Quarterly Payments & eCommerce Overview





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About Author

This report brought to you by Maxpay.

About Maxpay:

Maxpay is an international payment platform which helps monetize marketplace, online storefront and subscription service in a few clicks. Unlike its competitors, Maxpay provides not only payment solutions, but also the consulting services for merchants to help them get more benefits and full legal support including assistance with getting PCI DSS certification. The service analyzes user's business model and gives clear recommendations how to improve it with the most suitable Maxpay options.

Maxpay partnerships with 32 banks in USA, EU, Asia as well as companies and partners from 49 jurisdictions. Maxpay is PCI DSS level 1 V 3.1 certified.

One of our main issues that we focus on is **anti-fraud**. Maxpay's Covery is the fraud prevention platform that helps merchants to fight fraud and lower the operational overheads up to 95%. It brings together event chain analysis, feature engineering, rule management and machine learning to obtain the most accurate results. The solution adapts to any incoming data is fully customizable and suitable for any industry, merchant business model or traffic source. Covery currently analyzes over 5 000 000 actions daily in both high and low risk segment. The system only needs 0.5 seconds to complete an analysis of a customer and make a decision. Covery is scalable, so it can easily increase capacity as needed.

For more information, visit start.maxpay.com or follow us on <u>Twitter</u> or <u>LinkedIn</u>.





Introduction

Electronic commerce (eCommerce) is a business model, that enables a firm or individual to conduct business over an electronic network, typically the internet. Electronic commerce operates in B2B, B2C, C2C and C2B market segments. Almost any product or service can be offered via ecommerce, from books and music to financial services and plane tickets.



There are the following main eCommerce players:

Payment Gateway - Companies which capture the consumer payment instrument and transaction amount data online and pass them to acquiring bank for authentication.

Acquirer Processor – Companies which receive the data sent by payment gateways on behalf of the acquiring bank, and settle transactions with the issuing financial institutions.

Payment Network – Companies which are a network of financial institutions, and settle financial transactions between issuers and acquirers.

PoS Suite – Companies which capture consumer payment instrument and transaction amount data offline and pass them to the acquiring bank for authentication.



Summary

The world economy is in the process of significant change. Digital technologies are penetrating all spheres of human life, including the payments industry. We have prepared for you an overview of the latest developments, trends and innovations in eCommerce industry.

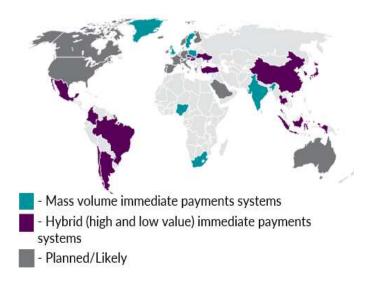
Main points of the research:

- Online payment transaction volumes to accelerate y-o-y growth. Most of online payments taking place in retail segment
- □ The share of alternative payment methods will increase to 58% next years. eWallets drive the non-card online payments volumes with PayPal dominating the market.
- Asia is the biggest and fastest growing online sales market
- Different west countries have different preferred payment methods
- □ Each industry develop and expand its online payment activity
- World moving forward real-time transactions, mobile payments and implementation such technologies as blockchain, AI, IoT.

Global Trends

Long term trends:

The world keep moving on the building 1 the **global** real-time payment system. 18 countries have responded and now have 'live' RT-RPS systems in place. Additionally. 12 countries are 'exploring/planning/building', and another 17 countries are 'exploring' through a pan-European initiative. Most of these RT-RPS systems have common characteristics: instant clearing confirmation to support instant or near real-time posting by the banks, full (or very near) 24/7/365 operation and a drive for a richer data standard, such as ISO 20022.



² New **mobile technologies** have been becoming more accessible within the last decade, and it's even more noticeable when you check the statistics of <u>trends</u> for last two years, be it holiday or regular online sales. No **mobile payments** <u>account</u> for over 30 % of all global online transactions. It's expected that the amount of mobile users will grow from 4.8B in 2015 to 5.5B by 2020.

³ Blockchain, the distributed ledger technology underpinning bitcoin, stole headlines from bitcoin in 2016. Much of the investment seems to be moving away from digital wallets and cryptocurrency applications and toward corporate payments and trading applications, where proponents say blockchain can cut costs and improve security. Capgemini estimates the global market for blockchain technology will hit \$400 million in 2019. Goldman Sachs previously had supported the blockchain consortium R3, but departed in 2016, along with Spain-based Banco Santander, according to CoinDesk. Microsoft and Bank of America in 2016 said they will team up to further develop blockchain technology, and BNP Paribas said Dec. 21 it had completed its first cross-border B2B payments between corporate clients using blockchain.

Global Trends

Artificial intelligence burst on the scene in 2016. Although it's still in its early 4 days, the largest banks (Bank of America, Santand-er UK and RBS) and networks, including Mastercard and American Express as well as startups like Varo Money, are launching chat bots or virtual assistants to help cardholders manage their money. Integrating chat bots into messaging platforms like Facebook Messenger and WeChat also is on the rise. Companies whose bots are available on Facebook have access to 1 billion users in 200 countries who use Messenger monthly, and developers and businesses have built more than 30,000 bots for the app, according to the social network. By 2020, it is estimated that the number of Internet of Things connected devices is expected to grow exponentially to 50 billion. Numerous analysts and research firms, often in their 2017 prediction lists, say it's only a matter of time before cybercriminals turn serious focus to IoT, through which they can gain access to sensitive consumer and payment data. Forrester Research, for instance, anticipates a "large-scale IoT security breach" in 2017. And the Smart Card Alliance is calling for adding embedded security to IoT devices, similar to that which already is being used in mobile devices, payment chip cards and secure identity tokens.

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Hot Topics



Brexit. The U.K.'s biggest export is financial services. In terms of payment services, more than 75 percent of e-money and payment services firms operating in Europe are based in the U.K. For payments institutions and e-money issuers based in the U.K., their ability to passport their licenses into EU countries is in jeopardy. Brexit also is likely to cause issues for major processors and cross-border acquirers for whom London has been a key European and cross-border processing center.



Visa Inc.'s acquisition of Visa Europe. Experts suggest that bringing Visa Europe back into the Visa Inc. business enables Visa to better compete for global business. The move also could spur EU banks to form a Euro-centric payments network, similar to national networks in Russia and India, to compete with U.S.-based Visa and Mastercard.



Wirecard strengthened its position in North America with Citi Prepaid deal. In addition to expanding on the market, the move could spur significant adoption of virtual incentive cards in the numerous mobile wallets Wirecard supports.

Żelle

Chase Pay and Zelle get real. Chase's long-promised mobile wallet entry finally makes its debut in early 2017. Chase's model holds some inherent advantages, including network effects across both consumers and merchants. Time will tell whether it's worth the hype. Ditto for Zelle, Early Warning System's financial-institution-led answer to Venmo's popular person-to-person app (Zelle has been actively courting credit union participation). Don't expect either solution to set the world on fire immediately. But their trajectories will be key indicators for a pair of persistent stubborn corners of payments innovation.

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Global eCommerce Industry Overview

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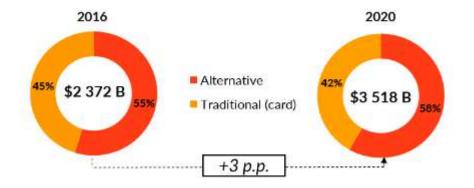


The global ecommerce transaction value will grow from \$2 372 b in 2016y to \$3 518 b till 2020y.

Over 80% of ecommerce transactions comes from retail segment.



The y-o-y growth will accelerate from 8,5% to 10,4%, which is more than 3 times higher than world GDP growth rate (2,3-2,9%)



Alternative payment methods already represent biggest part of ecommerce transactions and will continue to growth.

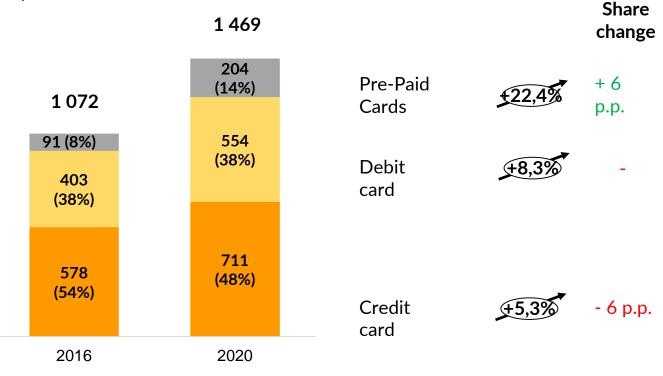
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Traditional Payment Methods

Highlights:

- □ Traditional payment methods^{*} volumes will lose 3,4 p.p. of e-commerce market share as alternative payments will developing 1,5 times faster.
- Despite this, card payments will still be a huge part of online transaction industry. The volumes will reach \$2 049 b in 2020y, up 37% from 2016y, which will represent almost 42% of the market.



1) Credit and debit cards

- □ Size 2016y: \$578 b (54%) for credit and \$403 b (38%) for debit cards
- **Examples:** Visa, Mastercard, American Express

Credit card payments segment has the second highest volumes among all methods. Debit and credit card methods expected to hold the position of strong demanded payments in the future.

The launch of new debit and credit cards that utilize cryptography, like EuroPay, MasterCard and Visa, has resulted in <u>decreased</u> fraudulent activity. These cards detect modified transactions and require a pin for added protection. For merchants that accept chip cards, counterfeit fraud fell 26% in January compared to last year. In some countries card payment methods <u>accounts</u> more than 90% of e-commerce transactions.

* - methods that are cards running on global scheme networks such as Visa, Mastercard or American Express

Sources: 1. Worldpay



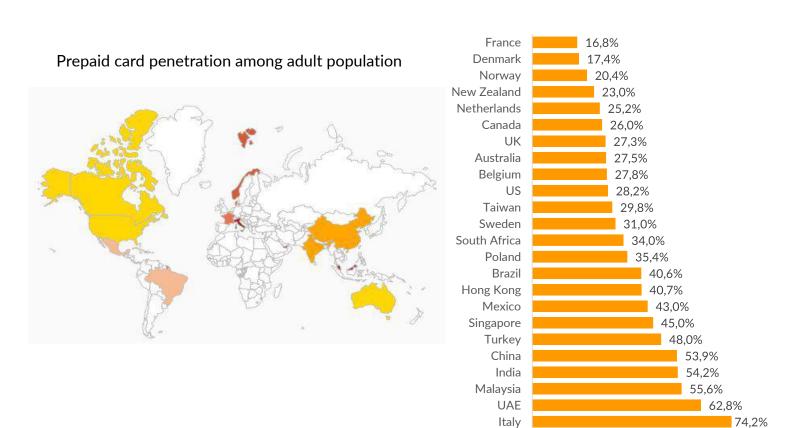
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Traditional Payment Methods

Pre-Paid Cards

- **Gize 2016y:** \$91 b (8%)
- **Examples:** VirginMoney

Such cards often offered to the un/under-banked, younger people, or people with a poor Credit history. It is <u>forecasted</u> by payment institutions potential of EUR14 billion for the prepaid market.



80,0%

0,0%

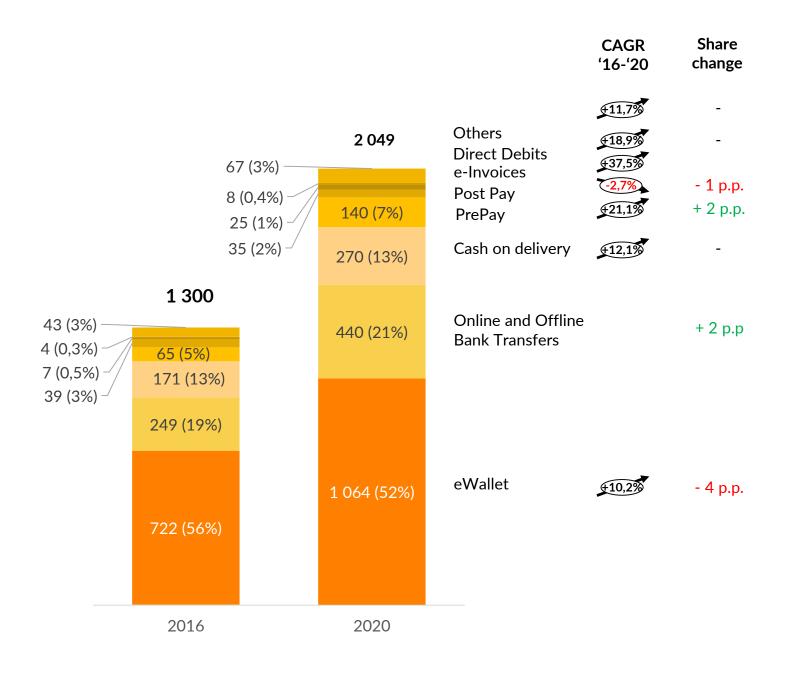
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Highlights:

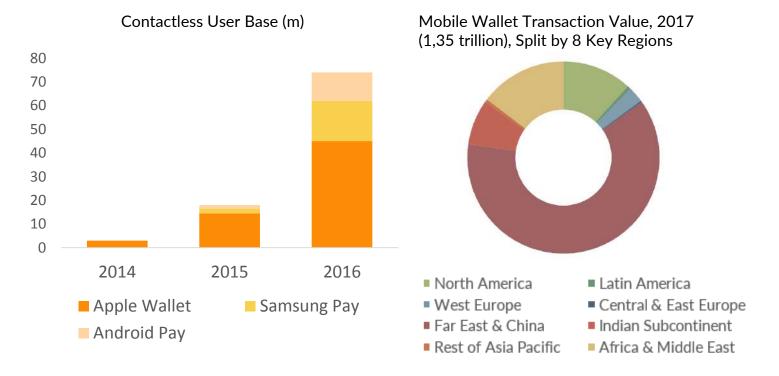
- Alternative payment volumes will increase for more than 57% between 2016 and 2020 years, reaching \$2 049 b.
- The most active growing segments will be e-Invoices and PrePay payments, while Post Pay became less interesting for merchants.



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1) eWallet

- □ Size 2016y: \$722 b (55,5%)
- **Examples:** Alipay, Tenpay, PayPal, Qiwi, Yandex.Money
- eWallet became the biggest and <u>fastest</u> growing payment method in the world. They are especially popular for purchasing digital goods and video games because of its convenience, simplicity and security.
- Mobile wallet payment will show a significant growth, reaching \$1.35 trillion of transaction value in 2017y, up by 32% from previous year. More than half of them come from China and Far East. Apple Pay, Android Pay and Samsung Pay dominate the Mobile wallet market, reporting almost 4 times user base growth between 2016 and 2015.
- Consumers <u>believe</u> that Mobile Operators (Vodafone, T-Mobile, Virgin), Handset Providers (Apple, Samsung, HTC, LG) and Payments Network (AmEx, MasterCard, Visa) will be the main players to drive growth in digital wallet industry.



India market is one of the most hot topic these days as the Government <u>drafts</u> ewallets payments regulation.



2) Real-Time and Offline Bank Transfers

- □ Size 2016y: \$249 b (19,2%)
- **Examples:** iDeal, Sofort Banking, eNets, Przelewy24, Safetypay, Dineromail
- Such methods got popularity and widely expanding mostly through Europe and its <u>B2B</u> transactions. Real-time and offline bank transfers are often used by online gamers, gamblers.
- □ Australia is an interesting market as lawmakers will <u>introduce</u> an open access payments platform in 2017, making real-time fund transfers a reality.

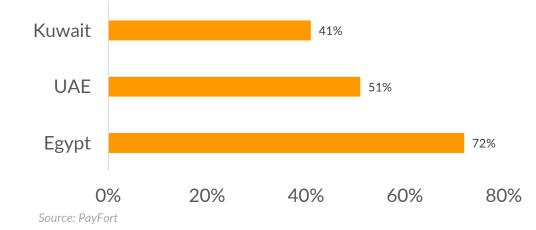
3 Cash on delivery

- □ Size 2016y: \$171 b (13,2%)
- **Examples:** Flipkart, Amazon and Snapdeal, Aramex, Shopclues
- This type of payments have a <u>huge</u> utilization in Middle East, <u>India</u>, Far East and dominate other methods in those countries.

At the same time the <u>ban</u> on high value currency notes in India, low collection rates and high risks could inhibit the growth of COD business.

The Cash on delivery in the Middle East

The payment method is hugely popular in the region, and is considered a gateway to ecommerce adoption



PrePay

- □ Size 2016y: \$65 b (5%)
- **Examples:** Paysafecard, NeoSurf, Cashu
- □ This payment type show a strong customer engagement as clients <u>extending</u> their partnership with prepay payments providers.



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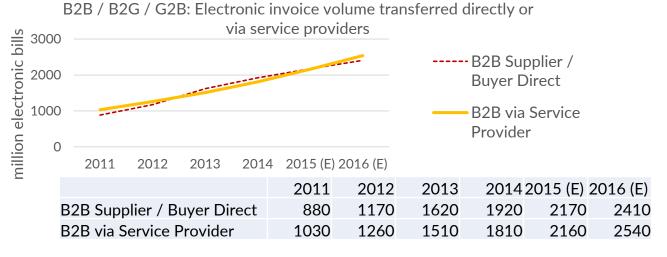
PostPay

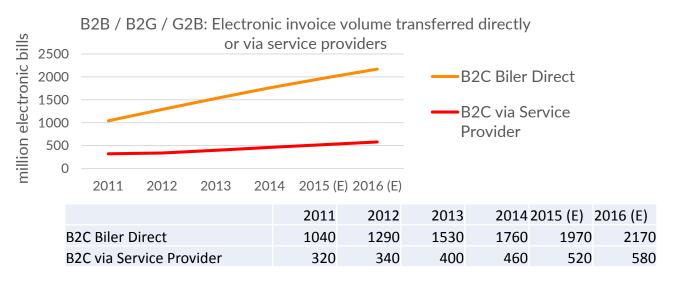
- **Size 2016y:** \$39 b (3%)
- Examples: Konbini, Boleto Bancario
- This payments are popular in <u>Brazil</u>, Latin America, Japan. Post Pay is the only one method that predicted to decrease transaction volumes in next years.

) E-invoices

- **Size 2016y**: \$7 b (0,5%)
- **Examples:** Klarna, AfterPay
- e-Invoicing industry is developing with governments across the world are officially <u>headed</u> to towards e-invoicing. That's why this method will have the highest growth rate during the next few years.

The other important trends is that e-Invoice payments preparing to go mobile. Scandinavian countries and Latin America are the most <u>active</u> markets in case of e-Invoicing.





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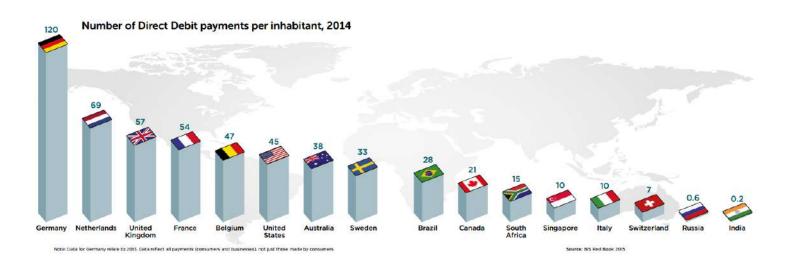
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Direct debits

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- **Size 2016y:** \$4 b (0,3%)
- **Examples:** SEPA DD, ELV
- Direct Debit are one of the most trusted and easiest way of payments. In 2014-15 the segment has the <u>lowest</u> cancellation rates in its history. Europe and USA has the <u>highest</u> percentage of DD payers.



8 Others

- **Size 2016y:** \$43 b (3,3%)
- **Examples:** Bitcoin, Zong, BOKU

Bitcoin's **digital currency** is <u>growing</u> at incredible rates, with more than \$1.46 trillion in circulation as of June 1, 2016, more than 100,000 bitcoin transactions are <u>taking place</u> every day. The number of merchants, which accept this crypto currency is <u>growing</u> worldwide.

Presently online purchases of digital content (games, music, video, e-books, ringtones) are the primary <u>use case</u> for **direct carrier billing**. Juniper Research believes that the value of digital content billed via direct carrier billing will rise from just under EUR 790 in 2015 to more than 5,2 billion in 2017, representing an average annual growth over the forecast period of 39%.

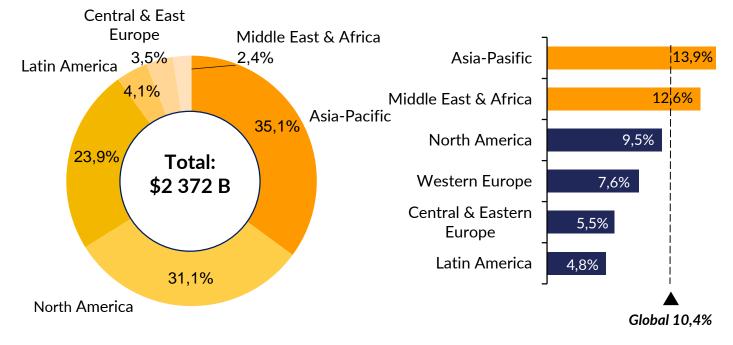
The **other alternative payments** are also <u>increasing</u> their presence in e-commerce market.



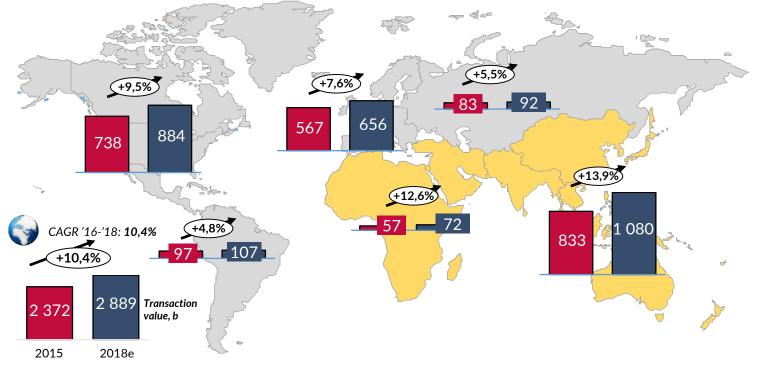
Geographical Structure Of Payments

Three main regions accounts more than 90% of the market

Asia and Africa will have the highest growth rates 2016-18



Till 2018y Asia will remain the biggest market, Africa – the smallest



Regions with CAGR rate higher than global market index

Sources: 1. Worldpay 2. eMarketer

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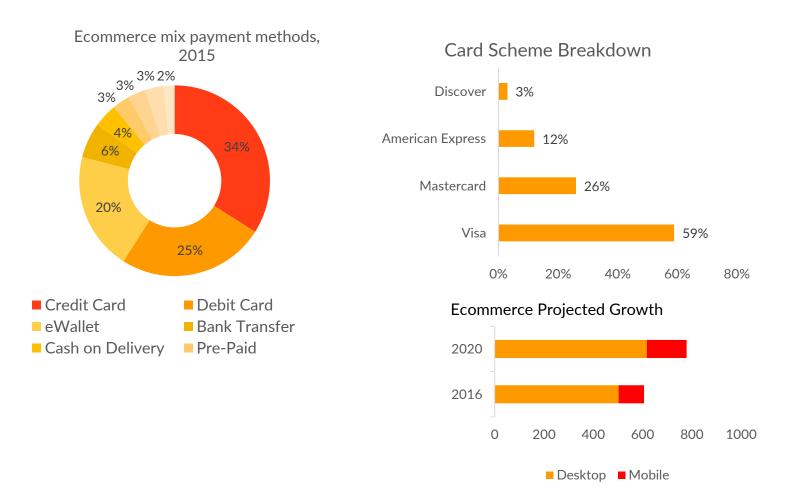
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USA

Highlights:

- □ Although PayPal was used by 43% of online shoppers in 2014, its position is threatened by new market entrants such as Apple Pay and Google Wallet. Consider oiering a range of eWallet options on your website.
- □ Credit Cards will become less dominant in the world's single largest eCommerce market.

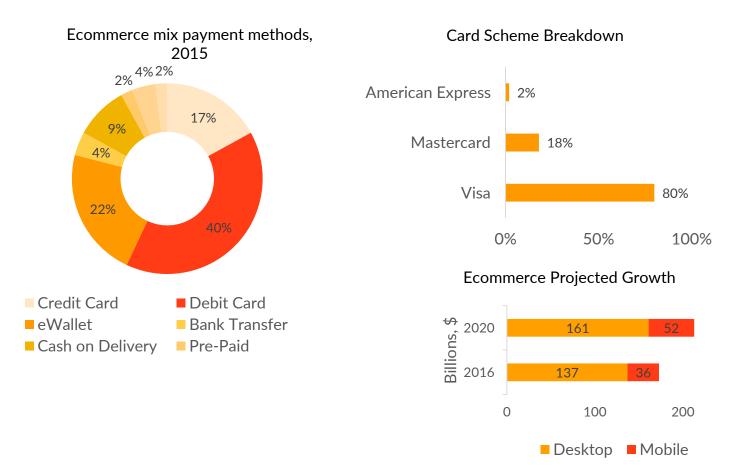


Popular alternative payment method: PayPal, ACH, BANK TRANSFER

UK

Highlights:

- With mCommerce set to almost double over the next few years, it's vital to offer a great mobile shopping experience. Online businesses should consider accepting a range of eWallet options alongside credit and debit cards to appeal to most UK consumers.
- □ As an early adopter of eCommerce, the UK's eTail market has matured, and growth is steady rather than dramatic. However, smartphone penetration is high and the mCommerce sector is likely to almost double over the next few years. In terms of payment, cards are the most popular method, with 57% of the market, while eWallets follow behind at 22%. However, the share of cards is expected to decline over the next few years.



Popular alternative payment method: PayPal, Cash on delivery, bank transfer

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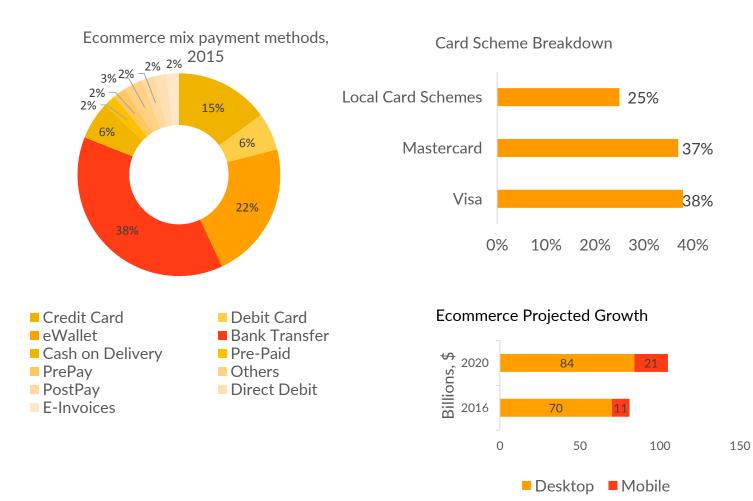
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Germany

Highlights:

- □ With over 50% of German consumers expressing a desire for stricter laws with regard to privacy and security, shoppers want to see payment authentication and digital certificate logos to make them feel more secure.
- □ Bank Transfers are set to continue to dominate the German payments landscape, while the popularity of cards is expected to decline further.

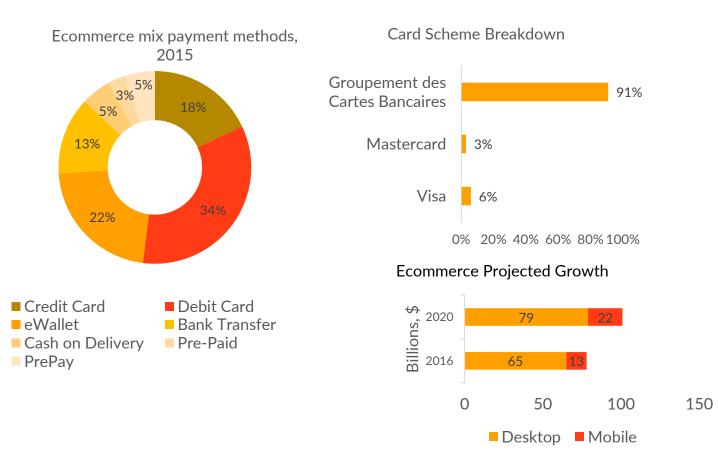


Popular alternative payment method: Sofort banking, Sepa DD, Giropay

France

Highlights:

- □ France already has three times as many users of Paylib than PayPal, and the trend is set to continue in the future, so merchants should offer both eWallets types to attract French consumers.
- □ Although France is innovating in the payments arena, cards remain the dominant online payment method.
- One of Europe's largest markets France, has high levels of eCommerce, leaving less opportunity for rapid growth compared with some other countries. However, although growth is modest, it remains significant, particularly in the mobile channel. While a range of payment methods are used, the most popular is Debit Cards, followed by eWallets. Card Bancaires maintains a relatively high share of transaction volumes. The new bank-owned national eWallet (Paylib), has become very popular in the market.



Popular alternative payment method: PayPal, Paylib, bank transfer

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Payments In Different Segments

Online Games

□ Superdata research <u>showed</u> that:

- eWallets hold the greatest market share in every region (25-40%) except Latin America (17%), Paypal is the dominant brand in North America (40%) and Western Europe (25%).
- Credit and Debit cards come in as the second most popular payment method in every region (22-33%) but Eastern Europe (17%).
- Mobile payments market share is up 11% year-over-year, while Prepaid cards fall by 12%. Increased smartphone adoption and the emergence of convenient payment methods mean more unbanked players are opting for Mobile carrier billing instead of paying cash for physical game cards
- Direct Debit and Real-Time Bank Transfers saw an 8% decline in market share from 2014 as a result of the security and convenience eWallets offer in their stead.
- Bitcoin is steadily gaining market share in most regions. Large gaming marketplaces like Zynga, Microsoft and G2A are also facilitating Bitcoin payments

	Credit/Debit card	Direct Debit/ Real-time Bank Transfer	Prepaid card	eWallet	Mobile carrier billing/SMS	Bank Transfer	Phone	Internet	Other
North America	32.7%	0.5%	15.7%	39.8%	5.6%	2.0%	0.3%	0.0%	3.4%
Latin America	21.3%	0.7%	13.4%	17.0%	21.0%	23.7%	0.2%	0.0%	2.8%
Eastern Europe	17.4%	2.8%	6.9%	34.9%	20.9%	12.7%	0.2%	0.0%	4.1%
Western Europe	23.5%	13.7%	14.1%	24.5%	14.6%	3.3%	3.0%	1.7%	1.6%
Middle East/Africa	23.6%	5.2%	11.8%	29.8%	13.5%	9.9%	0.0%	0.0%	6.1%
APAC	22.5%	5.5%	11.3%	32.2%	17.1%	9.4%	0.0%	0.0%	1.9%
Giobal total	24.7%	5.4%	12.7%	31.6%	14.4%	7.8%	0.6%	0.3%	2.4%

□ Another important point is that gamers <u>prefer</u> to use those payment methods which allow them to pay without entering credit card or any other id information.

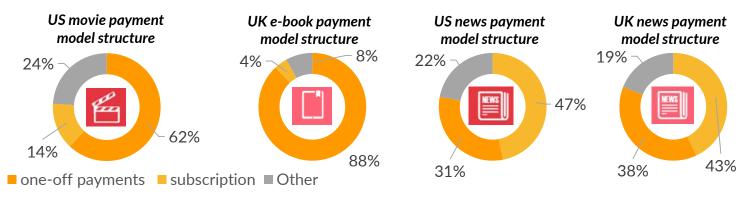


Payments In Different Segments

) Media, Digital Content

2

- Industry residents <u>indicate</u> on that social media already turning into full-fledged marketplaces. Social networks now have p2p payments, social apps, products tags etc. Recently Facebook messenger has <u>allowed</u> users to pay internationally.
- Digital content in USA and UK <u>usually</u> being bought by one-off payments instead of subscriptions. In case of buying digital music Americans preferred one-off payments in 78% of cases, Brits – in 82%. E-books and movie content also more often being purchased by one-off payments. The same time magazines distributed by subscription often enough.



3 Travel & Entertainment

- □ Travel industry <u>going</u> mobile, digital and expand through emerging markets:
- Online bookings have a huge growth opportunity as 83% of tour and activity companies still work with traditional methods for their daily management, which limits digital customers to order the products via online channel
- Tour and activity providers tend to get 30-40% more bookings after implementing an online booking system
- Millennials are 'fluent and comfortable with booking plans online, as well as on mobile and tablet devices'
- □ 65% of tourist book hotels reservations for the same day on a mobile device
- □ Every year travelers expect to spend <u>more</u>.

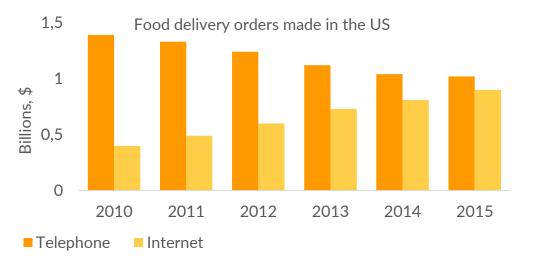


Payments In Different Segments

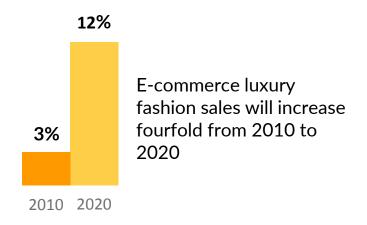
ight) Physical goods (Food, Fashion and Jewelry)

4

□ Toasttab <u>predicts</u> that mobile payments will be one of the most important changes in Food&Restaurant business to take place in 2017. The same time industry is continuing to <u>go online</u> and mobile as its demanded, more convenient and increases the merchant's profit. As an example, Domino's Pizza <u>has</u> 77.7% of UK deliveries through their ecommerce site, and 48.6% of online sales made through the Domino's Pizza mobile app.



Over 60% of Fashion executives <u>sees</u> digitalization and e-commerce as the top industry opportunity.



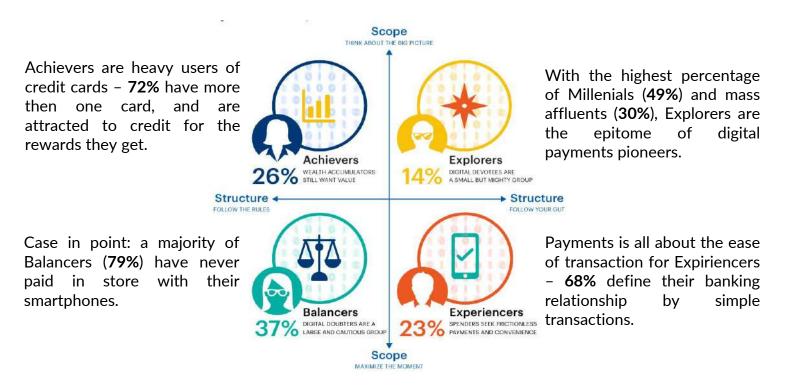
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□ The volumes of holidays online spending <u>increase</u> every year, especially in China.



Accenture <u>allocates</u> four typical North America spenders, and the smallest group is the most attractive for merchants.



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How to Integrate a Payment Gateway Into a Website

D Part 1. Choosing a Payment Gateway

1. Understand what the gateway does. The payment gateway processes the customer's credit card information by sending the data to the gateway's web server.

2. Check with your web host. Your web host or online shop software provider may provide payment gateway services. Check your website's control panel or your online shop's admin page to see if there are payment gateway options.

3. Browse your options. Before start looking for a gateway, check which gateways your shopping cart software supports. Your shopping cart software's support site should have a list of compatible payment gateways. Some of the more widely supported gateways include: PayPal, Payza, Perfect Money, Egopay, SecurePay, Authorize.net, Verify, Braintree, SecurePay.

4. Pay attention to fees and conditions. The payment gateway will typically charge you a onetime setup fee, a monthly fee, and then charge a small fee for each transaction processed.

5. Pick between an external or a direct gateway. External gateways ("redirect") send your customers to another website to process the payment. Direct gateways ("transparent") do the processing within your store, keeping the customer on your site. A direct gateway look more professional.

6. Sign up for a merchant account. You will need to sign up for a merchant account, which you then link to your payment gateway. This will allow you to receive payments from the customer. Merchant accounts will typically charge you per transaction as well.

7. Sign up for your chosen payment gateway. Once you sign up for your gateway, you will be provided the necessary information that you will need to provide to your online store software. This could be a login name and password, or it could be an ID and an authorization file.

Part 2. Integrating the Payment Gateway into a Web Shop

1. Set up your web shop. Most online retailers will use third-party software to create a web shop for their customers. This software handles the creation of the ordering page as well as all the code for transferring payment information to the gateway. It is one of the most difficult tasks so it's usually left to professionals.

2. Add payment methods. The process for this will vary from service to service, but generally you will need to enter your payment gateway information for each method of payment you intend to accept (Visa, Mastercard, etc.). Your payment gateway determines which cards are accepted.

3. Test the gateway. You will typically be provided Test or Sandbox accounts by your payment gateway service. These allow you to perform fake transactions to ensure that the payment process is working correctly. Be sure to test before making your store live. This will vary again from service to service. Check your payment gateway's support site for details on testing your gateway's integration.



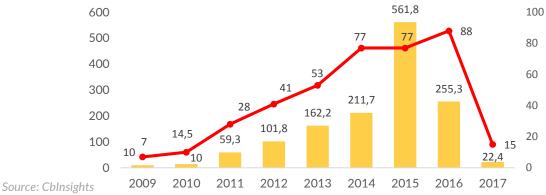
How To Choose A Payment Service Provider

- 1. How do you want to take customers details? What you decide will influence the technical option you choose for a payment gateway.
 - Direct, fully-integrated payment form: details sent to your server. This is the smoothest option for customers, but involves the highest risk and could come at significant cost, given you will need a hosting solution with PCI DSS compliant servers.
 - Redirect or iFrame. Both options take or place the customers details within your payment providers control. Far more secure, resulting in less risk/cost to your business. The only downside is it can be more difficult to make the page or a secure iFrame (a web page within a web page, e.g. in the checkout) match the design features of the rest of your website.
 - On-site payment form: details sent to a secure server. Similar to an iFrame, except the payment form is served as part of your website. However, the customers details are sent directly to the payment providers servers, rather than your own. The PCI compliance is more complicated, but not as involved as the first option.
- 2. Does your website / e-commerce platform support your payment gateway options? Once you have decided how you want to take customer details, you need to find out what payment providers your website or ecommerce platform can support. Not all are compatible, but most leading services have developed plugins or extensions for a wide range of platforms. Secure Trading partner with numerous shopping cart providers, ensuring you can select the best options for your business and customers.
- 3. Do you also need a merchant account? Some payment providers only offer the gateway (the secure technology that sits between your website and payment networks), whereas others include a merchant account or are fully integrated with that option.
- 4. Should you offer PayPal? With 197 million active PayPal accounts, this community is hard to ignore. PayPal processed \$99 billion worth of payments in Q4 2016 alone. As a trusted alternative payment method, you could be missing out on substantial revenue if you don't provide this option for your customers.
- 5. What fees are included? Payment gateways and merchant accounts don't have a one-sizefits-all approach to fees. There will always be a mix of monthly fees, fixed (per-transaction) fees, variable fees (based on the volume/amount of transactions processed) and extras, such as chargebacks and customers using international cards. Always ask to see the full range of fees, to ensure you won't get any surprises from the fee schedule. Ensure you know how these will be charged too. Some will take them direct from the merchant account, whereas others will charge separately.
- 6. What's the providers' reputation? As with any service a recommendation from another user is a useful starting point. Check out reviews, ask for testimonials and explore the payment process on other retailers' sites. A payment provider should offer all the services you need, integrate easily with your website and have great customer service. It's also worth asking around on social networks, such as LinkedIn, to find if anyone has issues with various brands.
- 7. What payment methods does the provider support? All payment providers should, at the very least, support Visa and MasterCard. And then it should be a matter of ensuring your provider supports the most popular methods in your market, such as PayPal, American Express, and others depending on customer preferences. For those retailers with an International customer base, it's extremely important to ensure your chosen payment service provider supports localized alternative payment methods.



Venture Investment Overview

In 2016 the payments startups funding volumes reach \$255 mln. That is twice less than in 2015 (2015 figure include \$400 mln AliPay round), but 21% higher that in 2014. Deal volumes was 14% bigger if compare to 2014-15 numbers.



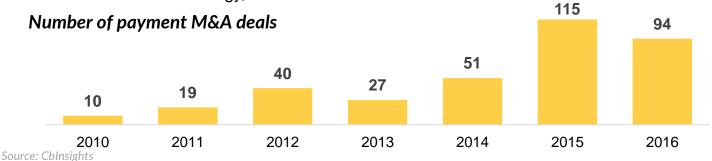
Most of 2016 top-20 startups providing online payments platform, cryptocurrency payments and special on-demand services.

Date	Company	Amount, \$mIn	Investor	Round	Description			
Feb-16	Blockstream	55,0	AME Cloud Ventures	Series A	Platform to optimize Bitcoin trade			
	Wangyudashi	23,0	Shenzhen Capital Group Co	Series A	Platform for internet cafe payments and eSports registry			
Nov-16, Oct-16	Conekta	14,0	Conconi Growth Partners, Fomento Economico Mexicana, Jaguar Ventures and Variv Capital	Series A	Online-payment system company			
	Assembly Payments	10,0	Carsales, Cultivation Capital	Series A	Online payment tools provider			
Feb-16	PayActiv	9,2	Softbank Capital	Series A	Provides employees with access to their earned but unpaid wages			
Jun-16	Tapp Commerce	9,0	AMMA Private Investment	Series A	Developed and operates a scalable secure payment processing platform			
Jun-16	OptioPay	7,9	Auden, Berlin Ventures, DvH Ventures, Elkstone Capital, main incubator and Nord/LB	Series A	Online payment platform			
Feb-16	Simplex	7,0	Bitmain, Cumberland Mining, FundersClub and Undisclosed Angel Investors	Series A	Develops software that makes bitcoin purchases quick, safe, and reliable			
Feb-16	Juspay	5,8	Accel Partners India, Ashish Hemrajani, Parikshit Dar and Rajesh Balpande		Optimize checkout process			
Dec-16	Wyre	5,8	9fbank, Amphora Capital, Baofoo Internet Technology, Digital Currency Group and Draper Associates	Series A	Created a foreign exchange engine room			
Nov-16	snapCard	5,6	Insikt	Series A	Provide tools to start accepting digital currency payments			
Oct-16	Finrise	5,4	Matt Humphrey, Mayfield Fund, NFX Guild, Sam Hodges and Western Technology Investment	Seed VC	Serve payments for out-of-pocket healthcare services			
Oct-16	Splitwise	5,0	Bullpen Capital	Series A	Provide tool to track bills for friends and roommates			
Dec-16	instantPay	5,0	Kaleden Holdings and RB Investments	Seed VC	Provides utility payments and financial services			
Sep-16	Sourcery	5,0	Marker and Steadfast Capital	Series A	Digital payments and commerce platform			
Nov-16	Flexiti Financial	5,0	Globalive Capital and Undisclosed Investors	Series A	Provide of point-of-sale financing and payment technology for retailers			
Aug-16	DailyPay	5,0	Frontier Venture Capital, Inspiration Ventures and RPM Ventures	Series A	Empowers companies to offer daily payments			
May-16	Cloud Alliance	5,0		Series A	Developing a comprehensive payment solutions portal			
	SupportPay	4,1	Continental Advisors, Fenway Summer Ventures and Moneta Ventures	Series A	Automated child support payment platform			
Aug-16	Coinify	4,0	SEB Venture Capital and SEED Capital	Series A	Blockchain payment service provider			



M&A Activity Overview

The 2015-16 shows a notable increase in the number of M & A deals in the payments industry. It is expected that activity will accelerate further as companies will try to accumulate the technology, resources and customers.



The key reasons for payment companies to participate in M&A are to acquire direct competitor in order to enhance positions on existing market or expand on the new one, and the other reason is to extend portfolio of services.

- Investors are ready to overpay for the acquisition of the target companies and have high expectations from new partnerships. This is evidenced by the high median multipliers:
 - TEV/EBITDA 29,4x
 - TEV/Revenue 4,6x

Year	Acquirer	Туре	Country	Value, \$ mln	Target	Туре	Country	TEV / EBITDA	TEV / Rev.
2016	Visa Inc.	Global payment network	USA	18 784	Visa Europe Limited	Europe payment network	United Kingdom	38,7x	10,7x
2016	Global Payments Inc.	Payment services provider	USA	4 457	Heartland Payment Systems, Inc.	Payment processor	USA	37,5x	1,6x
2016	FleetCor Technologies, Inc.	Provider of fuel cards and specialized payment products	USA	1 249	Serviços e Tecnologia de Pagamentos S.A.	Provider of automatic vehicle identification	Brazil	21,3x	6,6x
2016	MasterCard Incorporated	Global payment network	USA	1 149	VocaLink Holdings Limited	Payment processor	United Kingdom	96,6x	4,6x
2016	Fiserv, Inc.	Payment services provider	USA	200	ACI Worldwide, Inc., Community Financial Services Business	Online and mobile banking services provider	USA	-	-
2016	VeriFone Systems, Inc.	Payment services and devises provider	USA	90	AJB Software Design Inc.	Provider of payment gateway	Canada	NA	5,2x
2016	Fiserv, Inc.	Payment services provider	USA	65	Hewlett Packard Enterprise Company, Convenience Pay Services Business	E-payment services proviser	USA	-	-
2016	Ingenico Group	Payment services and devises provider	France	64	Nera Payment Solutions Pte Ltd.	Payment services and POS terminals provider	Singapore	-	-
2016	Global Payments Inc.	Payment services provider	USA	50	Web Active Corporation Pty Ltd.	E-commerce payment gateway provider	Australia	NA	2,4x
2016	Wirecard AG	Payment outsourcing and white label solutions provider	German y	35	Provus Service Provider S.A.	Payment services provider	Romania	-	-
2016	Wirecard AG	and white label		35		provider	Romania	-	

Key M&A deals 2016:

- competitor acquisition

- extend portfolio of services



M&A Activity Overview

Year	Acquirer	Туре	Country	Value, \$ mln	Target	Туре	Country	TEV / EBITDA	TEV / Rev.
2016	Cielo S.A.	Payment solutions provider in Latin America	Brazil	23	Multidisplay Comercio e Serviços Tecnológicos S.A.	Mobile payment solutions provider	Brazil	4,9x	0,5x
		Payment card processor	USA	10	CollectorSolutions, Inc.	Payment card processor	USA	8,4x	0,6x
2016	Ingenico	Payment services and devises provider	France	6	Lyudia Inc.	Payment services provider	Japan	NM	33,3x
2016	Ingenico Group	Payment services and devises provider	USA	-	Think&Go NFC SAS	NFC solution provider	USA	-	-
		Payment services provider	Channel Islands	-		Payment services and devises provider	Israel	-	-
2016	Fiserv, Inc.	Payment services provider	USA	-	Online Banking Solutions, Inc.	Payment services provider	USA	-	-
	HVNrocc	Global payment network	USA	-	InAuth, Inc.	Mobile payment services provider	USA	-	-
2016	Visa Inc.	Global payment network	USA	-	CardinalCommerce Corporation	Payment technology provider	USA	-	-
2016	FleetCor	Provider of fuel cards and specialized payment products	USA	-		Automotive payments provider	Netherland s	-	-
2016	Wirecard AG	Payment outsourcing and white label solutions provider	Germany	-	Uronald (ard	Prepaid card services provider	USA	-	-

- competitor acquisition - extend portfolio of services



