

# RS2

Innovation, fragmentation,  
and the future of  
electronic payments



# How disruptive acquiring overcomes the current hurdles in the US payments market

As innovation in the payments sector continues apace, and new products and services are launched by providers of all types, the landscape is becoming increasingly fragmented. This is particularly the case in the US where a combination of technological, regulatory and historical factors coalesce to create a market that offers almost limitless choice to consumers and opportunities for providers, while simultaneously constricting those choices and building new barriers to adoption.

In this paper we look at the international perspective and how the US market compares to those of the EU and China, before exploring how legacy platforms and regulatory structures combine to create the complexities in the US. Finally, we discuss how a more innovative approach to acquiring holds the key to opening up and sustaining a more diverse, device-independent payments future.



How did you pay for your coffee this morning? Your parking permit? Your metro ticket? What about last week's groceries? That movie you streamed at the weekend? Last month's emergency plumber? Worldwide, there are now hundreds of methods consumers can use to pay for goods and services, using different form factors and different providers.

**Just three years ago, in September 2015, Entrepreneur magazine reported that there were around 200 ways to make electronic payments. That number fluctuates over time, but is almost certainly higher now. In its report *Beyond Fintech: A Pragmatic Assessment Of Disruptive Potential In Financial Services*, of August 2017, the World Economic Forum (WEF) expressed its belief that increasing fragmentation is one of the more likely payment trends to 2020<sup>1</sup>.**

That increased fragmentation means more parties are involved than ever before, both in the overall payments space and in individual transactions. Of the new players specialising in a particular field, some have risen dramatically but fallen equally hard, while others have cemented themselves in freshly carved-out market sectors. Innovation continues apace: there is now a small herd of unicorns within the international fintech community, with more than 50 start-ups valued at more than \$1 billion.

This kind of fragmentation can be fertile ground for significant leaps forward. Decades ago, both the Visa and MasterCard payment schemes were a response to the need for greater connectivity between different providers in different geographies. Their networks and consistent rules provided the means for interaction between a wide range of previously un-aligned financial and retail market players. It is impossible to imagine modern payments without them – and the payment schemes that followed.

However, concerns have been raised about the direction in which the global payments sector is heading today. Last year, Hult International Business School reported that the proliferation of payment services could be a considered one of the top challenges for international businesses<sup>2</sup>. When systems that are commonly accepted in a company's domestic market are not available elsewhere, it's an inevitable source of friction.

In *Beyond Fintech*, the WEF also says that the long-term trend towards financial globalisation could give way as divergent regional

models that are optimised for differing local conditions, customer needs, and regulatory environments emerge.

Weighing in on the subject, the Bank for International Settlements has expressed its concerns that the financial incentives for incumbent providers to develop new payment offerings may prove elusive. If that is the case, they are likely to lose market share to new entrants who themselves are unable to benefit from economies of scale and network effects in a vicious circle of insufficient growth<sup>3</sup>. The result may be services that are not just inefficient but, fatally, insecure.

## The international fragmentation spectrum

Those are the broad global trends, but they are not the complete picture. Regional differences and national idiosyncrasies come into play as well. Deep-rooted cultural attitudes to cash and to debt can play as important a role as regulatory differences, and are often much harder to shift.

Equally influential is the condition of legacy technologies and communications infrastructure. The success of mobile payments schemes in developing countries is due in large part to the fact that they were launched onto a blank tech canvas with no incumbent hardware or software to get in the way.

Today, the differences between the EU, China and the US highlight the various levels of fragmentation seen in the global payments industry.

Any discussion of fragmentation is incomplete without mentioning Alipay which, with nearly 45 per cent of global spend by eWallet, is now the world's most popular method for making payments online. It dominates China's electronic payments market, placing it firmly at the 'consolidated' end of the spectrum.

Alipay's position in its domestic market, and its more recent inroads into the international payments space, is less about central regulation and more to do with the user experience and product features, the existing market environment – and good timing.

<sup>1</sup> World Economic Forum: [http://www3.weforum.org/docs/Beyond\\_Fintech\\_-](http://www3.weforum.org/docs/Beyond_Fintech_-)

<sup>2</sup> 11 Biggest Challenges of International Business in 2017, Hult International Business School. 2017

<sup>3</sup> Fast payments – Enhancing the speed and availability of retail payments, Bank for International Settlements. 2017

Alipay launched at a point when mobile adoption was booming in China, along with middle class spending habits and aspirations.

The sheer size of the Chinese market has also helped, as has Alipay's brand position as a 'lifestyle' choice. This is a multi-purpose product that is deeply embedded into its customers' daily lives: from booking a taxi to socialising with friends, as well as making payments.

The EU, which is directing its efforts towards creating a more harmonised, standardised payments environment across the continent, sits in the middle of the spectrum. Although still a work in progress, specific banking initiatives like SEPA, PSD1, PSD2 as well as the broader data protection mandates of GDPR, are ironing out cross-continent irregularities.

Consequently, the individual experience of the consumer is less disjointed today than ever before. There are small variances between Malmo, Madrid and Munich, in accordance with the prevailing cultural attitudes, but the underlying principle for making and receiving payments is largely applicable across all member states. Diverse payment types are possible and widely accepted.

## American roulette

At the far end of the fragmentation spectrum is the US, famously described by CNet as payments roulette. It is almost impossible to imagine a product like Alipay gaining a similarly dominant position in the world's largest economy and largest single payments market.

The US remains highly competitive. Pure payment companies like PayPal compete for market share with smaller-scale offerings from hundreds of payment providers, merchant-owned services and, of course, offerings from established financial institutions. A higher number of issuing banks and an extremely large merchant acceptance base means that fragmentation is a way of life.

Even though the Alipay position is unlikely to be replicated in the US, its lifestyle approach is certainly appealing to the big beasts of consumer technology that have made their name using digital platforms in other sectors and have moved in on payments.

Having firmly established themselves and their e-wallets, Apple and Google are now taking a leaf from the Alipay playbook and developing payments-as-lifestyle services. As a first step, both are expanding on their existing payment services to roll out in-browser payments, which can be accepted by any online retailer.

Equally interesting is the recent addition of P2P payments to Facebook's Messenger app as well as new in-app payment

capabilities in Instagram: an examples of the social media/ payments crossover in the Alipay mode.

Then there's Amazon. It has used its expertise in platform design, data analysis and storage to create funding products, data products and logistics services – all of which are being bundled in entirely new ways. The potential for smart speakers in the realm of shopping, purchasing and customer service is being explored and, in its most recent hook-up with Snap, the company is bringing visual search to its payment app customers – a technology that is also being trialled by retailers, Forever 21 and H&M.

As an interesting aside, Snap also illustrates that a competitive payments market can reject new services as swiftly as it accepts them. Its mobile P2P payments app, Snapcash, was dropped in August 2018. Having partnered with Square to combine instant social media messaging with payments, it was eventually felled by competition from Zenmo. That 30 US banks selected Zelle as their preferred P2P partner was the final nail in Snapcash's coffin – but a sure sign that incumbents are working with challengers to avoid disintermediation and engage with customers in new ways.

Crossing the boundary between online and offline is Stripe, whose new Stripe Terminal will allow online businesses and platforms to accept in-person payments, and expands Stripe's payments infrastructure to the physical world. Even wearables like Garmin and Fitbit are getting in on the act, adding mobile payments to fitness trackers to compete more closely with Apple Watch.

Apple itself is engaging with the problem of 'closed loop' systems that many banks and large merchants prefer and which prevent expansion of Apple Pay into certain lucrative areas. With its loyal universe of dedicated and affluent customers, Apple is an attractive partner and its recent credit card arrangement with Goldman Sachs is another example of the way in which a challenger is working with an incumbent to the advantage of both.

Also getting into the closed loop payments business is ride-sharing firm, Uber, albeit with a few teething problems. Uber Cash is intended to provide a payment network that allows its consumers to add funds to their stored value accounts to pay for goods and services within the Uber multiverse: bikes, food delivery, and ridesharing.

As for retailers, the number of merchant-specific shopping and payment apps continues to grow: 47 per cent of retailers are now placing a significant focus on their apps. It's a strategy that is paying off. Consumers use an average of four retail mobile apps, and are spending more money more frequently through them. More than half (53 per cent) of consumers also said that the apps they use come with credit-card-servicing features and three quarters found these features valuable<sup>4</sup>.

<sup>4</sup> Synchrony Digital Study, 2018

## Tap, swipe or scan

In theory, this dynamic market offers consumers more choice. That is born out by the growth rate of P2P and other payment types that were once considered extremely niche and deeply alternative. Unheard of fifteen years ago, the top three P2P payments apps – Zenmo, Zelle, and Square Cash – already have a combined monthly active user base of 40 million.

However, in practice, many US consumers are still unsure of the merits of individual payment services, and unclear as to which are the most relevant to their own lives, which hampers new tech's ability to reach its full potential, and adds unwarranted risks to the process of innovation.

The story of mobile payments in the US is a perfect illustration. It might be the world's biggest payments market, but the US is by no means the biggest market for mobile payments. That accolade goes to China, where the total value of mobile payments is around \$5.5 trillion. To put that in perspective, China has a population that is four times greater than that of the US, but spends 50 times more through mobile payments.

Nonetheless, the number of consumers in the US that have expressed interest in using a mobile wallet rather than some form of payment card at the check-out has increased steadily over the past few years. WorldPay suggests that, by 2020, e-wallets will account for 27 per cent of transactions in North America (up from 19 per cent in 2015). Meanwhile, 60 per cent of US consumers believe that, by 2025, average shoppers will leave their physical wallets at home and go shopping armed with only a mobile phone<sup>5</sup>.

Apple also tells us that, in 2017, the number of Apple Pay transactions had increased year on year by 330 per cent. What's more, approximately 90 per cent of POS terminals in the US have the near-field communication (NFC) technology that underpins it – according to Jordan McKee, principal payments analyst at 451 Research.

But despite all this, as McKee reminds us: *"Mobile payments are under one per cent of in-store US transaction volume."*

Why the relatively low take-up? Why are NFC-enabled tap-and-pay mobile payments – whether with a contactless card or a mobile phone – much less common in the US than in the EU?

For a start, NFC technology is only switched on in about 50 per cent of stores. In addition, large retailers are keen to promote their own closed loop solutions over those from the tech firms. CVS and Walmart are just two notable merchants that developed their own mobile payment solutions, based on QR codes, rather than give Apple Pay or the various forms of Android Pay a foothold in their stores.

Proprietary bank-owned offerings, such as ChasePay, which was recently rolled out for exclusive use in Kroger stores, are also available – although they too are also a long way from universal acceptance. Again, most are based on QR codes that require minimal investment in technology by retailers. They compete directly with the tap-and-pay systems that depend on NFC capabilities at the POS device.

In this environment, consumers that want to take advantage of mobile payments have to arm themselves with multiple apps and payment devices. Unless they are making a purchase at a retailer where they are familiar with the set up, they still have to guess which payment method will be accepted.

This can slow down each individual transaction. But the bigger problem is that it adds uncertainty to the market overall, and even slows down innovation. It's worth noting that there is a big difference between trying to use a phone at the POS terminal but then having to dig out a card, and attempting to tap a card but then simply having to swipe it instead. For many consumers and merchants it is simply easier to stick with a familiar credit or debit card, which still account for just under 60 per cent of all payments in North America.

This is a classic chicken-and-egg situation: consumers are reluctant to commit to new methods of payment that may not be accepted by their favourite online or offline stores. At the same time, merchants resist investment in new systems and technology that would enable such payments when they cannot be sure that the majority of their customer base will actually use them.

## Finding regulatory incentives

The framework of this complex environment is set by a combination of regulatory structures that have not yet caught up with the reality of modern payments, and all-pervasive legacy systems that were simply not designed to support payment capture or merchant acquiring in such a diverse landscape.

The obvious point to make here is the role of the EMV standard that enables Chip and PIN cards and, more recently, contactless payments. The standard had been adopted across Europe for at least a decade before it was implemented in the US. With Chip and PIN already in place, EU merchants found that adding NFC payment capability to POS terminals was a fairly minor undertaking.

After an initial period of resistance, contactless mobile and card payments quickly passed a tipping point and entered the mainstream. Strong consumer demand, particularly when it comes to small-ticket items and repeat payments, means that of every five face-to-face Visa transactions two are now contactless in the

<sup>5</sup> Synchrony Digital Study, 2018

UK, the EU and in Canada. In many cases adoption has gone from single digits to more than 50 per cent in a mere two years.

EMV was already old when the US adopted it in October 2015. When fraud liability shifted, provision was made for magnetic stripe cards to still be used as a fall-back position, which prolonged dependence on 70-year old mag-stripe technology and held back other form factors. The majority of issuers focused on a contact-only strategy for chip cards, leaving contactless payments to the e-wallet providers.

Ironically, contactless card payments have increased in the US even while fragmented phone-based payments remain at the lower end of the growth curve – despite this push and despite phones being far better suited for security, encryption and tokenisation.

ABI Research suggests that by 2021, the number of contactless cards shipped will reach 229.6 million – approximately 20 per cent of the US total issued card base. 11 million CitiBank cards, co-branded with CostCo, have recently been enabled for contactless payments. And in Boston and New York, mass transit authorities intend to move to contactless payments by 2020. That the price of issuing these cards has come down has only helped their market penetration.

This brings us to the question of cost incentives, and interchange fees on different types of card payment. This is an area where both the Fed and the EU authorities have been keen to create an even playing field to ensure a better deal for consumers with fewer misaligned financial incentives and unexpected consequences for providers.

Still, the US hosts some of the more bitter battles in the wider interchange conflict between merchants, card networks and the regulators. Kroger vs. Visa is just the latest in a long line of flairs-ups. As mentioned above, the Kroger retail chain has been forward thinking in its adoption of ChasePay solutions, but has announced it is no longer accepting Visa cards thanks to interchange fees.

## Overcoming the legacy chokehold

However, the biggest regulatory impact has certainly come from the EU's payments services directives (PSD1 and PSD2), which represent the bloc's belief that a country-by-country payment system is suboptimal and occasionally dysfunctional. European regulators have attempted to use these regulatory instruments to reshape the payments marketplace and create a more competitive, efficient and innovative transactional landscape in its place.

With its demands that financial institutions open up access to account information to third-party providers (TPPs) including fintechs, PSD2 in particular spells the end-game for traditional

acquiring and processing systems that are both siloed and sclerotic – and which are doing so much to cement complexity in place.

Absent a similar regulatory mandate, the US market will find its own path to overcoming the choke-hold that these legacy platforms have on payments innovation. In fact, the entire market stands in need of easy tech that simplifies and streamlines acquiring and issuing, regardless of the technology that is used to capture and authenticate payments.

One of the ways through this impasse is to disrupt traditional acquiring in much the same way that payment capture has been disrupted. Merchants cannot be expected to invest in another dense layer of technology just to accept one of the 200+ payment types currently in circulation.

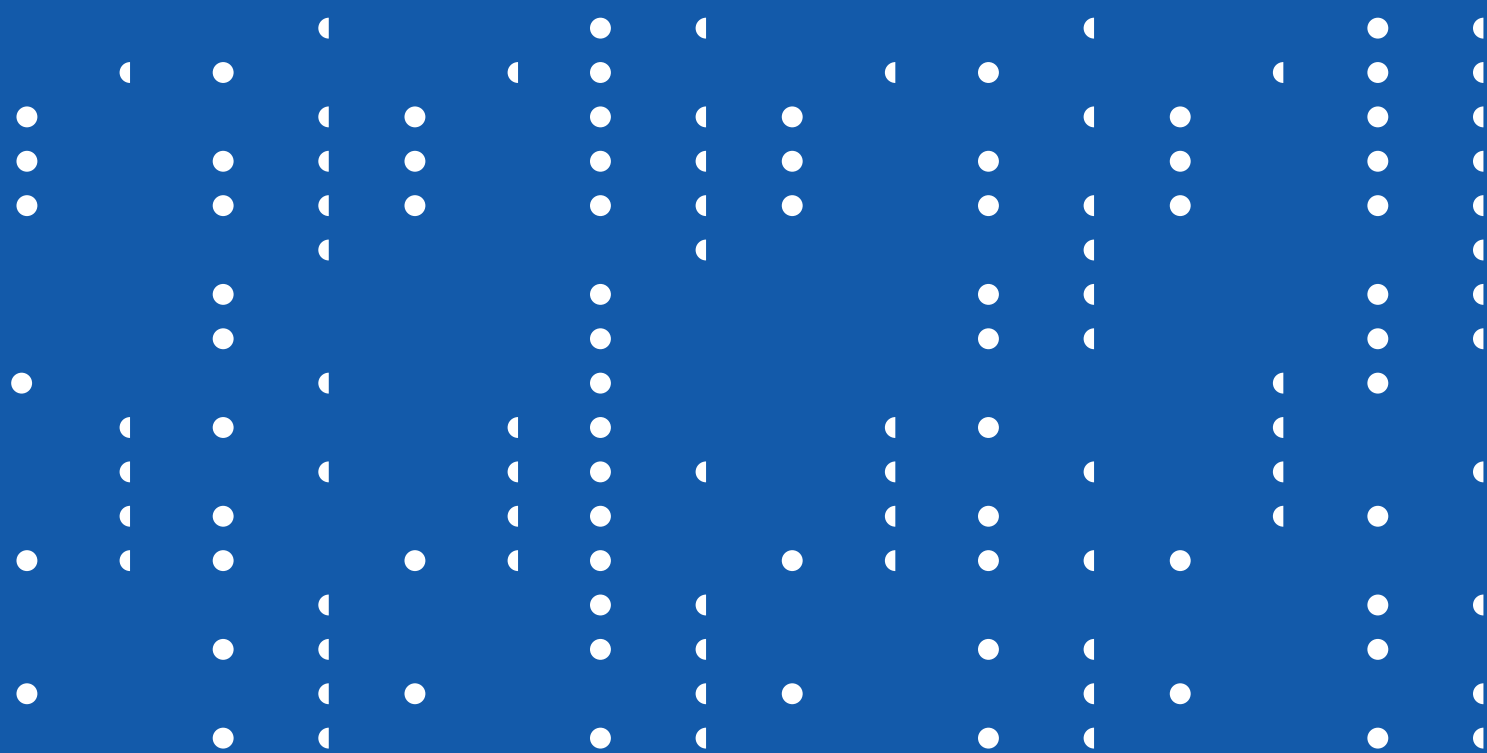
Platforms that take a year to implement or which resist simple configuration and swift updates for even minor adjustments are an obvious barrier to more payment solutions successfully coming to market. Instead robust, global, multi-currency, multi-lingual platforms with acquiring and issuing capabilities are a solid proposition – particularly at a time when the US is facing growing competition in international trade.

## Conclusion: facing the future

This is an issue that will only increase in importance. The challenge is real now, but will become more acute as emerging technology continues to push the boundaries of the payments sector. The move to mobile and the development of more sophisticated fraud defences will accelerate to the point that consumers no longer need a specific payment device and can pay for any goods or services regardless of payment form factor.

We will also continue to see more and more customer segmentation at the front-end of retail management systems to create highly personalised retail experiences. Payments will be integrated into a broader value proposition and software. There are signs of this already in the US, with some retailers and restaurants taking a big step forward, but small businesses will need to add this kind of sophistication to their own arsenal of customer engagement tools.

The US is a large enough market to create opportunities for many different players and many different innovators. But it really is dependent on simplifying underlying platforms so that they make life easier for merchants and users alike. By removing the hurdle to adopting promising innovation, not just once but each time new potential emerges, omni-channel platforms enable payments markets to flourish.



# RS2

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