instantly transferring funds between two bank accounts on a mobile platform. As of March 2019, there are **142 banks live on UPI with a monthly volume of 799.54 million transactions** and a value of INR 1.334 trillion (USD 19 billion). In January 2019, the aggregate volume of transactions through the **UPI has surpassed that of credit and debit card transactions**, according to the National Payments Corporation of India (NPCI) and Reserve Bank of India (RBI). →

More and more Indians are now in possession of a payment card thanks to the government's efforts to digitise the country. However, serious investments in payment card security from the banking sector are lacking. Due to a booming cybercrime scene, **India is expected to surpass the UK in 2019** and become the second-most targeted country for payment card fraud, behind the US. According to **Gemini Advisory**, over 3.2 million Indian payment card records have been compromised in 2018, an increase from 2017, when 800,000 Indian payment cards' details had been posted on cybercrime forums.

China

In the Chinese market, domestic card networks are dominant. In 2017, there were nearly 6.7 billion credit and debit cards in circulation, according to a research by GlobalData. The research predicts that **China will overtake the US** as the largest bank card market in the world in 2019.

Western card networks Visa, Mastercard, and American Express have been campaigning to enter China for years. In 2017, the Chinese government **opened the door** for US card companies to apply for licenses, but the applications are still under review.

State-controlled China UnionPay has solidified its hold on the bank card industry, controlling more than 90% of the market. With over seven billion cards accumulatively issued worldwide, UnionPay' global network has extended so far to 174 countries and regions, covering 52 million merchants and over 2.6 million ATMs worldwide. Visa and Mastercard can only issue co-branded cards, typically offered in partnership with the driving force behind card payments in the country, UnionPay. American Express appears to be furthest along, the company **confirming that its application was formally accepted** by the People's Bank of China, China's central bank.

As **Euromonitor International** suggests, in the entire APAC region, the diversification of card products is driving card payments growth. The region has seen the emergence of specific card products for particular consumer segments that is driving growth of card payments. For example, in South Korea, various cards are marketed to medical professionals and other types of consumers. Prepaid cards are also being used as 'common mobility' cards in multiple transport systems as well as in retail outlets. Future growth in the global cards market is expected to be driven by the APAC region, which **will increase its market share in the total number of cards worldwide** from 52% (in 2018) to 57% (in 2023).

LATAM

Credit cards are the most used online payment method in LATAM, but in some countries, the card transactions register a low approval rate. In Brazil, the main cause for this is related to the fact that international merchants cannot process local credit cards. **Less than 20% of the payments market in Brazil** goes through international credit card brands. To enter this market, a merchant needs to move to local acquiring and be able to accept local cards, such as Elo and Hipercard, as well as local Visa and Mastercard cards. Most credit cards in the region are not enabled for international transactions, which has a negative impact on cross-border transactions, while **most wallets do not offer an enhanced experience over cash or EMV cards**. →

US

Tap and go payments have taken so long to hit the US, where the **rollout at scale is happening in 2019**, giving card-issuing banks a chance to grab market share. In 2017, according to the Federal Reserve, US consumers made USD 6.6 trillion in payments on credit, debit, and prepaid cards, 8% more than in 2016. Due to the market complexity (**thousands of banks, tens of millions of merchants, a fragmented payment industry, the Target data breach in 2013**), issuers moved to issue cards with chips, which are harder to counterfeit.

Once terminals that accept cards with chips are in place, the move to contactless only requires updated cards. However, the delay on chip cards put the US way behind on contactless. Fortunately, in **November 2018**, J.P. Morgan Chase announced that all of its credit and debit card holders would be moved to contactless by the end of 2019. Also, **Visa** says that it expects 100 million contactless Visa cards to be issued in the US by the end of 2019.

Trends and developments

Rewards cards

Rewards credit cards have proliferated in recent years to drive usage, mostly in developed economies. Usually, cardholders are offered hundreds, even thousands of dollars in rewards, cashback, points, or miles. In the third quarter of 2018, **rewards costs grew** approximately 15% on a year-over-year basis at many major banks. Due to this, banks are expected to find **new ways to encourage more card usage** and scale back upfront bonuses.

Apple card

In March 2019, **Apple announced the launch of a credit card** powered by Goldman Sachs. The Apple Card, with both a physical and digital version, will come in the summer of 2019 along with a rewards program, Daily Cash. Apple cardholders get 2% back on all purchases made with a digital card, and 3% back when they are spending money in an Apple Store or on an Apple service. With this product, the company is **charting out its post-iPhone future**, by launching a traditional product to promote Apple Pay. While the digital wallet and payment platform is growing fast, it is **used by less than half of all global iPhone owners**.

Biometric payments

On a global level, there is significant interest in biometric payments due to the perceived enhanced level of security. According to a **TNS report**, more than 50% people welcome the concept. However, more than 61% are concerned about security and personal data being used in other purposes. According to a **HSBC report**, Asia and the Middle East are ahead of Europe in the adoption of biometrics. At a market level, **biometrics are being combined with other card programmes** to deliver more secure identification and authentication for payments. For example, the government of Singapore is planning to integrate biometric data into the national ID card, and use open APIs so that the ID can be used to access online banking services and to make payments online. →

Payment tokenization

As many online shoppers save their credit card information on multiple online sites and the industry average for online checkout is ten minutes, improvement was required on payment tokenization. In this sense, **Mastercard** announced in October 2019 that it will enable token services on all cards by 2020. With token services, consumers can store their card credentials with a merchant or retailer without the risk of exposing actual card account details, adding another layer of security to online transactions without removing the convenience.

In the same month, **Visa** expanded Visa Token Service for credential-on-file (COF) token requestors, to further secure consumer payments in the digital channel. With this expansion, **acquirer gateway and technology partners** Adyen, AsiaPay, Braintree, Checkout.com, Cherri Tech, CyberSource, Elavon, Ezidebit, eWAY, Fit-Pay, Giesecke & Devrient, PayPal, Payscout, Rambus, SafeCharge, SecureCo, Square, Stripe, Worldpay, and YellowPepper are able to tokenize credential-on-file digital payments on behalf of their merchant and payment clients.

What to expect next

The growing adoption of PSP methods and digital wallets, and greater use of bank-initiated direct payments is expected to shunt some traffic off the card networks. Alibaba, Amazon, and the likes will most probably foray (more) into payments, further threatening the market power of existing card networks.

British Retail Consortium

Readiness for Strong Customer Authentication (SCA)

About Andrew Cregan: Andrew coordinates industry engagement with Government, regulators, and providers on matters relating to retail payments and consumer credit, and acts as a spokes-person for the industry. He has led the industry response to the IFR, PSD2 and domestic initiatives, including the Payments Strategy.

Andrew Cregan ▪ *Head of Payment Policy* ▪ British Retail Consortium

Without a smooth and successful implementation by the industry, there is significant risk that Strong Customer Authentication (SCA) will lead to disruption and to an adverse impact on consumer confidence in retail payments.

Many businesses lack awareness of the changes that SCA will bring to payment processes, and the absence of a UK-wide consumer communications plan, such as the one that supported the roll-out of chip-and-pin in 2006, is cause for concern. So far, merchants have been advised to discuss SCA readiness with their acquirers and bank equipment manufacturers and to have a version of 3D Secure in place for online transactions, but further, more detailed communication, is lacking. Any communications plan has been stalled by a lack of clarity and consistency emanating from UK payment system providers on the technical infrastructural upgrades required, the application of SCA exemptions for certain transactions, and the detail of how important solutions like 3D Secure will be employed. Merchants have worked in partnership with UK Finance, card schemes, and other payment service providers to resolve the many outstanding issues; however, progress has been slow.

The approaching cliff edge

Most online purchases in the UK are made by credit or debit cards. Following the 14th September deadline, it is unlikely that a business will be able to receive payment for goods or services by card without a version of 3D Secure (i.e. Verified by Visa, Mastercard SecureCode, AmEx Safekey). And, since it's not an overnight solution, merchants will need to plan and prepare well ahead of the September deadline to continue operating.

All online trading businesses must understand that they are likely to need 3D Secure, and all businesses and consumers need to know how to use it. However, public information remains limited on 3D Secure, how it works, and what to do if or when it doesn't work. For example, what information will customers receive to complete a payment with 3D Secure? How will it be delivered? What is the risk of it being intercepted and what steps can be taken to prevent it? What are the functions and requirements of each version of 3D Secure across important factors like speed, conversion, or exemptions? Can customers choose what information they receive and how they receive it? Are there defaults in place for when things go wrong (for example, technical or accessibility issues)? What options are open to businesses in the case of system failures depending on where those system failures lie? Similarly, what protocols are in place to ensure operational resilience? Are any of these being applied consistently by payment system providers? How will all this be communicated to businesses and consumers?

Exemptions

Exemptions could apply to certain types of transactions, removing the need for SCA. However, further clarification is required today on how each of these will be applied:

- Transaction Risk Analysis (TRA) involves a series of behind the scenes measures to check that customers are who they say they are, measures that could replace SCA in some situations. Whilst several payment service providers have given advice, it is card issuers that ultimately decide to 'step-up' a transaction for SCA, and it has been very unclear whether this will be applied consistently across payment service providers; →

- 'Whitelisting' is a tool that customers could use to register merchants as trusted beneficiaries, but it is very unclear how this process will work and whether this will be applied consistently across payment service providers. In any case, it has been suggested that this exemption can only be applied whereby businesses have a specific version of 3D Secure;
- Merchant Initiated Transactions (MITs) are not subject to SCA after the first transaction, yet it has been very unclear as to what constitutes an MIT and whether this will be applied consistently across payment service providers.

Face-to-face transactions

The impact on face-to-face transactions is limited because contactless transactions (max. GBP 30) fall below the threshold to which SCA applies, whilst chip-and-pin and Higher Value Payments with a phone or wearable device are already SCA compliant; however, some older Pin Entry Devices (PEDs) may be affected. Merchants are yet to receive clear information from their acquirers or terminal providers on what changes they will be required to make to payment terminals, and what changes they may choose to make.

Costs

The additional cost of these solutions is a further concern for end-users of the payment system. The use of 3D Secure is likely to come at an additional cost to merchants, and there is a concern that confusion over SCA will enable acquirers to upsell inappropriate solutions. Excessive card fees and charges are ultimately paid for by the consumer in the cost of goods and services. Merchants have already provided Government and regulators in the UK and in Brussels with ample evidence of excessive card payment fees and charges prior to these new developments. Merchants and consumers are now looking to the EU for the regulation of all card fees and charges through the revision of the Interchange Fee Regulation (IFR).

Action needed

It would be a matter of utmost concern if full implementation of SCA were allowed to proceed on 14th September. We are calling on the FCA to deliver a managed roll-out of SCA in the UK involving a two-year enforcement moratorium, or non-active supervisory period, that provides the breathing space to ensure readiness across a range of metrics set out below. A review should then be carried-out three to six months prior to active enforcement, reporting progress against these readiness metrics and defining whether further time is needed. A managed rollout period will have no negative impact on security and avoid a situation in which the opportunity for fraud is increased by the confused scramble to meet the September deadline.

About British Retail Consortium: The BRC campaigns for the retail industry and is the authoritative voice of retail, recognised for powerful campaigning and influence within Government and as a provider of in-depth retail information. The BRC leads the industry and works with their members to tell the story of retail, shape debates, and influence issues and opportunities which will help make that positive difference.

www.brc.org.uk

E-wallets, Mobile Wallets, and P2P Payments

The Evolution and Adoption of E-wallets

Raluca Constantinescu | Content Editor | The Paypers

Setting the scene

We expect transactions to be quick and around the clock – that is why change and innovation are constant when it comes to technology in the mobile payments space. The evolution in digital payments has resulted in the emergence of e-wallets. According to Capgemini's **World Payments Report** from 2018, non-cash transactions conducted via e-wallets were estimated to a total of 41.8 billion globally. Of the estimated total, about 71% (or 29.7 billion) were conducted via the payment apps and e-wallets offered by Big Techs to their customers.

The proliferation of this payment method has intensified due to the surge of mobile payments, smartphone penetration, shift in consumer behaviour, and, sometimes, regulation. What's more, the key to their success seems to be **a combination** between frictionless payments (related to customer experience), security, and the added value that a consumer would get from using the service and the innovation around these wallets. Therefore, the new possibilities provided by e-wallets are appealing for several reasons: they are easy to integrate on multiple devices; many of them can be used across channels; they have interfaces that are user-friendly; they pave the way for loyalty and marketing programmes – and all sorts of new ideas with regards to payments (eg Apple Card linked to Apple Pay). According to **Juniper Leaderboard 2018**, the top three e-wallets globally are PayPal, Alipay, and WeChat Pay. →

Moreover, thanks to e-wallets, consumers in developing nations are able to participate in the global financial system, since these do not require a bank account with a physical company or branch, enabling users in rural areas to connect. In some parts of the globe, they help users accept payments for services rendered, as well as receive funds or remittances from friends and family. For example, M-Pesa, which is an e-wallet in Kenya that facilitates easy money transfers and bill payments through mobile phones, currently has **27,8 million users** in a country of 45 million people. Previously, Kenyans had to use informal channels such as the services of bus drivers in order to transfer funds across the country. Today, M-Pesa is a fully fledged financial ecosystem, and transactions via the platform represent close to **50%** of Kenya's GDP.

Expansion across different areas

According to Juniper Research, by the end of 2019, nearly **2.1 billion consumers** worldwide will be using an e-wallet to make a payment or send money. In addition, **according to yStats**, more than two-thirds of e-wallet users live in the Asia-Pacific area.

Besides being the most numerous e-wallet users, customers located in the Asia-Pacific area are also the most active ones. However, we can observe a rather pronounced division between the East and the West when it comes to e-wallet adoption both in variety of wallets and volume of transactions. Even if Europe and the US have a greater variety, Asia has a larger consumer base – e-wallets are also used due to high smartphone penetration.

All across Asia, we can observe the emergence or expansion of players such as Alipay, WeChat Pay, Paytm, PhonePe, LINE Pay, Rakuten Pay, GO-PAY, and others. Besides offering coverage of online and brick-and-mortar shops in China, Alipay has become much more than just a platform for (e)commerce payments. It processes millions of virtual and physical payments daily, becoming one of the **'mega apps'** in China, used by hundreds of millions of consumers on a regular basis.

While in Europe Facebook **announces** that it will be discontinuing its P2P money transfer service, in India the situation is a bit different, with two major players announcing the launch of P2P payments in 2019. Paytm, backed by Alibaba and SoftBank, faces competition from global rivals, like Google Pay, Amazon Pay, and WhatsApp's P2P payment feature, WhatsApp Pay, which is set to enter the Indian payments market **in 2019**. Amazon announces that it will continue its investment in India as well, by launching **P2P payments** via Amazon Pay, for Android users in the country. Nonetheless, according to **TechCrunch**, WhatsApp has greater potential to dominate the Indian P2P payments space. The company has been working on a payments feature that would benefit from the Unified Payment Interface and include support from a number of India-based banks – State Bank of India, ICICI Bank, HDFC Bank, and Axis Bank. According to **Kapronasia**, WhatsApp now has over 300 million users in India, exceeding Paytm's 230 million; thus, it could prove to be a big challenge for Paytm.

In a fragmented payments market like India's, where there are **many players** competing in the e-wallet segment – including MobiKwik, Oxigen, FreeCharge, PayU Money –, Ola, backed by SoftBank and Naspers, provides an **e-wallet service** as well, allowing people to pay for transportation offerings, city cabs, as well as the company's food delivery service and grocery delivery venture. However, there is a new competitor: **the Unified Payment Interface (UPI)**. UPI payments are increasingly adopted by consumers and merchants, as the solution is backed by the banks, allowing for direct transactions from one bank account to another. Furthermore, India is about to impose **increased KYC regulations**, which threaten the existing non-bank e-wallets and could heavily impact the use of e-wallets, but UPI is exempt from these regulations. Nonetheless, by adapting business models to meet consumers' needs and differentiating products from other alternatives, including UPI, the e-wallet industry **is expected to maintain** the pace of its current expansion across India. →

Mobile payments are used every day by millions of people across Europe, and there is an abundance of choice for the European consumer – supported by banks, fintech, Big Techs, and merchants. At **42%**, e-wallet usage is higher proportionally in Norway than in any other European country.

P2P has been an important step for e-wallets in the Nordics. According to **BearingPoint**, MobilePay, initiated by Danske Bank in Denmark, DNB's Vipps in Norway, and Swedish banks' joint effort Swish have managed to acquire 13 million users amongst the population of 27 million people in the Nordic countries. More specific, according to **Deloitte**, MobilePay has over 4 million users in Denmark (69,3% of the population) and around 800,000 users in Finland (14,5% of the population), Swish has over 6,7 million users in Sweden (67,3% of the population), and Vipps has over 3 million users in Norway (57,1% of the population). The success of Nordic e-wallets has gained international interest, according to Deloitte's **report on Nordic mobile payments**. Therefore, while Sweden-based Swish seems to be focusing mainly on its home market, Denmark-based MobilePay and Norway-based Vipps have clearly communicated their international intentions.

Besides global brands, like Apple Pay, Google Pay, and Samsung Pay, there are many local initiatives in Europe, including Payconiq (Germany, Belgium, the Netherlands), Payback (Germany), Paylib and Lyf Pay (France), Pingit (the UK), Vipps (Norway), Swish (Sweden), MobilePay (Denmark, Finland), and OK (the Netherlands) – and by forging partnerships with retail chains, local e-wallets can offer extra value to clients (eg OK partnered with Dutch retailers; Lyf Pay teamed up with Carrefour).

In *LATAM*, **there are three main types** of e-wallets: contactless mobile wallets such as Apple Pay, ecommerce wallets like Visa Checkout or Amazon Cash, and stored value wallets that allow users to 'top up' their feature phone mobile money accounts. Thanks to its security and value-added services (eg free return shipping) that connect the wallet to a larger environment for ecommerce, PayPal has been quite successful in LATAM.

In *North America*, the pace of progress towards contemporary technologies like e-wallets is tempered by mature technology infrastructures, habits, and preferences established over generations. Here, the **typical user** of mobile payment methods is between 30 and 44 years old, is college-educated, and has an above-average yearly salary. Moreover, according to Statista's report **Mobile Payment Usage in the US**, in 2018 only 15.4% of mobile payment customers utilised designated e-wallets such as PayPal or Google Pay. Worldpay's **Global Payments Report 2018** presents the share of e-wallets in the payments space as follows:

- *North America ecommerce payment methods*: credit card – 34%, e-wallet – 20%, debit card – 19%, charge & deferred debit card – 13%, bank transfer – 6%, cash on delivery – 4%, prepaid card – 3%, PrePay – 1%, other – 1%;
- *North America POS payment methods*: credit card – 41%, debit card – 34%, cash – 16%, charge card – 4%, e-wallet – 3%, prepaid card – 2%.

Looking towards the next five years for this market, Worldpay expects the use of cash to drop by about 5% at the POS, the majority of that spend migrating to e-wallets. In addition, the company **projects** e-wallet usage will more than double in POS share by 2022. The awareness regarding digital payment methods, such as e-wallets, already started growing steadily across the US, the most popular e-wallets accessed in-store by US users as of December 2017 being **Apple Pay and PayPal**. PayPal is a global online payment business allowing users to make payments and money transfers online. In Q1 of 2019, there were **277 million** PayPal accounts active worldwide. Moreover, as of December 2018, **36%** of US retailers already accepted PayPal as a payment method, and 34% planned to accept it within the next 24 months. In 2018 the company was on a roll, announcing the acquisition of **iZettle** and **Hyperwallet**. Moreover, in 2019 it shared plans to invest USD 500 million in **Uber**, while also launching its new **digital commerce platform**. →

There are also e-wallets provided by banks and merchants. The latter ones integrate payments with the entire shopping experience, showing great success amongst US-based customers. A good example is provided by Starbucks, which enables app users to place orders and pay for them in advance, and then just pick them up when they get to a location. The e-wallets provided by merchants also integrate incentives – like the one coming from Walmart. The company has integrated incentives with its e-wallet, thus assuring users they are getting great prices and encouraging adoption. All these e-wallets have in common one feature: loyalty. Merchants that have their own apps have certain benefits: pre-existing permissions for engaging, known user behaviours, built-in brand trust, and smaller costs for acquiring e-wallet customers.

Alipay and WeChat Pay – worldwide expansion

The expansion of e-wallets – like Alipay and WeChat Pay – has made it possible for Chinese consumers to use their mobile devices instead of their physical wallets or even their formal bank accounts. They're using their smartphones to pay for almost everything they buy. Alipay, for example, offers almost complete coverage of online and offline shops in China, and it provides a wide range of other financial services, like money market investments, insurance, travel booking, and loans. On the other hand, WeChat Pay provides targeted marketing options for merchants and it is also widely integrated in social media hosted by WeChat.

Western countries are visited by millions of Eastern tourists and, throughout 2018 and 2019, we witnessed a trend growing stronger, while this opportunity was seized and Alipay and WeChat Pay expanded globally. According to a report by People's Bank of China (PBOC), in the rural areas across the country mobile payments have become more popular as well. Moreover, a **survey** regarding the payment behaviour of Chinese travellers revealed that they prefer to use mobile payment methods with which they are familiar. Therefore, Alipay moved even further in 2018 by forming global partnerships with many companies, including **Openpay** in Mexico, **Motion Pay** in Canada, and **FreedomPay** in North America. Alipay expanded even more across **Japan**, and it was also implemented in the Middle East at the airport in **Doha** and in Europe by **MCM**.

WeChat Pay expanded as well all across the globe – in **Italy**, **France**, the **UAE**, **Russia**, and **Sri Lanka**, amongst other countries. It has also announced it will **expand** its business even more across Europe. In April 2019 the number of European merchants offering WeChat Pay as a mobile payment method to Chinese tourists was 3.5 times higher compared to 2018.

Additionally, the two Chinese e-wallets moved beyond payments in 2018, as they were both integrated by **7-Eleven** for retail, for online bookings by **Air Canada**, by **CITCON and ACCEO** across North America, and by **CANCAN and WorldFirst** worldwide. Therefore, Alipay and WeChat Pay provide users with an entire ecosystem through which they can communicate, invest, pay and get paid, borrow, and manage their financial lives from a single place.

The 'pays' – global status

The 'pays' dominate more than half of the global supermarket transactions, according to the latest consumer spending data from **Worldpay** that shows that 59% of all in-store supermarket mobile transactions are taking place worldwide via e-wallets. Confidence with mobile payments has also shown an increase, with shoppers starting to purchase higher value goods via their mobile phones and the growing number (65%) of Generation Z contributing to the increasing popularity of e-wallets as well. →

In 2018 and 2019, Apple launched its e-wallet in many new countries, amongst which **Germany**, **Spain**, **Norway**, **Taiwan**, **Poland**, **Ireland**, **Australia**, **Austria**, **Iceland**, **Italy**, and the **Czech Republic**. What is more, a recent study found that Apple Pay has an estimated **127 million** active global users. According to reports from April 2018, Google Pay has reached **100 million** installs in just a few months, and throughout 2018 and 2019 it expanded its global presence as well, rolling out in many countries, including **Japan**, **Croatia**, **the Nordics**, **UAE**, **Chile**, **France**, **Switzerland**, **Israel**, and **Germany**. Following the launches in Singapore, Russia, and the US from 2017, in 2018 and 2019 Samsung Pay went live in **France**, **Australia**, **Brazil**, the **UAE**, **Italy**, **South Africa**, and **Mexico** as well.

Conclusion

According to **Global Mobile Wallets 2019**, the number of e-wallet users worldwide is expected to reach a ten-digit figure in 2019. More than two-thirds of them live in Asia-Pacific, with China alone contributing close to 50%. Some of the global competitors in the e-wallet space include Apple Pay, Google Pay, and Samsung Pay – and each of the three increased the number of covered markets during 2018. However, Apple Pay, for example, remained behind PayPal's app for in-store payment usage, according to surveys cited in the Global Mobile Wallets report.

Lack of trust in the security of mobile payments is one of the major barriers in LATAM as well, but despite this, the number of e-wallet users in countries such as Argentina, Brazil, and Mexico **is expected to grow**. According to **Javelin**, worldwide, smartphone owners who have made a purchase on a mobile browser or app but not in-store are considered the ideal target market for wallet adoption, responding more positively by approximately 10% than the average consumer to smartphone features that they would be most likely to use.

Merchants only want to accept this payment method if it's commonly used amongst consumers, as they do not wish to invest in adding in-store technology unless there is a significant demand for it. Nonetheless, there is a market that is ready for e-wallet adoption, but identifying potential e-wallet users will only be valuable if the experience itself is compelling enough for consumers to use it (and, most importantly, to keep using it) – and for merchants to offer it.

MuchBetter

Wallet Innovation: Three Factors for B2C Payments Success

About Jens Bader: Jens has a rich management background with more than 20 years of experience in the online and mobile payments industry. A seasoned commercial leader, Jens recently co-founded MIR Limited, an FCA-licensed Fintech group that develops and operates second-generation electronic money services assisting on- and offline merchants. Jens is a frequent speaker on payments and fraud-related topics worldwide.

Jens Bader ▪ *Co-founder* ▪ MIR Limited / MuchBetter

The financial services market, B2C payments in particular, has experienced considerable change over the last five years. Technology and a shifting regulatory environment have acted as catalyst for innovation – and they will continue to do so.

Amid all this change, however, payments still always follow the same scheme. A payment transaction is created, payment data is sent for authorisation with the issuer, and a response is received via the sender's acquirer. This is true for any digital transaction, regardless whether it's account, card or e-money based. If the process in the 'blackbox' follows the same logic, what makes the difference to people? What influences customers to choose one payment method over another, considering they have the ability to access several different options?

I see this choice as a triangle between convenience, speed, and price. These three factors, well-balanced, have a significant impact on the success of a B2C payment product or service. Ultimately it is convenience and the customer experience that makes the most telling difference, however, in this regard, innovations in the digital wallet space make a telling impact.

Convenience is king

Firstly, I want to start by explaining why security isn't part of the payments triangle. Instead, security is encapsulated into convenience. The art of engineering strong authentication and authorisation processes into a smooth and quick customer journey is the exact definition of convenience.

We have seen many new payment schemes and services coming to the consumer payments market in the last two/three years. Most, if not all, have been building their proposition around the customer experience. Some have a good balance of the triangle, others less so. This demonstrates that the battle for wallet-share in consumer payments is fought over customer experience.

We have witnessed that many card products and banking services also added customer journey elements, introducing easier ways to authorise transactions, reducing the steps required to initiate payments, making the payment process a simpler and more integrated part of the purchase process.

The role of digital wallets

Since the customer experience is such a critical success factor for any issuer, naturally e-wallets or digital wallets can play a starring role in today's payments eco-system.

So what are the benefits of wallets for online payments? A wallet is a purpose-built payment product that assumes 'customer ownership.' The payment journey is designed by the wallet to replace and streamline the transaction experience, the kind which the customer has when using a card or bank account directly. With a well-designed wallet, the customer buys into the triangle and starts using the wallet as a 'layer', rather than the raw product underneath (ie card). →

MuchBetter

Wallets are one step closer to customers, a true touchpoint to consumers. They are the layer that can create the envisioned and requested convenient experience and features that merchants require to support them; for example allowing merchants to use the wallet for subscription-based, recurring business models.

Wallets live within the financial eco-system as intermediaries, connecting customer and merchants at the point of transactions via a smooth journey, like a one-tap checkout or a simple confirmation of a push message by the customer to authorise a transaction. They eliminate the need of lengthy data entering and reduce friction. Wallets also introduce additional features and services to the benefit of customers and merchants alike, such as real-time cross-border peer-to-peer transactions or the ability to stretch payment acceptance across different shopping channels. Another core-feature is to keep sensitive data concealed during a transaction, reducing data exposure and the risk of theft/fraud. Wallets can also offer payment indemnification to the merchant and transactional integrity can be increased by the ability to match and validate certain data points between wallet and the customer data held by the merchant.

Digital Wallet schemes often operate globally, and therefore play an important role by managing and patching the fragmented global banking and payments infrastructure by spanning their functionality across many features and services within one product. It's a 'duct-tape' product. Front-side, it offers simplicity, while being feature-rich and convenient. Backside, it sorts the plumbing – by taping together a fragmented world of banking and payments. Wallets allow merchants to implement a holistic customer journey, based on one payment service, globally.

The wallet serves as a turnkey solution, managing the underlying payment schemes, risks, contractual relations, and fund flows.

At MuchBetter we designed a wallet that balances customer and merchant benefits, introduces a simple yet secure payment process, and allows payments in any situation, online, in-store between individuals or global remittances. The ability to communicate to merchants and customers, both connected to our wallet system via our smartAPI, makes MuchBetter a global, digital wallets service for many different merchant industries.

About MuchBetter: MuchBetter, operated by MIR Limited UK, an FCA-licensed and regulated e-money issuer, is the new payment application for iGaming and marketplaces. Available on Android and iOS, MuchBetter allows effortless online, offline and contactless payments, around the globe. MuchBetter's unique commercial models increase operators and merchants' revenues while its anti-fraud features and use of best in class technology eliminates payment risk whilst creating a convenient payment experience for customers.

muchbetter.com

Click here for the company profile

MuchBetter

Type of payment method	E-wallet
Active since	2017
Operational Area	Worldwide
Industries	Gaming, retail, marketplaces, financial services, digital entertainment
How it works	Mobile payments app
Potential reach	Worldwide
Market Share	
Acceptance	High
Chargeback Risk	Low
Facts	
Settlement currency	Major European and international currencies
Processing currrency	Any
Currency available for consumer	EUR, USD, GBP, CHF, PLZ, DKK, SEK, CAD, AUD
Transaction volume	Available on request
Implementation requirements (non technical)	None
Reconciliation	Merchant reporting portal, csv, xls data sets
Pricing	On request
Link to the APM Database for more details	https://onlinepayments.thepaypers.com/alternative-payment-method/MuchBetter/company/633
Channels (POS/ecommerce)	Ecommerce

Ant Financial | Alipay

Building out Digital Finance for the Underserved

About Douglas Feagin: Douglas joined Ant Financial in June 2016 to spearhead its globalisation strategy and Alipay's international businesses. He was previously senior partner at Goldman Sachs, with clients from sectors including banking and technology. He graduated University of Virginia in 1988, and received his MBA from Harvard Business School in 1994.

Douglas Feagin ▪ *President of the International Business Group* ▪ Ant Financial

Our world is truly entering the mobile era – by 2025, **an estimated six in 10 people will surf the internet on handheld devices such as smartphones**, a big jump from less than half the global population that had such access in 2018.

However, when it comes to mobile payments and other forms of digital finance, we're still very much in the first innings of a long game. Or using a sports analogy more familiar to those on the other side of the Atlantic, we've just heard the whistle for kick-off.

While some countries, such as China and Sweden, have leapt ahead of the world in adoption of digital finance, huge parts of developing world still lack even the most basic of access to banking. According to a study by the World Bank in 2018, **1.7 billion adults globally remain unbanked**, missing out on a crucial capability needed for them to escape a lifetime of poverty.

Helping underserved and unbanked individuals has long been part of our mission – from launching Alipay in 2004 to create trust between buyers and sellers in China's nascent ecommerce industry, to the formation of Ant Financial in 2014 to expand beyond online payments with innovative technological solutions to meet the broader financial needs of our consumers.

Over the years, Alipay has grown from online payments to a digital lifestyle platform that provides users in China with over 100 kinds of services, from hailing cabs and paying utility bills, to making medical appointments and investing their spare cash.

Last year, after social media apps such as Facebook and Instagram, Alipay was **ranked as the most popular application in the world by App Annie**.

As China's consumers increase their wealth and raise their expectations for services, we've grown with them, accompanying them as they increasingly travel overseas. From **catching the northern lights in Canada and paying for ice hockey tickets in the US**, to **shopping at Harrods and Selfridges in the UK**, our aim is to connect merchants with Chinese tourists as they explore with the world together with their Alipay e-wallets.

But that's not the only way that we are expanding overseas. A few years ago, we began forming partnerships with local digital wallet operators who share our vision, of using technology to help the underserved and unbanked.

By forming a strategic tie-up with India's Paytm 2015, jointly developing Thailand's TrueMoney in 2016, and a year later, investing in GCash in the Philippines and kakaopay in the Republic of Korea, we've began to create a global payments and digital finance partnership that now serves more than 1 billion users around the world.

So why do I say that our world is still in the very early stages of digital payments? That's because I believe that many of the foundational use cases that will bring about truly globalised payments are still in the process of being developed. →

Full list of Alipay's current e-wallet partners

One promising area is that of cross-border remittances. Today, much about traditional money transfers can be time-consuming and inefficient - but the application of new technology and the proliferation of e-wallets can change that.

For example, in June 2018, Alipay's blockchain technology was applied to allow **real-time, 24-hour cross-border remittances** between users of Hong Kong's AlipayHK and the Philippines' Gcash e-wallets. A similar model was replicated in January 2019, **enabling Pakistanis living in Malaysia to send money home, instantly and securely**.

Speaking at the Money 2020 conference in Singapore earlier in 2019, I recounted the stories of two Filipino domestic helpers working in Hong Kong, who no longer queue for hours at remittance centres during their precious time off to send their earnings home. Now, that's all done by tapping a few buttons on their mobile phones, and their families back in the Philippines can receive the money quickly and safely on their e-wallets.

Today, we continue to explore and capture the benefits and convenience that digital finance can bring for users. In China, for example, Alipay's 'Yu'e Bao,' an investment platform for money market funds, **has helped transform how more than half a billion Chinese manage their spare cash**. Through a new mutual aid product called '**Xiang Hu Bao**,' we're also bringing health protection to the millions of Alipay users who've signed up.

And since March 2019, Hong Kong users of AlipayHK – a joint venture between CK Hutchison and Ant Financial – can also pay at merchants where Alipay is accepted in mainland Chinese cities within the Greater Bay Area, simply by displaying their AlipayHK QR codes.

In the near future, I expect more users of Alipay's strategic partners will be able to use their e-wallets when travelling the world in much the same ways as they do at home. Together with our global partners around the world, we're continuing to use digital technology to come up solutions that make the world a friendlier and more convenient place.

About Ant Financial: Ant Financial is a technology company based in Hangzhou, China, that aims to bring inclusive financial services to the world. Founded in October 2014, it operates Alipay, a digital payments platform that's also the world's most popular non-social networking app.

www.antfin.com

Ecommerce Foundation

Mobile Ecommerce, Mobile Wallets, and Payment Safety

About Shaun Packiarajah: Shaun graduated with a Master's degree in Victimology and Criminal Justice from the University of Tilburg. As part of the Research Team at the Ecommerce Foundation, he is involved in creating content and reports. His background is in public administration, policy creation, and statistical analysis.

Shaun Packiarajah ▪ *Researcher and Editor* ▪ Ecommerce Foundation

The idea of making a purchase from your phone is often second nature nowadays. That's no surprise, with Visa estimating that **20 billion connected devices will be in action by 2020**. Let's dig a little deeper into how mobile commerce is looking currently.

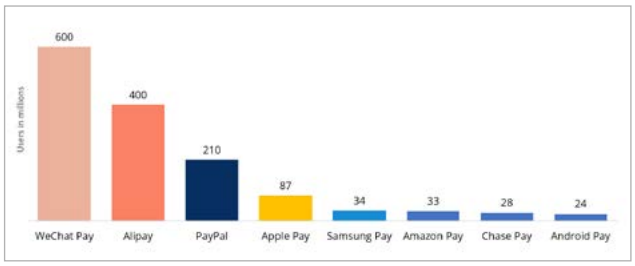
The current mobile commerce landscape

One of the most significant shifts in the ecommerce world is mobile ecommerce. As mentioned before, the capabilities of mobile phones have improved as their importance in people's everyday lives has increased. **Mobile commerce** accounted for 48% of ecommerce sales worldwide in 2017, with a forecast of 70% by 2022. Digital growth in retail is dominated by mobile, in terms of both raw growth in traffic (+24%) and orders (+37%).

When it comes to mobile ecommerce, merchants are also standing up and taking notice. In 2018, **17% of merchants saw half of their sales coming from the mobile channel**. By 2020, this is expected to rise to one-third. An overwhelming **92% of merchants are currently or are planning to support the mobile channel in the near future** – demonstrating the commitment to mobile payments.

However, when it comes to buying on a mobile device, it can still often be a headache. Multiple pages are put in front of the consumer before the order process is complete, many of them requiring time-consuming form-filling. All the convenience of a mobile device is lost at this crucial moment. That is where options such as mobile wallets have come into play. By enabling a payment experience that can be spread across multiple online stores, it can make things both simple and quick for consumers on-the-go.

The popularity of mobile wallets in particular can be demonstrated below by research from Fung Global Retail & Technology, with its global snapshot from 2017:



What security issues are holding consumers back?

The perception of security (and privacy)

New technologies are often difficult to grasp for consumers. But when new technology involves customers' payment options, the hurdle is much higher. **Fears around identity theft and hacking can have a chilling effect when it comes to adopting mobile ecommerce** where the convenience of mobile payment can be most felt. This is where consumer education is crucial. Methods such as digital wallets utilise technology like encryption and tokenization to make payments safer than a traditional physical card. By communicating this effectively on their online store (or through alternative channels), consumers will both understand this point and be more used to it during their customer journey. Merchants are also wary about the security of new payment technology, according to research from **Forrester**. →

Consumers often do not (and should not) understand the underlying security system at play when shopping online. They just want it to work and be secure. But there needs to be some perceptible 'symbol' or indication of this security for consumers to feel comfortable shopping online. With the exponential growth of ecommerce (especially new online stores), the consumer can't base this on guess work.

The way forward: best practices

Tackle the remaining adoption barriers by looking past brand

Apart from trust and security, there are many issues that are holding consumers back from adopting mobile payments such as mobile wallets.

Convenience comes top of that list, with 45% of US users from a 2018 **report** finding it is simply easier to pay with a card. This is amplified by the fact that almost a quarter of individuals do not know where they could use a mobile wallet. Many of the most popular payment platforms are being tied to a physical device (Apple, Samsung) or have other restrictions. This can create a competing web of payment services, confusing consumers. Through innovation and possible cooperation, these leading brands can work to unify the experience from the consumer's perspective – making the process of mobile ecommerce payments quick, easy, and hassle-free.

Keep devices secure

Many mobile methods are tied to a device. This can be both a blessing and a curse depending on the level of 'cybersecurity hygiene' a user is using. One perfect example is the digital wallets where many have the restriction that a mobile device needs a lock screen for it to function. Ideally, such a security feature should only be known by the account holder, but just as with a Netflix password, this is often shared with friends or can be obtained via unscrupulous means. Smart authentication methods such as biometrics and two-factor security can keep these issues to a minimum.

Gain consumer trust through a third-party trustmark

Mobile ecommerce is growing rapidly in many directions and consumer behaviour is changing just as rapidly. Cross-border trade means that consumers are exposed to websites from across the globe. In order to feel comfortable, consumers require a visible and simple indication of security. Ideally, this would be one that is familiar to them, no matter the country they are buying from. Trustmarks can provide this independent form of trust.

Making mobile ecommerce payments convenient and safe is the way forward

Buying online is increasingly a mobile activity. We want to shop on the train, waiting in line, or even in a store itself. By utilising easy and convenient payment options, ecommerce can not only grow faster but be safer as well.

About Ecommerce Foundation: Ecommerce Foundation is an independent organisation with the mission to facilitate ecommerce through the development of practical knowledge, market insights, and services.

About Safe.Shop: Safe.Shop is the Global Ecommerce Trustmark initiated by Ecommerce Foundation, helping online shops selling nationally and cross-border by creating consumer trust. Safe.Shop services include an ecommerce Global Code of Conduct certification, a Consumer Review System, and an automated Trust Score.

About Scamadviser: Scamadviser.com helps over 2.5 million consumers every month to discover if a website is legitimate or a scam.

www.ecommercefoundation.org
www.safe.shop
www.scamadviser.com

Trust is our business

“Legal Advice, Certifications, Consumer Review System & Trust Score to support your global expansion.”

Discover more benefits at **www.safe.shop**

Safe.Shop™

The Global Ecommerce Trustmark

Increase Conversion & Order Size | Prevent Costs & Lower Legal Risks | Grow Your Business Locally & Globally

Merchant Risk Council

Mobile Payments: Where Smartphone Meets Wallet

About Markus Bergthaler: Markus oversees the development of the association's entire programme and marketing content, including strategy, conference education, subject matter, website content, benchmarking, and online forum topics. Markus joined the MRC from Wizards of the Coast, where he led the company's fraud department.

Markus Bergthaler ▪ *Director of Programs and Marketing* ▪ Merchant Risk Council

According to a February 2018 **Pew Research poll**, more than 95% of American adults now own a cellphone, with 77% of those phones considered smartphones. The amount of personal possessions these ubiquitous devices have replaced is nearly endless; from kitchen timers to instrument tuners, most helpful apps are only a quick tap away. With that in mind, it's no real surprise that the smartphone's ambitious growth has stretched into users' wallets through mobile payments. There are a variety of reasons behind this innovation, not the least of which are security and convenience. So what can the world expect from mobile payments in the years to come?

Users still want physical options

Though it would follow that mobile payment users willing to make the digital jump would want to ditch their wallets entirely, that's not exactly the case. A variety of reasons – your wallet doesn't lose signal or power down, for example – drive the need to satisfy both 'bricks' and 'clicks' for payment options. Most major third-party payment apps offer debit card-like options that draw directly from the account balance: both Paypal and its acquired company Venmo, as well as Square's well-known Cash app, offer them. Considering new smartphones almost always have biometric-linked security built right in, experts can't shrug off the phenomena as a fear of hackers but must instead acknowledge that people simply want the option.

Mobile payments support tech orientation

At their core, mobile payments drive the financial ends of a business – they give merchants the ability to accept a popular, growing form of payment without significant infrastructure changes.

Most of the newest card-swipe checkout modules now come with a technology called NFC, or near field communication, built right in. This tech interacts with chips embedded in many new debit and credit cards, enabling the user to simply tap the card flush to the module to pay, rather than swiping. Not only is this generally a little faster than the swipe-or-insert conundrum forced on checkouts in recent years, but it also thwarts physical theft devices like card skimmers handily.

That same NFC tech extends seamlessly to smartphones embedded with NFC capability, allowing a user with the right apps in place to perform the same action with their phone. By normalising the use of a phone at checkout, the barriers to other digital interactions, such as an email signup or a digital loyalty card app, are significantly lowered in the process. This helps strengthen brand or store loyalty among a dominant demographic – millennials – that are notoriously disloyal when competitive pricing is involved.

Beyond the vendor-customer relationship

Focusing entirely on their checkout-counter benefits does mobile payments a disservice. Many important transactions are now done just before the checkout, among friends and associates. This so-called peer-to-peer payment network is almost exclusively driven by mobile payments, allowing a group out to dinner to pay their fair share, eliminating the 'forgot my wallet' embarrassment completely. ➔

Group outings, complete with their quibbles over gas cost, event tickets, and even food delivery, become significantly easier as well. Curiously, the public ledger of at least one digital payment app – Venmo – has become something of an ad hoc social network, offering users the chance to describe and display exactly why money is changing hands and who's receiving it. Punctuated with emojis, these often-cheeky notes allow inside jokes to flourish as the ledger balances, and can even give companies a footing for marketing. Recently, for example, Chipotle used the app to drive contest signups, rewarding hundreds of users with a handful of (emoji-laden, of course) dollars in the app, ostensibly to splurge on tacos at the restaurant. In the process, the company gained a rich database of individuals that not only frequented Chipotle, but demonstrably had the app installed as well – a marketing goldmine.

As younger generations normalise sending, charging, and accepting digital money to divide debts, it's reasonable to expect certain legacy costs to accept the payment type as well. Imagine paying rent or utilities in a shared housing arrangement with a central mobile payment app. While this is a task often divided between branded apps, the digital functionality is already in place: it wouldn't take much work to bridge the efforts under a Venmo or Cash App-branded umbrella.

The forefront of financial evolution

While some still consider it a fringe concept, the fact of the matter is that 'cryptocurrency' like Bitcoin and Ethereum is garnering enough interest and volume to legislate and debate at the highest levels.

The Cash App, among other mobile peers, offers seamless conversion between cryptocurrency and usable, everyday currency. This access turns a digital concept into lunch or bill payments for the intrepid crypto investor. An essentially-digital currency, it makes perfect sense that crypto plays well with digital payment companies in terms of functionality. As use and interest grow, mobile payments are in an enviable position to offer much-needed liquidity to a financial investment often hampered by the very liquidity-resistant format that defines it.

While mobile payments aren't a panacea for all that ails money movement, they're an impressively effective bridge between disparate payment options and on-the-go needs. Expect this industry to grow and evolve even more as mobile capabilities do – making the ever-present smartphone even more of a must-have accessory for a busy modern lifestyle.

Payment Operations Group

Peer-to-Peer Payments May Be the Next Ecommerce Trend in the US

About Sally Baptiste: Sally Baptiste has 30+ years professional experience with some of the largest US ecommerce acquirers. As a leader at Chase Paymentech, then a Senior Business Manager of payments for AT&T, she was employed as the payments expert for McAfee. With a Master of Business Administration degree and Payment Card Industry Professional certification, she now co-owns her own consulting group of payment experts.

Sally Baptiste ▪ *Consultant* ▪ Payment Operations Group

As global payments erase borders for US companies selling worldwide, US merchants appear to be stepping back. But appearances can be deceiving. With a focus on global sales in recent years, merchants are aligning to their new reality – International Regulations. With new regulations and Brand deadlines looming, and a two-year development calendar for most merchants, taking a rebuilding timeout is wise.

While they update systems, manage costs, juggle multiple providers, and comply with global regulations, US merchants are watching for the next major US payment trend. This time, however, they are using binoculars. In the last major payment type trend, merchants jumped to install mobile wallets such as Apple Pay and Samsung Pay. In their next steps, merchants are looking for payment types that bring larger, committed user bases and new markets. And they are becoming aware that their next market may not be overseas – it may be right here at home with Millennials.

Quietly building their own trends, these younger US buyers have characteristics that have been overlooked. Forecasters note they will be the first generation to achieve lower levels of financial success than preceding generations. Millennials are hit with record levels of student loans and housing costs, making them very aware of every dollar spent. Furthermore, they spend in groups, combining their limited resources, and in doing so, they have empowered Peer-to-Peer (P2P) payment types.

Not willing to accept lower quality, younger buyers are using tools such as Venmo and Zelle to fund areas of the market not previously tagged as 'pay-type-impacting'. Combining funds to execute one rent payment, for example, may take four different transactions – transactions that Visa and Mastercard have eyed for decades – and it is something that Millennials have achieved in just a few years using the P2P tools that were originally marketed for dinners out.

These P2P payment types are not new, especially when you consider this path was launched almost 30 years ago. Universal (almost) smart phones in the US gave developers a way to create the ease-of-use tools which moved these transaction types off card-backed and into bank-backed arenas, regardless of device type. In 2018, **some estimates** noted 80-90 million users engaged in P2P transactions through these apps, so now it's a race to obtain (and retain) the growing user base.

In distinguishing themselves from the pack, P2P applications are using three approaches: Location, Convenience, and Audience. Success in location has been critical as services such as Zelle (imbedded in many mobile banking apps) and Messenger P2P payments (within Facebook) leverage persons already within their reach. Along the same location arguments, Apple Pay Cash, Google Wallet, and other device-centric services are trying to take advantage of mobile usage to become the P2P service of choice for their customers. Of note here is the recent breakout (Q4 2018) of Apple Pay Cash which actually loads your incoming money to a card within your Apple Pay wallet to be used as a pre-paid card. →

Tying back to a card normalises this payment type and opens the spendability of this payment type, but not more than the stand-alone apps that drive funds into your bank account, so Apple is mainstreaming the P2P results but long-term adoption is far from guaranteed.

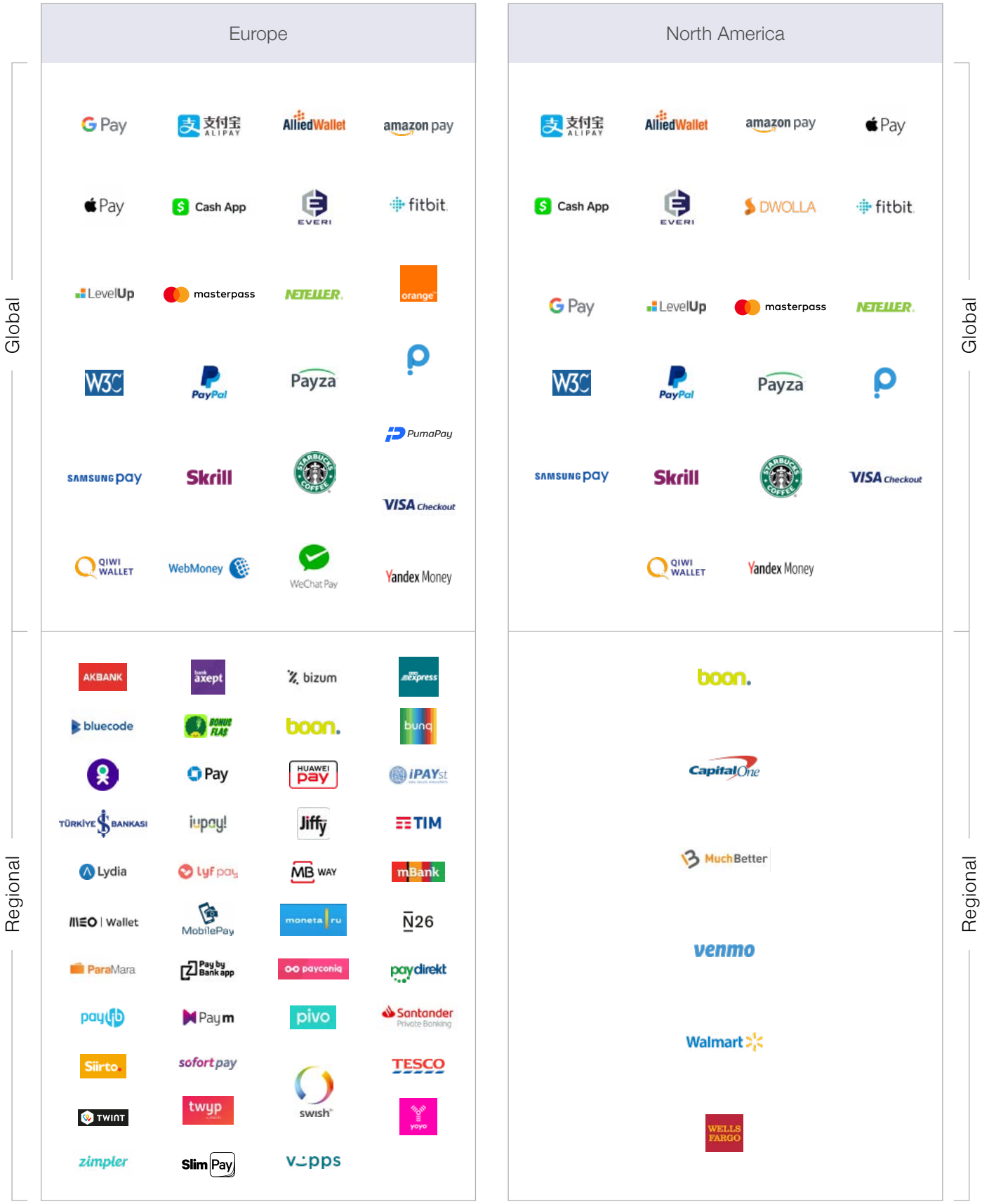
The next adoption approach is Convenience, but that's not an isolated approach. While the original ease-of-use path was adopted, a few other areas were impacted – Security and Feature Expansion. The fewer steps needed to send a payment, the greater the initial adoption… Until you send money to the wrong person and cannot get it back. Security of the service generally and of each transaction specifically adds back the complexity that application developers worked so hard to remove. Users are growing more aware of this gap, especially as reporting of these issues increases, so apps like Venmo, Cash App (by Square), and Zelle's standalone version are expanding security as well as contact confirmation prior to remittance. Additionally, supporting a Convenience mode as they reduce your interface with other applications, P2P apps are adding messaging, emojis, activity feeds, and more as features they feel will add fun while reducing overall clicks.

In a third approach to market acquisition, some services are crafting products tied to a desired Audience. Services such as Dwolla (targeting small transactions) and Payoneer (for freelance services) are targeting specific use-cases in an effort to tie up a user base and smaller market – and theoretically they would grow out into the larger market. The most extreme market success for a targeted community is Venmo as they resonate with Millennials – **the largest user group for stand-alone P2P services sending an estimated USD 1 billion each month**. With support from parent company PayPal, Venmo is now approaching merchants for ecommerce checkout placement. With their larger user base and device ubiquity, Venmo could be an attractive payment type in the future. For Venmo, it would be a way to monetise the payments they have been facilitating for years – and bring in profit.

In the meantime, US merchants are waiting to see where or if P2P payment types could effectively bring in new sales. Consumers are viewing P2P as a growing part of their financial arsenal – for Millennials, every bit as important as cash. Device-driven payment types are entering late in the game, but is literally at the fingertips of the desired market. And the rest of the world sits back wondering why it took the US so long to get this far.

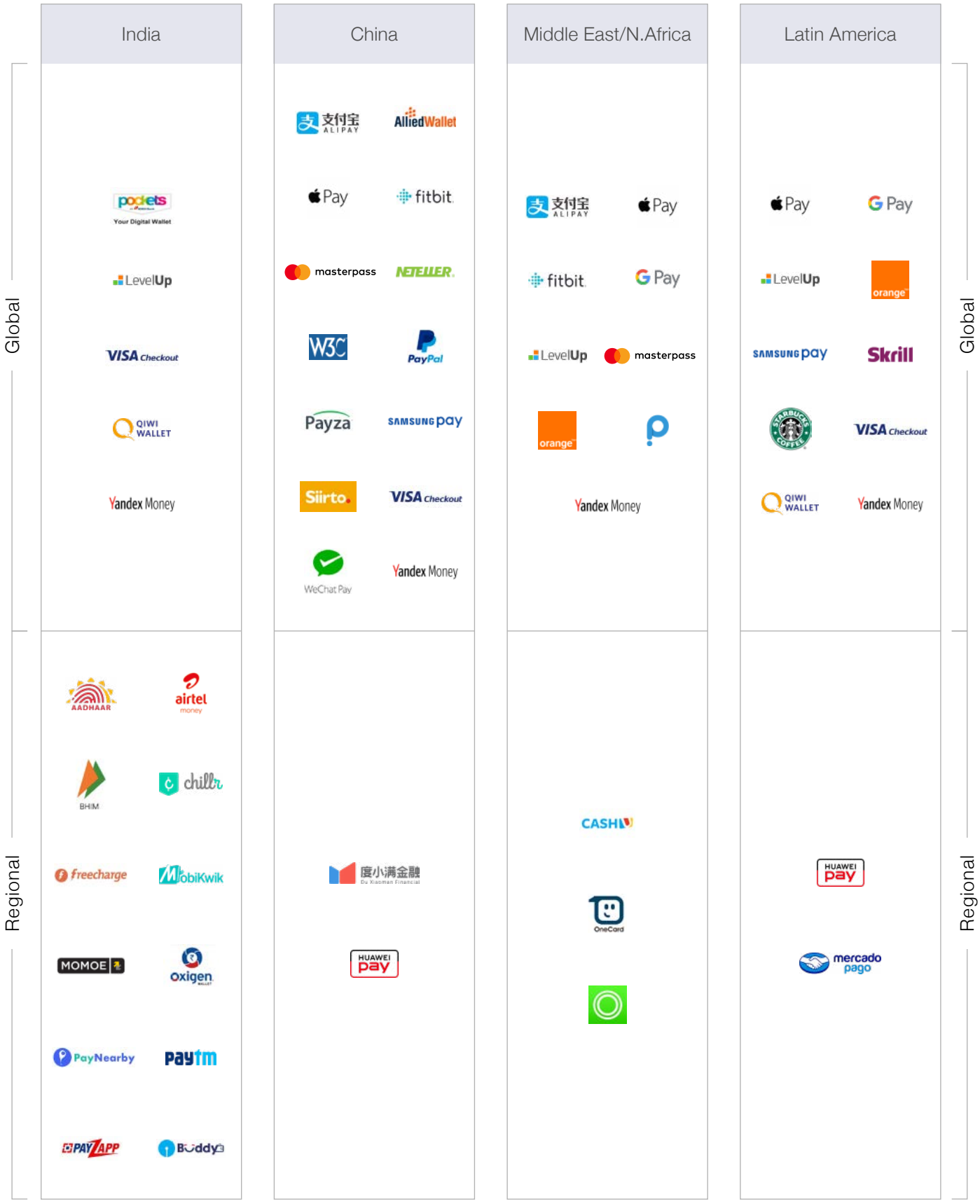
Overview of Regional and Global E-wallets

in Europe and North America

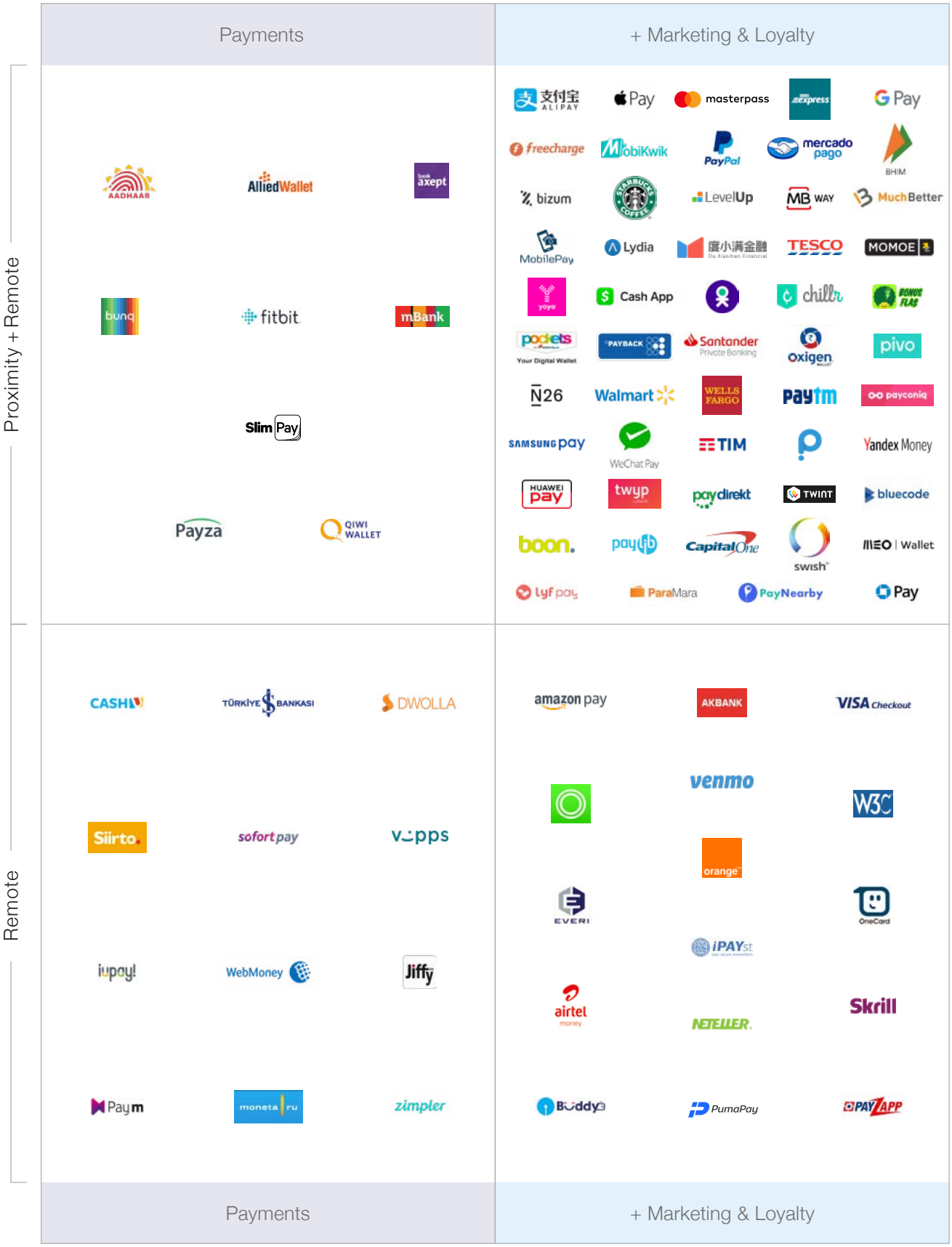


Overview of Regional and Global E-wallets

in India, China, Middle East/North Africa and Latin America



Mapping of E-wallet Functionalities



E-wallets Mapping 2019

Company	Platform	Business Model	Scope	Context	Proximity/Remote	P2P/C2B	Backing	Head office	Scale
Aadhaar Pay App	Independent	Transaction-driven	1) Payment	3) Bills	Prox+Rem	C2B	Bank	India	Regional
AirtelMoney	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Rem	P2P+C2B	Bank	India	Regional
AKBANK Direkt	Independent	Transaction-driven	2) Loyalty & Marketing	3) Bills	Rem	P2P+C2B	Bank	Turkey	Regional
Alipay	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Merchant; Fintech	China	Global
Allied Wallet	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Prox+Rem	C2B	FinTech	UK	Global
Amazon Pay	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile. Voice, in-store	Rem	C2B	Merchant	US	Global
Apple Pay	Specific	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Big tech	US	Global
BankAxept	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Prox+Rem	C2B	Bank	Norway	Regional
BHIM / UPI App	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	Government	India	Regional
Bizum	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Spain	Regional
BKM Express	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Turkey	Regional
Bluecode	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	B2B+P2P+C2B	FinTech	Germany	Regional
BonusFlaş	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	Bank	Turkey	Regional
boon (Wirecard)	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Germany	Regional
Bunq	Independent	Subscription-driven	1) Payment	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Netherlands	Regional
Capital One Mobile App	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	US	Regional
Cash App (Square)	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	FinTech	US	Global
CashClub Wallet (Everi)	Independent	Transaction-driven	2) Loyalty & Marketing	1)In-Store	Rem	C2B	FinTech	US	Global
CashU	Independent	Transaction-driven	1) Payment	3) Bills	Rem	C2B	FinTech	Dubai	Regional
Chase Pay	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	US	Regional
Chillr	Independent	Transaction-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	Bank	India	Regional
Du Xiaoman Pay (ex Baidu)	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	FinTech	China	Regional
Dwolla	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Rem	C2B	FinTech	US	Global
FitBit Pay	Specific	Data-driven	1) Payment	1) In-Store	Prox	C2B	Merchant	US	Global
FreeCharge (Snapdeal)	Independent	Transaction-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	FinTech	India	Regional
Google Pay	Specific	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Big tech	US	Global
Huawei Pay	Specific	Data-driven	2) Loyalty & Marketing	1) In-Store	Prox	C2B	Big Tech	China	Regional
ICICI Pockets	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	India	Global
iPAYst	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	C2B	FinTech	Spain	Regional
İşCep	Independent	Transaction-driven	1) Payment	3) Bills	Rem	P2P+C2B	Bank	Turkey	Regional
iupay	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Rem	C2B	Bank	Spain	Regional
Jiffy	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Rem	P2P+C2B	FinTech	Italy	Regional
LevelUp	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	C2B	FinTech	US	Global
Lydia	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	FinTech	France	Regional
Lyf Pay	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank/Merchant	France	Regional

E-wallets Mapping 2019

Company	Platform	Business Model	Scope	Context	Proximity/Remote	P2P/C2B	Backing	Head office	Scale
MasterPass	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	US	Global
MB way	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Portugal	Regional
mBank	Independent	Transaction-driven	1) Payment	3) Bills	Prox+Rem	P2P+C2B	Bank	Poland	Regional
MEO Wallet	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	FinTech	Portugal	Regional
MercadoPago	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	Merchant	Argentina	Regional
Mobikwik	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	FinTech	India	Regional
Mobilepay	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	Bank	Denmark	Regional
Momoe (Shopclues.com)	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox	C2B	FinTech	India	Regional
Moneta.ru	Independent	Transaction-driven	1) Payment	3) Bills	Rem	C2B	FinTech	Russia	Regional
MuchBetter	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	FinTech	UK	Regional
N26	Independent	Subscription-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox	C2B	Bank	Germany	Regional
Neteller	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	P2P+C2B	FinTech	UK	Global
OK	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	FinTech	Netherlands	Regional
OneCard (Bandar Utama)	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	C2B	Merchant	Saudi Arabia	Regional
Orange Cash	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	P2P+C2B	Telco	France	Global
Oxigen Wallet	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	FinTech	India	Regional
ParaMara	Independent	Transaction-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	Bank	Turkey	Regional
Pay by Bank App (Zapp)	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Prox+Rem	C2B	Bank	UK	Regional
Payconiq	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Luxembourgh	Regional
Paydirekt	Independent	Transaction-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	Bank	Germany	Regional
Paylib	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	France	Regional
Paym	Independent	Data-driven	1) Payment	2) Online, Mobile	Rem	P2P+C2B	Bank	UK	Regional
Payment Request API (W3C)	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	C2B	FinTech	US	Global
PayNearby	Specific	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	B2B+P2P+C2B	Bank	India	Regional
PayPal	Independent	Transaction-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	FinTech	US	Global
PayTM Wallet (PayTM)	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	FinTech	India	Regional
Payza	Independent	Data-driven	1) Payment	2) Online, Mobile	Prox+Rem	P2P+C2B	FinTech	UK	Global
PayZapp (HDFC)	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	P2P+C2B	Bank	India	Regional
Pingit	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	UK	Global
Pivo	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Finland	Regional
PumaPay	Independent	Subscription-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	P2P+C2B	NA	Cyprus	Global
SamsungPay	Specific	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Big tech	South Korea	Global
Santander Wallet	Specific	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Spain	Regional
Siirto	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Rem	P2P	Bank	Norway	Regional
Skrill Wallet	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	P2P+C2B	FinTech	UK	Global

E-wallets Mapping 2019

Company	Platform	Business Model	Scope	Context	Proximity/Remote	P2P/C2B	Backing	Head office	Scale
SlimPay	Independent	Transaction-driven	1) Payment	2) Online, Mobile, In-store	Prox+Rem	B2B+B2C	Fintechs, PSPs, Resellers	Paris	Regional
sofortpay	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Rem	C2B	Bank	Germany	Regional
Starbucks Card	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox	C2B	Merchant	US	Global
State Bank Buddy	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Rem	P2P+C2B	Bank	India	Regional
Swish	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Sweden	Regional
Tap	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Rem	C2B	FinTech	Kuwait	Regional
Tesco Pay+	Independent	Data-driven	2) Loyalty & Marketing	1) In-Store	Prox	C2B	Merchant	UK	Regional
Tikkie Pay	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Netherlands	Regional
TIM Pay	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Telco	Italy	Regional
Twint	Independent	Transaction-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	Bank	Switzerland	Regional
Twyp	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	P2P+C2B	Bank	Spain	Regional
VenMo	Independent	Data-driven	2) Loyalty & Marketing	3) Bills	Rem	P2P+C2B	FinTech	US	Regional
Vipps	Independent	Transaction-driven	1) Payment	2) Online, Mobile	Rem	P2P+C2B	Bank	Norway	Regional
Visa Checkout	Independent	Transaction-driven	2) Loyalty & Marketing	2) Online, Mobile	Rem	C2B	Bank	US	Global
Visa Qiwi Wallet (Qiwi)	Independent	Transaction-driven	1) Payment	2) Online, Mobile, In-store	Prox+Rem	P2P+C2B	Bank, FinTech	Russia	Global
Walmart Pay	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	C2B	Merchant	US	Regional
WebMoney	Independent	Transaction-driven	1) Payment	3) Bills	Rem	P2P+C2B	FinTech	Russia	Global
WeChat Pay	Independent	Transaction-driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	FinTech; Big Tech	China	Global
Wells-Fargo Wallet	Specific	Transaction-driven	2) Loyalty & Marketing	1) In-store	Prox	C2B	Bank	US	Regional
Yandex.Money	Independent	Transaction-driven, Data driven	2) Loyalty & Marketing	3) Bills	Prox+Rem	P2P+C2B	FinTech, Bank, Merchant	Russia	Global
Yoyo Wallet	Independent	Data-driven	2) Loyalty & Marketing	2) Online, Mobile	Prox+Rem	C2B	FinTech	UK	Regional
Zimpler	Independent	Data-driven	1) Payment	3) Bills	Rem	C2B	FinTech	Sweden	Regional

E-wallets Mapping 2019

Company	Transaction Volume	Instruments	Website	Founded	Regions					
					Europe	North America	India	China	LATAM	MENA
Aadhaar Pay App	163 Mln transactions (2018)	Bank Debit	https://www.npci.org.in/product-overview/bhim-aadhaar	2017			x			
AirtelMoney	15 Mln users	Bank Debit, Credit Card, Debit Card	http://www.airtel.in/money/	2012			x			
AKBANK Direkt	NA	Bank Debit, Debit Card, Credit Card	https://www.akbank.com/tr-tr/Akbank-Direkt/Sayfalar/Akbank-Direkt.aspx	2016	x					
Alipay	NA	Bank Debit, Credit Card, Debit Card	https://global.alipay.com	2004	x	x	x	x		x
Allied Wallet	110> Mln users (2016)	Bank Debit, Credit Card, Debit Card, Cash	https://www.alliedwallet.com/e-wallet/	2002	x	x		x		
Amazon Pay	NA	Bank Debit, Credit Card, Debit Card	https://pay.amazon.com/uk/	2007	x	x				
Apple Pay	NA	Credit Card, Debit Card	http://www.apple.com/apple-pay/	2014	x	x		x	x	x
BankAxept	NA	Bank Debit	https://bankaxept.no/en/om-oss/	2014	x					
BHIM / UPI App	USD 15 Bln (2019)	Bank Debit	https://www.bhimupi.org.in/	2016			x			
Bizum	NA	Bank Debit	https://bizum.es/	2016	x					
BKM Express	NA	Debit Card, Credit Card	https://bkmexpress.com.tr/	2012	x					
Bluecode	NA	Bank Debit	https://bluecode.com/en	2014	x					
BonusFlaş	NA	Bank Debit	http://www.bonusflas.com.tr	2015	x					
boon (Wirecard)	NA	Bank Debit	https://www.boonpayment.com/de/en/	2015	x	x				
Bunq	NA	Bank Debit	https://www.bunq.com/	2015	x					
Capital One Mobile App	NA	Bank Debit	https://www.capitalone.com/applications/mobile/	2014		x				
Cash App (Square)	NA	Bank Debit, Debit Card, Credit Card, E-wallet	https://cash.app	2009	x	x				
CashClub Wallet (Everi)	NA	Credit Card, Debit Card	https://www.everi.com/fintech/cashclub/cashclub-wallet/	1991	x	x				
CashU	2.3 Mln users (2016)	Bank Debit, Credit Card, Debit Card, Cash	https://www.cashu.com/	2002						x
Chase Pay	NA	Bank Debit	https://www.chase.com/digital/digital-payments/chase-pay	2015	x					
Chillr	NA	Bank Debit	http://www.chillr.com/	2013			x			
Du Xiaoman Pay (ex Baidu)	100 Mln users (2014)	Bank Debit, Credit Card, Debit Card	https://www.duxiaoman.com/	2018				x		
Dwolla	3 Bln transactions (2015)	Bank Debit	https://www.dwolla.com/	2008		x				
FitBit Pay	NA	Bank Debit, Debit Card, Credit Card, E-wallet	https://www.fitbit.com/nl/fitbit-pay	2018	x	x		x		x
FreeCharge (Snapdeal)	54 Mln users (2018)	Bank Debit, Credit Card, Debit Card	https://www.freecharge.in/	2010			x			
Google Pay	USD 102 Bln (2016)	Credit Card, Debit Card	https://www.android.com/pay/	2015	x	x	x		x	x
Huawei Pay	USD 595 Million (2018)	Debit Card, Credit Card	https://consumer.huawei.com/en/mobileservices/huawei-wallet/	2016	x			x		
ICICI Pockets	NA	Credit Card, Debit Card	https://www.icicibank.com/Personal-Banking/insta-banking/internet-banking/pockets/index.html	2015			x			
iPAYst	NA	Debit Card, Credit Card	http://www.ipayst.es/	2015	x					
İşCep	NA	Bank Debit	https://www.isbank.com.tr/EN/digital-banking/	2012	x					
iupay	NA	Bank Debit, Debit Card, Credit Card	https://www.iupay.es/OasysWebService/login/landingpage?language=en_GB	2014	x					
Jiffy	NA	Bank Debit	http://jiffy.sia.eu/en	2016	x					
LevelUp	1 Mln users (2016)	Bank Debit, Credit Card, Debit Card, Cash	https://www.thelevelup.com/	2008	x	x	x		x	x
Lydia	EUR 80 mln per month	Debit Card, Credit Card, E-wallet, Bank transfers	https://lydia-app.com	2013	x					

E-wallets Mapping 2019

Company	Transaction Volume	Instruments	Website	Founded	Regions					
					Europe	North America	India	China	LATAM	MENA
Lyf Pay	NA	Bank Debit, Credit Card	https://www.lyf.eu/fr/	2013	x					
MasterPass	NA	Credit Card, Debit Card	http://www.masterpass.com	2013	x	x		x	x	x
MB way	NA	Bank Debit, Debit Card, Credit Card	https://www.mbway.pt	2015	x					
mBank	854,000 users	Bank Debit, Credit Card, Debit Card, E-wallet	https://www.bankmbank.com/	1986	x					
MEO Wallet	NA	Bank Debit, E-wallet	https://wallet.pt/	2015	x					
MercadoPago	USD 884.4 Mln (2016)	Credit Card, Cash	https://www.mercadopago.com.br/	2004					x	
Mobikwik	65 Mln users (2018)	Bank Debit, Credit Card, Debit Card, Cash	https://www.mobikwik.com/	2009			x			
Mobilepay	~USD 13 bln (2018)	Bank Debit, Credit Card, Account-to-Account	https://mobilepay.dk/da-dk/Pages/mobilepay.aspx	2013	x					
Momoe (Shopclues.com)	NA	Bank Debit, Credit Card	https://www.momoe.in/	2014			x			
Moneta.ru	NA	Bank Debit, Credit Card, Debit Card, E-wallet, Cash	https://www.moneta.ru	2006	x					
MuchBetter	NA	Bank Debit, Credit Card, Debit Card, Cash, Cryptocurrency, E-wallet	https://muchbetter.com	2016		x				
N26	USD 1.68 bln per month (2018)	Debit Card, Credit Card	https://n26.com/en-eu/?utm_source=google&utm_medium=cpc&utm_campaign=1449256016&utm_content=68720687478&utm_term=n26&matchtype=e&device=c&loc_physical_ms=9065286&gclid=EAIaIQobChMIttefstG24QIVlOh3Ch01lwWHEAAYASAAEgKRcPD_BwE	2013	x					
Neteller	NA	Bank Debit, Credit Card, Debit Card, Local payment methods	https://www.neteller.com/en	1999	x	x	x	x	x	x
OK	NA	Bank Debit, Credit Card	https://okit.com/	2016	x					
OneCard (Bandar Utama)	NA	Bank Debit, Credit Card, Debit Card, Cash	https://www.onecard.net/customer/index.html?siteLanguage=en	2004						x
Orange Cash	600.000 users	Bank Debit, Credit Card, Debit Card, E-Wallet	https://www.orange.com/en/Group/Activities/Orange-Financial-Services/Folder/Orange-Cash	2008	x				x	x
Oxigen Wallet	20 Mln users (2017)	Bank Debit, Credit Card, Debit Card	https://www.oxigenwallet.com	2004			x			
ParaMara	NA	Bank Debit, Debit Card, Credit Card	http://www.paramara.com.tr/tr/#sss	2014	x					
Pay by Bank App (Zapp)	NA	Bank Dedit	https://paybybankapp.co.uk/	2013	x					
Payconiq	NA	Bank Debit, Credit Card	https://www.payconiq.com	2014	x					
Paydirekt	NA	Bank Debit	https://www.paydirekt.de/	2014	x					
Paylib	40 Mln users (2017)	Bank Debit, Credit Card, Debit Card	https://www.paylib.fr/	2010	x					
Paym	NA	Bank Debit	https://paym.co.uk/	2014	x					
Payment Request API (W3C)	NA	Bank Debit, Credit Card, Debit Card	https://www.w3.org/TR/payment-request/	2018	x	x	x	x	x	x
PayNearby	NA	Bank Debit, E-wallet	https://paynearby.in/	2017			x			
PayPal	USD 578 Bln (2019)	Bank Debit, Credit Card, Debit Card	https://www.paypal.com	1998	x	x	x	x	x	x
PayTM Wallet (PayTM)	USD 50 Bln (2018)	Bank Debit, Credit Card, Debit Card	https://paytm.com/	2010			x			
Payza	NA	Bank Debit, Credit Card, Debit Card, Cryptocurrency	https://www.payza.com/	2012	x	x	x	x	x	x
PayZapp (HDFC)	8 Mln users	Bank Debit, Credit Card, Debit Card	https://www.hdfcbank.com/htdocs/common/PayZapp/index.html	2015			x			
Pingit	NA	Bank Debit, Credit Card, Debit Card	https://www.pingit.com	2012	x	x	x			x

E-wallets Mapping 2019

Company	Transaction Volume	Instruments	Website	Founded	Regions					
					Europe	North America	India	China	LATAM	MENA
Pivo	NA	Bank Debit, Credit Card, Debit Card	https://pivo.fi/	2013	x					
PumaPay	NA	NA	www.pumapay.io	2018	x	x	x	x	x	x
SamsungPay	1.3 Bln transactions (20180	Bank Debit, Credit Card, Debit Card	http://www.samsung.com/us/samsung-pay/	2015	x	x	x	x	x	
Santander Wallet	NA	Bank Debit	https://www.bancosantander.es/es/private-banking/soluciones-de-valor-anadido/banca-online/banca-online/santander-wallet	2016	x					
Siirto	NA	Bank Debit	https://www.nordea.fi/en/personal/our-services/online-mobile-services/siirto.html	2017	x					
Skrill Wallet	NA	Bank Debit, Credit Card, Debit Card, Local payment methods	https://www.skrill.com/	2001	x	x	x	x	x	x
SlimPay	N/A	Credit Card, Debit Card, SEPA Direct Debit, SEPA Credit Transfer	slimpay.com	2011	x					
sofortpay	NA	Bank Debit	https://sofort-pay.com/	2005	x					
Starbucks Card	USD 1.2 Bln (2018)	Credit Card, Debit Card, Cash	https://www.starbucks.com/card	2008	x	x			x	
State Bank Buddy	12.5 Mln users (2017)	Bank Debit, Credit Card, Debit Card	https://www.sbi.co.in/buddy/#page1	2014			x			
Swish	6.5 Mln users (2018)	Bank Debit	https://www.getswish.se	2012	x					
Tap	NA	Bank Debit, Debit Card, Credit Card	https://www.tap.company/pay/	2014						x
Tesco Pay+	NA	Bank Debit, Debit Card, Credit Card	https://www.tesco.com/pay-plus/	2017	x					
Tikkie Pay	4 Million Users	Bank Debit	https://www.tikkie.me/bedrijven	2016	x					
TIM Pay	NA	Debit Card, Credit Card	https://www.tim.it/timpay	2013	x					
Twint	NA	Bank Debit	https://www.twint.ch/en/	2017	x					
Twyp	NA	Bank Debit	https://www.twyp.com/	2015	x					
VenMo	NA	Bank Debit, Debit Card	https://venmo.com/	2009		x				
Vipps	2.6 Mln users (2017)	Credit Card, Debit Card	https://www.vipps.no/	2015	x					
Visa Checkout	> 7 Mln users (2016)	Credit Card, Debit Card	https://usa.visa.com/pay-with-visa/visa-checkout.html	2014	x	x	x	x	x	x
Visa Qiwi Wallet (Qiwi)	20,8 Mln active wallets (2018)	Bank Debit, Credit Card, Debit Card, Cash, E-wallet	https://qiwi.com/	2008	x	x	x		x	
Walmart Pay	20 Mln users (2016)	Credit Card, Debit Card	https://www.walmart.com/cp/walmart-pay/3205993	2016		x				
WebMoney	31 Mln users (2016)	Bank Debit, Credit Card, Debit Card	https://www.webmoney.ru/eng/	1988	x					
WeChat Pay	600 Mln users (2018)	Bank Debit, E-wallet	https://pay.weixin.qq.com/index.php/public/wechatpay	2013	x			x		
Wells-Fargo Wallet	NA	Debit Card, Credit Card, E-wallet	https://www.wellsfargo.com/mobile-payments/wells-fargo-wallet/	2014		x				
Yandex.Money	>46 mln users (Autumn 2018)	Bank Debit, Credit Card, Debit card, Direct Carrier, Cash, E-wallets, Money transfer	https://money.yandex.ru/new	2002	x	x	x	x	x	x
Yoyo Wallet	1 Mln users (2018)	Bank Debit, Credit Card, Debit Card	http://yoyowallet.com/	2013	x					
Zimpler	112,000 Users	Bank Debit, Credit Card, Debit Card	https://www.zimpler.com/	2016	x					

Online Banking ePayments

Trends and Developments

Ana Păstrăvanu | Content Editor | The Paypers

On one hand, we distinguish multi-bank online banking ePayments schemes (a set of agreements between multiple banks that facilitate the initiation of one payment between banks) such as Incasso Machtigen, iDeal, MyBank, or Giropay. Merchants need to connect once, and afterwards all players of all banks can pay at this particular merchant. On the other hand, there are mono-bank online banking ePayments schemes, such as ING Home Pay. In a mono-bank situation, every bank offers its own solution and merchants must integrate separately with every online banking e-payment solution.

Popularity and usage

Bank payments are an attractive option for online merchants and consumers thanks to their low acceptance costs and the convenience they offer for online shopping. Some of the factors that contribute to the increase in usage are related to fewer chargebacks for merchants, a regulatory push from PSD2/Open Banking mandates in Europe, and a rise of banked populations in emerging markets. According to Worldpay's **Global Payments Report 2018**, over the next five years, the use of this alternative payment method will exceed that of credit and debit cards on a global level. In addition, as research by **Ovum** forecasts, instant payments will become one of the main online payment tools in Europe, accounting for approximately EUR 338 billion of direct online expenditure. →

The popularity of bank payments is mostly built on the trust consumers have in their bank. The advantages of using this payment method include:

- **convenience**: in the Netherlands and Nordic countries, for example, bank payments offer a frictionless payments experience, especially on mobile;
- **speed**: the implementation of the Faster Payments infrastructure reduces settlement times from hours to seconds, bringing benefits both to merchants and consumers, and it also enables instant settlement of refunds to consumer bank accounts, drastically improving the shopping experience;
- **lower cost** for the merchant.

Moreover, the popularity of online bank payments among European online merchants can be explained by the fact that, according to a **report** by Trustly, many Europeans (68% of Spaniards, 66% of Italians, 61% of French, 55% of Germans, 55% of Dutch, 51% of Swedes) would more likely shop from international websites if they did not have to disclose credit or debit card information to obscure or unknown foreign merchants. People would shop on foreign sites more often if online banking was offered as a payment method (59% of Spaniards, 59% of Italians, 55% of Dutch, 47% of French, 44% of Germans, 35% of Swedes), according to the same report.

The convenience also comes from the fact that the risk of fraud is almost absent, thanks to strong two-factor authentication, which is required. This way, online bank payments align with PSD2, the legislation currently adopted across the EU, which aims to drive innovation, competition, and reduce costs for consumers. When online merchants offer this payment method, consumers feel safe shopping abroad because they do not risk compromising their card details.

Online banking ePayments is one of the most important growing payment method across Europe, getting the biggest traction thanks to the combination of PSD2 and SEPA Instant Credit Transfers. Instant payments will facilitate the growth of online bank payments as a payment method across Europe. When it comes to cross-border transactions, merchants may also see it as more advantageous.

This payment method is currently also emerging in the US as an alternative to credit cards. Here, PayWithMyBank is one of the best-known providers of ACH payments. The company allows customers to pay or get paid easily by connecting to their online banking account without leaving the merchant's site or app. In June 2019, **PayWithMyBank has merged with Trustly** for transatlantic online banking payments coverage. The two companies will enable global merchants to accept online banking payments from European and US consumers. This merger addresses the needs of merchants that look for an alternative to the card networks and accept online payments directly from consumers' bank accounts.

In India, Unified Payments Interface (UPI, an instant real-time payment system developed by the National Payments Corporation of India, facilitates inter-bank transactions. The interface is regulated by the Reserve Bank of India and works by instantly transferring funds between two bank accounts on a mobile platform. Currently, there are **142 banks live on UPI with a monthly volume of 799.54 million transactions** and a value of INR 1.334 trillion (USD 19 billion). In January 2019, the aggregate volume of transactions through the **UPI has surpassed that of credit and debit card transactions**, according to the National Payments Corporation of India (NPCI) and Reserve Bank of India (RBI). →

Innovation

Digital authentication methods have started to become more mainstream in certain markets, which is expected to drive the popularity of online bank payments due to the increased convenience. In Sweden, Mobile BankID lets consumers authenticate themselves with a few taps and is widely used by banks and government organisations. In the UK, Barclays lets users verify themselves via **PINsentry**, a feature of the Barclays Mobile Banking app that enables users to log in to Online Banking without having to carry around a card reader or use their debit card.

Another innovation in this space is represented by the move from bank-based peer-to-peer payments to customer-to-business and business-to-customer payments, with providers such as Tikkie in the Netherlands and Mobile Pay in the Nordic countries. With Tikkie, users can get paid quickly and easily over WhatsApp, not matter with whom they bank with. MobilePay is a mobile payment service developed by Danske Bank and is mainly used in Denmark, but also in Finland. MobilePay was also available in **Norway**, but shut down due to competition from Vipps.

iDEAL | Currence

iDEAL QR, the Next Step!

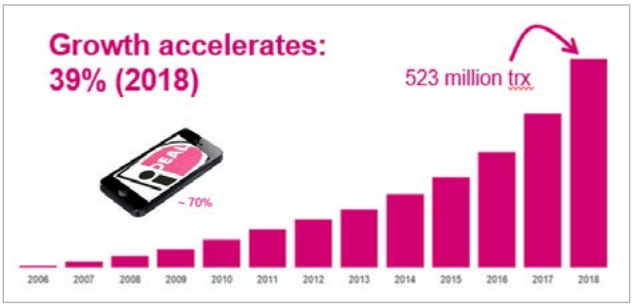
About Monique van der Horst: Monique van der Horst is Product Consultant iDEAL in Team Online at Currence. Monique is a payment expert in digital payments with a broad background in cards, online, and mobile payments.

Monique van der Horst ▪ *Product Consultant iDEAL* ▪ Currence

About Amos Kater: Amos Kater is Head of Team Online at Currence. Amos has a broad background in payments, telecom, and identity management.

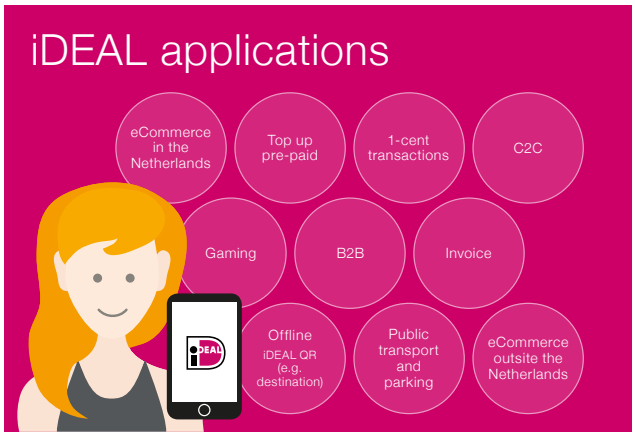
Amos Kater ▪ *Head of Team Online* ▪ Currence

After almost 15 years, iDEAL is still the most successful online payment method in the Netherlands used in both the B2C and C2C space. iDEAL is swift, reliable, and efficient. It took over 10 years to reach the milestone of a total of one billion iDEAL transactions in 2016. Less than three years later, in November 2018, the 2-billion transactions milestone was reached. iDEAL and its partners are very pleased with this exceptional success. Also in 2018 the consumers prefer to pay with iDEAL in ecommerce. The market share of iDEAL in eCommerce is 59%. Next to iDEAL the second preferred payment method is the credit card, with a market share of 10%.



The average transaction amount increased every year up to 2017; in 2018, the average amount decreased for the first time (from EUR 87.59 to EUR 81.94). Given the growing popularity of relatively small payments between consumers (C2C payments), the share of C2C payments in the total number of iDEAL transactions increased from 4.3% in 2017 to 14.2% in 2018.

iDEAL is used in a variety of market segments: in ecommerce (in the Netherlands and abroad in more than 60 countries), for payments between consumers (C2C), and for consumer payments outside of ecommerce. This last category forms the largest segment of all iDEAL payments (44% of payments, 50% of the turnover). This includes transactions for (e-)invoices, purchase of games, top-up of wallets, and donations to charities through payments requests. →



A quick overview of some statistics:

- For several years, iDEAL has consistently ranked first among the financial brands and within the top 5 of the strongest and most indispensable brands in the Netherlands;
- iDEAL is offered as a payment method in more than 136,000 web shops and at other organisations in more than 60 countries worldwide;
- AliExpres, Amazon, Apple, Facebook, and Google also offer iDEAL to their Dutch customers;
- Over 98% of Dutch online banking users can pay with iDEAL;
- iDEAL conversion is around 90%;
- Close to 80% of the iDEAL payments are authorised by the customer in his mobile banking app, providing a fluent flow.

Mobile payments with iDEAL

The best user experience is with iDEAL mobile payments, where iDEAL payments are authorised in the mobile banking app simply with a fingerprint, face recognition, or a pin code. The increased ease-of-use for consumers is reflected in higher conversion rates – 90% – for iDEAL payments via mobile banking apps. At this moment, about 74% of the iDEAL payments are processed via banking apps. The blurring line between online and physical shopping triggered the introduction of iDEAL QR for payments in the physical world.

Everyone can pay with iDEAL QR!

All major Dutch retail banks can now scan iDEAL QR codes within their mobile apps: ABN AMRO, ING, Knab, and Rabobank. However, iDEAL QR codes can also be scanned with a generic scanner. As a result, every Dutch mobile banking customer can pay with iDEAL QR! That's about 10 million people out of a total of 13 million self-reliant adults in the Netherlands.

Opportunities

iDEAL QR codes offer new opportunities. Think about faster and error-free payment of (e-)invoices: simply add an iDEAL QR code on the invoice. Your invoicing becomes more efficient and customers pay faster.

Merchants and charities can show an iDEAL QR code in many ways: on web pages, on printed receipts, on TV screens, in advertisements, on billboards, on (printed) invoices, and so on.

Merchants can point out to their customers that they can pay with a QR code with the new iDEAL QR logo or add an actual iDEAL QR code on top of the bank selection list for iDEAL. An iDEAL QR code on a paper invoice, with the iDEAL logo in the middle, speaks for itself.

About iDEAL: iDEAL is a banking payment method. The scheme management of iDEAL is vested with Currence, the product owner of iDEAL, iDIN, and Incassomachtigen (eMandates).

www.ideal.nl/en/
www.currence.nl

Click here for the company profile

Type of payment method	Online Banking e-Payment with SEPA Credit Transfer
Active since	2005
Operational Area	Worldwide for merchants; consumers with a Dutch bank account
How it works	After selecting iDEAL and their bank, consumers authorise the pre-filled payment in their online banking portal or their mobile banking app. The merchant instantly receives a payment guarantee. The funds are irrevocably credited by SEPA Credit Transfer.
Potential reach	13 million consumers
Market Share	59% of all online consumer purchases
Acceptance	136.000 merchants worldwide (in 60 countries)
Chargeback Risk	No chargeback risk. Refunds can be easily initiated by the merchant.
Facts	iDEAL is the digital payment method of choice for Dutch consumers. Started in ecommerce, it now is being used for C2C payments, ticketing, e-invoices, charity donations and top-ups. In real-world situations, iDEAL payments can be initiated from a QR code on a web page, a merchant's cash register, a paper invoice or a poster.
Settlement currency	EUR, other multi-currency through specific payment service providers
Processing currrency	EUR
Currency available for consumer	EUR
Transaction volume	523 million trxs / EUR 42.9 billion
Implementation requirements (non technical)	Corporate bank account, Chamber of Commerce registration (at a minimum)
Reconciliation	'Data field - format [owner] - purchaseID - 35 chars max. [Merchant] - transactionID - 16-digit number [Acquirer] - amount - number with 2 decimals [Merchant]
Pricing	iDEAL services are available from licensed payment service providers; see https://www.ideal.nl/en/partners/acquirers-and-cpsps/
Link to the APM Database for more details	https://onlinepayments.thepaypers.com/alternative-payment-method/Currence_iDEAL_B.V./company/188

Trustly

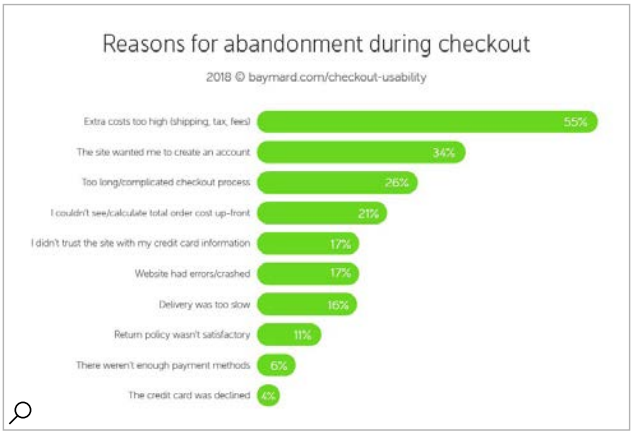
Online Payments: From Obstacle to Opportunity

About Luke Flomo: Luke Flomo is Head of eCommerce at Trustly and is a payments expert, bringing a wealth of knowledge with his 13 years of experience in the industry. He has worked for the likes of Barclaycard, WorldPay and, more recently, Klarna, where he headed up the Sales and Partner channel.

Luke Flomo ▪ *Head of eCommerce* ▪ Trustly

It's a familiar story: online retailers invest massive resources to lure shoppers to their site, and streamline the shopping experience, only to have roughly 7 in 10 of them jump ship when they get to the check-out.

While many of these flighty shoppers are 'just browsing,' with no intent to buy, those that intend to make a purchase still abandon their carts for various reasons, from unexpected extra costs (55%) and a lengthy checkout process (26%), to being required to create an account (34%) or the lack of their preferred payment method (6%).



As a result, the checkout has become the bane of online retailers' existence – that last hurdle in the purchase process. But what if online retailers stopped thinking about the checkout and the payment step as a hindrance, and instead started thinking of payment processors as an ally that can deliver a treasure trove of data to be used in order to simplify the shopping experience?

Online banking payment providers to the rescue

By adding an online banking payment option to the checkout, for instance, online retailers can eliminate many of the main reasons for cart abandonment, and ultimately increase conversion.

Off the bat, 6% of shoppers report that they abandoned an intended purchase because there weren't enough payment methods. Often times, online retailers assume that offering payment by credit card is sufficient, but with the rise of alternative payment methods, shoppers expect to be able to pay in whatever way they prefer, whether it be by invoice, e-wallet, or directly from their online bank.

The payment alternatives they want often vary across markets and industries – in Finland, for example, roughly 40% of shoppers prefer to pay directly from their online bank, while in the US shoppers prefer to pay by card. Understanding these localised preferences is key to optimising your checkout and reducing cart abandonment.

Ultimately, offering choice is king. According to **a study conducted by PYMNTS.com**, the best performing online retailers have more payment methods in their checkouts: while the weakest performing retailers in the study offered an average of 1.4 payment methods in their checkouts, the best performing retailers supported an average of 8.2 payment methods. →

Polishing the shopper experience

Beyond simply offering more choice, online retailers that add online banking payments to their checkout can drastically decrease abandonment due to other reasons, too.

How, you ask? An estimated 18% of shoppers drop out of the purchase process because delivery is projected to be too slow and another 11% due to the fact that the returns policy isn't satisfactory. But online retailers that offer online banking payments through a full-service provider like Trustly, rather than a traditional bank payment option, can receive instant notifications when a payment has been made, letting them ship goods faster with greater confidence.

Retailers can also offer instant refunds, which can drastically improve the return experience. In fact, according to **a recent study conducted by Trustly**, 69% of shoppers reported waiting four or more days for a refund, but 58% of shoppers agreed they would spend more and 56% would shop more frequently if offered faster refunds.

Unlocking data's potential

But where online banking payment processors can really add value is in the shopper data they can glean during the payment process. Imagine shopping on your favourite brand's website. You load up your shopping cart, and when it's time to check out, you simply proceed to the checkout and make a payment through your online bank, which can be as simple as using your thumbprint or facial recognition. That's it, you're done, and a few days later your purchases show up at your front door. There's no need to fill out a long form with your shipping details because online banking payment processors like Trustly can fetch that data during the payment and pass it along to retailers, who can pre-fill the shipping form. Not only that, there is no paying bills at the end of the month or waiting days to see the transaction on your account. The result is a more frictionless experience and fewer drop-offs due to a complicated checkout experience.

Let's take it one step further. Considering that an estimated 34% of shoppers drop out during the checkout process because they are forced to create an account, retailers could quell that concern by automating the registration process. Using the data delivered by the payment processor, online retailers could create a shopper account in the background with nearly no shopper interaction required.

This is a concept already revolutionising the online gaming industry, where players don't need to actively register an account because the operator can easily do so for them. And just like in online gaming, where operators must confirm that their players are of legal age to play, online retailers could confirm shoppers are legal to purchase certain goods, such as tickets for an 18+ concert.

Best of all, there's no need for the shoppers to remember a username or password because their identity is confirmed when they verify themselves through making an online bank payment using two-factor authentication. By delivering this data, payment processors can help online retailers know their shoppers better, which could also inspire better retargeting and personalised recommendations.

About Trustly: Trustly is a FinTech company that makes online banking payments fast, simple, and secure. By signing just one agreement with Trustly, ecommerce businesses can accept payments from and issue instant refunds to shoppers in 29 European countries, in all local currencies. To learn more, visit **trustly.com/ecommerce**.

www.trustly.com

Click here for the company profile

European Payments Council

Instant Payments' Impact on Bank-Enabled Payment Methods

About Javier Santamaría: Javier Santamaría has been the Chair of the EPC since June 2012 and a member since its creation in 2002. Thanks to decades as a bank employee, Mr Santamaría has accumulated a broad and balanced expertise in the intertwined dimensions of payments – business-related, operational, technical – across different client segments and product lines in both the legacy and innovative spheres. He is now further developing this expertise as an independent professional.

Javier Santamaría ▪ *Chair* ▪ European Payments Council

What are the latest updates concerning the adoption of the SEPA Credit Transfer Inst scheme among banks and PSPs?

After a year and a half since its launch, the SEPA Instant Credit Transfer Scheme has kept on growing, and today counts 2,078 PSPs (51% of the total) from 20 countries in Europe. The countries with the largest number of registered Payment Service Providers (PSPs) are currently the following ones: Germany (1,299 PSPs), Austria (465 PSPs), and France (126 PSPs).

> *"The SEPA Instant Credit Transfer Scheme has kept on growing, and today counts 2,078 PSPs (51% of the total) from 20 countries in Europe*

The potential of the SCT Inst scheme resides in its reachability, which is actually higher than what the above figures show: from the 51% of PSPs that already joined the scheme, SCT Inst largely enumerates those having the most significant payment volumes in their countries. Obviously, the footprint of SCT Inst does not stop here: we remain confident that a critical mass of SCT Inst scheme participants will be reached by the end of 2020 notably in the euro area.

Besides speed, what is the most significant change that instant payments bring in the way we pay?

An important component of the DNA of SCT Inst is its flexibility and variety of use cases. Instant payments are the closest substitute to cash, as in both cases the transfer of money is immediate and available 24/7/365. In particular, they have the potential to develop in the person-to-person and person-to-business segments in situations where cash and cheques are currently widely used. Moreover, they would reduce the cost of managing cash and cheques, which are the most expensive means of payment at the level of the entire economy. They could further facilitate electronic and mobile commerce payments.

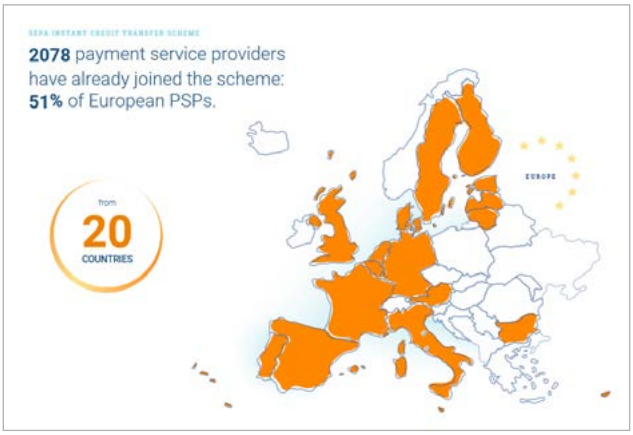
Additionally, the 24/7 availability of funds can help business customers improve their cash-flow management, and reduce their need for external financing. Similarly, instant payments can act as a springboard for PSPs to develop other 24/7/365 financial services and products to better serve their customers and attract new clients. More SCT Int use cases can be found in our **infographic**.

What impact will instant payments have on bank-enabled payment methods?

Today, the customers want fast and convenient payment methods that are available 24 hours a day, seven days a week. Real-time accessibility to funds means SCT Inst provides a new way for the customers to relate to the PSPs, by adding a new customer payment experience. →

European Payments Council

SCT Inst marks a major change in European payments, and offers a tremendous opportunity to PSPs to satisfy their customers in the digital age as well as harmonising payments in Europe, which could also be a good example for other regions of the world.



How are companies involved in the online banking ePayments space expected to innovate in the following years?

The EPC does not have a crystal ball to predict the future, but it appears that the combination of the implementation of PSD2 and the deployment of SCT Inst is likely to impact the European payment landscape over the few coming years.

New payment services and new players are expected to emerge and develop. But we believe that existing European Payment Service Providers (PSPs) will remain key actors in payments if they proactively embrace the changes brought about by regulation and technology with customer needs and experience in mind. By rapidly offering safe and convenient mobile, real-time payments to their customers, European PSPs will be able to compete successfully.

About European Payments Council: The European Payments Council (EPC), an international not-for-profit association, representing payment service providers, supports and promotes European payments integration and development, notably the Single Euro Payments Area (SEPA).

www.europeanpaymentscouncil.eu

Direct Debit

Trends and Updates

Ana Păstrăvanu | Content Editor | The Paypers

Direct Debit payments are so called pull-payments whereby the merchant initiates the transfer of funds from consumer to merchant. Direct Debit payments are predominantly used for recurring payments (bill payments) or for small-value purchases. As a means of recurring payments for subscriptions, European consumers have, among other payment methods, SEPA Direct Debit (SEPA scheme in EUR) or BACS Direct Debit (UK scheme in GBP). For SDD/BACS based payments, the consumer signs an (e-)mandate. For SDD based payments, refunds are possible for a period of 8 weeks, while for BACS based payments, this is an option for an unlimited period of time.

Unlike the UK Direct Debit scheme, SEPA Direct Debit allows collection of payments in 21 Eurozone countries. It is **best that the service be used** for collecting regular payments, such as subscriptions, invoicing for services where instant payment is not required (marketing agencies, accountancy companies etc) or for account customers with an on-going relationship with the merchant, and it is ideal in markets with low card use, such as Germany or the Netherlands. On the other hand, SEPA Direct Debit is not suitable for transactions that need immediate clearing or transactions that are most likely to be charged back (high-value goods, for example). →

One of the advantages of this payment method is that it offers a frictionless payment experience. Consumers indicate that peace of mind is the most important advantage of Direct Debit, given the nature of subscriptions. Consumers no longer encounter distress around due dates, delayed payments or fees.

Since consumers value the convenience of subscriptions, the involved payment methods should be simple to use by consumers. One way to achieve this is by storing payment credentials online or in a mobile application. Direct Debits require merchants to store payment details on file, necessary for future transactions. A **study** by SlimPay and Innopay has shown that more than 40% of consumers have at least once saved their payment credentials online to avoid having to re-enter their details for future purchases. Moreover, from those users that never saved their credentials before, 1 in 4 are willing to do so in the future. The study also shows that an average of 20% of the European respondents were unaware of the fact that setting-up a Direct Debit requires the provision of a mandate. The awareness of SDD Mandate on a global level reaches 80%.

The popularity of Direct Debit has been on the rise since its inception in 1968. The volume of transactions processed each year for the last ten years has increased from **2.9 million to 4.1 billion**. Based on current trends, **Bacs** estimates that the number of Direct Debit transactions will rise to around 4.6 billion by 2026. As a payment method, Direct Debit is popular in Germany, the Netherlands, UK (BACS Direct Debit), and Canada (Interac, a local Direct Debit scheme). In the UK, the **figures** show that 9 out of 10 people with a bank account have at least one Direct Debit while over a third of households use it for more than 6 of their regular payments. Moreover, research conducted by YouGov found that almost half of UK consumers were likely to choose Direct Debit to pay for online subscriptions, compared to 32% who were likely to choose debit card.

As more and more consumers shift towards subscription-based services for digital services or physical goods, Direct Debit as a payment method to facilitate the recurring transactions process may also become more relevant. Also, this payment method might become more popular after the implementation of SCA in September 2019, due to its reduced friction in the payments process.

Providers of Direct Debit, such as SlimPay, GoCardless, AcceptEasy, Nuapay, TrustPay, or BlueSnap have made accepting Direct Debits easier for companies looking to implement recurring payment plans. Instead of connecting with a bank or Direct Debit bureau (which usually involves high set-up fees and tedious paperwork), merchants choose a Direct Debit provider and connect with the Direct Debit scheme via an API. Set-up fees are usually lower and the offering is more competitive, as different Direct Debit providers try to capture a bigger share of the market by charging lower fees or by providing other value-added services.

SlimPay

The Paypers interviewed SlimPay Founder and CEO Jérôme Traisnel to understand the latest advances in the payment ecosystem and how merchants can thrive in a subscription economy.

About Jérôme Traisnel: Jérôme Traisnel is the CEO and Founder of SlimPay, focusing on reinventing the subscription payment journey. A serial entrepreneur, he specialises in new technologies, mobiles, and security. Jérôme also sits on the board of several innovative companies.

Jérôme Traisnel ▪ *CEO and Founder* ▪ SlimPay

There's been a change in consumer behaviour and disruption in the payment world. How would you describe this evolution?

We cannot deny that technology is one of the main drivers in the evolution of payments. But behind all these technological advances is where we stand – the consumers. We are the ones driving this digital disruption.

When we entered the age of the sharing economy, we effectively said goodbye to ownership and put more emphasis on accessibility and experience. Especially, among the younger generation, where streaming movies and music is preferable to owning DVDs and CDs.

> *"A long-term engagement is created when you sell services based on what a customer wants instead of selling one-off product*

We have also witnessed the rise of instant gratification. Technology has unlocked convenience and instantaneous gain, resulting in this behaviour of getting what you want, when you want – without exhausting too much energy while doing so.

All of these developments have ushered us into the subscription economy that we are living in today.

As you mentioned, we favour usage over ownership. Why should merchants adapt their business model from selling a product to a subscription?

For merchants, the challenge is: how can they increase their revenue and reduce churn? We believe the strategy lies in subscriptions (or recurring payments). We conducted a **survey** on European consumers and their behaviour, where we found that 85% of them use at least one subscription.

A long-term engagement is created when you sell services based on what a customer wants instead of selling one-off product. You have a built-in customer retention by offering a subscription or a pay-as-you-go service. But there's another thing that's missing from this conversation: you really get to know your customer. It enables merchants to cater their services toward offering the best customer experience and added value.

There is also a shift in dynamics between consumers and merchants. Consumers no longer want to be restricted to certain rules of engagement, meaning they want the freedom to terminate a subscription at any time. Typically, merchants offer a contract that locks customers into a subscription for 12 months or 24 months. By doing this, you're introducing the idea of churn.

What some businesses have discovered is that if you launch an unlimited subscription that gives consumers the flexibility to cancel anytime, the churn is lower and the topline is higher. This presents a huge market opportunity for merchants – if they are ready to embrace this kind of engagement model. →

For merchants who are doing recurring payments, what kind of pain points are they facing?

When a consumer enters the payment funnel, there's a high chance that they will abandon paying because of the complexities. But if they finish the payment, that's what we call conversion.

Today, the conversion rate is low industry-wide. Some of the reasons for this include a poorly optimised checkout process, security concerns over payment data, and limited availability of payment means.

The payment experience for consumers has become a headache – we have all these credentials to remember and prerequisites for stronger authentication. This has become a pain point for merchants to offer a quick and user-friendly checkout experience.

Now once you get past the checkout challenge, there's the issue of how long it takes for the payment to be processed, and whether that payment is actually collected. Failed transactions have an impact on overall revenue, especially if you have a subscription business model.

So how do you solve this? That's the role for payment service providers like SlimPay. Our focus is on mitigating all these frustrations by building a one-stop solution for all payment needs.

Can you tell us more about this solution, specifically how it solves the challenges merchants are experiencing?

SlimPay has developed an end-to-end solution covering the entire payment process through innovative technology such as API.

First, SlimPay addresses the **customer enrolment** issue by offering a user-friendly checkout front end. Our checkout manages electronic signatures for both SEPA Direct Debit (SDD) mandate and document signatures. With one single signature, merchants are able to have their clients sign a contract and a mandate.

Second, SlimPay helps merchants in their **payments collection** by allowing SDD payments and card payments. It's essential for merchants to offer the right payment mix that can address specific needs. Let's say you are a merchant selling a physical device and a subscription to a service, you will need to get an instant confirmation of the payment before shipping the product. SlimPay can help you by combining both payment means at the checkout – first with payment by card, and then through SDD on a recurring basis.

We've also created the Automatic Retry feature in the event that merchants need to recover failed payments. This feature helps merchants minimise their losses through a hassle-free process.

Finally, SlimPay allows merchants to use a unique dashboard to **follow up on their activity and their clients' activity**. SlimPay acts as a bank, meaning that we hold the merchants' account. This account is centralising the transactions made by SDD and card, which enables an easier reconciliation process.

After nearly a decade in this industry, we can really say that we have proven track record in the management of recurring business payments. We created our solution so that merchants can really focus on what matters: increasing their topline.

About SlimPay: SlimPay is the European leader in recurring payments for subscriptions. SlimPay's payment solution enables merchants to facilitate acquisition, increase the consumer lifetime value, and maximise revenue – through card and direct debit payments. Launched in 2010 in France, SlimPay operates across Europe with flagship offices in Paris, Madrid, and Milan.

www.slimpay.com

Click here for the company profile

Type of payment method	SEPA Direct Debit SEPA Credit Transfer Card Payments
Active since	2010
Operational Area	SEPA zone
Industries	Utilities, insurance, financial services, fitness, media and entertainment, SaaS, digital
How it works	SlimPay is doing the processing and acquiring of recurring transactions. We can also handle the electronic signatures of documents and mandates.
Potential reach	N/A
Market Share	N/A
Acceptance	Information available on request
Chargeback Risk	Information available on request
Facts	Launched in France, SlimPay operates across Europe with flagship offices in Paris, Madrid and Milan.
Settlement currency	EUR
Processing currrency	EUR
Currency available for consumer	EUR
Transaction volume	N/A
Implementation requirements (non technical)	Information available on request
Reconciliation	Information available on request
Pricing	www.slimpay.com/pricing
Link to the APM Database for more details	https://onlinepayments.thepaypers.com/alternative-payment-method/SlimPay/company/524
Channels (POS/ecommerce)	ecommerce, call centers, emails, POS

Invoice and Pay Later Solutions

Trends, Updates, and Innovation

Ana Păstrăvanu | Content Editor | The Paypers

In recent years, consumer finance has seen a surge in popularity amongst consumers, many retailers currently offering point-of-sale finance in a certain form. In emerging economies, the surge is in part driven by a growing middle-class population, widespread smartphone adoption, and rising internet penetration, which are all set to increase consumer's shopping power. In developed economies, digitisation and new services that cater to the needs of consumers have led to a rise in consumer preference for deferred payment for online purchases. The preference also stems from the convenience and affordability it provides to pay at a later date, resulting in less frequent cart abandonment and increased online purchases. Pay later, consumer credit, invoice, after pay, or slice it types of solutions also solve the problem of customers that do not want to part with their money until they are sure the goods meet their expectations. Moreover, for some consumers, especially millennials, large purchases cannot be covered by a single paycheck.

Globally, as research by McKinney shows, Sweden has been the focal point in this space, with 60**% of the country's consumer finance market in 2016, compared with 20% in 2001**. In other European countries, banks retain a larger share of the consumer finance market. In Germany, lenders control more than 95% of consumer finance volumes, in France more than 90%, while Swedish banks have lost 35% of consumer finance volumes in the past 15 years, capturing over 40% in 2016, according to the same **study**. →

Generally, we distinguish two main types of 'buy now, pay later' solutions:

- **pay later**, where the consumer does not pay a fee or interest, just the merchant does (eg instalments by Afterpay, a free service offered by retailers to shoppers; there are no upfront fees charged or any interest incurred); other companies offering this type of solution are Klarna or Splitit;
- **consumer credit**, where instant credit is offered, which allows the consumer to spread the payments; the consumer pays an interest, and there is no fee for the merchant (eg CreditClick: instead of paying immediately the full amount at purchase or at delivery, the company offers consumers the possibility to spread the cost over several months).

POS loans (the consumer credit option), in which online shoppers are offered the option of an on-the-spot 'buy now, pay later' loan from a third party as they check out, are available at big retail sites like Walmart, AliExpress, ASOS, JD.Sports, Arcadia Group, Nest, Media Markt, and more. Pay later popularity in retail can be explained by the fact that this sector is notoriously competitive, and consumers' behaviour is highly versatile. Shoppers have many options to choose from, so if they do not enjoy an optimised service and user experience they simply go elsewhere. The **acquisition of technology platform Vyze by Mastercard** is likely to increase the already rapidly growing availability of this type of loans and see more retailers introducing financing solutions. Vyze connects merchants with multiple lenders, allowing them to offer their customers a wide range of credit options online and in-store.

Popularity and usage

In Europe, **UK consumers** have been open and quick to adopt pay later solutions, compared to other European markets like Germany or Italy. A third of UK shoppers perceive retail finance as a convenient way to spread the cost of expensive purchases, and nearly one in five name the availability of different finance options as the most important factor when making big-ticket purchases, according to a **study** by Divido, a white label point-of-purchase finance platform. When it comes to the typical pay later UK shopper, **Divido** has found that shoppers in full-time employment are requesting the most credit, followed by self-employed and retired consumers. Of those consumers, most popular duration of credit agreed between a consumer and lender is 12 months, followed by 40 months, and 60 months.

In Germany, open invoice (pay after delivery) is popular in light of to the fact that Germans became used to merchants bearing the cost in advance, they grew up with catalogues and slogans such as 'try before you buy.' Paying by invoice is still the most popular payment method in Germany, according to a 2018 **EHI study** on retail ecommerce in the country. In the country, RatePay offers open instalments and checkout lending solutions for ecommerce, handling the entire payment process and carrying the risk for payment default. In the Western European market, other players like Mash, Divido, CreditClick, and AfterPay are all competing, while in the US, Splitit (which is also present in Europe), Future Pay, Affirm or Uplift are well-known for their pay later solutions.

Chinese websites also enable pay later solutions for western shoppers. It is important to mention the recent Alipay, Adyen, and Klarna's partnership, initiated in **May 2019**, which aims to allow shoppers at AliExpress to use Klarna's Pay later solution. This payment option will help AliExpress' shoppers in Germany, the Netherlands, Austria, and Finland to decide when and how they want to pay, with more countries to be added in the following months of 2019. →

In the US, **McKinsey's Digital Payments Survey** finds that more than 20% of US digital shoppers have pursued a digital POS loan to complete a purchase. Millennials are the most frequent users, but adoption exceeds double digits across all age brackets. PayPal is the most common solution while Swedish challenger Klarna has developed a solid US following among millennials.

Online pay later solutions are gradually appealing to shoppers in Asian markets, with payment service providers and online merchants offering solutions to allow payments at a later date. As **GlobalData** shows, the rising appetite for short-term financing presents huge potential in Asian markets. The pay later concept is also **gaining popularity** in countries like Australia and China. AfterPay and zipPay in Australia are offering convenient credit financing options for many online shoppers. In India, online pay later tools provide significant growth prospects for the country's ecommerce market. Here, LazyPay is well-known for its pay later options offered to more than 250,000 customers in collaboration with Zomato, Swiggy, Foodpanda, Redbus, and Faasos. In addition, Flipkart and cab aggregator Ola have introduced their own deferred payment solutions for loyal customers in India.

In Australia, AfterPay offers an extended pay later option with four equal instalments due every two weeks. The amount gets deducted automatically on the due date from a linked debit or credit card. In New Zealand, PartPay, Oxipay, and Laybuy offer similar services. PartPay allows customers to pay only 25% of the total purchase amount upfront and the remaining in three equal fortnightly instalments via debit or credit card.

Nevertheless, solution providers should be very transparent about interest rates. In the UK, for example, as research from **Arrow Global** shows, the younger generations have increased the amount of debt they owe over the last five years, many being unaware of how much interest they are paying. The research reveals that 40% of 18-24 year-olds and 46% of 25-34 year-olds have increased the overall amount of debt they owe over the past five years.
Innovation

Machine learning and artificial intelligence

Machine learning technology can be effectively integrated in setting up pay later plans as it allows lenders to determine the creditworthiness of the applicant. Using artificial intelligence, lenders can perform background checks faster and approve loans at a lower risk.

New entrants and new products

PayPal (which acquired BillMeLater – now PayPal Credit), PayU, Square, Yandex.Checkout, PAYFORT have entered this market, capitalising on credit lending for both retail and businesses. Some of these tech companies have a few advantages over traditional lenders, such as low costs and access to transaction data from months or years of activity. The sales data gives them an alternative to traditional credit scores when deciding whether to lend money.

Other companies, such as Fly Now Pay Later or Uplift, offer pay later and instalments for travel services. Fly Now Pay Later, for example, allows customers and businesses to instantly spread the cost of holidays, hotel or trip over a period that suits them. With financing through Uplift, consumers can book their trip, travel on your schedule, and pay over time in convenient monthly instalments.

For a similar offering, Mastercard and Divido have partnered with lastminute.com to offer online checkout financing in the UK. Consumers can take advantage of a new instalment payment solution when booking travel through lastminute.com, giving them greater flexibility on when to pay.

Splitit

Instalment and Pay Later Options Call For Simplicity and Ubiquity

About Gil Don: Gil Don is the CEO and co-founder of Splitit. He holds over 20 years of experience in sales and management for US corporations, previously serving as the Country Manager of Veritas Technologies. Prior to this, he served as Regional Manager for one of Dell EMC's product divisions where he was responsible for driving sales, building customer relationships, and establishing additional channel partners.

Gil Don ▪ *CEO and Co-Founder* ▪ Splitit

The proliferation of instalment options in today's payment space proves how attractive such solutions have become. Merchant and consumer uptake, along with new market entrants, underscore that this segment is reaching a new level of maturity. Benefits, such as higher shopper loyalty, lowered acquisition costs, and increased Average Order Value, are now well-understood.

However, the current saturation also creates confusion. For merchants, there are now many choices when choosing instalment payment providers. For shoppers, checkout experiences can differ from merchant to merchant. As a result, at Splitit, we have focused all of our products on two factors: ubiquity and simplicity.

Simplicity offers enormous benefits to merchants. In a world of growing customer acquisition costs, losing purchases unnecessarily is increasingly costly. Aside from price, speed is the most important factor in converting a visitor to make a purchase. With Splitit, the consumer has the fastest possible checkout experience. Splitting a purchase happens in split seconds. There is no irritating signup process asking for additional information, such as contact details, date of birth, or other forms of application credit check information. As a result, there is no resistance to the 'buy now' mentality that shoppers have once goods are in their cart.

Simplicity also gives access to an important segment of shoppers – those who feel unwilling or unable to take out additional credit on top of what they already have, and those who want to manage their existing credit usage carefully without using too high of a percentage of their credit limit. Credit-sensitive shoppers can be a valuable segment, but only when given the opportunity to purchase. Splitit's proprietary model works for these shoppers even for larger ticket items.

In fact, Splitit's consumer **research** has consistently shown that significant percentages of shoppers do not want to undergo any kind of credit check. They also have concerns about annual percentage rates (APRs) and potential late fees.

- 35% of shoppers say they are more likely to make a purchase if offered the ability to pay in interest-free monthly instalment payments;
- 25% of online shoppers would increase the size of their purchase (ie their Average Order Value) if they had the option to choose interest-free monthly instalment payments. ➔

Splitit

The way Splitit opens access to these sizable consumer segments is by leveraging shoppers' existing cards. This eliminates credit checks and signup processes. Shoppers do not need to change their behaviour or make uncertain decisions at the point of purchase. They do not incur additional APRs, membership fees, or late fees. In fact, 0% of Splitit's revenue comes from the consumer.

By focusing on simplicity, Splitit also reduces the overhead for merchants. Our instalment product lowers the total costs associated with accepting and processing payments. It also avoids the unintended consequence that shoppers can become frustrated with the merchant if late fees are incurred by the payment arrangement, which in turn lowers loyalty and increases customer service costs. In addition, our pay later product helps merchants manage products with a high return rate, without having to provide an additional level of customer service or manage the cumbersome, costly process of refunds.

Perhaps most importantly, our focus on simplicity means merchants do not take on the risk of non-payment. Ubiquity benefits both merchants and shoppers, too.

First, ubiquity means making payment options available both via ecommerce and in-store. Payment providers are slowly coming up to speed and integrating with in-store Point of Sale systems. At Splitit, we prioritised this seamless experience in our products. It helps merchants limit the impact of 'showrooming,' where consumers browse in-store and buy online, lowering the efficiency of spending on real estate, staff, and operational overhead of running a physical store network.

Second, many instalment payment providers are only available in select countries. This forces merchants to choose to restrict instalment options to those countries where their payment provider offers service. Global reach is often an essential factor for any merchant choosing a provider. The Internet has clearly made shopping a more and more borderless phenomenon that merchants in many product categories can tap into. Research shows over 50% of shoppers in some countries are interested and willing to make cross-border purchases, for example.

The value of Splitit's model is borne out by its results.

- 85% of purchases are approved because the approval consists of simply checking the credit card limit card balance. This rate is higher than other instalment providers that require application for approval;
- Splitit merchants see as much as 80% higher Average Order Value and a 12% increase in sales after implementing Splitit. These increases maximise the value of customers once they are acquired;
- Shopping cart abandonment, which remains a significant challenge in the world of ecommerce, goes down by 11 percentage points on average across Splitit merchants. This reduction increases the ROI of ad spend and other customer acquisition.

Simplicity and ubiquity will undoubtedly remain key considerations as the payments market continues to evolve into the next decade. We're looking forward to seeing what's ahead, as well as leading further innovations to address merchant pain points along the way.

About Splitit: Splitit is a payment method solution enabling customers to pay for purchases with an existing debit or credit card by splitting the cost into interest and fee-free monthly payments, without the need for additional registrations or applications. Splitit's global footprint extends to hundreds of merchants in 27 countries.

www.splitit.com

Click here for the company profile

Splitit

Type of payment method	instalment payments and Get Now, Pay Later
Active since	2012
Operational Area	Global
Industries	All retail
How it works	Splitit operates within a user's credit limit and does not allow for a consumer to exceed it. Once a purchase is made using Splitit, a hold is placed on the consumer's existing credit or debit card for the full amount of the purchase. Splitit charges the customer's credit card every month according to the total number of instalment selected until the purchase is fully paid, with no interest or other fees. No external party is owed any money and no debt is involved.
Potential reach	160,000 unique shoppers for Q1 2019
Market Share	Splitit currently operates in 27 countries, and has the ability to operate in every country in the world
Acceptance	Splitit currently operates in 27 countries, and has the ability to operate in every country in the world
Chargeback Risk	There is no additional chargeback risk when working with Splitit
Facts	Headquartered in New York, Splitit has an R&D center in Israel and offices in London and Australia, where it is a public traded company on the ASX.
Settlement currency	Same as processing
Processing currrency	Varies per country
Currency available for consumer	Any - Splitit is a crossborder solution
Transaction volume	Approximately USD 23,000,000 USD as for Q1 2019
Implementation requirements (non technical)	For consumers - they must have an existing Visa or Mastercard. For Merchants – direct integration and connected to major ecommerce platforms.
Reconciliation	We developed our own admin system which does full reconciliation on all Splitit's transactions.
Pricing	Per-transaction processing fee plus nominal per instalment fee (with no merchant or setup charges added)
Link to the APM Database for more details	https://onlinepayments.thepaypers.com/alternative-payment-method/Splitit/company/651
Channels (POS/ecommerce)	POS, ecommerce (web and mobile)

Cash Payments

Cash in Today's World – *The Times They Are A-Changin'*

Raluca Constantinescu | Content Editor | The Paypers

Trends and developments that impact the use of cash in commerce

Almost 300 years after paper money became accepted as legal tender, even though the way in which we sell and buy goods has definitely changed, cash has stuck around. Nonetheless, the use of cash is considerably impacted by developments and trends that include a retail environment moving towards online, continuous digitalisation, internet access, an increased adoption of smartphones, and regulation. For example, **India's 'demonetisation' regulation** aims to reduce black money and put an end to corruption, by withdrawing the country's highest-denomination currency notes, the ones for INR 1,000 and INR 500. Moreover, technologies like QR codes and NFC – but also the integration of online payment functionality on social media platforms – encourage the use of card and mobile payments.

According to **McKinsey**, the share of the world's transactions carried out in cash has diminished from 89 to 77% over the past five years. Meanwhile, the share of credit card and debit card usage has almost doubled, from 5 to 9%. Over the next five years, the downward trend of cash usage worldwide is expected to be even more emphasised, due to the push toward real-time payments, the wide variety of payment options, the evolution of digital commerce, and further regulatory adjustments. →

Cash – alive and kicking

Most of the times, cash is universal, ubiquitous, and untraceable, therefore it makes people have a sense of security. Not having cash may cause people to feel vulnerable, especially during power breaks or when ATMs are not working – therefore, the cashless society dream does not seem, at the moment, very feasible.

Cash also makes people have a sense of independence from government oversight. 50% of the respondents surveyed in 2019 by card-issuing platform Marqeta in Spain, the US, the UK, France, and Germany for its **consumer behaviour study** admitted they have used cash to make payments with the particular purpose of not leaving a record of what they were buying. That is why cash is also a commonly used payment method when it comes to igaming, providing players with both anonymity and a streamlined way of funding online gaming accounts. For example, PayNearMe does just that, by enabling online account loading with cash.

Furthermore, the transition towards a cashless society is not uniform, as cash usage varies per country and across different age groups. If we take a look at demographic information provided by Marqeta's **survey**, we notice that millennials already started using other means for payments. In the US, 49% of millennials said they prefer to use P2P payments instead of cash to pay someone back (20% of baby boomers are likely to do the same), while in the UK, 44% of millennials have expressed this preference as well (compared to 21% of baby boomers).

Global overview of cash in commerce

The fluctuation of cash usage in different countries is also worth mentioning. While South Korea and Sweden, for example, have already started this transition to a cashless future, other countries, like Germany, show signs of concern when it comes to digital money. According to the Deutsche Bundesbank, **74%** of all domestic transactions in 2017 were conducted via cash, especially for purchases under USD 23. Germans use debit cards provided by banks for around 18% of transactions and credit cards for about 2% of them, proving a low adoption of cashless payment methods.

Generally, across Europe, the use of cash is decreasing at two different speeds, according to G4S's **World Cash Report 2018**. Some countries are reducing their use of cash in favour of non-cash (eg the Nordics, the Netherlands, the UK), while others still rely on cash, mostly in Southeast Europe. When it comes to the number of transactions in European countries, paper currency is often used in Germany, Austria, and Slovenia, where 80% (or more) of POS transactions were conducted with cash. In the Netherlands, Estonia, and Finland. However, cash was least used, the number of transactions ranging from 45% to 54%.

In the US, for example, the 2018 **report** on the Diary of Consumer Payment Choice (DCPC) shows that cash accounts for 30% of all transactions and 55% of transactions under USD 10, but there is a decline when it comes to cash usage. In this context, it may seem paradoxical that the amount of cash being issued is **increasing**. If 40 years ago approximately USD 90 billion in cash was in circulation, this number has increased roughly 20 times, to USD 1,7 trillion nowadays. In his book, Kenneth S. Rogoff – professor of Public Policy at Harvard University and former chief economist of the International Monetary Fund – **argues** that this is not a specificity of the US space, but rather a globally occurring phenomenon that lies at the core of some of the world's most intricate problems. →

When it comes to Asia, there is a strong discrepancy in cash usage between China and Japan. Cash in circulation in Japan **is estimated** to be the equivalent of over 20% of the country's GDP, which is higher than China's, with 9.5%. In Japan, kiosk payments are still very popular. By choosing this cash payment method, shoppers print a voucher or receive a reference number – and with it, they can pay for products at a kiosk, cash register at a convenience store, or bank branch. Cash on delivery is another popular payment method in Japan, allowing customers to pay from home when they receive purchased products. **Konbini (convenience store) payments** are also attractive, allowing Japanese customers to pay for online purchases in 24/7 convenience stores.

In LATAM, in countries like Peru and Colombia, cash-based payment methods amounted to more than 20% of ecommerce volume in 2016, with Mexico and Argentina close behind, with 19% and 18% cash transactions respectively – according to **Worldline**. In Brazil, the most popular cash-based payment method is Boleto Bancário, which is regulated by the Brazilian Federation of Banks, issued by banks at the request of merchants, and payable at over one million locations nationwide.

In Africa, there is a tendency to move away from cash-based payments, but things move at different speeds across the continent. Here, many local initiatives are underway. With a smartphone penetration of 60% and 56% of its population being banked, Kenya shows great improvement from 2016 to 2019. According to PPRO's **Payments and E-commerce Report for the Middle East and Africa** this growth has been driven by enhanced performance in mobile telephony and ecommerce, and Kenya's digital economy is projected to boom. As **presented** by Boston Consulting Group, in 2018, Rwanda's central bank announced the launch of a regulatory sandbox for testing digital payment solutions, aiming to go cashless by 2024. Malawi has also experienced a rise in cashless transactions, while Ghana is digitalising with the aim of streamlining access to financial services. Nonetheless, according to the **African Cash Report** published by calleo in 2018, the African continent is still quite dependent on cash. Here, the introduction of digital and mobile payments cannot replace cash, especially in countries like Nigeria and Morocco, where there is low banking penetration.

Levers to drive the cashless agenda

Source: Boston Consulting Group analysis. →

Looking into the future

Cash cannot be hacked, it doesn't rely upon POS technology, it is accessible, user-friendly, reliable, and trusted – hence its popularity. Nonetheless, undeclared payments in cash lead to tax gaps, and there are great costs associated with it. According to **Boston Consulting Group**, one of the main banks in the North American landscape spends approximately USD 5 billion every year just to process cash and check transactions and servicing ATMs – and the UK spends about GBP 1 billion a year for free-to-the-customer ATM withdrawals.

The payments landscape is, as one might expect, very diverse – however, worldwide, cash **remains** the leading payment method at the checkout for now, even if spend tends to shift from cash to cards and e-wallets, and the use of cash registers a decrease in every global region. Worldpay **projects** that, by the end of 2019, cash will be replaced by debit cards as the leading POS payment method, and by 2022, it will be surpassed by credit cards, debit cards, and e-wallets. What's more, according to Marqeta's **survey** conducted in 2019, 50% of the respondents believe that cash will disappear completely in the future.

In order to succeed in ecommerce across different regions, cash is still needed because it is relevant, and there is a high reliance on this payment method, both via kiosks and cash on delivery. Looking towards the future, we expect technological developments regarding payments to further impact cash usage worldwide.

Direct Carrier Billing

Trends, Updates, and Opportunities

Ana Păstrăvanu | Content Editor | The Paypers

Usage and popularity

According to **Statista**, in 2019 the number of mobile phone users is forecast to reach 4.68 billion. With more mobile phones than credit cards worldwide (in 2018, there were **6.3 billion cards in circulation in total**), higher payments coverage in emerging markets, and a simple checkout flow, direct carrier billing (DCB) is gaining in popularity. This growth is seen in multiple telco partnerships initiated in industry segments like gaming, social networks or streaming. According to **Juniper Research**, the value of digital content transactions paid for by carrier billing is expected to reach USD 47 billion by 2020, more than 4 times the amount of under USD 11.3 billion in 2015. Other segments, such as transportation or ticketing, are able to leverage the capabilities of DCB due to improvements of commercial and technical capabilities of telcos (see the latest partnership between **EasyPark and Fortumo**, which aim to allow Slovenian drivers to charge parking fees to their mobile phone bill).

From a regulatory perspective (PSD2 and GDPR), merchants using DCB had a lot to gain during the past years as carrier billing is the payment method which requires the least amount of consumer data for processing transactions. DCB ensures a friendly payment user experience: there is no need to sign in or create additional accounts to pay, nor share personal data online. Under PSD2, single DCB transactions are capped to a maximum of EUR 50 per transaction, with a monthly limit of EUR 300. The PSD2 will continue to allow electronic money institutions to extend the scope of DCB from digital content to the purchase of physical goods. →

However, there are a few obstacles when considering implementing this payment method: transactional fees that are charged to the merchant whenever a customer uses DCB, Mobile Network Operators (MNO) that charge app retailers, the average price of just-in-time purchase of minutes, regulatory constraints, and the complex DCB ecosystem in emerging economies. Moreover, high fees make it a less attractive option for OTT, content providers that distribute streaming media as a standalone product directly to viewers over the internet.

Europe

With 80-90% smartphone penetration, carrier billing in the Nordic countries has a **10-21% market share from digital content payments**. In Norway, DCB is the second most popular payment method for digital gaming, while in Finland, it **has a 16.2% market share** in digital gaming transactions, according to SuperData Research. Digital merchants including Facebook, Apple, Google, Netflix, and Riot Games have begun to leverage carrier-based payments in the region.

LATAM

Thanks to fast adoption of smartphones and low access to traditional payment methods such as credit cards, DCB is very popular in LATAM. According to a **report** by Fortumo, carrier billing is the second most popular payment method for digital gaming transactions in this region. However, as the report shows, LATAM still has some way to go when it comes to the deployment of modern direct carrier billing solutions by telcos, while the complicated taxation system makes doing business in the region challenging. For this reason, telcos rolled out their own offerings, such as Vivo with its Android app store in Brazil and Claro with its music streaming service across the entire region. Also, a great potential here is represented by gaming and digital content.

Asia

Asian landscape looks promising for DCB. In 2018, Subscription Video on Demand (SVOD) services were estimated to reach **1.8 billion subscribers**, **Amazon Prime** launched in India, while Tencent announced its plans to dominate the **e-sports** and livestreaming scenes, with its **USD 632 million investment in Douyu**, and online games streaming platform. As Fortumo's **Carrier Billing in Asia Report** shows, when it comes to monetising digital services, service providers face a challenge caused by low bank cards ownership, which can constitute an opportunity for the development of DCB service.

MENA

In this region, digital content and streaming is largely paid for using DCB with SLA Digital, one of the most important players in the region that **links MNO with merchants**. The **average revenue per user** from DCB in UAE was USD 6.4 in September 2018, higher than in Switzerland or Netherlands. Of great importance for the evolution of DCB in the region is 5G technology, with its commercial 5G networks, which is expected to drive the usage of DCB.

Opportunities and innovation

High smartphone growth and low credit card penetration bring countless opportunities for DCB, especially in emerging markets. In countries like India, Nigeria, Brazil, Egypt, Indonesia or the Philippines, smartphone adoption is increasing, while **mobile data consumption** in these regions is growing faster than in mature markets.

As the majority of potential gamers are located in mobile-first emerging markets and credit cards are not popular or suited for this type of consumers, DCB is a better solution, being by default available to any mobile phone owner, whether they are playing on their mobile, PC or on a console. DCB is deployed by many game developers and is among the most **popular alternative payment methods for digital gaming**. Moreover, mobile gaming accounts for over half of the gaming market, generating new opportunities for DCB providers.

Cryptocurrencies

The page in the economics book that people (should) read

Mirela Ciobanu | Senior Editor | The Paypers

'Bitcoin may be a product of computer science, but it is a very human story.'
Larry Summers, American economist

Some money history…

Money in general is a human story, we might add, a tale that takes us from different stages through history, and using different technologies. Money, in general, and banking, in particular, are historical institutions, which were developed before modern capitalism and owe a great deal to the technology of an earlier stage.

Even if no one knows for sure who invented money, still, David Birch mentions in his book, Before Babylon, Beyond Bitcoin: From Money that We Understand to Money that Understands Us, that some 4,000 years ago the temples of Babylon were taking deposits and making loans. Money by that time was recorded on a clay tablet and was entries in a not-at-all shared ledger. The first recognisable coins date from Lydia (modern Turkey), more than 2,500 years ago, while paper money came from China. Some important years in the financial industry are marked by the creation of Bank of England in 1692, and by the launch of formal Electronic Funds Transfer (EFT) via telegraph use in 1871 by Western Union, which helped us distinguish between invention and innovation, and reinforced the point that 'money innovation can come from communication companies rather than banks', the author adds. →

Cryptocurrency (Bitcoin) in the beginning and today

Almost 150 years have passed since the launch of formal Electronic Funds Transfer (EFT), and while cash used to be king for most of this period, lately it has started to disappear, and the potential not only for cash substitutes, but for cash alternatives has started to grow. As such, in a generation or so, there will be a completely new set of monetary arrangements in place, David Birch predicts in his book.

And even if until recently, digital money has been conservative – 'an electronic emulation of the physical currency it is replacing', we are now entering a new phase for payments/money where everything is digitalised, faster and conveniently.

Today we speak about cryptocurrency and how these 'experiments' ten years ago became a reality nowadays, with people using them to buy concert tickets, governments regulating them, banks trialling them and social media companies reinventing themselves via these tokens.

A cryptocurrency is a digital asset designed to work as a medium of exchange based on strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets. Cryptocurrencies use decentralised control as opposed to centralised digital currency and central banking systems. The decentralised control of each cryptocurrency works through distributed ledger technology, typically a blockchain, which serves as a public financial transaction database.

The first cryptocurrency to capture the public attention was Bitcoin. The Bitcoin concept first came into scene in 2008, when a pseudonymous software developer going by the name of Satoshi Nakamoto proposed it as an electronic payment system based on mathematical proof. To this day, no-one knows who Satoshi Nakamoto really is.

Bitcoin aimed (and still does) to challenge some of the most powerful institutions in our society – it held out the promise of taking the power from banks and governments and giving it to the people using money. In his book, Digital Gold: Bitcoin and the Inside Story of the Misfits and Millionaires Trying to Reinvent Money, Nathaniel Popper mentions that from the beginning, Satoshi envisioned a digital analogue to old fashioned gold: a new kind of universal money that could be owned by everyone and spent anywhere. The system was set up so that, like gold, Bitcoins would always be scarce – only 21 million of them would ever be released – and hard to counterfeit. As with the precious metal, it required work to release new ones from the source, computational work in the case of Bitcoin.

Moreover, Bitcoins were designed to exist within a cleverly constructed, decentralised network, just as all the websites in the world exist only within the decentralised network known as the internet. Similar to the internet, the Bitcoin network wasn't run by any central authority. Instead it was built, and sustained by all the people who hooked their computers onto it (which anyone in the world could do).

In the beginnings, Bitcoin:

- was seen as a digital payment method that doesn't require users to hand over identifying information each time they use it;
- equalled universal money that doesn't have to be exchanged at every border;
- promised the fairness of a currency that even the poorest people in the world can keep in a digital account without paying hefty fees, rather than relying on cash;
- promised the convenience of a payment system that makes it possible for online services to change small amounts of money, skirting the current limits imposed by the 20/ 30 cent minimum charge for a credit card transaction. →

Nevertheless, because of its volatility, Bitcoin has been viewed as not such as a reliable store of value and because of its restricted use of a medium of exchange, it remained primarily a tool for speculations.

Therefore, many bankers, economists and government officials dismissed the Bitcoin fanatics as naïve promoters of a speculative frenzy similar to the Dutch tulip mania (1637). The use of cryptocurrencies, in general, has been compared to Ponzi schemes, pyramid schemes and economic bubbles. In 2017, **J.P. Morgan CEO, Jamie Dimon claimed that cryptocurrency use in general is only fit for use by drug dealers, murderers and people living in North Korea**, and more importantly, *Bitcoin is a fraud that will ultimately blow up*.

Some governments even prohibited the trading of cryptocurrencies due to the lack of control and market unpredictability. But none of the critics managed to destroy the enthusiasm of Bitcoin believers, and the number of users kept growing.

Current state, brands, market reach

The creator of Bitcoin, Satoshi, disappeared in 2011, leaving behind open source software that the users of Bitcoin could update and improve. In 2016, it was estimated that only 15 % of the basic computer code was the same as what Satoshi had written.

Since the release of Bitcoin, over 4,000 altcoins (alternative variants of Bitcoin, or other cryptocurrencies) have been created. Other popular cryptocurrencies include: Bitcoin Cash, Ethereum, Dash, Mixin, Litecoin, Zcash, Bitcoin SV and Monero. In the fourth quarter of 2018, the cryptocurrency used the most in daily transactions was **Ethereum**.

In April 2019, the cumulative market cap of all the cryptocurrency was around USD 417 billion and it is predicted to propel the entire cryptocurrency market to a valuation of USD 1 trillion, by the end of 2019. **According to the CEO of Kraken, Jesse Powell**, the reason behind this growth is the fact that *there are many businesses revolving around cryptocurrencies now and there are many people in the know-how of cryptocurrency*.

To be able to use Bitcoin or any other cryptocurrency, consumers need to have a digital wallet. A cryptocurrency wallet is a software program that stores private and public keys and interacts with various blockchains to enable users to send and receive digital currency and monitor their balance. Since the creation of Bitcoin, in 2009, **the number of blockchain wallets has been growing, reaching nearly 35 million blockchain wallet users at the end of March 2019**.

If users want to purchase Bitcoin via cash or debit card, they need a Bitcoin ATM. **The number of Bitcoin ATMs increased from 954 in January 2016 to 2,053 in January 2018. Most Bitcoin ATMs, as of January 2018**, were located in the US and Canada. The Bitcoin ATMs located in Europe constituted 20.42% of the global ATM market share.

Big companies, such as Microsoft, Overstock, Expedia, KFC Canada, to name just a few, accept Bitcoin and other cryptocurrencies, while others, like Corporate **Traveller, Shopify, let customers make Bitcoin payments via crypto payment gateways such as bitpay**. Or, there is the Lightning Network that Bitcoin spenders can use to shop at ecommerce sites like Amazon, with no direct merchant integration. **The Lightning Network** is a 'Layer 2' payment protocol that operates on top of a blockchain-based cryptocurrency (like Bitcoin). The network enables fast transactions between participating nodes and features a peer-to-peer system for making micropayments of cryptocurrency. →

Overall, cryptocurrencies are not yet among the world's payment trends but, despite the lack of usability, the number of payments made using cryptocurrencies is consistently on the rise. In fact most recently big social media companies or banks have also jumped on the crypto experiment bandwagon.

The social media crypto experiment – Libra

Facebook announced plans to launch a digital currency called Libra that will roll out for use in 2020. The new currency aims to reach the 1.7 billion people around the world who do not have access to a bank account and to allow them make financial transactions online.

The project will see it join forces with banks and brokers that will enable people to change dollars and other international currencies into its digital coins. HSo far the currency is serviced by a group of companies called the Libra Association. The companies who contributed a minimum of USD 10 million to be listed as founding members of the Libra Association include tech companies such as PayPal, Ebay, Spotify, Uber and Lyft, as well as financial and venture capital companies such as Andreessen Horowitz, Thrive Capital, Visa and Mastercard.

Facebook's plans for a digital currency network were first reported in December 2018, when the world's largest social network had been quietly trying to recruit product managers, engineers, academics, and legal experts with experience in cryptocurrencies and payments, to found a blockchain group. In the 2019 spring, **nearly 40 employees** — including several former PayPal executives were joining Facebook's blockchain group, with the company **hiring the team behind Chainspace, a small blockchain startup founded by researchers from University College London to support this initiative**.

As the general criticism around crypto has been around its volatility, Facebook wants to prevent wild swings in the Libra value by pegging it to a basket of established currencies, including the US dollar, euro and Japanese yen. The social networking site, which owns WhatsApp and Instagram, is hoping to disrupt existing networks by breaking down financial barriers, competing with banks and reducing consumer costs.

When the cryptocurrency launches, users can download Calibra, a digital wallet, which will allow them to send it to anyone with a smartphone. It will be available in Messenger, WhatsApp, and as a standalone app.

With Libra there is **a huge opportunity for Facebook to enter the remittances market**, especially since WhatsApp is widely used worldwide and people sending money to the loved ones are in search for faster and cheaper ways to do so. Plus, if Facebook is able to stabilise the value of the token, these innovations could be embraced in places like Zimbabwe and other parts of Africa which have been hurt by hyperinflation in the past.

Still, Facebook is in the initial phase of engaging with governments, central banks and regulators, and insiders admit that launching any cryptocurrency network by the start of 2020 is ambitious. Moreover, the biggest test is likely to be whether people will trust the social networking giant enough to start changing their cash for the digital coin. Nevertheless, Facebook claims it will keep financial data from transactions on Libra separate from user ad profiles. ➔

Meanwhile, other global messaging applications, such as Kakao, **LINE** and Telegram, **Vkontakte**, a Russian social media platform, have already revealed plans to move into the blockchain space and develop their own crypto.

Overall, we can conclude by admitting that Libra project has the potential to become one of the most significant events in the history of cryptocurrencies, according to **Garrick Hileman**, a researcher at London School of Economics. And not only Libra…

The biggest announcement this year so far – JPM Coin

At the beginning of 2019, **engineers at J.P. Morgan Chase have created the JPM Coin, a digital** token designed to make instantaneous payments based on the blockchain technology.

The JPM Coin isn't money per se, but a digital coin representing US dollars held in designated accounts at J.P. Morgan Chase. When one client sends money to another over the blockchain, JPM Coins are transferred and instantaneously redeemed for the equivalent amount of US dollars, reducing the typical settlement time. The lender has plans to extend JPM Coin to other major currencies over time. Still, **the product and technology capabilities are currency agnostic, according to Umar Farooq, head of Digital Treasury Services and Blockchain, J.P. Morgan**.

There are three early applications for the JPM Coin:

- **International payments for large corporate clients**, which now typically happens using wire transfers between financial institutions on decades-old networks.
- **Securities transactions** - in April 2019, J.P. Morgan tested a debt issuance on the blockchain, creating a virtual simulation of a USD 150 million certificate of deposit for a Canadian bank. Rather than relying on wires to buy the issuance — resulting in a time gap between settling the transaction and being paid for it — institutional investors can use the J.P. Morgan token, resulting in instant settlements.
- **Large corporations** that use J.P Morgan's treasury services business to replace the dollars they hold in subsidiaries across the world. Unseen by retail customers, the business handles a significant chunk of the world's regulated money flows for companies from Honeywell International to Facebook, moving dollars for activities like employee and supplier payments

At the moment, JPM Coin is a prototype. And as the bank moves towards production, it will actively engage regulators to explain its design and solicit their feedback and any necessary approvals.

Worth mentioning is that only institutional customers passing J.P. Morgan KYC can transact with these coins, as they have **been developed exclusively for institutional customers (eg, banks, broker dealers, Corporates). According to fintech expert Chris Skinner**, *it's a mistake to call it a cryptocurrency as it is clearly described by the bank as a 'digital coin', and that they do not endorse cryptocurrencies per se*.

Trends to watch out for the next 12 months

1. More businesses will get into cryptocurrencies

The news from Facebook and J.P. Morgan regarding the launch of their own cryptocurrencies is a major development for the payments industry, suggesting they are very interested in learning more about ways of innovating the way money move and delivering great experiences for the digital era user, and we expect many other businesses to join their endeavours. →

Plus, the biggest attraction of cryptocurrencies to banks and big companies is the tech that underpins them. Blockchain can help to reduce the time and cost of sending money across borders by bypassing banking networks.

2. Mass Bitcoin adoption to become inevitable

For cryptocurrencies to develop into a credible alternative to fiat currencies, they need to become a widely accepted payment method, both online and on the high street. To adapt to this shift, retailers will need to ensure they have the processes in place which enable them to accept crypto at the checkout. Many now expect the world's biggest tech companies, from Rakuten and Amazon to micro-blogging site Twitter, to drive the next wave of Bitcoin and crypto adoption.

As a result, **Jack Dorsey**, the CEO of Twitter, is taking further steps toward incorporating Bitcoin and cryptocurrencies into his payments business, Square, as the company plans to *improve money* though its developments in this space. In March 2019, Dorsey said Square would be hiring three or four Bitcoin and cryptocurrency engineers and one designer to work full-time on open source *contributions to the Bitcoin and crypto ecosystem*.

Also, **Amazon's rival Rakuten**, a Japan-based company with operations across ecommerce, online banking, media and communications, began accepting registrations for its new Bitcoin and cryptocurrency exchange, Rakuten Wallet.

3. Cryptocurrencies, less volatile as stable coins rise

In 2017, Bitcoin's price dropped dramatically low and then soared to great heights within a matter of weeks. Nevertheless, since 2018, the changes of cryptocurrencies prices were not as volatile as the year prior, signalling that this industry has since stabilised after several institutions have accepted it as a form of payment. Moreover, within this period, 2018 – 2019, many stable coins, used as hedging tools against the potential decline of an underlying cryptocurrency, have been rolled out to stabilise the potential volatility of Bitcoin and cryptocurrencies.

4. Increased interest in blockchain and cryptocurrencies regulation

Many companies and financial institutions will continue exploring the blockchain technology to ensure that not only each transaction, but also the cryptocurrency's overall history, remains transparent and less susceptible to fraud and third-party tampering. Nevertheless, as the global crypto space is still work in progress and full of new ideas, and cryptocurrencies are not issued or guaranteed by a central bank, it is hard to classify and regulate them.

Therefore, 'transnational cooperation is necessary to regulate virtual currencies' and 'it is important to consistently implement international standards agreed by international organisations on a country-by-country basis to minimise regulatory inconsistencies', as reported by **Choi Jong-ku, Chairman of South Korea's top financial regulator, the Financial Services Commission (FSC)**.

Conclusion

Throughout the years, cryptocurrency, and especially Bitcoin, have spawned a global social movement with great ambitions – transaction transparency, no additional costs of moving money, empowering people financially in remote areas, etc. The concept of Bitcoin, maintained by tech developers and fintech visionaries across the globe, has attracted many jokes and critics, but this has not stopped it from growing into an industry worth billions of dollars, supported by followers and business people who have come to view it as the most important new idea since the creation of the internet.

PumaPay

PumaPay's Crypto-Friendly Payments

About Yoav Dror: Yoav Dror is the CEO of PumaPay, one of the biggest ICOs in 2018, which raised over USD 117 million. With an MBA and over 20 years of experience in heading online high-volume and high-transaction companies, Yoav is now leading PumaPay's team to deliver a comprehensive digital payment system, which will enable businesses to easily accept cryptocurrency and fiat payments.

Yoav Dror ▪ *CEO* ▪ PumaPay

Cryptocurrencies are increasingly gaining more popularity as the latest surge in the price of Bitcoin attests and, we believe, by 2020 they will become mainstream. Market analysts have suggested that the recent interest in cryptocurrencies has been partly driven by mainstream institutions and organisations researching, adopting or implementing payment solutions with cryptocurrencies. While there are obvious geopolitical, technological, and regulatory drivers, the wider acceptance of crypto payments by international companies cannot be neglected. Facebook is already aiming to launch its own cryptocurrency called Libra in **2020**, something that will further boost usability and bring crypto payments in the realm of everyday life. From **major organisations** like Microsoft and Amazon to J.P. Morgan's JPM Coin, the world's biggest companies are bringing cryptocurrencies into mainstream finance, significantly shifting the existing paradigm.

We believe that such a change will be largely driven by blockchain-based crypto payment systems such as PumaPay. We are the pioneers in introducing Flexible Billing Models on the blockchain, as we have elevated the concept of transactions by moving from simple push transactions to a universe of possibilities with pull payments. We gave back businesses the control they wanted by streamlining online payments and improving business and customer relationships through flexible billing and efficient pull transactions.

By adopting blockchain technology and creating a token economy based on the PumaPay (PMA) token, PumaPay is driving innovation at the token level. By developing a range of products for both end users and businesses, our robust cryptocurrency payment system is built around the idea of utility, so that cryptocurrencies can be used in everyday scenarios.

How is PumaPay pushing for cryptocurrency adoption?

PumaPay is visionary and has a clear strategic plan: to work with forward-thinking businesses which want to innovate, change, and adopt in order to implement the financial system of tomorrow. To boost cryptocurrency usability, PumaPay has designed products and solutions that will shape the ways we perceive finance.

First and foremost, our Business Console, which will enable businesses to accept crypto payments, will integrate a third-party fiat settlement layer so that businesses can accept crypto payments, without worrying about volatility and liquidity. In this respect, we create usability by establishing this settlement layer which will allow both customers and businesses to settle in whichever currency they wish, without needing to know each other's preferences. For example, a business could accept fiat, while its customers could choose to pay in any currency they wish: fiat, BTC, or PMA. The settlement layer is envisioned to work in such a way that the businesses will have zero exposure to crypto volatility while enjoying 100% liquidity. By implementing this solution, we'll be able to close the cryptocurrency loop, making it viable and sustainable for any business to use cryptocurrencies for their products and services. →

We are striving to set the standard for flexible billing models taxonomy, and to enable flexible billing not only with cards but also with any sort of billing: pure crypto, crypto/fiat, or digital fiat payments. As our vision is to deliver a comprehensive, easy to use, end-to-end system with all the advantages of blockchain technology and the flexibility of credit cards, we have tried to design a flexible system where businesses can tailor different billing models to suit their needs and ensure customers can pay easily through our wallet app. From simple one-time crypto-currency payments for everyday transactions to recurring payments, such as regular subscriptions or subscriptions with a free or paid trial period, PumaPay is currently offering a variety of choices for businesses and individuals.

Why businesses prefer PumaPay

It's simple. We are constantly innovating, developing, and re-designing our products and solutions in line with our partners and early adopters' needs, so that they respond to their existing and future requirements.

We were established in May 2018 and have already started integrating businesses with our basic solution, learning in the process, and improving our products. Being a straight-forward system that can be easily adopted by modern businesses, our solution has attracted the attention of many companies from different industries, as we were the first to introduce recurring billing on the blockchain.

Not only crypto payments, but we are also aiming to deliver flexible billing models for digital payments, so that fiat and cryptocurrencies become interchangeable, and doing business in either currency becomes the standard for online payments. Our aim is to help both businesses and their customers to access a lucrative crypto-currency **market**.

About PumaPay: PumaPay is a streamlined cryptocurrency payment system with its own cryptocurrency mobile wallet app, Business Console payment gateway, and the marketing hub PumaPay Pride. Our PullPayment protocol utilises a new architecture of smart contract called 'PullContract,' which inverses the mechanics of the crypto transaction. Instead of the customer sending or 'pushing' funds, the business can pull funds from a customer's wallet based on preapproved terms.

www.pumapay.io

Click here for the company profile

Innovation in How People Pay in Different Verticals

Retail

Raluca Constantinescu | Content Editor | The Paypers

When it comes to the retail vertical, the environment is changing at a rapid pace, with new platforms, providers, and payment tools emerging almost every day. Going from cash to cards, and from cards to online and mobile payments, consumers require improvements with regard to the convenience and speed of payment methods. Moreover, in the light of the latest developments in the payments space, customers expect omnichannel solutions for commerce – they want to use the same payment methods to safely buy products both online and in-store.

Challenges in retail payments

In order to get a grasp on retail payments, let us take a look at some of the key challenges that retailers encounter nowadays:

- *the omnichannel approach*: it is essential to understand the multiple payment methods preferred by customers while making purchases. Therefore, retailers need to create a seamless experience in order to provide a **connected customer journey**;

- *personalisation*: according to Forrester's **report** called 'The State of Retailing Online 2019', personalisation represents a problem for retailers because of the limited data, seldom visits even from their best customers, and product catalogues that do not drive any lift in conversion. Thus, personalisation plays a major part in converting a one-time customer into a loyal one; →

- *retaining millennials*: in order to retain millennial customers, retailers must be able to provide a streamlined customer-centric experience and appoint customer service professionals who are able to make specific recommendations for the needs of this demographic group, whether we talk about online or in-store shopping. Therefore, retailers need to use **customer data** in order to deliver an improved in-store experience;

- *in-store innovation*: global brands, such as Apple and Amazon, constantly innovate in order to streamline their customers' experience, followed by online-only companies, **like Made.com**, that open physical stores just to better connect with their customers. In order to increase loyalty, retail companies must continuously innovate, providing secure, cutting-edge technology for payments, and finding new ways of getting new customers' attention. Let us take a look at Amazon's convenience stores. With its Amazon Go store, the multinational technology company provides a new physical retail experience that is quite different from brick-and-mortar stores, since it requires no checkout. When customers arrive at the store, they use the app to enter it, then they can just browse and shop – closely monitored by many cameras. The system can track what is taken from and put back on the shelves, while also distinguishing between similar products. Thus, Amazon Go sets a new standard for in-store innovation.

Current trends and the future of retail payments

Currently, there are many new ways to pay for different products, but what is the future of retail payments? Will cryptocurrency be ubiquitous and cash forgotten? Which are the main trends to be observed in this space?

Many of the challenges encountered by retailers nowadays show how important convenience is for customers, which is why currently most developments in the retail payments space have been about streamlining the buying process and making it quicker and safer. There are also many choices available to both customers and retailers, especially in ecommerce. From bank-owned e-wallets, to services like PayPal that are widely accepted, to e-wallets like Apple Pay and Google Pay, the options are countless. All these payment solutions can have added benefits by connecting information about a customer to transactions.

It is almost impossible to talk about developments in this space without mentioning cryptocurrencies as well, especially Bitcoin, one of the most well-known blockchain-based cryptocurrencies. Websites want to show inclusiveness, and to provide their customers with as many payment options as possible. That is **one of the reasons** why online retailers, such as Expedia and Cheap Air, have added cryptocurrencies as a payment options, thus allowing customers to pay for goods this way. Even if globally cash payments still account for at least **20%** of all retail transactions by value, as more and more cryptocurrencies seem to appear every year, the retail payments space is expected to be influenced by these developments.

Another development is represented by the expansion of Smart POS solutions. Since card payments are part of the POS operations, smart functions relate to POS features. Consequently, Smart POS terminals emerged. They usually have an inbuilt receipt printer, touchscreens for the navigation of POS features, and also a customer-facing display, an inbuilt camera for barcode scanning, and they function through WiFi, 4G or **3G**. They are produced by different companies, such as Spire Payments, Verifone, Clover Network, and myPOS. ➔

In this chapter

Ron van Wezel, Senior Analyst at Aite Group, presents the evolution of POS for SMEs and large enterprises, while also shedding light on new Smart POS solutions provided by companies such as First Data Clover, Poynt, and Verifone Carbon. Readers can also learn more about PCI's new standard – to be published by the end of 2019 – for contactless payments on COTS.

Carlos Madrona, Payment Methods and Fraud Director at MANGO, points out the importance of providing the right payment methods when it comes to driving customer loyalty. He also provides more details about MANGO's idea of a 'Phygital' payment ecosystem, with the purpose of streamlining the payments experience for customers.

René Pelegero, President and Managing Director at the Retail Payments Global Consulting Group, underlines the importance of the merchant's need for payments orchestration. He argues that merchants need a Payments Orchestration Panel in order to manage the complex, modern payments environment – since one of its main functions is the workflow management of transactions.

Aite Group

The Next-Generation POS is Here. What's Next?

About Ron van Wezel: Ron van Wezel is a senior analyst for Aite Group's Retail Banking & Payments practice. His research covers market and regulatory trends in the payments space, with a focus on Europe.

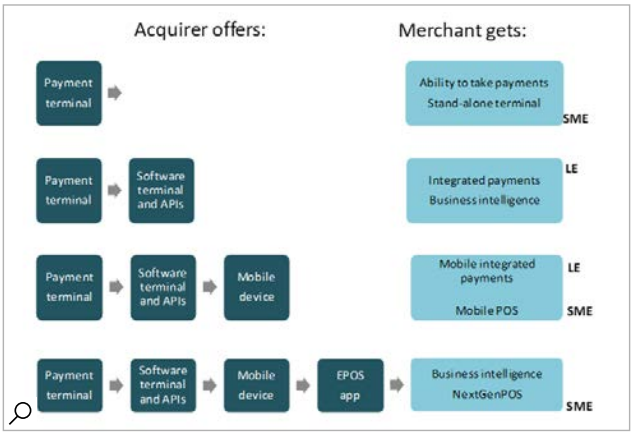
Ron van Wezel ▪ *Senior Analyst* ▪ Aite Group

The days of the cash register and the stand-alone payment terminal may be counted. The arrival of cloud-based electronic POS (ePOS) applications has brought enterprise-level business intelligence and integrated payments within reach of small and medium-sized enterprises (SMEs). ePOS provides tablet-based applications tailored to specific merchant verticals, with payments pre-integrated as part of the solution. That means that the choice of ePOS will sit at the top of the merchant's priority list, while the acquirer, as the provider of the payment solution, will just be an option that the merchant will select mainly based on cost.

The evolution of POS

The evolution of POS for SMEs and large enterprises (LEs) is presented in Figure 1.

Figure 1 – Evolution of POS for SMEs and large enterprises (LEs)



Source: Handpoint, with minor changes by Aite Group

Many SMEs still use the stand-alone payment terminal, providing only the ability to receive card payments. Enterprise merchants can integrate payment software through APIs into their business applications, but such integration used to be out of reach for SMEs.

That changed with the arrival of mobile POS (mPOS). mPOS provides a card reader connected to a basic ePOS app running on a tablet or smartphone. Merchant onboarding is simple and fast, and the service is delivered on a 'pay-as-you-go' model. mPOS was initially targeted at micromerchants, but it has been quickly adopted by larger SMEs for its convenience, competitive pricing, and value to the business. Large enterprises are also integrating mPOS into their business for new store concepts (think of the Apple Store, for instance) or applications that require mobile solutions, such as deliveries.

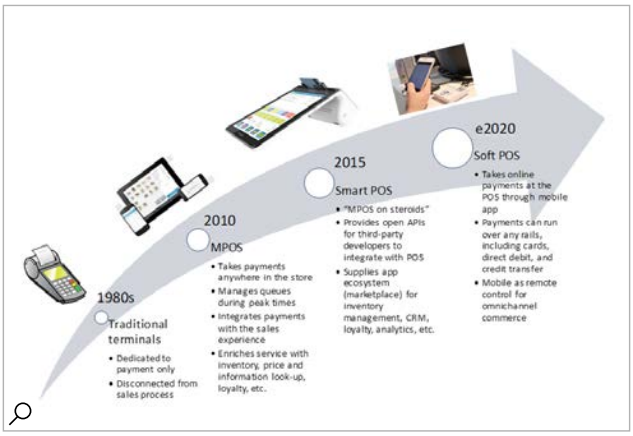
The next stage in this evolution is the availability of dedicated tablet-based ePOS software for SMEs, provided in the cloud on a subscription model. This development empowers SMEs with access to business intelligence similar to that of large enterprises, with payments integrated as just one of the many functions that the business needs. mPOS providers, such as Square and iZettle, are now offering more advanced ePOS apps, but they also provide integrations with popular ePOS systems.

Is there a future for the hardware terminal?

In 2018, the PCI Security Standards Council published the specifications for PIN entry on commercial off-the-shelf devices (PIN on COTS). ➔

This standard enables EMV card transactions with PIN entry on the merchant's consumer device, using a secure PIN entry application in combination with a secure card reader. Before the development of the PIN on COTS standard, only dedicated devices approved by PCI allowed PIN entry 'on glass'. Such Smart POS solutions consist of a purpose-built, tablet-style device with an integrated card reader. Providers offer an app store or marketplace to merchants, allowing them to compose their own POS environment and business applications. Examples of Smart POS providers are First Data Clover, Poynt, and Verifone Carbon. However, smaller Smart POS solutions come to market as well, integrating a payment terminal, a cash register, and a printer into a portable device. Examples are EVO Payments' PosPay, and Yello.

Figure 2 – (R)evolution of the POS terminal



Source: Aite Group

The question is if, or when, the final step can be made and the hardware terminal will disappear. Payment acceptance will then become as easy as downloading an app, with all functionality and security programmed within the software. This could be called 'Soft POS' as the next step in the evolution of the payment terminal (Figure 2).

The first steps to make that possible have already been made. PCI is working on a new standard for contactless payments on COTS, which is due for publication by the end of 2019 **and has been shared with stakeholders for comments in April 2019**. This standard will allow the acceptance of contactless card payments on the merchant's device, using NFC, without the need for a separate card reader. The solution is already piloted by a few acquirers, such as WorldPay in the UK and Elavon in Poland.

The jury is still out on whether the hardware terminal can be replaced altogether. However, fact is that the value chain and distribution model of traditional acquirers and independent sales organisations is already challenged by fintech providers of mPOS solutions, particularly for the SME segment. Acquirers must focus on the business needs of their customers, offering solutions that centre around business intelligence, not payments alone.

MANGO

Driving Customer Loyalty through the Right Payment Method

About Carlos Madrona Guillén: Carlos Madrona, with more than eight years of experience in payment methods, joined the company in 2015 as Head of Online Fraud. In July 2017, he was promoted as Director of Means of Payment and Fraud, a position in which among others he aims to lead the strategy of payments and offline in the markets.

Carlos Madrona Guillén ▪ *Payment Methods and Fraud Director* ▪ MANGO

Omnichannel selling is currently one of the biggest challenges facing retail.

The model of the relationship between customers and brands has become much more complex in recent years. The technological evolution (particularly, the arrival of smartphones) has totally changed the way customers interact with brands.

Faced with this new reality, as retailers, we have the difficult task of satisfying the needs of customers who are much better informed, more demanding and more powerful. We have to do it quickly, because for customers there is no going back. They expect more from their favourite brands: fast delivery methods, product availability, great customer service, etc.

As retailers, we need to develop initiatives and technologies that will allow us to understand the way in which our customers relate to us today, and, subsequently, other initiatives and technologies that respond to their needs. We also need to be capable of segmenting our customers into different standardised groups, because not all our customers are the same. In fact, no two customers are the same and for this reason, ultimately, we must be able to offer personalised experiences for each and every one, taking their needs and preferences into account. These needs and preferences affect all the 'touchpoints' the customer has with the brand, and payment is just one of them.

In payments, there has also been a major disruption in recent years with the appearance of several more payment methods, which a short while ago did not exist; basically, we used to pay in physical stores in cash or with a debit/credit card.

However, payment in itself will not disappear. We have to assume that payment is a 'painful' moment for customers, since paying, by definition, does not generate the same satisfaction as, for example, finding the garment you have been after for a weekend party. However, payment will always exist. ➔

MANGO

This is why at MANGO we are working on the creation of a 'Phygital' payment ecosystem with a single aim: to generate the least possible friction for the customer and streamline the payments experience. We all know that queuing is something we prefer not to do. So why not allow the customer to pay in any location other than the store without the need to pass through the cash desk? How can we resolve these painful aspects of our customers' shopping experience?

When we talk about a Phygital ecosystem we are referring to being able to transfer the online payment experience to the physical store (if the customers prefer, they may continue to pay with hard cash or physical debit/credit cards). We want to be able to make payment virtually invisible to the customer. To achieve this, we are working on developing payment solutions via smartphone.

We are constantly analysing the preferences of our customers in the digital environment to find out their preferred payment methods to be able to offer them in the physical store. The more data we have from customers, the more simple and natural it will be for them to pay. Adapting to the speed at which new payment methods are appearing involves the integration of the vendor with the payment hubs. As a result of a single integration, we can offer a single worldwide payment system, irrespective of the channel the customer purchases through and irrespective of the payment method they choose.

This is why at MANGO we are focusing on learning about the customer and using technology as a means to improve the shopping experience of our customers.

About MANGO: MANGO was founded in 1984 and is today one of the leading fashion groups in the world. Based in its city of origin, Barcelona, the company has an extensive store network of 812,000 m2 in 110 countries. From its 'El Hangar' Design Centre in Palau-solità i Plegamans, every year it designs more than 18,000 garments and accessories for wearing the season's trends. The company closed the 2017 financial year with sales of EUR 2.194 billion. More information at www.mango.com

www.shop.mango.com

Retail Payments Global Consulting Group

The Merchant's Need for Payments Orchestration

About René Pelegero: René was the first payments person at Amazon.com, growing operations to 160 countries. At PayPal, he managed industry relations, and created the PayPal payments education curriculum. He directs consulting efforts for leading merchants such as Google, Upwork, Priceline.com, and T-Mobile.

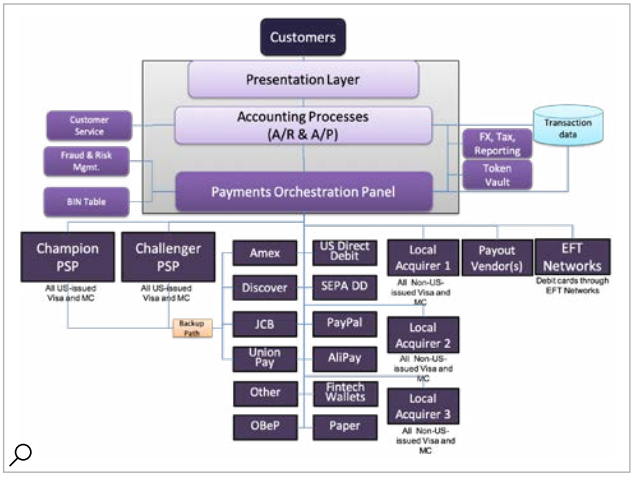
René Pelegero ▪ *President & Managing Director* ▪ Retail Payments Global Consulting Group

For merchants, payments do not exist for their own sake but to support their business goals. The payment itself is an intimate moment between the buyer and seller that needs to be executed in a frictionless way, with safety, and with accuracy. Otherwise, the merchant risks losing the purchase; or worse, the customer.

Moreover, merchants do not add new payment methods for their own sake, but to support market growth. While cards are popular in the US and Commonwealth countries, bank transfers are the preferred method of payment throughout Europe (in one flavour or another). 'Push' payments such as Boletos in Brazil or inbound cash payments accepted at convenience stores in Japan are very popular. And demand continues to grow for e-wallets (eg PayPal, AliPay, Apple Pay, Google Pay) and instalments (eg Affirm or Klarna).

But even when accepting card payments, there are challenges. The introduction of chip cards in the US has caused fraud to move from the card present environment to the card not present (CNP) environment. Because of this, many card issuers have tightened their authorisation criteria, which, in turn, has increased the number of declines, translated into the loss of hundreds of billions of dollars. Upsetting good customers because of card declines increases friction and is a good way to also losing the client's purchase.

So we work from this premise: *Customers need to be offered the ability to use the payment methods and currencies they want and when they pay, the authorisation needs to succeed*. Not meeting this premise means there has been an undercapitalisation of the efforts from marketing, operations, sales, product, engineering and finance.



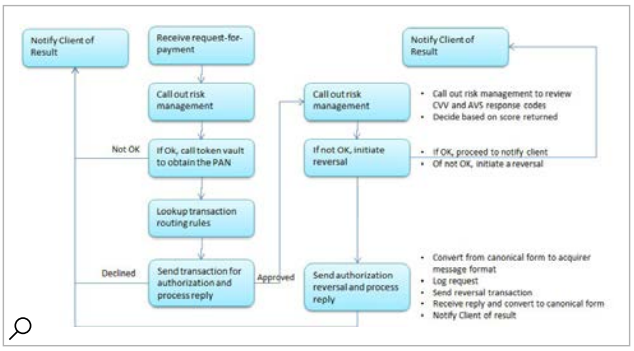
Sample Orchestration Panel Architecture for the US Merchant

Why can't a single Payment Service Provider (PSP) service all of a merchant's needs? To support local payment methods and maximise approval rates, merchants need to connect to local PSPs. But some PSPs will not connect to other PSPs for competitive reasons. Retry logic varies between every PSP, and in many cases, the generic logic may not be optimised for a merchant's specific business. Plus, with the growing number of publicised PSP outages and latency spikes, no single PSP can provide every desired payment method, currency or can maximise approval rates in every geography.

In order to manage such an environment, merchants need their own Payments Orchestration Panel that allows non-engineers to:

- Easily add or subtract payment methods per business case;
- Setup and customise transaction workflows;
- Reconcile transaction information across multiple providers. →

The connectors (payment methods, acquirers/PSPs, risk management services etc.) are actually commodities that can be deployed in 2–6 weeks by an experienced payments engineering team. The current industry gap resides in merchants lacking the non-coder tools to easily orchestrate these connectors as demonstrated in Figure 2.



Sample Orchestration Panel Transaction Flow

The Payment Orchestration Panel's most important function is the workflow management of transactions. If each box in Figure 2 represents a microservice, then the panel needs to provide the tools to arrange these services in a manner best suited to the merchant's needs. The Panel's value is in being flexible enough to accommodate all of the different payment flows (pull or push, batch or real-time, instalment or anticipation etc.) without requiring major repair to the platform.

The Panel provides routing and retry logic that interacts with token vaults, BIN tables, risk management, and foreign exchange systems, while remaining compliant with the many card scheme regulations (eg reversals, credit authorisations etc). Plus, the tools should be able to allow merchants to easily activate or deactivate payment methods by business case or business unit.

To be clear, some of this functionality is currently available within specific PSP environments, but because a PSP assumes financial ownership of a transaction, they are not incentivised to provide merchants the necessary tools to orchestrate transactions outside of that specific PSP environment. Merchants with deep product and engineering resources have been able to build their own panels, but that strategy isn't viable for most merchants. The table below lists the functionality, tools and reporting that enterprise merchants need to sufficiently manage every cent of revenue.

Given that there are few locations within a merchant's stack where all transactions pass through, a panel that reports on all providers and fees that pass through its system saves merchants from manual time-consuming reconciliation efforts. A Payments Orchestration Panel also allows merchants to conduct A/B tests quickly without impacting reconciliation.

Good payments orchestration tools help business users to penetrate new markets and pursue growth initiatives otherwise left behind. Payments becomes an asset when merchants can quickly deploy new payment methods and determine the business impact to best service strategic markets with minimal demand on their scarce engineering resources.

About Retail Payments Global Consulting Group: Retail Payments Global Consulting Group provides merchants advisory services in payments strategy, education, RFP management, and architecture design for functionality. RPGC Group believes that merchants need to retain control of their payments data in order to fully support their business objectives.

www.rpgc.com

Travel

Ana Păstrăvanu | Content Editor | The Paypers

Airline industry has a true global model and is among the few retail sectors in which the same entity sells in most (if not all) countries around the world. National card payment schemes like RuPay in India, MIR in Russia, or UnionPay in China, which is eyeing global acceptance, are bringing back fragmentation in card payments. And that's not a particularly nice-thing-to-have for airlines.

With a plethora of card brands, airlines see their worldwide card payments moving towards more fragmentation. At the same time, the customer's appetite for new payment instruments leads to an increasing complexity of payment management. **IATA's Global Passenger Survey 2018** shows that the percentage of travel consumers preferring to pay by card decreases steadily by age group (53% in the age group 55+ versus 31% for 24 year-olds and younger). Moreover, e-wallets are more popular among millennials (19% in age group 18-24) versus older generations (2% in age group 55+).

The challenge for the airline community is to identify which payment innovations will take root in order to build new and more relevant products and services, and to meet the expectations of the digitised consumer. Personalisation is currently a major trend that has gained traction in the entire travel industry as consumers expect more personalised experiences from the moment they begin searching for a booking to the moment when they check out of a hotel room. →

The latest partnerships and innovation

Adding new services to increase relevancy is a top priority for airlines and for the entire travel industry. In recent months, we have seen a lot of innovation and partnerships in this sense. In May 2019, **Amazon partnered with ClearTrip** to add a flight booking option to its payment service Amazon Pay in India. Adding travel services could potentially make Amazon an even more ever-present superapp. In the same month, **Google** announced that it will launch a more unified travel product to integrate flight and hotel search functions, while organising people's travel plans and saving research. Moreover, the company plans to 'surface' more travel data on Google Maps, and incorporate hotel and restaurant reservations for customers that are logged on, a move that will increase competition with companies that offer similar services, such as Expedia or Booking.com.

Moving beyond travel, **AirAsia Group** announced that it wants to sell more than cheap flight tickets and build an ecommerce app that integrates everything from hotel bookings to beauty products and dinner vouchers, aiming to see it surpass the size of its airline business. On the other hand, we see banks tapping into the travel business. In March 2019, **Sberbank launched Business Travel**, a travel booking service with an all-electronic invoice and document flow. Similarly, In May 2019, **Tinkoff Bank released an own-branded online travel agency**, offering air and railway tickets, packaged tours, hotels, and car rentals.

In recent months, we have also witnessed new loyalty partnerships aimed to make it easier for frequent travellers to earn and spend points across the entire travel industry. **Hilton and Lyft** have announced that they will enable shared car riders with the ability to earn Hilton Honors points on each ride while **American Airlines and Hyatt Hotels** said that they will allow elite members to share benefits and earn points across brands.

In a bid to streamline the payments experience for travellers, several payment products have been launched in the past few months. **Afterpay teamed up with LayAway Travel** to launch Play, a travel-booking site that allows people to split up the cost of the holiday into several interest-free instalments. In February 2019, **Barclaycard partnered with Amadeus** to integrate Precisionpay into Amadeus' B2B Wallet payment solution, which provides the ability to pay supplier up-front without affecting cash-flow or tying up important capital. What is more, in April 2019, **Wirecard and Al Ansari Exchange** launched a multi-currency Visa Platinum card solution that allows its customers to withdraw local currency at over two million Visa ATMs worldwide, to make online purchases, and to exchange foreign currencies within the currency card wallets.

Evolution of payments in an NDC environment

As today's travel retail world is highly complex, the New Distribution Capability (NDC) standard, IATA's new data standard for XML-based data communications – a messaging standard for multi-channel retail – will give airlines the ability to distribute their content through third parties and sell their products in a more modern way. Through the new standard, airlines have the capability to move from a legacy IT environment to an Application Programming Interface (API)-based world where developers can build travel and shopping apps in only 40 hours.

As a travel industry supported standard – IATA represents 290 airlines or 82% of total air traffic –, NDC is designed to unify the entire informational ecosphere. NDC messages support product differentiation, such as fare families, ancillary services, seat selection, and personalisation, complementing them with rich content and media. →

The NDC is an opportunity for airlines as it unlocks new distribution channels. There are **three key ways NDC can support an enhanced approach to retailing**: personalisation, ancillary products and services, and rich media. Moreover, using the NDC API, airlines can be more active in managing payment and settlement of air travel. NDC allows airlines to take direct payments through their NDC gateway or other supported payment service providers, bringing the payment process in-house.

Regulations impacting airlines – challenges

The upcoming introduction of PSD2's Strong Customer Authentication (SCA) standards, based on two-factor authentication, can become a hurdle for airlines if it is not managed properly. As Pascal Burg, Director of Edgar Dunn and Company, **underlines**, some airlines are concerned about the past experience with the introduction of 3-D Secure, when e-merchants lost up to 40% of their sales right after the introduction of 3-D Secure 1.0. Since not all the stakeholders are ready, it is not clear whether the number of successful transactions will decrease as it did after 3-D Secure 1.0.

What you'll read in this chapter

Amy Wei, CEO of International Train Ticketing at Ctrip, the largest OTA in China, shares valuable insights into the key challenges for an OTA when expanding in Europe and in other Asian countries. She explains why certain payment methods are popular among travelers, and what is the difference between Europe and Asia in terms of the profile of the typical traveller. Moreover, Amy Wei tackles issues concerning the best approach to cater to the needs of Chinese tourists while they travel abroad as China has become the world's largest outbound tourism market and the world's fourth largest tourist destination.

Regulatory aspects are tackled in this chapter by Pascal Burg, Director of Edgar, Dunn & Company, who presents the major payment regulatory changes that impact the airline industry. Despite their challenging aspect, Pascal Burg believes that PSD2, Open Banking, SCA, and TIP are also offering new opportunities to various stakeholders, and explains why these play a key role in changing and opening up the payments market in the airline industry.

Ctrip

Interview with Amy Wei, CEO of International Train Ticketing, Ctrip, on payment methods, travel payments, and 'Train + X' tourism

About Amy Wei: Amy Wei accumulated extensive experience in product management and international market expansion over the past 15 years. Before joining Ctrip, she worked at global technology companies including Amazon, Motorola, and Nokia. In 2015, Amy joined Qunar, a Ctrip Group company, overseeing international air ticketing. Since August 2016, Amy has been spearheading the international train-ticketing unit at Ctrip Group.

Amy Wei ▪ *CEO of International Train Ticketing* ▪ Ctrip

What is the story behind Ctrip's and TrainPal's inception, and how do you differentiate yourself in the market?

Ctrip is a travel service provider of accommodation reservation, transportation ticketing, packaged tours, and corporate travel management based in China. In 1999, four co-founders James Liang, Qi Ji, Neil Shen, and Min Fan established the 'click-and-brick' model that combined information technology with traditional travel services in China. Since its inception in 1999, Ctrip has grown to become one of the best-known travel brands in China.

> *"An increasing number of Chinese tourists seek unique travel experiences, and they prefer high quality travel products.*

My team launched TrainPal, a mobile app that offers international train ticket booking services first in the UK in February 2018. TrainPal will soon expand its service to other European countries and regions, such as Italy and Germany.

Ctrip is a one-stop shop, while TrainPal focuses on international train ticketing, which is a great supplement to other travel related products on the Ctrip platform as general interest in 'Train + X' tourism within China and abroad increases.

In September 2018, Ctrip first raised out the idea of 'Train + X' tourism in the industry and we believe 'Train + X' tourism will amount to 20% of China's travel market by 2025. 'Train + X' refers to those packages that utilise train as transportation tool meanwhile book hotel, attraction tickets, or any other travel related products. We see the number of 'Train + X' travellers doubled for the past May Day holiday in China compared from 2018.

What is particular about Ctrip's and TrainPal's expansion outside China and what are the key challenges when expanding in Europe and in other Asian countries (eg branding, localisation, payments)?

Ctrip acquired Skyscanner in 2016 and Trip.com in 2017. Now, under Ctrip Group, we have four brands, namely Ctrip, Qunar, Skyscanner, and Trip.com. Ctrip/Xiecheng and Qunar target the Chinese market, providing domestic and outbound travel services to Chinese consumers. Skyscanner, a global travel search site, concentrates on markets in Europe and the Americas. Meanwhile, Trip.com, the youngest in the family, focuses on the Asia Pacific region. TrainPal emerged from Ctrip's international train ticketing business and the UK is our testbed for serving international train ticket bookers.

We believe it is essential to understand your customer. In the months immediately following the launch of TrainPal, the user growth rate and ticket sales were not as high as we had expected. →

In August 2018, we evaluated the user conversion rate with our partner, an App store. We were surprised that only one or two per-cent of those users who had looked at our app actually downloaded it. After examining user behaviour, we realised many users looked at the app without clicking into it. They would have learned in the app details it was 'a cheap train booking provider in UK' if they had clicked. Then, we realised we needed to boost our marketing and branding efforts in the UK, and that a good product by itself is not enough.

What kind of payment methods are popular among travellers that want to book and pay for rail tickets? Are there any major differences between Europe and Asia, for example, in terms of the profile of the typical traveller?

In China, WeChat Pay and Alipay are the dominant payment methods for rail ticket bookings. From what I could see, Chinese and other Asian market customers tend to favour third party payment channels.

As for Europe, I think Visa and Mastercard are among the most popular payment options. Apple Pay and Google Pay have caught up quickly in the past several years. PayPal amounts to some share too, but is still relatively small compared to that of WeChat Pay/ Alipay in China.

Earlier in 2018, TrainPal was soft launched. Can you share with us more information about this app and the 'split ticketing' algorithm?

As a consumer, I found it complicated as well as costly to book train tickets in the UK. To solve customers' pain points, our team devoted itself to innovative solutions, specifically developing our unique split ticket algorithm, allowing consumers to get a cost-effective paper or electronic train tickets for all routes where operators offer them without a booking fee.

For example, I would like to book a train ticket departing from London Kings Cross to Manchester Piccadilly. Our smart search engine will find the cheapest ticket shortly by splitting the ticket to two, namely London Kings Cross to Milton Keynes Central, and Milton Keynes Central to Manchester Piccadilly. Using this method, we help our consumers save an average of about 40% on the train ticket fare.

China has become the world's largest outbound tourism market and the world's fourth largest tourist destination. How does Ctrip cater to the needs of Chinese travellers?

The 'C' in Ctrip stands for 'customer,' and customers have always come first since our inception. According to the 2018 Chinese outbound travel report jointly launched with the China Tourism Academy and Ctrip, we noticed that an increasing number of Chinese tourists seek unique travel experiences, and they prefer high quality travel products. Around 82% of Ctrip customers chose 4 or 5 diamond package tour products when travelling abroad, an increase of 2% from the previous year. It will be an interesting journey, I believe, sightseeing around the UK by trains booked with the help of TrainPal.

About Ctrip: Ctrip is a travel service provider of accommodation reservation, transportation ticketing, packaged tours, and corporate travel management in China. It is the largest online travel company in the country, as well as the top global player in terms of gross merchandise volume (GMV).

www.ctrip.com

About TrainPal: TrainPal is owned by Ctrip Group and authorised by National Rail. Ctrip Group has signed an agreement with Evolvi Rail Systems to enable the sales of UK rail tickets on TrainPal. With the smart search engine, TrainPal recommends the cheapest fare to travelers and does not charge any booking or credit card fees.

www.thetrainpal.com

Edgar, Dunn & Company

Major Payment Regulation Changes in the Airline Industry

About Pascal Burg: Pascal is a Director with responsibility for the Paris office and for EDC's Travel practice globally. He has been with Edgar, Dunn & Company (EDC) since 1999 and has worked in the London, Sydney, and San Francisco offices. Pascal has over 20 years of consulting experience in business strategy for financial services clients in multiple European, Asian, and North American countries, and over four years of line management experience within the UK financial services industry.

Pascal Burg ▪ *Director* ▪ Edgar, Dunn & Company

The payments industry is experiencing major structural changes that create new opportunities to various stakeholders in the value chain, especially in the airline industry.

Drivers of change for payments include:

- changes in customer expectations such as the ability to split a payment between a credit card and frequent flyer miles;
- digital innovation such as in-app payments: for instance, EasyJet enables one-touch in-app payment via Apple Pay since 2016;
- new entrants such as Alipay: for instance, UATP enabled Delta to accept Alipay since 2015;
- an evolving regulatory environment such as (a) Payment Services Directive 2 (PSD2) in Europe and (b) changes in IATA Resolutions worldwide, and this article will focus on these regulatory changes.

Objectives of EU Regulations: innovation and security

1. PSD2 (EU Directive) and 'Open Banking'

In simple terms, the PSD2 requires banks to open up their payments' infrastructure and customer data to third parties (subject to customers' prior consent). The aim of 'Open Banking' is to enable a financial institution to allow access to customer data/accounts to 'new' third-party providers known as Payment Initiation Service Providers (PISPs) and Account Information Service Providers (AISPs).

A customer could give their consent to a trusted PISP (such as their primary bank, if they use multiple banks, or another type of aggregator) that would initiate a bank transfer on their behalf to pay an airline. Thus, Open Banking might enable new use cases that could be of interest to airlines.

2. PSD2 and the SCA (Strong Customer Authentication)

From September 2019, all remote electronic payments by card or credit transfer (with some exceptions, eg for low-value transactions) in the EU will require SCA. SCA entails the existence of at least two out of three authentication factors:

- what the payer knows (eg password);
- what the payer has (eg smartphone);
- what the payer is (eg fingerprint).

A lack of clarity is making balancing security and the customer experience difficult for airlines. For instance, it still unclear which commercial card transactions are exempted from SCA and how exemptions are to be communicated across the payment flow with various intermediaries involved. Some airlines still remember what happened when 3D secure was first introduced: they are **concerned about the past experience of e-merchants losing up to 40% of their sales right after the introduction of 3D secure 1.0.** In any case, airlines need to understand potential exemptions and any required changes in payment processes. ➔

3. PSD2 and Surcharging

Since January 2018, the EU has banned merchants from surcharging payment debit and credit consumer cards issued in the EU and submitted to the Interchange Fee Regulation (IFR). This ban is most definitely forcing airlines to rethink their payment acceptance strategy, by accepting for instance alternative payment methods or by only surcharging commercial cards.

IATA: changes in Resolutions and a new standard

IATA is an association that brings together 290 airlines and whose mission is to 'represent, lead, and serve the airline industry'.

1. Transparency in Payment (TIP)

One of IATA's recent initiatives is 'Transparency in Payment' (TIP). TIP went live in 2018 in Norway, Finland, and Sweden. TIP focuses on providing airlines with increased transparency and control when travel agents remit funds to airlines. Moreover, it will allow travel agencies to use alternative transfer methods (such as virtual cards issued in the name of agents) with the airlines' consent. Each airline will therefore need to define its TIP-related acceptance policy.

2. New Distribution Capability (NDC)

The first official release of the NDC standard was in September 2015. The objective is to improve the communication between airlines and travel agents to enhance customer experiences by offering richer and personalised offers (eg meals based on the travellers' choice).

In 2018, more than 100 players of the industry value chain have adopted the standard: airlines (eg Air France, Lufthansa), aggregators (eg Skyscanner), IT providers (eg Amadeus), travel agents (eg Ctrip).

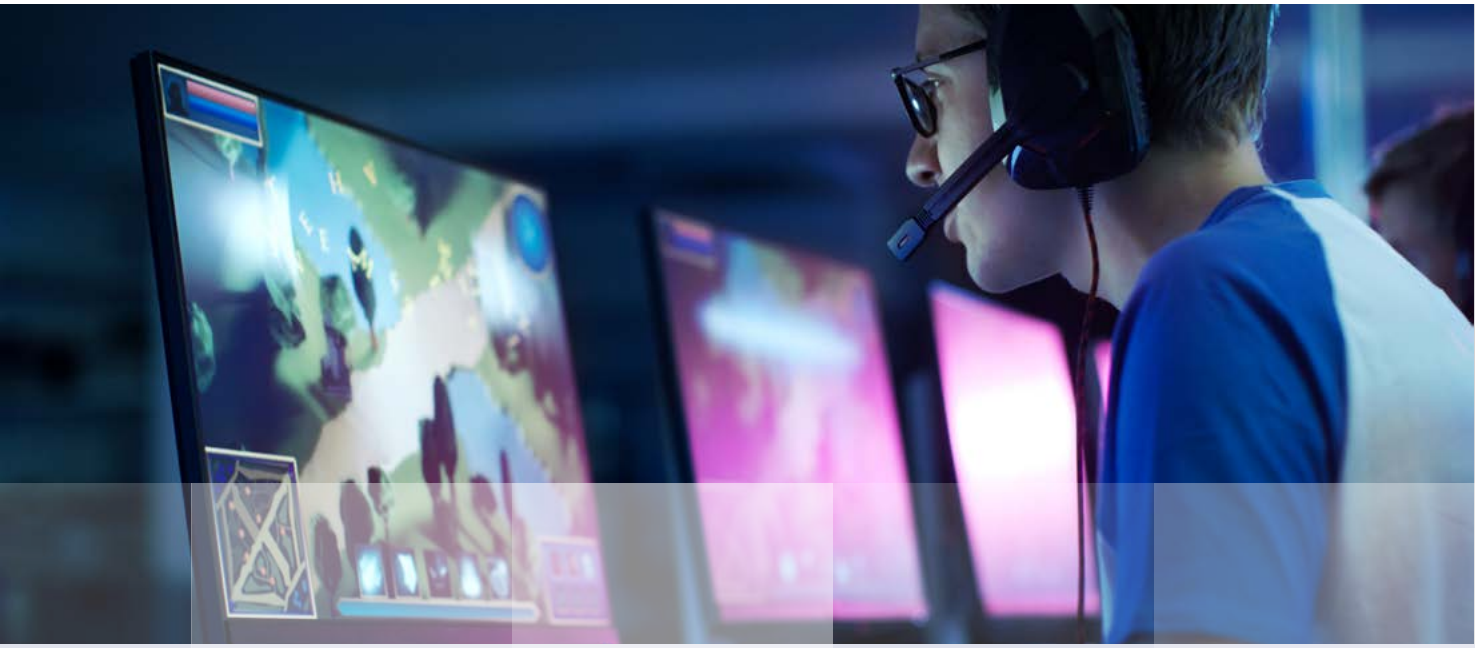
NDC standards will ultimately enable airlines to meet their payments-related objectives (eg better control over fraud) and to have a better agility in terms of payment methods that can be accepted via travel agents (eg enabling alternative forms of payment via travel agents when the airline is the merchant of record).

Need for airlines to pro-actively manage 'payments'

Recent studies show that optimising conversion is a key goal for large merchants like airlines. To improve conversion, it is key for an airline to understand the type of regulatory changes discussed in this article and their impact.

In order to understand regulatory changes and their impact, and to pro-actively manage the 'payments' function, some airlines have put in place a payments strategy team, set up internal payment governance processes, or allocated dedicated internal IT resources to optimise payments. For instance, at Southwest Airlines, a multi-team payment strategy committee oversees the strategic direction of payments and it consists of representatives from marketing, finance, and IT. As another example, a large European airline has a dedicated internal IT team of 15-20 resources focused on payments.

In conclusion, EU's payments reform agenda as well as IATA's initiatives play a key role in changing and 'opening up' the payments market in the airline industry. It is key for all stakeholders to identify, evaluate, and address payments opportunities and threats, such as regulatory changes, that might impact their business so that they can 'play better than anyone else'.



Gaming

Anda Kania | Senior Editor | The Paypers

Within the current payments industry, where everything has started to revolve around customer experience, gaming is, by far, an ecommerce vertical worthy to be addressed in terms of innovative payment methods. Video games consumers are, obviously, looking for convenient ways to pay, since they select the online space for this type of service.

In matter of choices, according to a **Newzoo and ACI Worldwide study**, 95% of users across the UK, US, and Germany are playing mobile titles, and PayPal is the preferred payment method. Moreover, the same study shows that 75% of mobile gamers who do spend money spend it on in-game purchases. A good remark of this report is the one that mentions the excitement as a key factor of keeping customers active – after all, games mean entertainment, so it's not just about convenience here, but rather about enjoyment. The main motivation for users to spend money on or in a game is to enjoy themselves more. To provide a clear sense, 20% of gamers are motivated to pay to show their support for the game developer. In regards to the loyalty/rewards programme, perhaps it shouldn't be surprising that in all three countries under discussion, a majority of gamers are more likely to keep playing a game if it offers loyalty/reward programmes.

Therefore, we can observe that in the gaming industry, convenience is translated into entertainment, and with so many online users, the gaming industry is likely to become 100% cashless. For this reason, both gaming merchants and PSPs should consider several key aspects that pave the way to a joint evolution of both payments and gaming industry. →

This successful business comes with a large volume of transactions, and the latter must be secure and optimised according to customers' preferences and regulatory standards. Furthermore, given the rapid pace of the industry's development, the current players are somehow pushed to implement new ideas in order to be ahead of the game and meet customers' expectations.

The gaming vertical that we address in this section features thought leaders – representatives of both merchants and payment service providers. Each contribution aims to provide a unique perspective of the existing challenges and opportunities in this space, and to help the interested parties in creating their own winning strategy.

As mentioned previously, gamers are looking for entertainment, so how about integrating a payment method into something fun? Trustly has designed a service that allows consumers to make a payment by simply clicking a banner that advertises a product they are interested in (a game, in this case). The company's Director of Partner Sales Adam Bowman depicts this solution and other services made available for ecommerce merchants. The iGaming industry is also a subject of international expansion, so when considering extending their business abroad, the gaming operators must also take into account the preferred payment methods in a particular country and the regulatory compliance from that country. Every region has its own challenges, obstacles, but also business opportunities. It is essential for any operator to the local payments needs and possibilities, while enabling cross-border payments, this meaning to partner a provider that offers multiple payment solutions to process payments in multiple currencies. In addition, a crucial aspect is ethics, as dealing with addictive users should also be something to bear in mind and discussed with the payment solution providers. Jens Bader, the co-founder of MuchBetter, recommends payments via e-wallets as a way of 'fixing the payment plumbing'. In any case, if we consider all the aspects depicted above (including the ethics), either we are talking about extending business across borders or further addressing local optimisation, iGaming operators are advised to align their payment strategy with trusted payment partners.

The gaming space is a high-risk industry, so merchants should carefully choose their partners, and this is also applicable the other way around. PSPs and acquirers should also keep a sharp lookout on the way their clients and partners deal with their payments management. To provide more insights into this matter, Vincent Minier, payments manager at Ubisoft, outlines five aspects to consider when evaluating which PSP they are going to work with, related to pricing transparency, payment methods coverage, technology, payment expertise, and corporate customer support. In the matter of payment management, Kinguin's head of payments, Faheem Bakshi, has presented an informative picture of the stages of payment management, as well as key factors to consider when implementing local payment methods.

MuchBetter

iGaming Payments: Challenges at Home and Abroad

About Jens Bader: Jens has a rich management background with more than 20 years of experience in the online and mobile payments industry. A seasoned commercial leader, Jens recently co-founded MIR Limited, an FCA-licensed Fintech group that develops and operates second-generation electronic money services servicing on- and offline merchants. Jens is a frequent speaker on payments and fraud-related topics worldwide.

Jens Bader ▪ *Co-founder* ▪ MIR Limited / MuchBetter

2019 presents several complex payments challenges at home and abroad for iGaming operators with global ambitions – which is the majority. On the one hand, operators are trying to expand into new markets around the world as quickly as possible to gain market share, which means building new payments programmes from scratch. Closer to home, they are also trying to optimise their payments programmes in more mature markets, such as Europe. Here, margins are shrinking and new regulations such as PSD2 are looming large on the horizon. With so many spinning plates and, in such a competitive landscape, operators can't afford to drop any.

To say that operators cannot afford mistakes is not hyperbole. Alongside gameplay, moving money in and out of player accounts is the most important, business critical function of any iGaming operator. If this doesn't happen, the business is dead, hence a close working relationship between operator and payment partner is fundamental. To that end, how do operators keep these plates spinning and balance their resources adequately?

International expansion

Within every region there are different payment challenges and pain points, including access to financial services, regional iGaming regulations, political sensitivities, fraud, customer acquisition costs, money repatriation, and so the list goes on. Operators need to be prepared to localise their payment strategies, but this is a difficult balancing act. It's hard to know how much time they should spend optimising their payments in these regions since payments teams have finite time and resources. Operators are in a race against time to grow as quickly as they can, find workable payments solutions, and gain market share, which usually means optimisation comes later.

In this landscape, businesses can throw a lot of money away into solutions that simply do not work – such is the urgency to get something up and running. The US marketplace is a prime example. Many people see it as an iGaming gold rush, but the market is still tiny and operators are burning through cash to get out ahead of the competition.

Operators usually trust payment partners they have worked with before, despite their suitability and experience in other regions, and this can end in disaster. Such are the nuances in iGaming payments that historical success in region A is a very bad indicator of success in region B – it's better to trust a vendor that knows region B well.

At home optimisation

Europe is a different animal entirely. It is a very mature market for iGaming, meaning it is only growing at a fraction of the speed as other parts of the world. In a consolidating market, rapid expansion is not a viable strategy. Instead, understanding and optimising payments related metrics, including conversion, retention, and loyalty, is critical.

The other big European challenge is the introduction of PSD2 and AML5 later in 2019, which bring more scrutiny and complexity for operators. In a sense, PSD2 will create a more fragmented payments market and introduces a diversified matrix of authentication processes. ➔

MuchBetter

New elements need to be considered, such as transaction size, country, channel, and payment authentication type – which now includes verification processes like video, biometric authentication, and SMS. As payment companies and banks introduce new PSD2 processes, this could disrupt popular one-click or fast deposit models and result in countless lost players. This is particularly likely in regions like Southern Europe, which is generally less well prepared for PSD2 today.

From September 2019, operators will need to ensure their payment partners can give them the data they need to do KYC seamlessly. They will also want to work with acquirers with the lowest fraud ratings, else they will have to jump through more KYC hoops.

Fixing the payment plumbing

In an ideal world, an operator has 100% control of its payment functions and a direct relationship with every payment option. They should see the whole funnel and have the ability to make changes wherever they need to. We're not in this ideal world, however. The payment 'plumbing' is often so complex that it looks more like spaghetti junction than the M1.

To this end, digital wallets can be an invaluable solution. Their business model depends on having already completed integration/optimisation with local partners worldwide. This helps international operators reach numerous countries and indirectly accept local payment options from day one. Closer to home, they help smooth the authentication process as new regulations come into force, doing a lot of the heavy lifting.

Ultimately, when it comes to international expansion or local optimisation, operators need to align their payment strategy with trusted payment partners – else failure is guaranteed at home and abroad.

About MuchBetter: MuchBetter, operated by MIR Limited UK, an FCA-licensed and regulated e-money issuer, is the new payment application for iGaming and marketplaces. Available on Android and iOS, MuchBetter allows effortless online, offline and contactless payments, around the globe. MuchBetter's unique commercial models increase operators and merchants' revenues while its anti-fraud features and use of best in class technology eliminates payment risk whilst creating a convenient payment experience for customers.

muchbetter.com

Click here for the company profile

Trustly

What Ecommerce Merchants Can Learn from the iGaming Industry

About Adam Bowman: Adam serves as Trustly's Director of Partner Sales, managing a team focused full-time on growing and managing Trustly's pan-European Partner network. He joined Trustly following stints at PAY.ON and OmniPay. Adam grew up outside of New York, and is based in Budapest, Hungary.

Adam Bowman ▪ *Director of Partner Sales* ▪ Trustly

When it comes to innovation, few industries lead the way quite like the iGaming industry. The appetite for risk that gaming companies have makes them open to trying new ideas; as a result, they tend to be on the cutting-edge of technology.

Take Pay N Play, for example. Trustly developed this payment and registration technology in 2015, and today it has become a standard in European online gaming. Registering at a gaming site has traditionally involved filling out lengthy registration forms, and then waiting days for the online casino to conduct its due diligence. But with Pay N Play, in order to register and deposit, all a player has to do is make a deposit via their trusted online bank – no redirect away from the mobile gaming site is necessary, which drastically improves conversion.

From the player perspective, it's incredibly frictionless. But in the background, it's rather complex; as the player makes a deposit, Trustly extracts necessary information from the player's bank account to fulfil KYC requirements and delivers the data to the operator, who can register the player account in the background. During this step, operators can verify the player's identity and age, ensuring that they are allowed to play. Not only does it streamline the registration and deposit steps but it also ensures that operators stay compliant with increasingly strict security regulations.

Pay N Play also enables instant withdrawals, so players can cash out their winnings to their bank account right away. When Trustly first introduced Pay N Play, some operators were very sceptical. They didn't see how offering instant payouts to their players would actually increase deposits and ultimately build loyalty.

They were worried that if players could withdraw their money instantly, they would cash out and never return. But it turns out that offering instant withdrawals had the exact opposite effect.

According to internal Trustly data, not only has Pay N Play helped to attract a large player base quickly, but players remain more engaged and deposit over 80% more every month compared to a traditional gaming operator on average because they know they can withdraw their money instantly.

What ecommerce merchants can learn from the online gaming industry

So what can ecommerce merchants learn from a solution that has revolutionised the gaming businesses? At the end of the day, players are shoppers and shoppers are players. Their behaviours are influenced by the same innate attitudes: they want to be in control of their money, and they want a frictionless experience that won't disrupt their expectation of instant gratification.

Likewise, gaming and ecommerce merchants are not so different. They both strive to increase the number of purchases and to offer the most convenient and simplified processes for withdrawals or refunds. And, realistically, they would prefer to ignore the reality that their customers are asking for refunds at all. However, there is much to be gained from giving your customers – whether they are players or shoppers – what they want. →

Trustly

According to a recent Trustly report called '**Rethink Your Refunds, Perfect Your Payments**,' while free returns are now commonplace, refunds have not kept pace. In fact, timely processing of refunds is a core factor affecting the customer's experience. But many companies overlook this, assuming the offer of free returns is good enough. As a result, 69% of customers report waiting four days or more for their refund.

However, the report goes on to reveal that offering faster refunds would lead to 58% of customers spending more and 56% shopping more frequently. On top of that, 95% of shoppers said they would be more loyal to a merchant that offered same-day refunds. Overall, this represents a solid uplift in revenue without merchants needing to fundamentally alter their product offerings or business model. So while free returns earn you the sale, smart returns earn you loyal customers.

A frictionless future

Clearly, there are financial advantages to offering faster refunds to your customers. However, when we look more closely at the magic of Pay N Play, the true value comes from the data that Trustly can deliver to the merchants during the bank payment process. When applied in an ecommerce perspective, the potential can be equally transformative.

Imagine shopping on your favourite brand's website, and when it's time to check out, you simply make a payment through your online bank and you're done. No need to fill out a long form with your shipping details. Because Trustly can fetch that data during the payment process, the merchant can pre-fill the shipping form, which the shopper can confirm with one click.

Or the merchant can even create a unique shopper account, but there's no need to remember a username or password because shoppers verify themselves through the payment. The result is a much more frictionless checkout experience, which benefits both the shopper and the merchant.

But why stop there? Trustly's latest service, In-Banner Pay N Play, takes things a step further and puts the streamlined payment experience into a banner, which can be distributed across the internet. While scrolling through your favourite fashion blog, when you see a banner advertisement for a beautiful pair of shoes, you can buy them by making the payment from directly within the banner (hosted by the merchant) and never even need to leave the page you were surfing. It's an ecommerce experience that meets shoppers where they are, rather than redirecting them to a new page. It finally takes ecommerce into the world of impulse buying.

When ecommerce merchants, like gaming operators, start to view payments not as an obstacle but as an opportunity to increase conversion and streamline the shopper's journey, everybody wins.

About Trustly: Trustly is a Swedish fintech company that makes online banking payments fast, simple and secure. We cover 29 European countries and our payment solutions attract global merchants in ecommerce, travel, financial services and more. Trustly is a licensed Payment Institution under the supervision of the Swedish Financial Supervisory Authority.

www.trustly.com

Click here for the company profile

Trustly

Type of payment method	Online bank payments
Active since	2008
Operational Area	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, UK
Industries	Ecommerce, travel, financial services, digital goods, subscriptions, online gaming
How it works	You can pay with Trustly in 3 simple steps: 1. Select your bank and log in as you normally do. 2. Choose the account from which you wish to pay. 3. Confirm your payment with your preferred authentication method.
Potential reach	All banked consumers across Europe
Market Share	N/A
Acceptance	N/A
Chargeback Risk	None
Facts	In 2018, Trusty was recognised by the Financial Times as one of Europe's 1000 fastest growing companies. It also won Best Payments Company at the EGR B2B Gaming Awards.
Settlement currency	EUR, SEK, NOK, DKK, GBP, PLN
Processing currrency	EUR, SEK, NOK, DKK, GBP, PLN
Currency available for consumer	EUR, SEK, NOK, DKK, GBP, PLN
Transaction volume	Over EUR 10 billion since founding
Implementation requirements (non technical)	API manual online, designated integration support, plugins for web shops
Reconciliation	reconciliation information (web)
Pricing	Per transaction percentage and/or fixed fee, which varies depending on volume
Link to the APM Database for more details	https://onlinepayments.thepaypers.com/alternative-payment-method/Trustly/company/510
Channels (POS/ecommerce)	Online

Kinguin

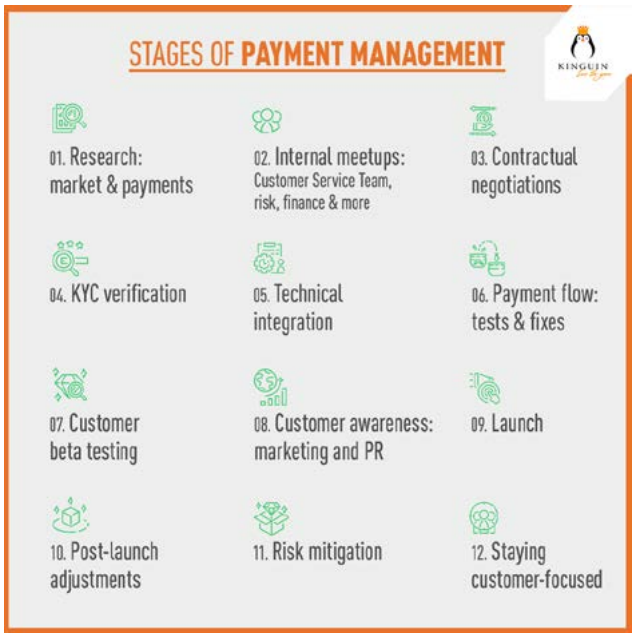
Overcoming the Challenge of Increasing Complexity of Payment Management

About Faheem Bakshi: Faheem Bakshi is an expert adviser on global payments, open banking, fintech, business strategy, KYC & risk mitigation, specialising on payments management with consumers, merchants & payment partners. Faheem has worked with a variety of companies and/or and has helped companies grow from local to global. Visit linkedin.com/in/faheembakshi/ to reach him.

Faheem Bakshi ▪ *Head of Payments* ▪ Kinguin

Ecommerce companies don't need an overly complex structure to have a payments team within their organisation. And it pays to have one, as it is quite crucial for ensuring a successful sale. Similarly, to a physical store, if the cashier greets you with a smile, you will most likely come back, and if he or she is rude, there's a chance you won't.

Here are some of my key takeaways that'll help you maintain a team and avoid an increase in the complexity of payment management.



Payment partner: your payment team's key to success

It is very important to maintain a good and healthy relation with your payment partners. Most of the time it comes naturally. There are amazing people working in the fintech industry and they understand the value of partnership, starting from sales to customer service and post-sales experience.

Consumers also need to have a choice when it comes to payments, including both local and global payment providers. Moreover, to maintain business uptime, there should be optional processors available at all times. Back in 2016, many companies suffered a drop in credit card payments when one of the top processors was effected. Partnering with additional processors prevents such instances, as the traffic can be re-routed to any of them. Since an online store is operational 24/7, technical issues with payments can arise after working hours and stay beyond internal control. In such cases it's very important to get immediate attention from the payment partner's assigned account manager. A good provider won't stop you from acting when needed.

The other way: global to local

Being part of a global platform, I found that expanding a local business to the global market is a great and rewarding experience. However, all actions in this field should be correctly aimed, with local companies expanding globally in a local manner. An ecommerce platform authorisation or conversion rate depends entirely on the payment method accepted in the target region. Most cases of lower conversion rate after an influx of potential buyers stem from checkout issues. Customers want to see the payment brands they trust. ➔

Apart from the most recognised global methods, it is very important to implement local methods. By connecting with a local partner, you are opening yourself for information and local insight. You can stay up to date with regulations and gain market knowledge, which helps in continuing expansion and creating marketing plans.

Keep an eye on the latest updates in the fintech industry

Always stay informed. Decision-making requires knowledge about what's going on outside the organisation, especially regarding trends that can affect the outcome of your decisions. The payments team needs to be up to date with all regulations such as PSD2, as well as local ecommerce regulations.

You need brands to help grow your brand

Partnering with globally-known companies helps to earn consumers' trust and to ensure a better customer experience. New users tend to abandon their cart due to their lack of knowledge about your brand and the payment methods you offer.

The payment logos in the checkout have a great influence on whether users are going to share their payment details and finalise the order. A customer who doesn't yet know your brand, but is interested in your product, can be very hesitant when encountering unknown payments. Brands like Google Pay, Apple Pay, Mastercard or Visa will surely help users make a purchase decision. Therefore, it is important for the payments team to cooperate with brands recognised in the consumer's region.

Payments team: competitive advantage and not a cost centre

The old way of managing payments is to monitor cost, set goals, KPIs and so on. But the new way is to measure how the payments are doing using extensive analyses performed by the payments team. Take the following subjects into consideration:

1. Alternative payment methods
   - Drop-off at the payment sign-up/end of payment process
   - Alternate methods – usage patterns (how often it's used, customer details such as gender, age etc)
2. Authorisation
   - Approval rates for card authorisations (regionally)
   - Conversion rates (complete orders vs orders created)
   - Number of attempts per payment method
   - Number of 2nd attempts to pay after the 1st attempt failed
3. Customer service
   - Number of tickets regarding payments topic
   - Recommendations for new payment methods (customer-centric)
4. Fraud and chargeback
   - Fraud losses
   - Chargeback rates
5. Financial
   - Cost per transaction
   - Payments P & L
   - Lifetime value

Summary

What consumers demand is the subject of constant change. In order to avoid a decline in transactions, it's crucial that merchants provide positive consumer experiences. Payment teams are becoming central players of the ecommerce industry. However, even though they focus more and more on the global market, maintaining a local-focused approach is and will be necessary.

About Kinguin: Founded in 2013, Kinguin has fast become one of the largest alternative marketplaces for games and software, with more than 7.5 million loyal customers globally. Kinguin's mission is to enhance gamers' experiences anywhere and anytime. Visit **www.kinguin.net** for more information.

www.kinguin.net

Ubisoft

Interview with Vincent Minier on popular payment methods for gamers

About Vincent Minier: Vincent is Payment Manager at Ubisoft. He joined the company in 2015 at the start of the Ubisoft Store. He is responsible for the payment strategy, payment costs optimisation, and all payment operations.

Vincent Minier ▪ *Payment Manager* ▪ Ubisoft

What are the criteria to consider when evaluating which PSP you are going to work with?

As a gaming company that sells mostly digital content, our criteria when evaluating a PSP might be different from other companies. It is always recommended to evaluate your company's needs first.

Selling across 100+ countries, we pay a lot of attention to five specific aspects:

- **Pricing transparency:** Not knowing the breakdown of commission fees or the currency conversion rate used and associated fees applied by the PSP can create a lot of frustration. It is important to know precisely what we are paying for (fees taken by the schemes, technical fees, FX rate etc).

- **Payment methods coverage:** As we are selling on a global scale, and for the comfort of all our players, we always want to make sure our future partner has many relevant local payment methods available. The process of selecting and implementing a new PSP is usually time-consuming. If one integration offers access to a wide range of payment methods, it makes the process worth even more and can help save time for the future.

- **Technology:** We always want to make sure our partner has the most up-to-date technology (good uptime, dynamic 3DS, acquiring routing tools, fast and efficient back office etc). We also want to know beforehand what the technical limitations are (settlement currencies, payment flow etc). Asking the PSP for their roadmap can also give a good idea of their potential in that aspect.

- **Payment expertise:** A PSP should be able to provide best practices, payment acceptance benchmarks, information on recent regulations, and expertise on PCI compliance. We always make sure the PSP has departments/people dedicated to these topics. We also pay attention to other merchants using this specific solution; for benchmark data, it can be useful if the PSP is working with merchants that are in the same vertical as us.

- **Corporate customer support:** Making sure that we will have the necessary support from a PSP is key. It is important to have direct contacts, for each topic, on the PSP side. Usually, good support consists of: 1 sales manager contact; 1 dedicated account manager; 1 implementation manager; 1 operations support contact, 1 escalation contact. →

> *When choosing a PSP, we always involve all the teams within Ubisoft that will be affected by this collaboration (Business teams, Development teams, Finance and accounting teams, Treasury department and Operations teams).*

When choosing a PSP, we always involve all the teams within Ubisoft that will be affected by this collaboration (Business teams, Development teams, Finance and accounting teams, Treasury department and Operations teams).

In terms of payment behaviour, what payment methods do your customers prefer? Is this something that differs from region to region?

If we take a global approach, the credit card is number one but closely followed by e-wallets. E-wallets are popular among the gaming industry and their users' demographics fit in general with ours, explaining their popularity on our distribution channels.

We, of course, have to take a region-to-region – and sometimes even country-to-country – approach. Here are some examples:

- We decided to deploy online banking payment methods in Germany and the Netherlands, to increase the accessibility to our games;
- We also deployed local e-wallets solutions, which are popular in Asia (in China, for example, we implemented the two most popular e-wallet solutions that are used by 90% of our customers). We always want to adapt to local cultures and provide the best payment experience possible.
- In some countries, prepaid cards/vouchers are popular. It can be challenging to deploy such payment methods, as most of them are not refundable. Your infrastructure and customer care processes have to adapt.

Does PSD2 have an impact over your business, especially the SCA? If so, could you please elaborate on this?

At Ubisoft, we really want to make sure our customers feel safe, and we are therefore happy to see legislators helping to go towards that direction.

The impact on our business is of course huge. We have many different selling channels and we want to make sure that developments are included across all concerned roadmaps. It is also critical to align with your PSP when it comes to implementing exemptions mechanisms as well as 3DS 2.0.

Is there a particular region or country that poses more challenges in terms of payments and regulations?

On the payment side, having a global coverage can sometimes be challenging. In some countries, you need to have specific payment methods to allow the customers to pay or you will see low conversion rates.

Acceptance rate standards can be very different from one country to another and, without the right context, it can be challenging to understand if you are performing well or not. For example, some local issuing banks in Asia have strict spending limits and strong customer authentication, which can create a lot of friction in your payment funnel and therefore you might see significantly low payment acceptance rates in these countries.

You also have to consider local tax regulations. If you are selling in some specific countries, you might have to register for taxes and tailor your invoices to local requirements.

About Ubisoft: Ubisoft is a leading creator, publisher, and distributor of interactive entertainment and services, with a rich portfolio of world-renowned brands, including Assassin's Creed, Just Dance, Tom Clancy's video game series, Rayman, Far Cry, and Watch Dogs. The teams throughout Ubisoft's worldwide network of studios and business offices are committed to delivering original and memorable gaming experiences across all popular platforms, including consoles, mobile phones, tablets, and PCs.

www.ubisoft.com

Optimising and Localising the Payment Checkout

Optimising and Localising the Payment Checkout

It is not controversial to claim that different contexts require different payment solutions. However, the right solution for any given context is more difficult to identify. And even when a perfect solution has been found, the context will invariably change, leading you to have to figure out whether your solution is still optimal for your context. And as more and more economies start to enter the global stage, contexts are changing more rapidly than ever before.

This section of the report aims to give some insight in context-specific adaptations of payment checkouts, optimising the checkout process for customers in a specific setting and context. Kicking off this section is the insightful introduction to the online commerce and payments environment of today from Stefan Merz, COO at PPRO.

The author emphasises the crucial role that the Web has played in the digital payment environment. Now, at the 30th anniversary of the World Wide Web, it's time to acknowledge the power shift that it has created from the merchant to the consumer. The www service has brought a lot of convenience for the consumer, and great opportunities for businesses. With a high demand for diversity in terms of both products and services, consumers have now the possibility to browse over the Internet for their favourite products and use the preferred payment methods. In the meantime, merchants may leverage the gathered data and build personalised experiences for their clients. And with the current fragmented payments landscape with many local payment methods, merchants, acquirers, and PSPs will learn how to keep up with 'more payment integrations, more card scheme mandates, and more regulatory changes.'

This is followed by in-depth discussions of payments from the emerging market of Mexico to the bustling economy of China, elucidated by Pierre-Claude Blaise, General Manager of the Asociación Mexicana de Venta Online (AMVO) and Zennon Kapron, Director of Kapronasia, respectively.

Pierre-Claude Blaise of AMVO touches upon the financial inclusion status in Mexico, and the efforts are made in order to fill the financial gap of social strata when it comes to payments. Breaking down the results into regions, according to the National Survey of Financial Inclusion, in south and east 60% of people do not have an account with a bank or another financial institution. So how can the Mexican business environment become more inclusive?

Zennon Kapron of Kapronasia outlines an overview of the payment methods in China, depicting the success of WeChat Pay and Alipay adoption. According to their research, 'millennials are more likely to say they "invest with Alipay" than 'invest with their bank/traditional provider."' Moreover, while 'fintech' is a buzzword in payments, banking and finance areas, the 'techfins' seems to be the popular one in China, as the Big Techs identity themselves as technology providers' rather than financial providers. It might be a matter of perspective, because, after all, fintechs develop technology too.

The section is concluded by an insightful summary of the challenges and solutions across Europe, as explained by Andréa Toucinho, Director Studies, Prospective, and Training of Partelya Consulting. The geopolitical aspect debated in the context of instant payments, B2B and B2C payments, and Open Banking, with a focus mainly on Southern Europe. As a takeaway, regulation, security, and collaboration between markets and countries are those that drive the payments evolution further and contribute to creating a European strategy.

PPRO

The Implications for Commerce and Payments as the Web Turns 30 – Interview with Stefan Merz, COO at PPRO

About Stefan Merz: Stefan Merz, Chief Operating Officer (COO), PPRO, is responsible for PPRO's strategic operational and organisational expansion, and also directs implementation of the corporate strategy. Stefan has previously worked for Siemens and HP Enterprises in the US and as COO for Diebold Nixdorf.

Stefan Merz ▪ *Chief Operating Officer* ▪ PPRO

While working at CERN in March 1989, the British scientist Tim Berners-Lee envisaged organising information as an interconnected web rather than a hierarchy. Originally known as The Project, the idea became the World Wide Web. Thirty years on, it's difficult to overstate the impact this has had on how we interact, react, and transact. We interviewed Stefan Merz, COO of PPRO, to learn more about the implication for commerce as the World Wide Web turns 30.

Could you summarise the main impacts of the Web on commerce?

That's a big question, but in short the Web created a massive power shift from the merchant to the consumer. Previously, information was held by the suppliers of goods. Retail was driven by availability, proximity, and opening hours, while consumers had to find, access, and shop for goods.

> *"Thirty years on, the World Wide Web has created a new operating system for payments*

Nowadays, precisely because they are included on a global, inter-connected network, consumers are the know-it-all type. They can research purchases, compare prices, and be better informed than the retailers who serve them.

Consumers have become more demanding and services more on-demand. Consumers expect to browse and buy anytime, anyhow, from any device or funding source. This is driving the service model for merchants, who have to be open for business, however and wherever their customers want to shop.

The process of adding new sales channels whilst also linking old, disconnected ones for a single customer overview has been called multichannel, cross-channel, or omnichannel. However, channel distinctions are falling away. Commerce is moving from being channel- to customer-centric, enabled by intelligent systems and insights.

What have been the ripple or spill-over effects of this on everyday purchases?

Firstly, commerce is becoming increasingly cross-border. Customers are looking internationally for a wider selection of goods and lower prices. Online retail spend in 2017 was around USD 2 trillion. With 60% of the world's population expected to be online by 2022, 20% of B2C ecommerce will be cross-border by 2022, estimates research firm **Forrester**.

However, while commerce is becoming more global, payment is becoming more local. Global payments brands such as Visa and Mastercard account for only 23% of global ecommerce payments. This will fall to 15% by 2021, Worldpay research **suggests**. →

Far from consolidating, the payments landscape is getting fragmented. There are more local payment methods than ever before, which follow customers wherever and however they shop, at home or abroad, online or in-store. Acquirers, payment service providers (PSPs), and merchants must accept that unless they can localise payments, they will miss out on sales.

Secondly, payments are becoming invisible. Uber with its non-payment payment experience is the poster-child for this. At the end of an Uber journey, the passenger gets out of the cab. Payment just happens in the background. It's not only seamless and frictionless, it's also invisible. The passenger's last memory of Uber is the ease and convenience of the experience.

With all these shifts – merchant- to consumer-omni-science, channel- to customer-centricity, global to local, and visible to invisible payment types – what are the implications for those who accept payments?

There are a couple more important shifts to consider: simple to complex, and generalist to specialist.

Payment sits on the intersection between commerce and finance. It's critical for driving simpler, smarter, more customised experiences. However, payments are becoming more complex. Personalised, simplified customer-centric systems on the front-end create complexity on the back-end.

Merchants, acquirers, and PSPs will have to keep pace with more payment integrations, more card scheme mandates, and more regulatory changes, not less. It then becomes a strategic decision of where to play in the commerce ecosystem.

Where do firms want to put time, effort, and budget to create and sustain competitive advantage?

I'd advise focusing on the front-end systems of engagement, where they can differentiate and add value, and outsourcing the back-end systems of operation. This means developing smart partnerships for local payment expertise and a centralised, value-adding hub for payments.

PPRO aims to be the operating system for local payments. When it comes to local payment methods across 175 countries, we are the payment professionals. We process, collect, reconcile, consolidate, and pay out all on one contract and with one integration and platform.

About PPRO: Cross-border e-payment specialist, PPRO removes the complexity of international ecommerce payments by acquiring, collecting and processing an extensive range of local payments methods for Payment Service Providers (PSPs) under one contract, through one platform and one single integration. PPRO supports international payment methods across more than 100 countries, allowing PSPs to expand their merchants' ecommerce reach, arrange hassle-free collection and achieve higher conversion rates.

www.ppro.com

Click here for the company profile

Asociación Mexicana de Venta Online (AMVO)

Mexico – Local Payment Methods Usage Overview

About Pierre-Claude Blaise: In his 15-year career, he has directed commercial and marketing projects in multinational companies and startups, mainly in consumer products, digital marketing, and ecommerce. He has held various positions, including: CMO of Dafiti Mexico, associate in digital consulting projects with Activamente, director of marketing of Nestlé's beverage business for LATAM, and global marketing director of Nestlé Pure Life.

Pierre-Claude Blaise ▪ *General Manager* ▪ Asociación Mexicana de Venta Online (AMVO)

The global economy is changing by moving towards a digital ecosystem through which companies can expand to several countries leveraging different technologies, generating new ways to promote, purchase, and pay for goods or services.

Mexico has to face various challenges in ecommerce, a multifactorial process where financial inclusion is one of the areas that has shown a before and after effect.

Undoubtedly, this is a process that requires great efforts where Mexico must add a degree of complexity if we take into account the information available from the most recent **National Survey of Financial Inclusion**. This is what the survey uncovers:

- 95% of the population continues to use cash to pay purchases of up to MXN 500 (around USD 26);
- 32% of the population between 18 and 70 years does not benefit from any financial product;
- In areas such as the south and east, the financial gap becomes more acute. 60% of people in this region do not have an account with a bank or another financial institution;
- 78% of the population does not have mobile banking;

Currently, one of the most important obstacles to electronic commerce is successfully completing online payments. In Mexico, more technological payment facilitators are needed to support businesses in integrating secure payment processing.

According to for online purchases, the debit card is the most commonly used form of payment, while cash is winning relevance as an alternative way to traditional channels. The relevance of different payment methods away from traditional banking products to purchase online has impacted the way the Mexican consumer acquires products and services through digital channels; hence the relevance of cash through strategic contact points with the consumer, which has been easily adopted in the market. ➔

The same report also uncovers the fact that 53% of respondents have experienced a payment rejection when buying online. The top three reasons for payment rejection are:

1. the bank detected the purchase as an unusual transaction;
2. the bank did not inform the customer why the purchase had been rejected;
3. the consumer had no funds when buying.

When considering the popular payment methods among consumers, the latest study of AMVO, 'Payments and fraud in ecommerce', shows that:

- credit card is considered as the easiest payment method (78%) to use, followed by debit card (77%), and pay on delivery (75%);
- following pay on delivery (77%), e-wallets (70%), and digital bank cards (69%) are considered the safest methods when buying online;
- the main reason why it is considered difficult to pay online through debit or credit card is that too many security filters are requested to complete the purchase (45% and 57% respectively), followed by too many attempts to approve a purchase (43% and 31% respectively);
- 4 out of 10 online shoppers prefer the generation of a code or number from the bank's app that must be entered on the page of the store where buying as a validation method of purchase;
- 6 out of 10 consumers declare that they do not have confidence in giving their banking information online;
- 5 out of 10 shoppers declare that they never or rarely save their bank information for future purchases;
- 48% of consumers prefer to pay electronically instead of paying in cash;
- 3 out of 10 online shoppers claim to have been a victim of electronic fraud; additionally, 58% of consumers consider that the risk of being a victim of electronic fraud has increased;
- 56% of shoppers claim to have left the purchase website because the site rejected their attempt to pay at least once in 2018.

About Asociación Mexicana de Venta Online (AMVO): AMVO is a non-profit civil organisation constituted in 2014 with the purpose of supporting and promoting the development of ecommerce and the digital economy in Mexico. It brings together more than 300 Mexican and international companies from the retail, fashion, travel, financial services sectors, among others, that seek to develop their ecommerce and apply the best practices of the industry.

www.amvo.org.mx

Kapronasia

Chinese Payment Methods – Trends, Developments, and Innovation

About Zennon Kapron: Zennon Kapron is a Director at Kapronasia, and has been involved in financial technology for over 20 years. Before Kapronasia, Zennon was the Global Banking Industry Manager for Intel and the CIO for Citigroup Portugal. He holds a B.S. in Computer Science from Syracuse University and an MBA from INSEAD.

Zennon Kapron ▪ *Director* ▪ Kapronasia

In 2019, a common challenge for any foreigner visiting China without an Alipay or WeChat Pay account is how to pay. A decade ago, shop owners would wave away cards or any other type of payment besides physical cash. Consumers and businesses would walk into banks with huge stacks of cash as it was just simpler to use physical currency than it would be to make a B2C or C2C payment. Cash was king back then.

Today, cash is the payment method that is being waved away as vendors ranging from local fruit sellers to car dealerships have made a massive shift to digital payments. QR codes and digital P2P payments are the norms as the usage of cash in retail has dropped dramatically; digital has dethroned cash to become king.

This increased acceptance of digital payments has been the basis for what has become a gigantic digital finance ecosystem, where more and more consumers and SMEs are handling their finances through their smartphones, and more specifically the WeChat and Alipay apps. From within one app, users can pay, invest, and borrow – creating a 'super app finance ecosystem,' and shifting consumer's financial relationship away from their traditional providers. Indeed, Kapronasia studies have shown that millennials are more likely to say they 'invest with Alipay' than 'invest with their bank/traditional provider.'

Fintechs to Techfins

This dramatic shift to digital has increased the balance sheets of Ant Financial and Tencent to the point that the government has (unofficially) deemed them systemically important. It's not a hard argument to make when you look at a product like Ant Financial's Yuebao, which has become the world's largest money market fund. Indeed, the China fintech market is the leading market globally when looked at my nearly any measure: AUM, transaction volume, lending etc.

Through direct regulation and indirect 'suggestions,' China's regulators have somewhat curtailed the reach and breadth of the big fintechs. Payments that used to go across the tech giant's own payment rails now need to go through a centralised payment switch called Net Union. The digital wallet balances that the big fintechs could once invest how they saw fit now need to be deposited at a custodial institution, cutting off a significant revenue stream. Finally, payments themselves have been limited to specific daily and monthly transaction limits depending on the level of KYC completed.

China's big techs have had little choice but to comply with those regulations. Also, as they have no desire to be regulated like a bank, and to address the perception issue, in 2018, they started referring to themselves as 'technology providers' rather than financial providers, or more colloquially as 'techfins.' However, beyond the marketing push, what is very interesting is how this transition is playing out on an operational level. ➔

As an example, when an SME or individual wants to borrow from Ant Financial's digital-only bank MyBank, that loan will be syndicated out to one of the traditional financial institutions in China. MyBank provides the distribution channel and some credit-scoring guidance, but the actual financing is provided by the traditional banks. In this way, rather than completely losing their business, the fintech giants Ant and Tencent are working with the banks to create symbiotic relationships that resonate with their core competencies. Similarly, the banks are better able to lend to a swathe of 'thin-file' consumers and SMEs that they may not have lent to in the past. The fintechs provide the technology and the banks provide the balance sheets.

As the revenues around their payment businesses slow, 'techfins' are increasingly looking at value-added products and services they can layer on top of basic payment services. Credit scoring was one of the first. If you know a person's payment, shopping, and social habits, you can make a fairly strong assessment of their credit risk – often much better than a bank.

Platforms, Value-add, and the Future

These value-added services are likely to define the future of payments in China. On the financial product side, payments have become the 'lubricant' in situational finance or, in other words, in being able to sell the right product, to the right person, at the right time. On the non-financial side, in say, ride-hailing, or even in-store transactions, the act of paying become the mechanism that helps you obtain the product or service that you were looking for without worrying about the payment itself.

This trend is unlikely to change soon. Although the initial set of regulations and requirements has largely accomplished many of the government's original goals, the footprint of China's 'techfins' continues to grow as they expand their financial and non-financial ecosystem. Regulators and the government will keep a watchful eye on developments to ensure things don't expand too rapidly or in the wrong direction as they have in China's P2P lending space.

In many ways, the development of fintech in China is very unique for consumers in this country, and it is unlike any other ecosystem globally. However, the case study of how China's digital payment giants have transitioned to fintech giants, and then 'techfin' giants is illustrative. There has been a lot of industry talk about how fintechs can co-operate with traditional incumbents. In this respect, fintech in China may also be leading the way.

Partelya Consulting

Europe of Payments: The Challenge of European Sovereignty

About Andréa Toucinho: Payments and financial services expert, Andréa Toucinho worked for ten years as Journalist – Editor-in-Chief of Point Banque magazine and Head of 'PayForum' and 'Banque et Innovation' events. Since 2018, she is working in the consulting area, with activities in Paris as Director of Studies, Prospective and Training of Partelya Consulting, and France's Ambassador of European Women Payments Network (EWPN). She also developed activities in Portugal and Spain as France Representative of Aefi and Afip Fintech Associations.

Andréa Toucinho ▪ *Director Studies, Prospective and Training* ▪ Partelya Consulting

Despite real initiatives in the field of harmonisation, the Europe of payments remains a real puzzle of use cases and strategies. Southern European countries, such as Spain, Portugal, France and Italy, testify to this situation with differences between habits, payments tools, and even strategies. Nevertheless, all these countries are conscious that developing a real European vision provides the possibility to address the global payments market and to compete with big tech companies and Internet giants in this field.

Digitalisation, new usage, European sovereignty

Southern Europe is facing big challenges when it comes to payments. First of all, there is social evolution. The development of the Internet, mobile, and ecommerce fosters payments usage based on digital solutions. For example, Italy is witnessing a growth in digital payments, which is two times higher than the European average.

This evolution is not a surprise: new usage is boosted by the new generation, which is connected to the smartphone and social media channels. The emergence of instant payments is also a part of this evolution that aims to provide an 'instant' payment for modern society and usage. Thus, the Italian financial market – and, above all, the Italian banks – welcomed instant payments as a modern way to address B2B and B2C new habits, despite huge problems, such as business models and costs. These remain real topics for a traditional market in which people don't want any costs for the payment and don't hesitate to return to cash, if necessary. Therefore, sociological evolution occurs.

Sociological evolution and geopolitical challenge

In many countries, such as Italy, Portugal, or even Spain, we witness a duality in the payments market between traditional generations, who use cash and national tools, and new generations, Millennials, who are better connected to new means of payments. Some institutions have already realised the importance of this challenge and are constantly informing and educating people in order to boost the evolution of the payments market. Portugal finds itself in this situation, as supervisor Banco de Portugal has invested in a communication campaign to promote instant payments across the country. This innovation is presented in video tutorials as a new means of payment linked to mobile and modern usage.

Last but not least, Europe (especially Southern Europe) is facing a geopolitical challenge: the necessity to create a real European framework in the area of payments and globalised economy. Instant payments represent one of the symbols of this challenge. We can also mention GDPR, or the necessity to create a European regulatory framework in the field of data, and PSD2, which opens the European payments market for more competition and innovation. Nevertheless, how can a real European payments and regulatory framework be created when each country has its own specificities? That's one of the major challenges encountered by the European market and economy. →

The differences are clearly visible in South Western Europe, with a French payments market symbolised by the power of payments card, a Portuguese payments market represented by SIBS – a big actor which provides several tools, from ATM to Internet and mobile (MB WAY) –, or an Italian payments market boosted, even today, by cash and checks. How to harmonise the situation?

Developing a European vision

First of all, a European vision can be developed by creating a real regulatory framework, as wanted by the European authorities, as well as investing in communication and information in order to boost real European payment tools such as instant payments. However, we cannot forget that all these countries and markets need to work together in order to develop a European vision and sovereignty. Fostering a real European strategy is a necessity – and the same goes for the field of regulation or economy. Thus, not only banking actors, but also new entities, such as fintechs, have to collaborate at a European level.

New services and models have to be inspired by a European vision as well, for example Open Banking and the development of APIs, with a huge necessity to promote standardisation of APIs in order to harmonise the European market and to create a good way to facilitate the development of cross-border solutions, more adapted within a globalised context.

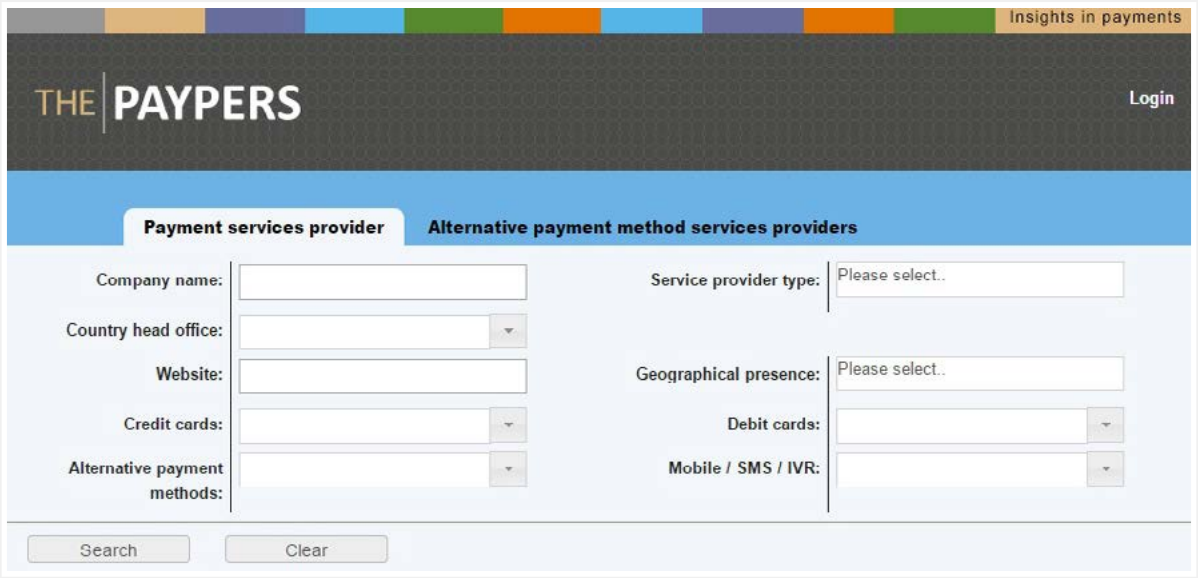
Today, several national markets have launched APIs – such as France with STET, the UK with Open Banking UK, Germany with the Berlin Group, and Portugal with SIBS API Market. But how will these solutions work together? This is a real question when we know that the market is also composed of many globalised actors, such as big tech companies and Internet giants. What is the value of Europe in this globalised market? This is yet another real question to be addressed in the context of tomorrow. Europe (especially Southern Europe) comprises of many differences and many tools, but above all else, of a secured and harmonised regulatory framework. This is one of the aces to face new globalised actors. That's why it is important to invest in regulation, in security, and in a collaboration between markets and countries in order to create – in the market as it is already the case in institutions – a real European strategy.

About company: Created in 2008, Partelya Consulting is a French consulting company specialised in means of payment. It works with all actors of the market, from banks to schemes and retailers, on technological and strategic issues. The company works at an international level (France, Europe, Morocco etc) and it is a member of the French Association du Paiement.

www.partelya.com

THE PAYPERS

Visit Our Enhanced Online Company Profiles Database



All company profiles in the Online Payments Market Guide are available online in an enhanced company profiles database, complete with keywords, company logo and advanced search functionality.

https://onlinepayments.thepaypers.com/

IoT, Payment Wearables, and Automotive

IoT, Payment Wearables, and Automotive

Internet of Things

Both retailers and customers envisage the store of the future as having automated returns, a cashierless checkout, and offering disruptive technologies such as AI, VR, AR, virtual mirrors, and IoT-enabled devices. However, many brick-and-mortar upgrades are still expected to gain momentum, as currently only 19% of retailers have implemented IoT within their stores and 23% implemented AI-powered platforms such as voice-activated POS and digital assistants, according to a 2019 report from **BRP**. Moreover, only 5% of retailers have implemented each technology with great results. According to the same report, 55% of retailers believe they will implement IoT in their stores within three years.

At the market opportunity level, **studies** suggest that 82% of worldwide enterprises express an interest in IoT, with 23% using an IoT solution and a further 29% planning to implement one in the near-future. The global IoT market will grow from USD 157 billion in 2016 to USD 457 billion by 2020, attaining a CAGR of 28.5%. Bain predicts B2B **IoT will generate more than USD 300 billion annually** by 2020, including about USD 85 billion in the industrial sector. In total, the IoT market will reach USD 267 billion by 2020, according to **Boston Consulting Group**.

When it comes to the IoT streamlining the payments experience, we see Google Pay, PayPal, or Amazon Pay being connected to at-home smart devices, such as the Amazon Echo and the Google Home, allowing shoppers to verbally order products, making the purchase experience easier, and helping them compare pricing and brand quality. Consumer-based items such as Amazon Dash, an ordering service consisting of multiple components including buttons, a Wi-Fi connected barcode scanner, and voice command, made it easier for products to be purchased on-the-go. In March 2019, **the company stopped selling its Dash buttons** due to the fact that product subscriptions and automatic reordering had grown in popularity making the buttons unnecessary.

With the proliferation of IoT-enabled devices on the market, security concerns are top of mind for vendors and consumers alike. When it comes to paying using connected devices, a **Visa** study has shown that 83% of consumers are willing to use connected devices for payments, but 75% of respondents consider data privacy the biggest concern. IoT payments generate important amounts of personal data like spending habits, online browsing/purchase records, credit card details, which represent a serious target for cyber criminals. An attacker can use multiple means to intercept, spoof or disrupt messages sent between connected devices, or a compromised IoT device placing its users at risk in multiple ways. As Randy Vanderhoof, Executive Director of Secure Technology Alliance underlines, what IoT payments need now is a trust framework that provides enough security but requires minimal interaction with the consumer.

Payment wearables

Millions of people are now in possession of payment-ready wearing devices. Smart technology has been integrated into watches, wristbands, fitness trackers, rings, and has started to keep pace with the evolving needs of the digitised consumer. NFC solutions enable users to seamlessly link an existing payment card, via their mobile phone, and activate the payment service. With all the convenience implied, security concerns are nevertheless top of mind for certain users. Even so, contactless payment via wearables uses tokenization, which makes paying with wearables **safer than paying with cash or credit cards**.

The wearables industry is expected to register a constant and significant growth. According to **Barclaycard's Contactless Spending Index**, the value of contactless payments using its bPay payments chip, which is embedded in watches or jewellery, increased by 365% in 2017 compared with 2016. ➔

IoT, Payment Wearables, and Automotive

Payments are expected to drive the take-up of wearable technology, whereas wearable payment in transit systems is expected to be the next use case set to take off in the next five years, according to a 2017 **white** paper by Smart Payment Association. Indeed, contactless payment is paving the way for a new kind of wearables as consumers become increasingly used to this technology, which is becoming even more convenient as POS infrastructure and the payments devices are upgraded with the latest technologies.

Connected cars and in-car payments

Connected car commerce is a USD **230 billion opportunity**. Millions of **commuters** spend an important amount of money every year on gas, parking, food, coffee, and groceries as part of their drive to and from work. Purchasing goods and services directly from or adjacent to the car, as fast and seamless as possible, is something consumers have started to expect.

We currently see car manufacturers, card networks, retail brands, financial institutions, travel companies, mass transit agencies, and other mobility providers enabling better, more connected experiences and equipping vehicles with in-car payment systems. Factors such as consumer adoption and ubiquity will play a key role in determining the success of the in-car payments concept. In-vehicle payments address some pain points for consumers in paying for fuel and parking and come with additional functionalities and personalised experiences.

What you will read in this chapter

In the first editorial of this chapter, Randy Vanderhoof, Executive Director of Secure Technology Alliance, tackles aspects related to the security of the payment-enabled IoT devices. These devices have small amount of memory and limited processing power making it difficult to use well established security protocols. In this context, he underlines the need for a trust framework that does not disrupt usability.

The second editorial is dedicated to in-car payments, approaching aspects such as the market opportunity brought in by the automotive industry and car owners' purchasing habits. It presents the most important partnerships and product launches in this space, aspects related to the actual adoption of in-car payment technology, advantages, use cases, and security concerns.

Secure Technology Alliance

IoT Payments: Where Convenience Needs to Meet Security

About Randy Vanderhoof: Randy Vanderhoof is the Executive Director of the Secure Technology Alliance, a not-for-profit, multi-industry association working to stimulate the understanding, adoption, and widespread application of secure chip technologies in North America. He is also Director of the US Payments Forum.

Randy Vanderhoof ▪ *Executive Director* ▪ Secure Technology Alliance

The Internet of Things (IoT) has become the cornerstone of convenience, matching consumer expectations of technology that can keep pace with their on-the-go, always-connected lifestyle. With the number of 'things' expected to **increase to more than 64 billion by 2025**, the payments industry has taken advantage of this opportunity to provide seamless user experiences with payment-enabled IoT devices.

Payment-enabled IoT devices can simplify a consumer's daily payment experience when other forms of payment are not available or are less convenient to use. The demand for these devices has grown – **BI Intelligence estimates that 62% of wearable device shipments will include payments functionality by 2020**. However, with more payment-enabled IoT devices on the market than ever before, device manufacturers need to shift their focus to security.

The new standard for user experience

There's been vast innovation within the alternative payments space: you can place voice orders for household staples and more through a smart home assistant. Refilling the fridge can be as simple as starting a grocery list and purchasing groceries through a smart refrigerator, authenticated by a PIN. With smart home devices linked to payment credentials, consumers can maximise convenience: purchasing from the comfort of their own home.

Outside of the house, connected cars are a natural fit for payments, leveraging secure vehicle connectivity and technologies such as geolocation and voice-activated controls. Drivers can seamlessly pay for tolls or parking at smart parking locations. They can refuel their car or leave a drive-through restaurant with secure transactions based on remote, card-on-file, or other payment methods.

There are endless different use cases for payment-enabled IoT devices, and while these frictionless payments experiences are what the consumer wants, security can't be put on the backburner.

Seamless consumer experience doesn't mean poor security

A **Visa** study revealed that 83% of consumers want to use connected devices for payments and other smoother transactions, but 75% of respondents cited 'data privacy' as their biggest concern about their financial security. Despite enthusiasm for a seamless payments experience, the IoT and payments industries need to put security first.

Right out of the box, IoT devices have security issues. The devices have small amounts of memory and limited processing power, making it difficult to use current, well-established security protocols and to push regular security updates to the devices. When devices are powered by a battery, remote security updates are even more challenging, since power must be conserved to prolong the life of the devices.

The threat to privacy is exacerbated by IoT devices' low resistance to data leakage. IoT payments have the potential to generate large amounts of data about personal spending habits, representing a potential target for cyber criminals. Stolen data is likely to contain personal information that can then be used for unlawful surveillance and tracking of users. →

And many IoT devices present a platform for launching distributed denial of service (DDoS) attacks, as they are shipped with default passwords and open remote access, making it easy for attackers to remotely take them over. With these risks, it's critical that companies make security a priority without compromising convenience.

A trust framework that doesn't disrupt usability

There are several considerations for securing payment-enabled IoT devices, including where payment-related data is stored, how cardholder authentication is done, how devices are managed through lifecycle changes, and how to protect the security of sensitive data in transit. IoT payments need a trust framework that provides enough security but requires minimal interaction with the consumer.

Applications that need high security, like payments, should take advantage of hardware security based on a tamper-resistant hardware element. Connected devices should include embedded hardware such as a secure element (SE) or a Trusted Execution Environment (TEE), which use strong cryptographic security to protect data at rest and in transit, enable secure transactions, and have little impact on usability.

Payments using IoT devices open up several different possible forms of consumer authentication, so issuers must be provided with a scalable mechanism to authenticate IoT devices and consumers. The protocols used to manage authentication, regardless of the underlying authentication method, are vital. Protocols to consider are FIDO authentication, EMV 3-D Secure, and OpenID Connect.

Preventing unauthorised tampering with and communications between devices doesn't end at manufacturing and authenticating. Unlike payment cards, IoT devices may have long lives, change ownership, be discarded, need updates and more – and all of this needs to be managed securely. Devices must be online at some point for provisioning and lifecycle management.

The key takeaway: as consumer demand grows for IoT payments, it's critical that the technology is secure – especially in ways that won't diminish convenience. Device manufacturers can make this happen through building security directly into each device and taking advantage of hardware-based authentication.

About Secure Technology Alliance: The Secure Technology Alliance brings together leading providers and adopters of security solutions designed to protect privacy and digital assets in a variety of vertical markets. The Alliance's mission is to stimulate understanding, adoption, and application of connected digital solutions based on secure chip and other technologies to protect data, enable secure authentication, and facilitate commerce.

www.securetechalliance.org

Connected Cars and In-Car Payments: the Road So Far and the Road Ahead

About Ana Păstrăvanu: Ana has been actively involved in covering digital payments and ecommerce related topics. She is interested in the latest trends and developments in cross-border ecommerce, payment methods, and monetisation of digital business models.

Ana Păstrăvanu ▪ *Content Editor* ▪ The Paypers

Today, people are looking to take advantage of new technologies that help them make purchases from the convenience of their car's dashboard. In-car payment technology is an exciting area of innovation and an amazing opportunity for vehicles to be part of the everyday commerce experiences.

Seizing the opportunities

Connected car commerce is a USD **230 billion opportunity**. In the US only, 135 million people spend 51 minutes in their cars, commuting to work, and 73% of them connect to the internet while driving. In addition, 64.9% of commuters choose to use a voice assistant provided by auto manufacturers for diverse needs. In 2018, more than **1 in 5 European workers** spent 90 minutes or more of their time on their way to and from work. On average, European workers spend 1 hour and 24 minutes a day commuting, travelling 28.56 km in total.

According to a **Visa report** from 2018, the 135 million US commuters spend more than USD 210 billion a year on gas, parking, food, coffee, and groceries as part of their drive to and from work. Purchasing goods and services directly from or adjacent to the car, as fast and seamless as possible, is something consumers have started to expect.

We currently see car manufacturers, card networks, retail brands, financial institutions, travel companies, mass transit agencies, and other mobility providers enabling better, more connected experiences and equipping vehicles with in-car payment systems. Therefore, our cars simply become wallets and we, as drivers, no longer need to get out of the vehicle to pay for gasoline, parking spaces, and other services.

The road so far

The in-car payments race begun in 2015, when **Shell** launched a mobile payment service in the UK, the Fill Up & Go mobile payment system. Working with Apple Pay, Android Pay, and PayPal, the technology enables the use of PayPal to pay for fuel through a smartphone at the gas stations. According to Shell, the launch is in direct response to customers that wanted faster and easier ways to pay for petrol.

In 2016, **Mastercard partnered with General Motors and IBM** to integrate payments into OnStar Go, an AI-powered version of the General Motors' OnStar system. This new version allows drivers/passengers to make payments for goods and services using credit and debit cards within their Masterpass wallet. It is also designed to learn from the user's behaviour and then bring them personalised offers from third-party partners.

Dubbed as the 'world's first in-car payment system,' launched in February 2017, initially in the UK and then globally, the payments system developed by **Jaguar and Shell** allows drivers to fill up the vehicle and go as the car pays for the fuel. Users no longer need to use a card at the pump or queuing in the forecourt shop; they can install the Shell app, drive up to any pump at a Shell service station, use the vehicle's touchscreen to select how much fuel they require, and pay using PayPal or Apple Pay. An electronic receipt is displayed once the payment is completed and is sent to the driver's email address. ➔

One year later, in January 2018, **Honda** revealed at Consumer Electronics Show that it was conducting 'the first proof-of-concept demonstration of in-car payments' for parking and fuel. The demo was part of Honda's ongoing partnership with Visa. Both companies wanted to install beacons that communicate with a Honda via Bluetooth in order to complete payments through a Visa Checkout integration.

In April 2018, **Chevrolet** teamed up with Shell to launch a similar payments feature that allows drivers to pay for gas from their vehicle's infotainment screen. It is the latest feature of General Motors' new Marketplace service in which owners can pre-purchase coffee and gas or make restaurant reservations from the driver's seat. The new service was initially rolled out for Shell station in Detroit, Seattle, and Houston and then all across the US, at over 14,000 stations. One month later, **Hyundai** announced a plan to work with automotive software company Xevo on an in-car credit card payment service that enables drivers to find and pay for coffee, gas, and parking from their infotainment screen. Xevo will help the automotive manufacturer build a wallet platform that securely stores customer credit card and PayPal account information. **Chevron, Texaco, ParkWhiz, and Applebee's** have already signed on as merchants for this new payment concept. And the system goes beyond credit and debit, allowing other options (such as gift cards) to be incorporated.

Early January 2019, **Mastercard and HERE Technologies** agreed to jointly create more connected experiences for people on the move, with the aim to take the friction out of an increasingly mobile world and shape the next generation of connected vehicle services. The partnership is part of Mastercard's work in partnering with car manufacturers, travel companies, mass transit agencies and other mobility providers, to enable more connected experiences for residents and visitors traveling to and within global cities.

That same month, **Honda** presented its prototype, Honda Dream Drive, the automotive industry's 'first integrated driver and passenger infotainment, commerce, services, and rewards dashboard.' Developed in collaboration with Connected Travel, the new prototype enables drivers to pay for goods and services like fuel, movie tickets and parking, make restaurant reservations or order food.

In January 2019, **Visa** and SiriusXM Connected Vehicles Services also launched an in-vehicle payment solution, SiriusXM e-wallet, which is designed to integrate into the dashboard and allow drivers and their passengers to shop and pay for coffee, find and pre-pay for gas, locate and pay for parking, purchase movie tickets, pay tolls, and more. Users activate and authenticate payments with their Visa account using biometric authentication (voice and touchscreen commands), which helps in eliminating driver distractions.

Adoption

Factors such as consumer adoption and ubiquity will play a key role in determining the success of the in-car payments concept. In-vehicle payments address some pain points for consumers in paying for fuel and parking and come with additional functionalities and personalised experiences.

As TNS' **Consumers Confirm Smart Payments Adoption report** shows, in the US, the UK and Australia, consumers are whiling to use smart payment technologies and Internet of Thing (IoT) based devices, including voice assistants, Wi-Fi refrigerators, and connected cars. 57% of respondents declare that they would be willing to make a payment via a connected car if they owned one. The US consumers are the most eager to own a connected car with payments capabilities, if the car is not too expensive. ➔

Advantages and use cases

Besides paying at the pump, three use cases are particularly interesting as they provide multiple benefits for users and communities alike:

- **Parking** (and paying for this service): for drivers, it eliminates the hassle of finding a parking place while cities can benefit from improved traffic management, less pollution, and reduced operational costs for parking spaces;
- **Predictive maintenance** (and paying for this service): by analysing real-time data, preventive systems can provide the car owners with timely updates about possible hardware or software malfunctions. This helps car owners in scheduling maintenance or drive to the closest dealership for an inspection. Through a connected dashboard, drivers can also estimate the costs of repairs or order the necessary hardware/software. What's more, the payment technology allows drivers to pay for those repairs when picking up their car;
- **Automatic payments for drive-through orders**, which help in reducing the time spent to shop as well as at the checkout.

Security concerns

Nevertheless, safety experts believe that **voice-activated systems may distract drivers**, as these systems take the driver's mind off the road. **Research** carried out by David Strayer, neuroscientist at the University of Utah, revealed that talking on the phone while driving creates the same level of crash risk as someone with 0.08 blood-alcohol level. Moreover, speech-to-text technology causes a higher level of cognitive distraction than any other activities since more effort is required to talk to the dashboard than talking to a real person. The neuroscientist claims that a driver needs up to 27 seconds to regain complete attention after using voice assistants.

The road ahead

As the advantages of in-car payment systems seem to far outweigh the disadvantages, the payments for the car industry is something we should definitely keep an eye on, as the future of this space looks promising. With the development of self-driving cars, it is obvious that new use cases and services will emerge. One could actually say that we are even farther than the envisioned car of the future of the previous century. Still, to what extent drivers will be able to use their car as a payment tool or for other types of services is something that only the future will tell.

Annex - Payment Methods Explained

Introduction

When trying to understand payments, it is useful to take a closer look at the various types of payment instruments and methods. This section starts with a short introduction presenting the terminology and the difference between a payment method and a payment instrument, followed by an in-depth description of all the payment methods.

Online payment methods refer to the entire set of means through which shoppers can pay for their purchases over the Internet. An online payment method is presented at the checkout or on the merchant's payment page, and should be clearly recognisable by the shopper through means of a well-known logo (eg Mastercard, PayPal, iDEAL) or common all-purpose words like 'credit cards,' 'bank transfer' or 'payment-on-delivery.' Alternative payment methods refer to online payment methods that are used as an alternative to credit card payments.

Online payment methods rely on six payment instruments:

- card payments;
- bank transfer payments;
- direct debit payments;
- cash payments;
- cryptocurrency payments;
- direct carrier payments.

Normally, online payment methods refer to online payment method brands (Mastercard, Bitcoin, Boleto, Bancontact), online payment solution brands (eg Klarna, PayPal, Masterpass), or directly to one of the payment instruments (eg 'bank transfer'). In this report, we draw a clear line between the six payment instruments - which are the actual tools for a transaction - and payment methods, as the ways in which these tools are put to use.

Each of the six payment instruments has its own local, regional, global, or vertical payment ecosystem. Ecosystems are represented by a specific payment scheme, which can be described as the institution that sets the governing rules and technical standards for the execution of payment transactions using one of the underlying payment instruments.

As mentioned before, online payment methods refer to the ways shoppers can pay for their purchases over the Internet. There is an endless number of payment methods to match all contexts (pay in advance, pay afterwards, and payment and delivery at the same time).

We have identified ten different payment categories. A payment method can stand in a one-to-one relationship with an instrument, as with credit cards, but it can also incorporate several payment instruments in one method, as with e-wallets (can be topped up by debit/credit card or Online Banking ePayments).

Annex - Payment Methods Explained

The ten categories discerned from one another are:

1. Credit card	6. Direct debit
2. Debit card	7. Invoice – Payment after delivery – Instalments
3. Prepaid card	8. Cash (cash-on-delivery and kiosk payments)
4. E-wallet	9. Direct carrier billing
5. Online Banking	10. Cryptocurrency

Payment Method Categories Explained

Below, we will elaborate on the ten payment method categories consisting of both card-based payment methods and alternative payment methods.

Credit card

General description	Credit cards are issued to cardholders, after which a revolving account is created by the issuer, granting a line of credit to the cardholder. The cardholder can then borrow money for payment to a merchant. For credit cards, we distinguish two different types of schemes: the three-corner model (closed and exclusive scheme, eg AMEX, Diners Club, Discover) and the four-corner model (open and inclusive scheme, eg Mastercard, Visa, UnionPay, RuPay).
Payment instrument	Credit card
Payment guarantee	When it comes to fraud and chargebacks, credit cards offer the highest protection for the consumer. At most, a cardholder is only liable for USD 50 of an unauthorised transaction. Some issuers provide zero liability cards, meaning the cardholder will be reimbursed for the full amount of the fraudulent charge. With credit card transactions, the consumer's cash reserves are not affected. While the available credit for the card may drop temporarily after the fraudulent purchase is made, the cardholder is not affected much by the unauthorised purchase. Chargeback can be used in cases of goods not arriving at all, goods that are damaged, goods that are different from the description, or where the merchant has ceased trading. There is a time limit on chargeback claims – typically 120 days. The time at which this period of 120 days starts depends on the specific circumstances, but will usually be from the day the consumer becomes aware of a problem. Additionally, once a chargeback has been filed, a refund should be credited to the account immediately.

Annex - Payment Methods Explained

Credit card

Brands	Mastercard, Visa, JCB, Discover & Diners Club, American Express, China UnionPay, RuPay, Chase
Market reach	Credit cards are widely used internationally, and enjoy a status of being widely accepted as common payment method for ecommerce and POS purchases. However, in Asia only 41% of online transactions are completed with a credit card. In some European countries (the Netherlands, Germany, Poland) alternative payment methods (online banking ePayments, invoice) are the dominant payment methods for ecommerce.

Debit card

General description	Traditionally facilitating offline payments, debit cards are also used increasingly online, as well. Functioning almost the same way as a credit card, but without several risks of debt, the debit card has become popular in countries that have drifted away from credit payments (Russia, Mexico), but have no or little accessible online banking options. In several countries where online banking has rapidly developed and increased in popularity (eg Germany and the Netherlands), debit cards are virtually no longer used online.
Payment instrument	Debit cards are directly linked to the checking account of the buyer.
Payment guarantee	Credit cards have a maximum fraud liability of USD 50. With debit cards, that liability cap only lasts for two days. If consumers do not immediately report a lost or stolen card that has been compromised, the fraud protection decreases significantly. After two days, the liability jumps to USD 500. If consumers let two billing cycles pass, they would not be reimbursed for any of the fraudulent purchases. Additionally, the effects of fraud are felt immediately. A criminal has the ability to completely drain the consumer's bank account before the unauthorised purchases are detected. The law allows banks to take 10 days to review the claim before issuing refunds. While some banks refund the cash much sooner, cardholders usually feel the effects of such a limited access to necessary funds.
Brands	Visa Debit, Debit Mastercard, Maestro, Dankort (DK), V PAY card, PostFinance Card, Interac debit cards
Market reach	In the US, credit cards are the dominant payment method for ecommerce, credit card market showing significant innovation. Rewards programmes of all kinds proliferate, and new digital account servicing tools help consumers manage purchases, debt, and account security in the country, but also globally. In Canada, debit cards (Interac debit) are more popular. In Europe, especially in North-Western Europe, online banking e-payment methods are more widely used.

Annex - Payment Methods Explained

Prepaid

General description	Some prepaid cards run on scheme networks, such as Visa and Mastercard. These cards can be used to make purchases or withdraw cash in the same way as a debit or credit card. The key difference is that they need to be loaded up with cash in advance – the balance then operates as the spending limit. Another type of prepaid cards, paysafecard for example, is the type of card or voucher consumers need to buy before starting a transaction. These cards are not usually run on scheme networks (such as Visa and Mastercard) and are usually authorised immediately. Most prepaid products have a funding limit and some do not allow multiple cards/vouchers to fund one single transaction.
Payment instrument	Cash, debit, or credit card
Payment guarantee	Payments cannot be reversed by the buyer
Brands	paysafecard, NeoSurf, Cashu, Kaiku, Mango Money
Market reach	Prepaid cards, with their relative safety for consumers and ease-of-access, are a popular payment method for consumers in BRIC countries and underage consumers without access to a credit card. The prepaid card sector continues to grow globally by capitalising on the needs of the unbanked or underbanked people in emerging countries.

E-wallet

General description	An e-wallet is a digital tool (software or app) for consumers to store their money or payment methods. It stores credentials of eg debit, credit cards, and alternative payment methods. Some e-wallets also store loyalty programmes. An e-wallet allows an individual to make electronic transactions with an improved checkout and payment experience compared to keying in all payment credentials every time a purchase is done. Wallets can function both in online and physical stores. Other remarks: • e-wallet providers can also be payment method providers, eg Visa and Mastercard; • e-wallet providers can also be independent, eg Seamless/SEQR, YoYo, OK. The term 'wallet' is also often used in the situation of a stored-value account for which a license is required (eg e-money). .
Payment instrument	Multiple payment methods can be used, depending on the e-wallet provider: credit card, debit card, online banking e-payment, and direct debit.

Annex - Payment Methods Explained

E-wallet

Payment guarantee	The chargeback risk of an e-wallet depends on the payment instrument used to top up the e-wallet. PayPal offers consumers protection if they are charged for goods they did not purchase or if the order did not arrive or if the order did arrive but is significantly different than it was described. Merchants are protected by PayPal when selling physical goods that are sold and shipped with proof of delivery from within the US to buyers around the globe.
Brands	PayPal, Alipay, WeChat Pay, Apple Pay, Samsung Pay, Google Pay, Masterpass, Paylib, Amazon Pay, SEQR, MobilePay, Lyf Pay, Vipps, Yoyo Wallet, Chase Pay, Allied Wallet, Starbucks Wallet, mBank, Lydia, Moneta, Dwolla, Paytm, MobiKwik, Pay by Bank App, OK, boon.
Market reach	**The US**: E-wallets are used mostly by young people, who tend to not stick with one e-wallet. Cash and cards are still far more important, and the preferred option for most in-store payments. There is an increase in P2P wallets, especially among young people. **Europe**: Adoption of e-wallets is slower than initial forecasts predicted. However, it is expected that their share will increase in the next 3-5 years. Notable exceptions are MobilePay in Denmark, with 4 million users, and Vipps in Norway, with 2.6 million users. **India**: Rapidly growing market due to the conjunction of rising smartphone usage. In addition, the phasing out of physical money in India has proved a lucrative opportunity for e-wallet players in the country. China: For online payments, the e-wallets (particularly Alipay and WeChat Pay) are the most popular form of payment. However, smaller players are entering the space in China, with varying success.

Online Banking e-Payment

General description	The Online Banking ePayments (OBeP) scheme is a type of payments network designed to facilitate online bank transfers. In an OBeP scheme, the consumer is authenticated in real-time by the consumer's financial institution. The availability of funds is validated in real-time, and the consumer's financial institution provides guarantee of the payment to the merchant in case the payment is made as a credit transfer (push payment): ie the consumer/buyer initiates the payment. The merchant receives a real-time guarantee so (s)he can continue with the fulfilment process. The actual funds arrive later (D+1, according to the SEPA Credit Transfer Scheme.
Payment instrument	Bank transfer payments: an online bank transfer, or online wire transfer, is simply the movement of funds from one bank account to another. When happening within one bank's system (also referred to an 'on-us' transactions), this typically happens in real-time. Transfers between banks can take longer (depending on the cut-off times), and are often subject to fluctuation of speed depending on the size of the transfer.

Annex - Payment Methods Explained

Online Banking e-Payment

Payment guarantee	A successful online banking-based payment is irreversible. After the bank has received the payment, the buyer cannot reverse the transfer. The merchant is not faced with a chargeback risk. Another benefit is the relatively low transaction cost compared to card, wallet, or other alternative payments.
Brands	**Multi-Bank OBeP scheme** – entails that a seller or Payment Service Provider has one single connection to the OBeP network in order to accept payments from any participating financial institution. Brands: iDEAL (the Netherlands) GiroPay (Germany), MyBank (EU), ePS (Austria), and Bankaxess (Norway). **Overlay OBeP** – third party (the overlay provider) which sits between the payment network and the consumer. The overlay provider requires the consumer to share their online banking credentials with them in order to have access to the consumer's bank account, and to initiate the credit transfer to the merchant. Examples: SOFORT banking (Germany), Trustly (pan-European), PayWithMyBank (US).
Market reach	**Europe:** Online Banking ePayments represent a significant share in the Netherlands, Germany, and the Nordics. It is likely to grow across Europe due to PSD2; more payments will be done via SEPA Instant Credit Transfers, since it will become easier for merchants and their buyers to initiate payments online and mobile. This is facilitated by the new role of Payment Initiation Services. Ovum, in Instant Payments and the Post PSD2 Landscape, estimates that by the early 2020s, instant payments will have become a mainstream method for online payments, and by 2024, they would have overtaken payment cards for online purchases **US:** The small market share of OBeP might grow with new players entering the market (PayWithMyBank), providing a better user experience and less risk. However, the US is slow in adapting banking innovations, especially toward consumers. **India:** A primary governing body of all retail payment systems in the country, National Payment Corporation of India (NPCI, has launched a Unified Payments Interface (UPI). The interface allows customers to make payments through a single identifier, like Aadhaar number or virtual address. UPI is an infrastructure on top of which end-user apps can build and implement the features offered by UPI. UPI enables a customer to make payments using his mobile phone as the primary device for payments, including P2P, C2B, and C2B with the ability to pay someone, as well as 'collect' cash from someone.

Annex - Payment Methods Explained

Direct debit

General description	There are no card scheme networks involved in the SEPA Direct Debit (SDD) Core scheme. All communication happens directly between banks. To set up payments by SDD, the payer must complete a mandate to the merchant. This mandate contains bank-approved wording that makes it clear the payer is setting up an authorisation for the merchant to debit their account. The interface for completing the SDD instruction is controlled by the merchant, which then sends the direct debit initiation to the bank. The SDD core scheme can be used for single (one-off) or recurring direct debit collections. Direct debit offers a relatively inexpensive payment method to merchants.
Payment instrument	SEPA Direct Debit
Payment guarantee	The SDD Core Scheme grants payers a 'no-questions-asked' refund right away during the eight weeks following the debiting of a payer's account. Therefore, during this time, any funds collected by SDD Core Scheme will be credited back to the payer's account upon request. Consumers may request a chargeback (claiming it was an unauthorised transaction) up to 13 months after the settlement. Solution providers offering SDD based payment methods can take over the risk of default payments and chargebacks.
Brands	RatePAY, SlimPay, GoCardless, SEPA Express, NuaPay, Fastpay, Eazipay, AccessPay, Eazy Collect, Smartdebit, B4payments
Market reach	SDD has seen a strong adoption level in Europe, specifically Germany, the Netherlands, Spain, and Austria. The payment method is often used for recurring payments, due to the lack of issues with credit card expiration. As more and more consumers shift towards subscription model, direct debit may also become a more relevant payment method in this economy.

Invoice/Instalment

General description	We distinguish two types of invoice payments: *open invoice* (payment after delivery) and *instalment payments* (a series of payments that a buyer makes instead of a lump sum to compensate the seller).
Payment instrument	SEPA Credit Transfer, credit card, debit card (instalments)
Payment guarantee	Solution providers offering open invoices often take over the risk of collecting the payment. They guarantee payment to the merchant, either by some sort of insurance or by taking over the invoicing process. To do this, they perform their own assessment of the shoppers' risk profile, and accept or decline the order online.
Brands	RatePAY, Afterpay, Klarna, AcceptEasy, FuturePay, Sezzle, Divido, CreditClick, Sliceit, BillPay

Annex - Payment Methods Explained

Invoice/Instalment

Market reach	Open invoice is popular in Germany, Benelux, Austria, Switzerland, and the Nordics (retail segment). In Turkey, 88% of the consumers prefer to use their credit cards instead of debit or prepaid cards to make instalments for online purchases. According to the Lost *in Transaction* report by Paysafe, invoice payments continue to be a dominant payment method in Austria (38% of Austrians now use payment by invoice, compared to just 18% using debit) and Germany (29%, compared to 20% for debit cards and 25% for credit cards).

Cash

General description	We distinguish two commonly used methods of cash payments: *cash-on-delivery* and *kiosk payments*. Cash-on-delivery (COD) is a payment method in which ordered goods are carried to the buyer's place but are handed over only upon full payment. Kiosk payments are popular in India, LATAM, Russia, Indonesia, and Japan. Shoppers can choose this cash payment method, and print a voucher or receive a reference number. With the voucher of reference number, they can pay for the item at a kiosk, cash register at a convenience store or bank branch. The kiosk notifies the merchant that the payment was made, credits the merchants account, and confirms to the merchant to ship the item.
Payment instrument	Cash
Payment guarantee	After the payment has been made and the goods are received, the buyer cannot reverse the payment via the carrier.
Brands	Boleto (Brazil), QIWI (Russia), PayNearMe (the US), Konbini (Japan), Kudo (Indonesia), Barzahlen (Germany), Paysafecash (global), YesByCash (France)
Market reach	Despite an increasing influx of money into the payments ecosystem in Southeast Asia, cash-on-delivery (COD) remains the most popular payment method in emerging Southeast Asian markets. In LATAM and Russia, kiosk payments give the opportunity to make purchases to a lot of people who are in rural towns and intermediate cities, where the presence of a payment point is much more common than a bank.

Annex - Payment Methods Explained

Direct carrier billing

General description	Direct carrier billing implies making a payment for goods or services, which is charged to the customer's mobile phone account, either to the monthly bill (for customers with a contract) or as a debit from prepaid credit. Presently, online purchases of digital content (games, music, video, e-books, and ringtones), charity donations, TV voting, and competitions are the primary use case for direct carrier billing.
Payment instrument	Direct carrier billing
Payment guarantee	Payments cannot be reversed by the buyer. When a buyer fails to pay his telephone bill, it is up to the telecom operator to collect the money.
Brands	DIMOCO, Bango, Fortumo, Boku, Zong, Text2Pay, Buongiorno, TxtNation
Market reach	Direct carrier billing helps merchants to monetise consumers who do not own a debit or credit card, such as the unbanked (ie consumers who do not have access to banks or credit unions), underbanked (ie consumers either having a checking or savings account, but also relying on alternative financial services), and younger demographics. In emerging markets, but also in some economically powerful countries like South Korea, a variety of purchases can be billed on a mobile phone. In Norway, direct carrier billing is the second most popular payment method for digital gaming, while in the other Nordic countries carrier billing has a 10-21% market share from digital content payments.

Annex - Payment Methods Explained

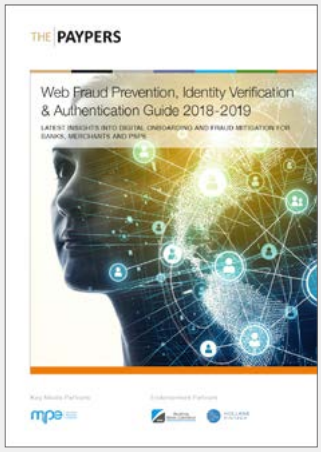
Cryptocurrency

General description	Cryptocurrency is a digital currency in which the regulation of the amount of currency units and the verification of transactions of these units are done through cryptographic techniques. Cryptography is generally used to secure the transactions, and also to control the creation of new currencies or coins. The first cryptocurrency to be developed was Bitcoin in 2009. Currently, there are over 1,000 cryptocurrencies available across the globe, with over USD 150 billion in market capitalisation, 10,000% up compared to where the figure stood in 2016 While Bitcoin's market capitalisation accounted for 86% of the total cryptocurrency market in March 2015, it has dropped to 72% as of March 2017. The most spectacular growth of a cryptocurrency in 2017 was that of Ripple' XRP, which has grown more than 35,000% in just one year. Ether (ETH), the Ethereum network's native cryptocurrency, has established itself as the second-largest cryptocurrency. Bitcoin allows people to pseudo-anonymously buy goods and services over the internet. All transactions are publicly visible but the account numbers are anonymised, and are not in someone's name. Cryptocurrency payments happen in two ways: firstly, a transaction from one crypto-wallet to another. These transactions are made exclusively in a cryptocurrency, and mostly happen B2B or C2C. Secondly, a transaction in a cryptocurrency is made to a crypto-wallet, but can be transferred into a payments account that uses an institutional currency, eg EUR or USD. These transactions happen mostly B2C.
Payment instrument	Cryptocurrency
Payment guarantee	Cryptocurrencies do not allow payments to be reversed because there is no third party between the sender and receiver of a payment.
Brands	Bitcoin, BitGo, coinify, Litecoin, Ethereum, Zcash, Dash, Ripple, Monero
Market reach	By the beginning of 2017, it was estimated that over 150,000 merchants worldwide accepted Bitcoin, the world's most popular cryptocurrency, as one of their payment methods. This list includes major retailers like Amazon, Walmart, eBay, Expedia, Microsoft, Apple, and even coffeehouse giant Starbucks. Most notably, cryptocurrencies are mostly adopted in the online gaming industry. Cryptocurrencies could prove efficient in countries with a low access to financial services or in countries where credit cards register high decline rates (Mexico, India, Brazil, the UAE), and other areas where there is a higher incidence of fraud. Geographically, Bitcoin is mostly used across North America and Europe, with a growth in LATAM and APAC countries.

THE PAYPERS

Don’t Miss the Opportunity of Being Part of Large-Scale Payments Industry Overviews

Once a year, The Paypers releases four large-scale industry overviews covering the latest trends, developments, disruptive innovations and challenges that define the global online/mobile payments, e-invoicing, B2B payments, ecommerce and web fraud prevention & digital identity space. Industry consultants, policy makers, service providers, merchants from all over the world share their views and expertise on different key topics within the industry. Listings and advertorial options are also part of the Guides for the purpose of ensuring effective company exposure at a global level.



Web Fraud Prevention, Identity Verification & Authentication Guide

Monetisation of Digital Business Models 2019

B2B Payments and Fintech Guide 2019

Payments and Commerce Market Guide

For the latest edition, please check the Reports section