

**G**Payments

authentication, security and payment solutions

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Online payment trends keep evolving as customers continue to look for more user-friendly solutions and developers constantly compete for a market share by trying to come up with the next big thing to fulfil that need.

This has led to a dramatic change in consumer shopping and paying behaviour, arguably one of the biggest impacts the internet has had on our lives.

In the final quarter of 2016 alone, US\$109.3 billion was spent online and in America, more than half of consumers (51%) actually prefer to shop online than in-store<sup>1</sup>.

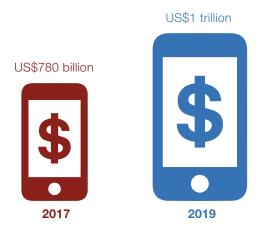


There are therefore many interesting movements within the online payments sphere and below are the top 5 trends to look out for in 2017.

<sup>&</sup>lt;sup>1</sup> https://www.bigcommerce.com/blog/ecommerce-trends/

#### MOBILE PAYMENTS

Mobile payment revenues are expected to reach a total of US\$780 billion by the end of this year and pass US\$1 trillion in 2019<sup>2</sup>.



The industry has seen remarkable growth in the last few years thanks to advancements in technologies such as mobile wallet applications and Near Field Communication (NFC).

Paying for your coffee with a swipe of your phone or sending money to your friends for your share of the bill has never been easier.

According to a report by the Mobile Ecosystem Forum<sup>3</sup>, close to 80% of people have made a mobile payment in the previous six months (which is up from just 4% in 2014), and 61% of consumers used a mobile device to do online banking.

Distributed ledger technology, blockchain, make it possible to process payments by text messages<sup>4</sup> and will continue to have an impact on the mobile payments industry. It is also expected that many of the mobile phone manufacturers will develop their own mobile payment solutions, following in the footsteps of Apple Pay and Samsung Pay.

Whichever direction you look in, mobile payments are most likely to make an impact in that area, if not already, as customers are increasingly looking for frictionless and cashless solutions.





 $<sup>^2\,</sup>https://www.statista.com/statistics/226530/mobile-payment-transaction-volume-forecast/$ 

<sup>&</sup>lt;sup>3</sup> https://mobileecosystemforum.com/2017/02/20/18-statistics-that-explore-the-growth-of-mobile-money/

<sup>&</sup>lt;sup>4</sup> https://www.theverge.com/2017/6/5/15731034/apple-pay-iphone-payments-venmo-update-announced-wwdc-2017

#### 3D SECURE 2.0

Being able to shop and pay online over the internet is beneficial to both customers, who have a wider range of products and services to choose from, and merchants, giving them easy access to a bigger, global customer base.

The drawback to this is that fraudsters are coming up with more sophisticated ways to tap into the multi-billion dollar industry and scam people out of their money.

To accurately verify the identity of users in online payments has therefore become increasingly important and challenging.

Research as has shown that half of online payments that get declined because of suspected fraud, are actually valid concerns<sup>5</sup>.

3D Secure 2.0 is the highly anticipated, improved version of the original protocol that is used in card-not present, online payment authentication. Although the original protocol will still be available and supported, early adoption of version 2.0 is expected to begin towards the end of 2017.

3D Secure 2.0 will move away from authentication through static passwords and instead rely more heavily on user-friendly biometric and token-based authentication.

The new version also addresses the wide-uptake of mobile devices and can be applied to digital wallet as well as in-app purchases. This moves the protocol closer to its intended function which is to help merchants facilitate a frictionless checkout process for their customers, while at the same time enhancing the security, accuracy, and flexibility<sup>6</sup> of buyer authentication in browser and application-based payments.



 $<sup>^{5}\,\</sup>text{https://usa.visa.com/visa-everywhere/security/future-of-digital-payment-security.html}$ 

<sup>&</sup>lt;sup>6</sup> Ethoca Payment Network, "Stopping Fraud, Accepting More Transactions": https://macmember.org/library/public/Ethoca.pdf

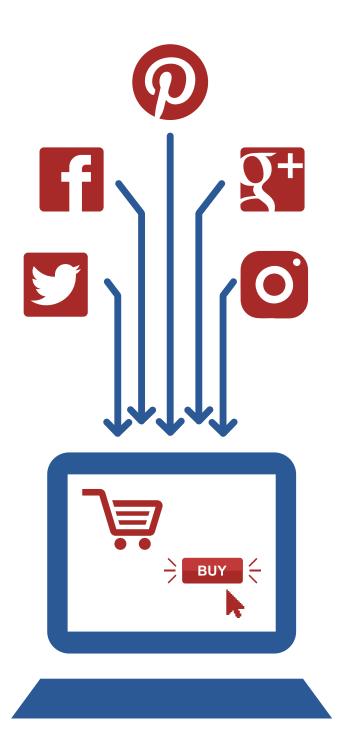
#### CONTEXTUAL COMMERCE

Contextual commerce is often described as "the future of payments". It's the notion of bringing the transaction process to the customer, no matter where they are on their mobile device. Instead of relying on the customer to find the merchant, the merchant can now meet the customer at their current "location", filling the gap between research and purchase.

A good example of this is Facebook Messenger which allows users to shop, request an Uber, or even manage flight bookings, all within one application. Instead of having to exit the messenger system, all can be done within the same app and represents a fully encapsulated solution.

Social Media, in particular, is where contextual commerce has the greatest impact. With users spending on average close to two hours a day on different social media platforms<sup>7</sup>, retailers are starting to realise the power of the "buy-now button" that allows browsers to instantly purchase items that they see on platforms like Instagram and Pinterest, without having to download the vendor's app.

What makes contextual commerce so successful in the online payments game is that, apart from presenting an offer at the right time, the process also offers a highly relevant product or service particular to the individual. Having the right timing if you offer a relevant product at the right time, you are more likely to make a sale. And this is what contextual commerce gives the merchant, an opportunity to offer a highly relevant product at the right time.



 $<sup>^{7}\ \</sup>text{http://www.socialmediatoday.com/marketing/how-much-time-do-people-spend-social-media-infographic}$ 

## DIGITAL CURRENCIES

The birth of digital currencies started in 2008, when the concept for the first digital coin, bitcoin, was released. Nine years later and there are now more than 700 different digital currencies in circulation<sup>8</sup> with a total market value of over US\$100 billion.

Digital currencies (or cryptocurrencies) like bitcoin, ether and litecoin has grown rapidly in popularity over the last few years, especially in online payments. Many online outlets will now accept digital currencies as a form of payment, including giants such as Microsoft and Expedia.

Although the overall market size is still relatively small, there are a number of reasons why experts believe digital currencies will completely revolutionize online payments.

The first is cost. Transactions using digital currencies don't have to pass through a central authority, like a bank, meaning associated costs are kept to a minimum and much lower compared to traditional payment methods.

Blockchain technology (the foundation on which digital currencies exist) also allows individuals to make payments without giving up too much personal information. At most, all you need is your name, email and an online wallet that can process digital currencies.

Digital currencies can also be sent and accepted from anywhere around the world in seconds, without having to worry about exchange rates or international banking red tape, making it a much more frictionless experience.



 $<sup>^{8}\,\</sup>text{https://youngadvisorygroup.nl/how-digital-currency-is-disrupting-the-international-payment-landscape/}$ 

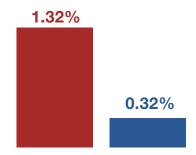
### ARTIFICIAL INTELLIGENCE

Artificial intelligence is not a new concept and most of us already come in to contact with it in some shape or form during our daily lives (think Apple's Siri or automated customer service lines). What is more of a new phenomenon is the use of AI in online payment solutions.

Al is not a single technology but a broader term that covers numerous processes, including machine learning, chatbots, and speech recognition.

For example, Amazon's Alexa enables users to buy products from Amazon purely through voice commands, and MasterCard introduced "selfie" payments, allowing customers to complete the checkout process by looking at the selfie camera and blinking.

Al is also widely used in fraud detection and prevention. Machine learning and deep learning techniques are used to study, analyse and compare thousands of transactions. Program software can then use this data to learn the signals of friendly and fraudulent transactions, allowing it to make future split-second decisions on the authenticity of a particular payment. It's this exact method that helped PayPal reduce their fraud rate to 0.32%, well below the industry average of 1.32%.



PayPal fraud rate reduction



## CONCLUSION

Online payment solutions will continue to evolve as consumers expect more from the technologies that underpin these platforms. Speed, security, and frictionless transacting will stay the main driving forces that push the industry forward. The good news though is that, at least for now, it would seem that developers are keeping up with the growing demand for minimal-effort processes.

