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Alternative payment solutions: how they are changing the payment scene

AXERVE WHITEPAPER



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Introduction

In a time where digital payments are on the rise both in the Ecommerce and brick-and-mortar landscape and projected to reach more than \$15.000 billion by 2027, with a CAGR of 16.3% over the period 2017-2027¹, it comes as no surprise that new payment solutions are quickly developing both at an international and local level. When we look at the evolution of payments, new methods have developed and changed quickly in the past 30 years, starting from the late 1990s with more traditional solutions like bank transfers, pay on delivery and credit cards, all the way to the more recent methods in the form of digital wallets, Buy Now Pay Later (BNPL), innovative Account-to-Account (A2A) solutions and the onset of cryptocurrencies. New necessities and the advancement of a modern and faster world have brought to the development of alternative solutions to the traditional methods of credit/debit cards, cash and checks, which we can refer to as "alternative payments".

In this whitepaper we dive into all the different types of alternative payments, their history and discuss what needs they fulfil across the world. By taking a close look at the market penetration of varied methods across geographies and product sectors, we analyse the uprising trend of new alternatives to traditional payments across the different countries in the world. In fact, only taking into consideration digital wallets, worldwide volumes are expected to reach 53% of the transaction total for Ecommerce and 39% for Point of Sale in 2025.²

We see that the growing adoption of alternative payments is also supported by Axerve's observational data, throughout all market sectors, from Fashion to Food&Beverage. Firstly, across Axerve's client pool that adopted alternative payments in their business, PayPal figures as the solution with the largest volumes across industries and geographies: 59% of the alternative payments' total. Moreover, when taking into consideration the Fashion sector, one of the most dynamic as it records the highest number of alternative payment integrations according to Axerve's observations, retailers who have integrated Klarna, have achieved peaks of transaction volume of over 54% with this method.

We can find many types of alternative methods on the market around the world, with specific differences in functions, popularity and usage according to the geographic region. In fact, on top of the international solutions that are common in different countries and even continents, there are many local alternatives that are in some cases extremely popular in specific areas, like iDEAL in the Netherlands.

Therefore, in this ever-evolving ecosystem, easy payment integrations become extremely important in order to be competitive and decrease time-to-market for businesses. Relying on payment infrastructures that allow flexibility of integration and optimised payment orchestration can be a strong asset for companies. Let's now dive deeper into the world of alternative payments and what they can do for your business.

^{1 -} FinTech - In-depth Market Insights & Data Analysis | Statista, 2022

Printech Trends 2022 | Statista, 2022



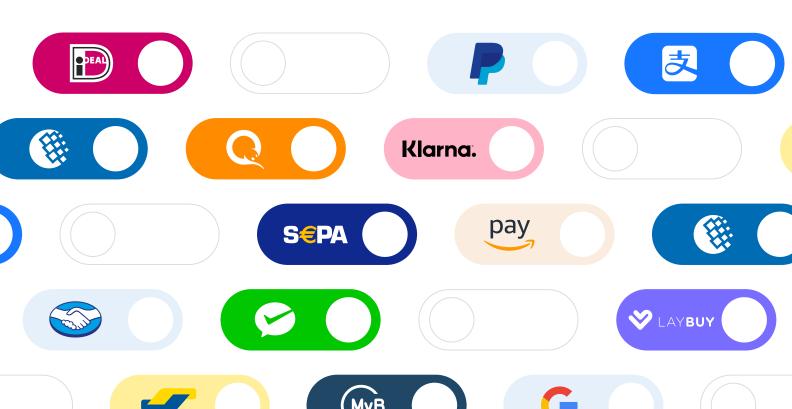
Alternative payments: what, when and why

When we look at the world of alternative payments, we refer to everything that falls out of the traditional payment methods that have been used both for online and in-store purchases, specifically all the payment solutions alternative to the main credit/debit card networks, cash and checks. However, these alternative solutions are now becoming so common that in some countries and regions they are more popular than traditional ones. Under the umbrella fall different types of payments that can be mainly grouped under digital wallets, Buy Now Pay Later solutions (BNPL), innovative Account-to-Account (A2A) payments and – even though still at an early stage – cryptocurrencies.

The rise of alternative payment methods is only the latest stage in a very ancient history, which started with barter and the first coins and evolved over the centuries to the first credit cards and then digital payments.

When

It all began in the mid-1990s, when the Internet became to all intents and purposes a space of mass communication and companies started to be attracted to its enormous potential for selling products and services. Which brings us to the first online payment, carried out in 1994 on the Pizza Hut online shop: this marked the transition from 'showcase' websites to actual Ecommerce through which making real purchases, also thanks to the rise of the first payment gateways. However, payments were still finalised by conventional methods: bank transfer, cash on delivery (also, collect on delivery) or the first MOTO systems, right up to credit cards.





Why

But these kinds of payments were not intended for the online space: traditional methods worked wonderfully for point-of-sale purchases and were then adapted to the new electronic commerce. The specific **limitations** that merchants encountered can be summarised as follows:

- Ecommerce was expanding rapidly across the world, but most of these payment methods could not cover all geographic areas, preventing businesses from growing internationally.
- Traditional payments often did not meet the buyer's needs, with a negative effect on customer experience, which is key for reaching and building loyalty among customers.
- The checkout process was often slow and complicated, conflicting with fast and frictionless types of technological experience that were then arising.
- A generalised lack of confidence towards buying on websites, enhanced by the fact that traditional payments had not been designed for online purchasing and its fraud risks.

And then came the solution: alternative payment methods.

In fact, alternative solutions have evolved in different areas of the world to answer to specific needs of buyers and to simplify the collection and money-exchanging processes. What we see is many local methods that have been developed around the globe and a number of international solutions that are common across the globe. From the **first digital solution** as the well-known wallet PayPal, developed in 1998, to enable people to make payments via email address, to BNPL payments and cryptocurrencies, the digital world has been evolving at an exponentially quick rate. Therefore, the payments scenario has been adapting to respond to ever demanding and new needs when it comes to the customer's buying experience. Both in terms of in-store and online payments, the new solutions to finalise a transaction are now more than ever.

It is up to the merchant what methods to provide their customers and that's why knowing your target and their preferences in terms of payment solutions is an important prerequisite to being competitive in the modern market.

New solutions for new needs

As we mentioned, alternative payment solutions answer to a number of specific needs of the modern market both regarding user experience and checkout process. Let's look at some of the main use-cases:



B2C PAYMENTS IN THE WORLD OF RETAIL

Checkout processes in the world of retail need to be guick and simple both when it comes to in-store and Ecommerce transactions, in order to increase sales. improve the customer experience and reduce abandoned carts. That's when wallets and other alternative platforms come to play. Customers in stores can pay for items with a simple click on their smartphone or by tapping their device on the POS terminal; while when it comes to Ecommerce checkouts, transactions can be easily finalised without the need to manually enter card details every time. Moreover, when it comes to larger sums, deferred payment solutions like Buy Now Pay Later can be the answer to customers that prefer to have more flexibility instead of paying in one go.





B2B TRANSACTIONS

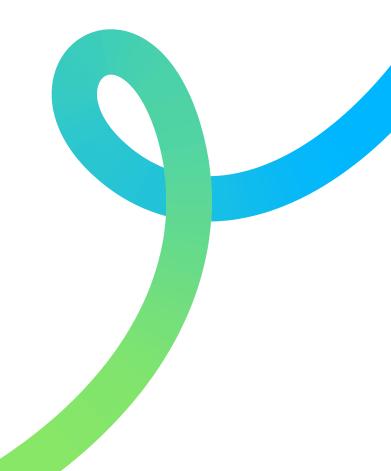
When it comes to transactions between businesses, simplicity, automation and ease of integration with other systems play a big role. Today new solutions are available that leverage the opportunities offered by more traditional A2A payment methods (eg. bank transfers) and offer a more advanced user experience. In this case the alternative methods to bank transfers or checks allow merchants to save time and reduce manual errors with a streamlined process to make traced transfers while, sometimes, even saving money on fees. In fact, thanks to the introduction of PSD2 regulations, and specifically with the introduction of new entities such as AISP and PISP, new ways to make payments have evolved via open banking.

Now that we have looked at what alternative payments mean and what needs they respond to, let's dive deep into the different types we can find and how they fit into the worldwide market.



MONEY TRANSFER BETWEEN CONSUMERS

Thanks to Peer-To-Peer payments (P2P), people can now transfer funds from a digital wallet or account to the one of someone else instantly and usually without any fees. This category includes e-wallets and new A2A solutions, that simplify money exchange between people and can be considered a forward step towards a "more" cashless society.





Types of alternative payment methods

There are various kinds of alternative payment methods available on the market, with varying levels of popularity and usage around the world. In this chapter, we'll explore each category of alternative payment methods - digital wallets, account-to-account transfers, Buy Now Pay Later options, and cryptocurrencies - by providing specific examples and highlighting their advantages that make them appealing to merchants and consumers. Let's start with the first category.

Interesting fact: for a while, contactless cards that are accepted today by most merchants all around the world, were considered as one of the first alternative payments since the late 90s and the early 00s when they were introduced. However, they became widely used in the mid-10s and are a traditional payment method offered by merchants operating in many industries.

Wallets

A <u>wallet</u> payment method refers to a way of making payments using a <u>digital wallet</u> (e-wallet), which is a virtual version of a physical wallet. It safely stores payment information, such as <u>credit</u> <u>or debit card</u> details, allowing users to make payments without the need to physically present a card or cash. There are different wallet payment methods available, including:

Mobile wallet

A mobile wallet is a digital wallet that is stored on a **mobile device**, such as a smartphone or tablet. Users can add their credit or debit card information to the wallet and make payments by holding their phone near a point-of-sale terminal or by scanning a QR code. Examples of mobile wallets include Apple Pay, Google Pay, Samsung Pay etc.

· Online wallet

An online wallet is a digital wallet that is stored on a website or app. After adding their info to the wallet, users can make payments by logging into the website or app and entering the required information. Examples: PayPal, Amazon Pay, Alipay etc.

There are also other types of wallets that aren't officially considered payment methods by some countries and not accepted as widely by the merchants, such as <u>cryptocurrency wallets</u>. A cryptocurrency wallet is a digital wallet that stores digital currencies such as Bitcoin, Ethereum, Litecoin and others depending on the wallet. Users can make payments by transferring the digital currency from their wallet to the merchant's wallet. Cryptocurrency wallets can be stored on a mobile device, on a computer or in the cloud. We will explore crypto as one of the payment methods shortly.



In summary, wallet payment methods provide a convenient and secure way to make payments, they are easy to use for customers and to integrate for merchants, and they can be used in a variety of different situations, whether in-store or online. They are also beneficial for companies, since the biggest wallets can attract new customers due to their global reach. Integrating e-wallets or other APMs, merchants benefit from transparent fee conditions, without hidden costs and more often than not free chargeback options are guaranteed.

While **customers** can choose their **preferred payment**, based on the language, geography etc., benefit from **faster speed** and better **accessibility**, ease of **use** and no additional costs.

Digital wallets examples

There are many digital wallets available on the market, each with their own unique features and differences. Some examples with the widest reach include:

- Alipay: digital wallet that dominates the Chinese market where it was developed by Ant Group, with its 92% user share among online payment services in China.³ The service is available only for Chinese citizens and residents and millions of merchants already integrated it in their payment systems. The payment is made via scanning a QR code instore, as well as within apps and on websites. The wallet is connected to other services such as investments, insurance, and loans. It supports a variety of payment options including bank transfers, credit and debit cards, and digital currencies.
- essential part of the Amazon in-app shopping experience. It allows customers to make payments using their Amazon account on the websites that have it enabled, no store needs to be created on Amazon for this. Customers can link their credit or debit cards to their Amazon Pay account via which user make payments, also via bank transfers and with gift cards.

- Apple Pay: a digital wallet that is available only on Apple ecosystem (iPhones, Apple Watches, and others), it allows users to link their cards to their account and to make payments by holding their device near an NFC-enabled point-of-sale terminal. Apple Pay also allows users to make payments within apps and on websites. One of its features is that it uses the Touch ID or Face ID for authentication.
- Click-to-Pay: digital card wallet launched and provided jointly by the card companies (schemes) Visa, Mastercard, AmEx and Discover. It is designed as a one-click express checkout experience, instead of manually entering payment info. The wallet uses automatic recognition of the device and payment can be done with a card or a bank transfer. To use the wallet a consumer needs only a card, username, and password to purchase online.
- Google Pay: available on Android devices and on the web. Like Apple Pay, it allows users to make payments with their linked payment cards by holding their device near a point-of-sale terminal or also by scanning a QR code. Google Pay allows for payments within apps and on websites, as well as loyalty and gift cards. It uses the fingerprint or pin for authentication.
- PayPal: an online wallet that allows users to make payments by logging into the website or app and entering the credentials. It also allows users to store their credit or debit card information for future use. PayPal is one of the most popular and widely accepted digital wallet and is available in many countries. It allows customers to transfer money to merchants and other individuals (P2P payments) securely, in addition to many other features, such as A2A transfers.

^{3 -} Global Consumer Survey | Statista, November 2022



- Samsung Pay: a digital wallet that allows
 customers to make payments using their
 Samsung devices, such as smartphones,
 smartwatches, and others, as well as the
 browser. Customers can link their credit or
 debit cards to their Samsung Pay account and
 make payments by holding their device near a
 contactless reader.
- WeChat Pay: a digital wallet accessed via a WeChat account that is part of the whole ecosystem that provides users with text messaging, broadcasting, gaming and many more, besides payment services. Customers (prevalently from China and Chinese residents) can link their credit or debit cards to their WeChat Pay account and make payments by logging in and confirming the purchase, payments can also be made via scanning a QR code. WeChat Pay has an 84% user share among online payment services in China, close behind Alipay.³

As we mentioned above, bitcoin and crypto wallets can be considered digital wallets that store Bitcoin and other cryptocurrencies. They allow users to make payments by transferring the digital currency from their wallet to the merchant's wallet. Crypto wallets can be stored on a mobile device, on a computer or in the cloud. Bitcoin wallets are decentralized, and in this sense, they offer more privacy and security compared to other digital wallets.

These are just a few examples of popular digital wallets on the market. Each wallet has different features, security measures, and acceptance rate, so it's important to research and compare different options before deciding which one to use for your Ecommerce. However, there are many advantages they have in common.





Digital wallet advantages

- Increased customer convenience: Digital
 wallets allow customers to pay quickly and
 easily using their personal devices, while
 friction is reduced, and conversions are
 increased during the checkout process. There
 is also no need to enter payment and shipping
 information for each transaction since the
 necessary data is pre-saved.
- Enhanced security: Digital wallets typically use tokenization, encryption and other security measures to protect sensitive payment information, reducing the <u>fraud</u> risk and <u>chargebacks</u> for merchants.
- Better customer data: Digital wallets can store customer information such as name, address, and purchase history, which can be used by merchants to personalize the customer experience, upsell and cross-sell products.
- 4. Streamlined checkout process: Digital wallets can pre-populate customer information at checkout, reducing the time and effort required to complete a purchase, making it frictionless and easier for customers to complete transactions.
- Reduced costs: Digital wallets can reduce the costs associated with processing traditional forms of payment, such as credit cards or bank transfers.
- Increased customer loyalty: Digital wallets can be integrated with loyalty programs, which can increase <u>customer loyalty</u> and repeat business for merchants.
- 7. Increased sales: With the convenience of the click-to-pay solutions, digital wallets can increase sales, and make it easier for customers to make repeat purchases. E-wallets lead to higher conversion rates, as customers are more likely to complete transactions when the checkout process is quick and seamless.
- 8. Increased brand recognition: Integrating popular digital wallets can help merchants increase their brand recognition and customer loyalty, as customers are more likely to return to merchants that offer their preferred payment methods, which are also fast and

secure.

It is important to note that each digital wallet may have different benefits for merchants and that the specific benefits of integrating these wallets may depend on factors such as a merchant's target market and business model.

A2A payments

A2A (Account-to-Account) transfers are a type of a digital payment method in which funds are transferred directly from one account to another, without the need for a card. Alternative payment methods have joined the A2A family as of late. A2A's purposes can vary from paying bills to sending money to friends and family and making online purchases. Examples of what can be considered A2A payments, besides bank transfers within mobile banking apps, are the following:

- **Direct debit** (typically recurring transfers from one bank account to another)
- P2P (<u>peer-to-peer</u>) payment apps, such as Venmo and Zelle
- Some digital wallets, such as PayPal, Google Pay and Apple Pay

Even though, **cryptocurrencies** are not officially considered a payment method by all countries, they still can be used to transfer funds. Therefore, <u>cryptos</u>, such as Bitcoin, Ether, Litecoin and others, can also be considered A2A payments, as they allow for direct transfers from one digital wallet (e.g. Ethereum, Bitcoin wallets) to another within the <u>blockchain</u>, without the need for a traditional financial institution.

A2A platforms examples

 iDEAL: A popular online payment method in the Netherlands and is supported by many international web-based merchants, it enables customers to make secure and real-time payments directly from their online banking account. It is based on A2A



- (Account to Account) transactions and allows customers to use the same login credentials and security measures they use to access their bank account online. iDEAL is supported by most Dutch banks and widely accepted by merchants in the Netherlands and can be used by customers to make payments to merchants, the payment process is simple and user-friendly, as the customer is redirected from the merchant's website to their own bank's website to complete the payment.
- MyBank: MyBank is an A2A payment method that enables customers to initiate online payments directly from their online banking account. MyBank is a pan-European e-authorization solution for online payments, allowing consumers to purchase online using the same **secure methods** as when they pay their bills via their bank's website. Instead of entering credit card details, the customer is directed to their bank's website where they can log in and confirm the payment. This eliminates the need for the merchant to handle sensitive financial information and intermediaries, reducing the risk of fraud and chargebacks. It also allows for faster and more efficient payments, as the customer's bank can authenticate the transaction in real time.
- PayPal: Although widely known and used as a wallet, PayPal is much more than that, specifically an online payment platform that also enables an A2A (Account to Account) alternative payment method. It lets customers make various types of online payments (as well as cross-border) using their PayPal account, including transferring money to merchants and other **individuals** securely. Customers can link their bank account, credit or debit cards to their PayPal account and make payments without having to enter their financial information every time. PayPal also offers a variety of services such as purchase protection, dispute resolution, and fraud protection to make the payment process safer. That's why PayPal can be considered a digital wallet and an A2A payment system at the same.
- SEPA Direct Debit: Even though A2A with Single Euro Payments Area (SEPA) Direct Debit (SDD) is a payment method in itself, rather than a solution/platform offered by a provider, as the ones listed above and below, it should still be included in the list, since there are different forms of SDD, such as SDD for consumers and SDD B2B, with and without mandates. Moreover, there are platforms that offer this type of service, such as Slimpay, which is the company that Fabrick relies on to offer the service. The definition of the SDD is a delayed notification payment method that enables merchants to collect payments from customers' bank accounts on a recurring or one-time basis, which is why it is often used for bill payments. It is based on the SEPA scheme, which standardizes the process of direct debit transactions within the EU. Collections occur without the need for credit card details, and the mandate can be also signed digitally. The customer must authorize the merchant to collect the payment and the funds are transferred directly from the customer's account to the merchant's account. SDD is considered a **secure** and **efficient** payment method as it reduces the risk of fraud and provides real-time tracking and reporting of payments. It also complies with the SEPA regulations, so it can be used across the EU.
- Sofort by Klarna: Klarna, well known for its BNPL and other online payment solutions, acquired **Sofort GmbH** in 2014 and integrated it into their suite of payment solutions, among which an A2A solution – Sofort Direct Banking. Today Sofort by Klarna (or Klarna Pay Now with online banking) is an Account-to-Account payment solution that allows customers to make direct instant bank transfers from their bank accounts to merchants. Customers can complete their purchases without the need for a card. A secure online banking system is used to facilitate the transfers, which makes it a fast and convenient payment method for customers. There is also a solution Klarna Pay Now with the credit card that allows for a card payment instead of a bank transfer.

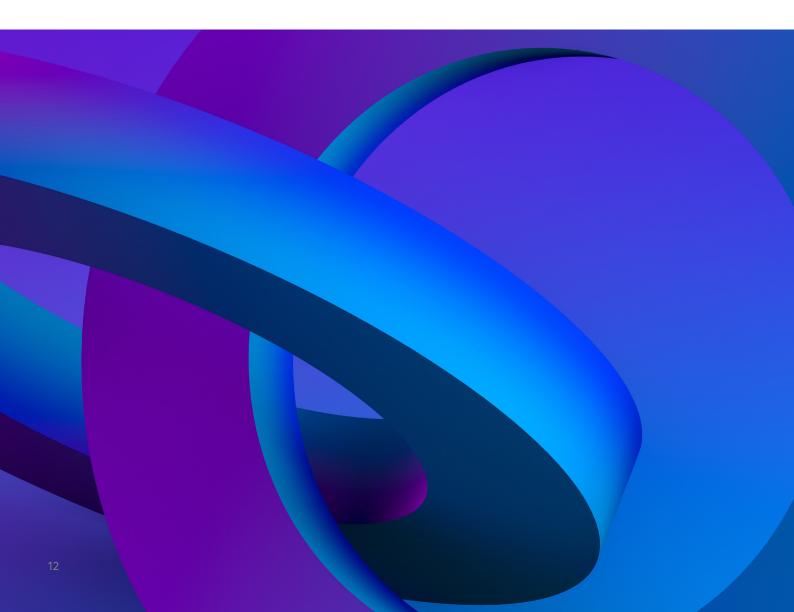


Also, in the late 2021, Klarna activated in the USA another A2A alternative payment method in partnership with GoCardless. Now in some regions for Pay in 4 and Klarna financing solutions, customers can pay directly using their bank account without a card or another intermediary, which reduces additional costs, such as credit card interests.

Some A2A solutions take advantage of the opportunities offered by PSD2 and, the introduction of PISP (Payment Initiation Service Provider, a third-party provider allowed by the PSD2 regulation to initiate payments on behalf of a user). However, the user must give their authorization first, an example of this service would be Fabrick Pass.

Fabrick Pass

A2A alternative payment method using Fabrick
Pass is a cross-border payments solution. The
platform enables fast and secure payments across
different countries and currencies by leveraging
the latest technology and compliance regulations.
The platform connects different payment systems
and financial institutions to facilitate A2A
transactions and reduce costs and complexity
of cross-border payments. It also provides realtime tracking and reporting, fraud detection, and
compliance with AML (anti-money laundering) and
KYC (know-your-customer) regulations.





A2A payment benefits

- Increased security: A2A payments use bankgrade security measures, such as encryption and two-factor authentication, to protect sensitive information, reducing the risk of fraud and chargebacks for merchants.
- Reduced costs: A2A payments can reduce the costs associated with processing traditional forms of payment, such as credit cards and other alternative payment methods.
- High limits: The limits for individual payments are often higher compared to other instruments, making it a useful feature for B2B transactions
- Fund transfers guarantee: Many A2A platforms anticipate the transaction to the merchant, even if the customer's account does not have sufficient funds at the moment of the transfer.
- Improved customer experience: customers
 are provided with a more convenient and
 streamlined checkout experience, as they
 do not need to enter payment information
 manually or deal with the complexities of other
 payment methods.
- Increased reach: merchant's business becomes accessible to customers who may not have access to credit cards or digital wallets.
- Better data insights: A2A payments can provide merchants with more detailed transaction data, such as account information, which serves to improve the customer experience and increase conversions.
- Better cash management: merchants can manage better their cash flow by providing real-time access to funds.
- Compliance: A2A payments, though alternative, can already be a compliance requirement for certain types of transactions, like for some B2B payments, making it a musthave for certain merchants.

Buy Now Pay Later

BNPL stands for "Buy Now Pay Later" and is a type of a delayed financing option that allows consumers to purchase goods or services and pay for them later and/or in installments, rather than paying for them upfront. This type of financing is often offered by retailers and can be used for a variety of products, including clothing, electronics, and home goods and many more. It is gaining its popularity due to almost always no-interest solutions, which makes the purchase even simpler, more attractive and affordable for consumers who may not have the funds to pay for them all at once.

Important note: In February 2023 the Financial Conduct Authority in the UK has planned to set out new regulations regarding Buy Now Pay Later services, due to the lack of strong affordability checks. Among the new rules there will potentially be mandatory credit checks, operators licensing and fair marketing requisites.

BNPL solutions

There are many Buy Now Pay Later solutions available for merchants, some larger examples include:

- Afterpay (Clearpay in Europe): best known globally as a BNPL provider that allows customers to make interest-based payments in either monthly instalments in 6 or 12 months or in 4 tranches. Only soft credit check is required but there is a late fee that accumulates over time and is to be taken into consideration.
- Klarna: as we mentioned earlier, Klarna, which
 is widely used all over Europe, offers many
 payment solutions, but one of their most known
 roles for the merchants is a BNPL provider.
 Among which pay later (Pay in 30 days), pay
 over time (Monthly financing), and slice it (Pay

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in 4 or in 3 - number of installments depends on the region). Klarna allows customers to make payments in instalments and interestfree.

- Zealand, is similar to Afterpay, but it allows customers to pay in 6 weekly instalments, with the first payment due at the time of purchase. There are no fees or interests charged for using its BNPL, but as many other BNPL providers, Laybuy applies a late fee. A soft credit check is performed for transactions' risk assessment, is the check is failed, the purchase will be denied. Laybuy sets a maximum purchase amount based on the credit check results.
- Scalapay: Scalapay's BNPL solution, which is
 often chosen by businesses in Europe, enables
 consumers to purchase items online and pay
 for them in interest-free installments over time
 and can be chosen at checkout. Consumers

- can split their payments into three equal installments, with the first payment due at the time of purchase and the remaining payments due in 30-day intervals. No credit check, fees or interest charges are applied. However, if a consumer misses a payment, they may be charged a late fee of up to €10. Scalapay uses an algorithm to assess the risk of each transaction and approve or deny the purchase accordingly.
- mostly in the North America. It allows customers to make purchases and pay in 4 equal instalments, where the first is a down payment of 25% due at the time of purchase, the rest is paid in 3 more biweekly installments. This solution doesn't require interests either, but the risk assessment is performed, as well as the late fees are applied, which if not paid, gets reported to the collections agency.



BNPL benefits for merchants and customers

For a merchant, there are a couple features to keep in mind when offering Buy Now Pay Later options to the customers. BNPL providers **charge fees** to merchants (transaction fees, interests etc). Also, it is important to remember that there are **regulations** to comply with in some countries to avoid legal issues and fines. However, there are many reasons for merchants, as well as for the customers in favor of adapting BNPL solutions because they can:

- Increase sales and customer loyalty, which
 is in part caused by the fact that it is easier
 for customers to afford larger purchases, and
 in part by the loyalty programs that BNPL
 providers invest in.
- Bring higher returns, since the cart value increases, because customers can afford more expensive products if the price is split in time. This, at the same time, lowers return rates. In turn, for customers this translates into more convenience and flexibility.
- Benefit merchants in having more competitive advantage, by offering additional payment solutions, which therefore, reduces payment friction for the buyers during the checkout process and reduces cart abandonment rate for merchants.

It is important to weigh the pros and cons of offering BNPL options and to select a provider that aligns with your business goals and business model, while ensuring compliance with the regulations in your area.

Cryptocurrencies

<u>Cryptocurrency</u> is a digital or <u>virtual currency</u> that uses cryptography for security. It is <u>decentralized</u> and operates on <u>blockchain</u> technology, crypto is stored in online crypto wallets, such as Coinbase, Ledger, Exodus, Electrum and ZenGo, just to name a few.

Interesting fact: Apple Pay is one of the wallets that can be used to recharge funds of the crypto wallet on ZenGo, which is an example of fusion of two alternative payment methods. PayPal also introduced crypto as a payment option and allows to hold, sell, and buy cryptocurrency within their app.

Crypto was made available to the public in 2009, but have garnered widespread attention and excitement, emerging as a popular topic of discussion and speculation in 2017, when an overwhelming amount of people started buying and trying to sell for profit or store crypto coins, among the most popular ones are Bitcoin and Ether. Cryptocurrency is sometimes referred to as the "future of payments" since it already can be used as an alternative payment method for merchants and its decentralized nature eliminates the need for intermediaries, even though, as we mentioned earlier, it is still not considered a payment method by many countries, but it carries big potential, as it offers several benefits (as well as risks) over traditional payment methods.

Among more evident benefits are **security** and **decentralization**. Cryptocurrency transactions are secured by **advanced encryption techniques** and other security measures of the blockchain technology to ensure better protection from fraud and hacking, which provides higher level of security in payment processing than traditional payment methods, making crypto a secure way to process payments. Also, cryptocurrency operates on a decentralized network, which means it is not controlled by any central authority, such as a



government, payment processors or a financial institution and can be used for cross-border transactions anywhere in the world, making it an ideal payment method for businesses with an international customer base. These aspects can provide users with greater financial freedom and autonomy.

Among the risks there are price volatility and lack of regulations. Cryptocurrencies can be subject to extreme price volatility, which can make it difficult for merchants to set prices or for consumers to budget for purchases. However, it is partially covered with the stablecoins introduction. Moreover, cryptocurrencies are not currently regulated in the same way as traditional payment methods, which can create uncertainties and risks for users. Some countries introduced very high fees per transaction for consumers, which pushes them away from using crypto as payments, but rather only for investments or for temporary storing. Cryptocurrencies are not widely accepted by all merchants and may not be a feasible payment **option** for all users.

Some risks are mitigated with the introduction of stablecoins. This is a type of cryptocurrency that are designed to maintain a stable value relative to a certain asset or currency (1:1 conversion). The most common types of stablecoins are pegged to the value of a fiat currency such as the US dollar or the euro, but stablecoins can also be pegged to other assets such as gold or even other cryptocurrencies. Some examples of stablecoins are Tether (USDT), USD Coin (USDC), Dai and EURS.

Overall, while crypto is one of the strongest trends in payments and can offer benefits such as greater financial freedom and security, they are not without their challenges and risks. It's important to note that crypto values can be volatile and the regulatory environment surrounding crypto is still evolving, so it's important to be aware of the risks and comply with all relevant laws and regulations before implementing crypto as a payment method. And it is important for users to understand these risks and to use cryptocurrencies and other digital payment methods responsibly.





Digital and alternative payment trends worldwide

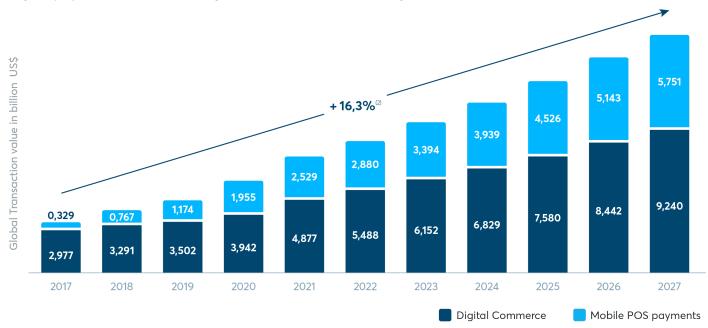
The use of **digital payments** is on the rise, with predictions estimating that the value of digital payment transactions will surpass \$15 trillion by 2027, growing at a yearly rate of 16.3% between 2017 and 2027⁴. In the last decade we have witnessed a significant upheaval in the traditional banking services, such as payments, lending, wealth management and retail banking.

Interestingly, this transformation has not been driven by fintech start-ups only, but also by tech

and Ecommerce giants like Google, Amazon, Facebook, Apple, and Alibaba, to name but a few. These companies have managed to leverage their technological know-how, vast amounts of data and user base to compete in the digital payment space.

Ecommerce transactions are projected to reach USD 9,240 billion by 2027. Meanwhile, mobile POS payments will also see significant growth, accounting for 38% of total transactions, with USD 5,751 billion, by 2027.







Estimated digital wallet penetration on total transaction volume in 2021 and forecast for 2025

		2021	2025*
Worldwide	Ecommerce	49%	53%
worldwide	POS	29%	39%
Asia-Pacific	Ecommerce	69%	72%
	POS	44%	56%
North America	Ecommerce	29%	33%
North America	POS	10%	15%
Europe	Ecommerce	27%	29%
Europe	POS	10%	15%
Latin America	Ecommerce	19%	25%
Latin America	POS	8%	15%
Middle East	iddle East	17%	26%
& Africa	POS	12%	21%
			*forecast

Source: Fintech Trends 2022 | Statista, 2022

Digital wallet volumes: +100% in five years

Digital wallets are among the alternative payment instruments with the greatest potential for global adoption.

In the next few years, we'll see a worldwide shift in the way people pay for goods and services, especially with the rise of digital wallets. By 2025, it's estimated that digital wallets will make up 53% of Ecommerce transactions (+4% from 2021) and 39% of in-store transactions (+10% from 2021). The Asia-Pacific region leads the way in terms of adoption, with the highest penetration of digital wallets in both Ecommerce (69% in 2021; 72% by 2025) and in-store transactions (44% in 2021; 56% by 2025).





Geographic Distribution of Alternative Payment Method Adoption

Traditional payment methods, especially credit and debit cards, are becoming less popular in favour of alternative payment options. This shift doesn't necessarily mean that cards will be completely replaced, but rather that they will evolve. For example, the use of physical cards will decrease with the adoption of digital wallets, as the latter become a touchpoint between the user and merchant during the payment process. To understand which payment methods are and will be preferred by consumers all around the world, we need to take a closer look at each geographic region.

North America

North America is where many alternative payment platforms originated, but even today, payment cards remain the preferred payment method for consumers. However, there are instances where their use is declining, both in-store and online.

From 2021 to 2025, the use of digital wallets for Ecommerce payments is expected to grow from 29% to 33%, surpassing credit card payments, which will drop from 31% to 28%, and debit card payments, which will increase from 21% to 20%. Over the same period, in-store payments with digital wallets are also expected to rise, reaching 15% of the market in 2025, up from 10% in 2021. Debit card transactions will also increase, from 30% to 34%, while credit card transactions will fall from 40% to 36%.

According to Statista's Global Consumer Survey 2022³, concluded in September 2022, the preferred

alternative payment methods for mobile payments in the US in 2021 were:

- PayPal 57%
- · Apple Pay 53%
- Cash App 51%
- Google Pay 38%
- · Chase Pay 15%

Other mobile payment options include Samsung Pay (14%), Bitpay (8%) and Fitbit Pay (8%).

When it comes to Ecommerce payments, the most used tools are:

- PayPal 82%
- Venmo 38%
- Google Pay 29%
- Apple Pay 27%
- Amazon Pay 26%

Other forms of payments, such as <u>Buy Now Pay</u> <u>Later (BNPL)</u>, instalment payment platforms, are also gaining popularity. Suffice to say that, as of October 2022, almost 37% of US online merchants, interviewed for a survey⁵, offered Klarna as one of their payment methods. BNPL adoption is expanding, and it is expected that by 2026 the volumes of these forms of payment in the United States will reach over USD 143 billion, up from USD 77 billion in 2022.6

Canada also confirms the prevalence of payment cards as the preferred payment method in North America. Also, according to the Global Consumer Survey 2022, found that the most popular alternative payments³ in Canada in the past 12 months were:

- 5 Number and share of merchants who use Klarna as a buy now pay later | BuilthWith e Statista, 2022
- US Buy Now, Pay Later (BNPL) Payment Value 2021-2026 | MAG e eMarketer, 2022



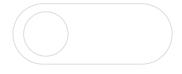
- PayPal 87%
- Interac 48%
- Apple Pay 27%
- Google Pay 22%

Buy Now Pay Later solutions, on the other hand, saw lower usage in Canada with Afterpay mentioned by 7% of respondents and KLARNA used by only 2% of the target audience.

Interac, founded in 1984, is a Canadian interbank network that enables its customers to withdraw cash, transfer funds, and make direct debit payments from their bank accounts.







Latin America

Consumers in Latin America are also embracing digital wallets, which will account for 25% of all Ecommerce payments by 2025, up from 19% in 2021.7 In-store payments also promise to demonstrate grown interest in digital wallets: rising from 8% in 2021 to 15% of transactions in 2025.

When it comes to alternative payment popularity in Latin American Ecommerce, here is a split by countries and payment methods:

	Credit card	Debit card	Alternative payment	A2A (direct debit)	Cash on delivery
Mexico	42%	63%	44%	19%	3%
Brazil	60%	55%	44%	38%	22%
Argentina	52%	75%	48%	5%	4%
Peru	46%	71%	37%	4%	3%
Colombia	35%	51%	43%	7%	5%
Chile	44%	85%	41%	6%	2%

Source: Global Consumer Survey | Statista 2022





























Latin America – in-store payment methods:

	Credit card	Debit card	Alternative payment	Cash	Checks
Mexico	41%	63%	44%	71%	3%
Brazil	64%	70%	33%	59%	2%
Argentina	48%	71%	46%	77%	2%
Peru	42%	71%	40%	73%	1%
Colombia	32%	52%	37%	80%	1%
Chile	40%	86%	23%	58%	2%

Source: Global Consumer Survey | Statista 2022

In terms of online payments throughout the region⁸, credit cards, both domestic and international, hold the largest market share of 57%. Debit cards account for 13% of payment volume while digital wallets or e-wallets make up 11%.

Credit transfers, despite being one of the traditional Account-to-Account payment methods and they accounted for only 7% of payments in 2021, they are expected to see significant growth in the coming years, by 55% from 2020 to 2024, outpacing other payment systems. Interestingly, credit transfers, which accounted for only 7% of payments in 2021, will rise more than other systems by 2024.

Adoption of credit and debit cards will also increase, by 33% and 28% respectively.

Digital wallets will experience a 32% increase, driving the growth of credit cards, which are the underlying instruments of these applications.

8 - Accelerating Digital Payments in Latin America and the Caribbean | IDB Lab e World Economic Forum, 2022

Payments in online purchases, by method (2021)

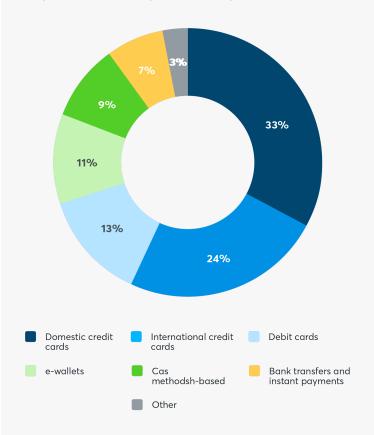


Chart 2 - Source: Notini based on AMI, 2022

CAGR expected for the period 2020-2024

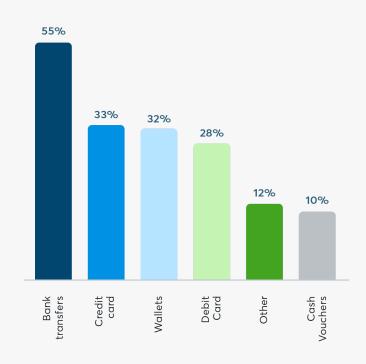


Chart 3 - Source: Americas Market Intelligence, Latin America Ecommerce Blueprint 2020-2024



A cash voucher is a type of gift voucher that can be used to purchase goods or services in a specific shop or retail chain. The voucher's value is expressed in cash and can be used as partial or full payment for a purchase.

In Latin America, access to traditional consumer credit is more difficult due to the high number of people who do not have access to banking services. Therefore, the BNPL model has good growth prospects. According to data in the "BoaCompra's Digital Renaissance in Latin America" whitepaper, instalment payment solutions for Ecommerce accounted for 1% of the market at the end of 2021 but are projected to reach 3% by 2025.

Asia-Pacific

In the Asia-Pacific region, a survey conducted in 20217, showed that 69% of total **Ecommerce** payments were made **with digital wallets** or alternative payments. This figure is expected to rise **to 72% by 2025**. Debit cards (from 8% to 9%) and BNPL platforms also will grow from 1% to 2%, while credit cards will decrease from 13% to 11%, bank transfers (from 5% to 3%) and cash on delivery (from 3% to 1%).

Electronic wallets will continue to be the most used in-store payment method, with their market share increasing from 44% in 2021 to 56% by 2025. The growth of electronic wallets will come at the expense of other forms of payments, including credit cards (their use will decrease from 19% to 17%), debit cards (from 15% to 14%), and cash (from 16% to 8%). Meanwhile, adoption of deferred payment/instalment payment methods will remain virtually unchanged at around 1%.

China is among the countries that have a fragmented digital payment landscape, driven by their technological advancements during recent years.

According to the Statista Global Consumer survey, the most widely used alternative payment online methods in China are the following:

- Alipay 92%
- WeChat Pay 84%
- UnionPay 43%
- Jdpay 25%
- Apple Pay 20%

There are also many other alternatives, such as Tenpay, Bestpay, PayPal, and Huawei Pay, to name but a few.

Over the period 2017-2021, the in-store payments saw a gradual growth in the use of wallets, which increased from 36% to 54% of total payments, and credit cards, which accounted for 12% of transactions in 2017 and 14% in 2021. While payments with debit cards decreased from 31% to 16% and cash from 21% to 10% during the period under review.



Like China, South Korea has a particularly large number of alternative payment systems. According to a survey conducted in 2021 on the use of these in-store tools⁹, among the most used are:

- Naver Pay (75%)
- Kakao Pay (64%)
- Samsung Pay (38%)
- Toss (31%)
- · Payco (27%)

Many others could be added to these: Smile Pay, Rocket Pay (Coupang) and SSG Pay.

Many of these tools are also used for Ecommerce payments. Besides credit cards, mentioned by more than 70% of respondents, Koreans use alternative payment platforms (more than 39% of respondents), credit transfers (about 31%) and debit cards (more than 28% of online shoppers).

In Japan, cash still dominates point-of-sale payments. According to a survey conducted in 2021¹⁰, 90% of the approximately 45,000 consumers involved chose this instrument as their preferred way to pay in-store. Second place (73% of responses) goes to credit cards, third (41%) to so-called alternative payments and fourth (over 28%) are e-money solutions, typically prepaid cards or cards issued by transport companies such as Suica and Pasmo.

It should be noted that the Japanese government has long been investing in reducing the use of cash. This is confirmed by a survey published by METI (Japan's Ministry of Economy) in March 2022¹¹, which shows that more than 51% of respondents regularly use QR code-based payment apps. Among the most widely used are PayPay and R Pay (Rakuten Pay).

These apps are joined by¹² other digital wallets and A2A apps, the use of which may be restricted to specific retail chains. The most used are Line Pay, Nanaco, Konbini, Waon and Rakuten Edy. The apps just described are also often used for Ecommerce purchases in the pick-and-pay model,

because payment requires the buyer to be present in the shop to be finalised. In Japan, the preferred payment instruments in Ecommerce are³:

- Credit cards (67%)
- Direct debits/A2A (43%)
- Alternative payments (21%)
- Debit cards (14%)
- Cash on delivery (10%)

Even in Southeast Asian countries, alternative payments supplant cash and cards payment.⁷ In Indonesia the use of cash in physical stores decreased from 79% to 51% from 2017 to 2021. Over the same period, the adoption of digital wallets increased from 5% to 19%, credit cards from 7% to 12% and debit cards from 8% to 12%. Interestingly, instalment solutions accounted for 4% of payments in 2021.

Thailand has also seen a reduction in cash payments over time. Over the period 2017-2021, its adoption fell from 68% to 63%, along with that of credit cards (from 23% to 8%), debit cards (from 6% to 4%) and prepaid cards (from 2% to 1%). In Thailand, in-store tranche payment instruments also accounted for 4% of the market.

In Australia³, in-store payments with electronic wallets accounted for only 32% of preferences, compared to 67% for debit cards, 57% for cash and 39% for credit cards. According to the research, among the alternative payment instruments available¹³ in shops are PayPal (present in 57% of the surveyed stores), A2A payments/bank transfers (56%), Apple Pay (26%), BPay (23%) and Google Pay (17%). For instalment payments, the most common platforms are Afterpay (17%) and ZipPay (12%).

According to analysis published by PPRO¹⁴, the distribution of **online instruments** is similar, although bank transfers have a much lower market share: 49% of purchases are paid by card, **24% by digital wallet** and 2% by cash on delivery.

^{9 -} Most popular mobile shopping apps among mobile shoppers in South Korea in 2021 | Opensurvey, 2021

^{10 -} Preferred payment methods in Japan as of January 2021 | MMD Labo, 2021

^{11 - 3}rd Commission for further promotion of cashless payments in small and medium-sized stores FY 2021 | METI, 2021

^{12 -} Best cashless payment options in Japan: what they are and how to use them | timeout.com, 2022

^{13 -} PayPal 2020 eCommerce Index | PayPal, 2020

^{14 -} The Asia Pacific online payment market | PPRO, 2021



In New Zealand, over the five-year period 2017-2021, the use of credit cards for offline transactions increased from 39% to 42%. The adoption of mobile wallets (from 2% to 7%) and cash (from 8% to 11%) also increased, while debit cards bucked the trend, with their use falling from 47% to 31%. In 2021, BNPL solutions in New Zealand accounted for 5% of payments in store.

New Zealand's **online** consumers favour credit cards (34% of total payments in 2021), **mobile wallets** (20%), debit cards (16%), credit transfers (15%) and Buy Now Pay Later solutions (10%).

Middle East and Africa

In 2021, in the Middle East and Africa, the Ecommerce alternative payments accounted for 17% of the total payments, and in 2025 it will reach 26%. In-store alternative payments accounted for 12% of the total and by 2025 will represent 21%.

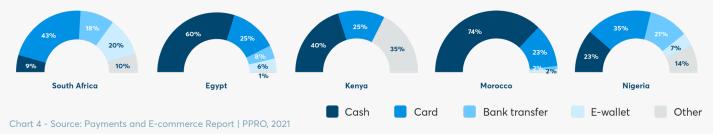
If we take a deeper look at the distribution of payment methods in **physical points of sale**, we can see that cash is still one of the preferred payment methods (44% of total payments in 2021⁷) but electronic and digital instruments are growing.

Ecommerce	2021	2025
Credit cards	31%	33%
Digital wallets	17%	26%
Transfers	16%	16%
Cheques	14%	7%
Debit cards	13%	11%
Prepaid cards	3%	1%
BNPL	1%	1%
POS	2021	2025
Cash	44%	31%
Credit cards	20%	22%
Digital wallets	12%	21%
Debit cards	12%	14%
Financing	6%	6%
Prepaid cards	5%	4%





Distribution of online payments methods in selected African countries as of 2021



In Africa, the penetration of different payment methods is very heterogeneous. In 2021, in Egypt, Morocco and Kenya, cash was still the predominant tool for online purchases while in South Africa and Nigeria cards and e-wallets already accounted for more than 50% of payments Ecommerce¹⁵.

The process of computer literacy on the African continent has skipped the computer era compared to the rest of the world. In fact, many African populations have gone from a rural socioeconomic situation to a "mobile" digitization without intermediate steps. This peculiarity has also involved the area of payments, and in Africa the most common alternative payments are applications developed by mobile phone operators in collaboration with major international card schemes. Among the best known are MTN MoMo, Airtel Money and JUMIA PAY, in partnership with Mastercard, Orange Money and M-PESA, in partnership with Visa.

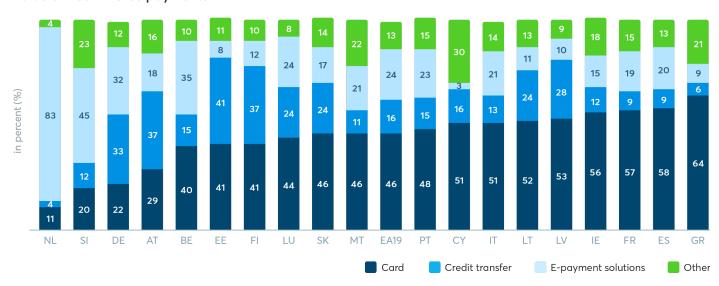
Europe

In 2021, in Europe Ecommerce alternative payments accounted for 27% of the total transactions, and in 2025 it will reach 29%.⁷ In PoS payments alternative payment methods accounted for 8% of the total and will account for 15% by 2025.

A study on consumer payment attitudes in the Euro area conducted by the European Union (SPACE 2022¹⁶) provides interesting insights into digital payments in Europe.

As far as **Ecommerce** payments in **Europe** are concerned, the situation is **very heterogeneous**. While in the Netherlands the dominance of alternative payments is overwhelming (83%), in Cyprus (8%) and in Greece (9%) these platforms represent only a small part of payment methods.

Value of Ecommerce payments



- 15 Distribution of online payment methods in selected African countries as of 2021 | PPRO, 2021
- 16 Study on the payment attitudes of consumers in the euro area (SPACE) | BCE, 2022



Value of In-store transactions

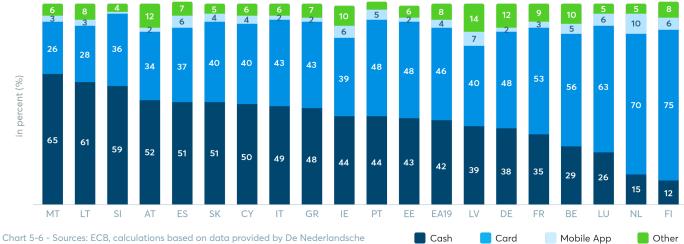


Chart 5-6 - Sources: ECB, calculations based on data provided by De Nederlandsche Bank, Dutch Payments Association (2022) and Deutsche Bundesbank (2022)

In 2022, 59% of in-store payments in Europe were made in cash. This number continues to decrease, if we consider that in 2019 these payments accounted for 72% of the total number. However, payment cards and mobile apps are growing in use, as highlighted in the next chapter.

Alternative payments use in Europe

Below we have presented the most important findings from studies and surveys conducted in 2021 and 2022, focusing on the usage of various alternative payment methods across different European country.

Austria³:

Ecommerce (alternative payments)

- PayPal 84%
- Klarna 59%
- EPS Überweisung 33%
- Amazon Pay 29%
- Apple Pay 16%
- Google Pay 13%

In-store

- Cash 78%
- Debit cards 57%
- Credit cards 32%
- Digital wallets 13%
- Prepaid cards 13%
- · Cheques 2%

Finland:

Ecommerce³ (alternative payments)

- PayPal 80%
- MobilePay 66%
- Klarna 63%
- Trustly 24%
- Nordea Siirto 17%
- Google Pay 22%

In-store⁷

- Debit cards 63%
- Credit cards 16%
- Cash 10%
- Digital wallets 7%
- Traditional financing 3%
- BNPL 1%

France:

Ecommerce³ (alternative payments)

- PayPal 90%
- Amazon Pay 15%
- Apple Pay 15%
- Paylib 15%
- Google Pay 12%
- CM-CIC 4%
- Klarna 2%

In-store7

- Debit cards 49%
- Credit cards 33%
- Cash 9%
- Digital wallets 4%
- · Traditional financing 3%
- BNPL 2%



Germany:

Ecommerce³ (alternative payments)

- PayPal 92%
- · Klarna 51%
- Amazon Pay 28%
- Giropay 18%
- Apple Pay 14%
- · Google Pay 14%
- Paydirekt 7%
- Afterpay 5%

In-store*17

- Google Pay 57%
- Apple Pay 56%
- App bancaria 50%
- PaybackPay 48%
- · App of a retail chain 28%
- · Alipay 16%
- Bluecode 2%

The Netherlands³:

Ecommerce (alternative payments)

- · iDEAL 89%
- PayPal 67%
- Tikkie 59%
- · Klarna 37%
- Afterpay 33%
- Apple Pay 21%
- Google Pay 16%
- Amazon Pay 8%

In-store

- Debit cards 76%
- Cash 49%
- · Digital wallets 27%
- Credit cards 20%
- Prepaid cards 9%
- · Cheques 6%

Portugal³:

Ecommerce (alternative payments)

- Debit cards 63%
- Diaital wallets 59%
- Direct debit 56%
- Credit cards 46%
- Payment on delivery 20%

In-store

- Debit cards 85%
- Cash 77%
- Digital wallets 33%
- Credit cards 32%
- Prepaid cards 8%

Italy:

Ecommerce³ (alternative payments)

- PayPal 88%
- · Apple Pay 32%
- Google Pay 21%
- Klarna 20%
- Amazon Pay 18%
- Clearpay 13%

In-store¹⁸

- Debit cards 45%
- Credit cards 28%
- Cash 11%
- Digital wallets 9%
- BNPL 3%
- Traditional financing 2%

Spain:

Ecommerce³ (alternative payments)

- PayPal 89%
- Amazon Pay 23%
- Google Pay 23%
- · Apple Pay 11%
- Paysafecard 4%
- Masterpass 3%
- Klarna 2%

In-store⁷

- Cash 47%
- · Debit cards 24%
- Credit cards 17%
- Digital wallets 8%
- Traditional financing 4%

^{*}Source: Payment behaviour in Germany in 2021 | Deutsche Bundesbank Eurosystem, 2022

^{17 -} Payment behaviour in Germany in 2021 | Deutsche Bundesbank Eurosystem, 2022

^{18 -} Pagamenti digitali, in Italia carte e wallet al sorpasso sul contante | Network Digital 360, 2022



The UK is close to becoming cashless: only 1% of payments are done with cash

As of 2021 one third of the population in the UK barely used cash, and even though two-thirds¹⁹ of the UK population believe that cashless methods are riskier and more prone to fraud than cash and the majority doesn't want the UK to become cashless, the numbers and tendencies speak for themselves. Total transaction value in the UK digital payments sector is forecast to reach almost \$440 billion in 2023.²⁰

According to Merchant Machine's²¹ research, the UK is one of the **most cashless countries** in the world, it is the 6th most cashless country in the world behind only the Nordic countries and Switzerland and the 8th in the world. 95% of people have internet access and 97% have a bank account.

65% of the population are credit card owners, and the **card payments** make up more than half of all payments in the country (51%), and **bank transfers** make up 7%, while cash is responsible for only 1%.

41% of payments in the UK are done with alternative payment methods:

- Digital wallets 32%
- BNPL 7%
- Other innovative payment methods 2%

Below there is a more detailed breakdown of the favorite payment methods in the UK in store and online.

Ecommerce³ (alternative payments)

- PayPal 88%
- Apple Pay 32%
- Google Pay 21%
- · Klarna 20%
- Amazon Pay 18%
- · Clearpay 13%

In-store⁷ payments

- Debit cards 45%
- · Credit cards 28%
- Cash 11%.
- Digital wallets 9%
- BNPL 3%
- Traditional financing 2%

^{19 -} How has the coronavirus pandemic impacted the use of cash globally? | YouGov, 2020

^{20 -} FinTech Digital Market Insights | Statista, 2022

^{21 -} The Countries & States That Most Want or Reject A Cashless Society | Merchant Machine 2022



Cryptocurrencies in payments

Despite the fact that the <u>technology behind</u> <u>cryptocurrencies</u> has been recognised as revolutionary in many fields, these new forms of digital currency are struggling to take off in the payments context.

In the past years, several companies have integrated cryptocurrencies, predominantly Bitcoin, into their payment solutions, although in some cases this decision has been revoked, mainly due to the high volatility of these currencies, particularly at the turn of 2021 and 2022. Microsoft, Starbucks and Gucci are some of the international brands that have shown interest in cryptocurrencies.

How are payment companies approaching this? Visa, Mastercard and PayPal, for instance, have been investing in this area for some time now, recognising blockchain as a technology with great potential.

On the other hand, cryptocurrencies have become a much more accessible technology. Today, these instruments are known by an increasingly wide public and are no longer relegated exclusively to investments. Data collected by the European Central Bank shows that cryptocurrencies are no longer identified solely as an investment instrument but also as a payment asset. In particular, the surveyed Italian citizens represent the largest share of the sample that confirmed to have acquired these tools for both purposes, compared to other countries.

The focus on these digital assets is confirmed by a survey conducted by Deloitte and PayPal at the end of 2021 in the United States.²² The research revealed that **64% of the participating companies** reported a **significant interest** in **cryptocurrency** among their customers. Furthermore, 85% of them stated that they anticipated crypto payments to become the standard by 2026, even in the B2B sector. Precisely for these reasons, 38% of the respondents considered the integration of cryptocurrencies into their payment processes to be a priority and 47% even evaluated it a very high priority.

Use of crypto assets in Europe

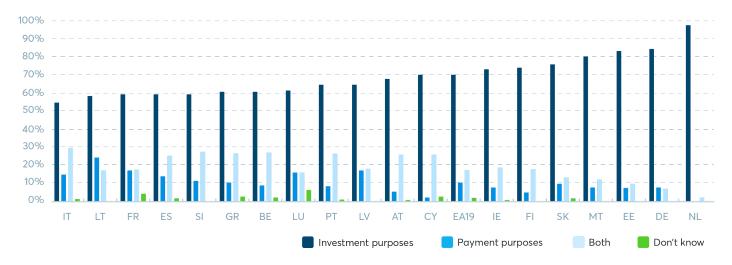


Chart 7 - Source: Study on the payment attitudes of consumers in the euro area (SPACE) | BCE, 2022 22 - Merchants aettina ready for crypto | Deloitte e PayPal, 2021



Axerve's analysis on alternative Ecommerce payments

As we have seen in the previous chapters, accurately identifying the penetration of alternative payment methods is a difficult task, mainly due to the lack of objective data, primarily on specific platforms.

Therefore, to further support this paper, we are presenting you **Axerve's analysis** based on data collected on thousands of online merchants operating globally.

Methodology

We examined Axerve's aggregated Ecommerce merchant transaction data covering the period from 5th until 31st January 2023, i.e. the winter sales period. The analysis involved the entire pool of merchants that adopted alternative payments, which were also grouped by product sector to identify the share of alternative payments amongst the total of collections.

Alternative payments: more than just digital wallets

As we have seen in previous chapters, digital wallets are among the most widely used tools in the world, however Axerve's own customers' analysis confirms that Buy Now Pay Later platforms and new A2A (Account-to-Account) tools, such as iDEAL and MyBank, are also popular amongst buyers.

PayPal is confirmed as the method with the largest volumes, reaching 59% of the overall alternative payments. This is followed by MyBank, with 25%, and Sofort by Klarna, which accounts for 3% of the total collections with methods other than credit cards.

It must be considered that merchants may have implemented one or more alternative payments with a direct integration, i.e. without going through the Axerve-managed flows.

Alternative payments on total collections

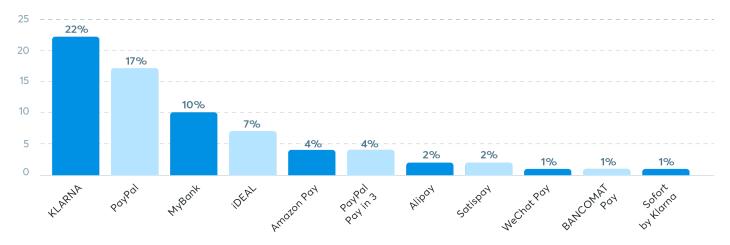


Chart 8 - Source: Axerve analysis of all merchants that have integrated the alternative methods shown in the graph



For this reason, we have also compared the transaction value of the individual methods to the total amount collected by Ecommerce merchants that have integrated those specific alternatives.

It is Klarna, in its instalment payment formula, that registers the highest penetration in comparison to total collections (22%), followed by PayPal, which, as we shall see in the following chapters, confirms itself as the most widely used digital wallet across all sectors. Among the A2A forms of payment, it is MyBank and iDEAL that account for the most, 10% and 7% respectively, while Satispay and Sofort by Klarna record only 2% and 1% of the total volumes collected by the Ecommerce shops that have integrated them.

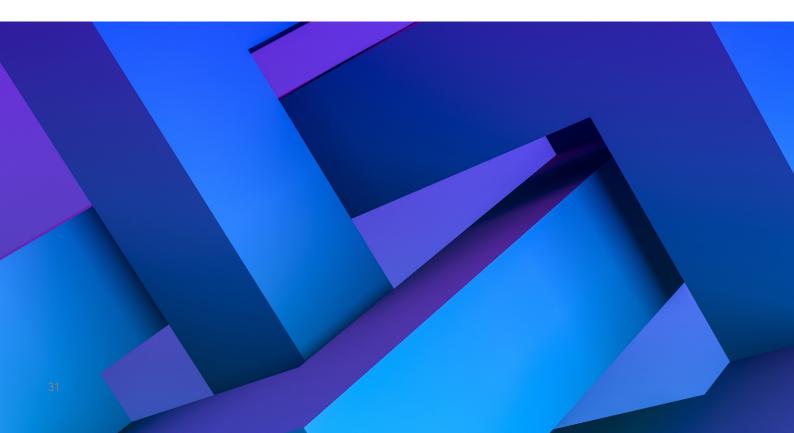
Preferred methods by product sector

Let us look at the data by product sector and explore the individual clusters, according to the area in which they operate.

The Fashion and Accessories sector proves to be the most dynamic, i.e. the sector with the highest number of integrated alternative methods. Those who integrated Klarna, reached transaction peaks of over 54%, a sign that the appreciation for this solution in this area is particularly high. It is PayPal, however, that recorded the highest average volumes, with over 32% of the total. Amongst the 'local' payment tools, i.e. specific to certain areas or geographical region of the buyers, Alipay (Chinese market) emerged with almost 9% and Bancontact (available only to users from Belgium) with over 3% of the total volumes of those who integrated it.

In the Food&Beverage sector, PayPal leads the rankings, with more than 33% of the volumes, and Amazon Pay, the youngest of the international digital wallets examined, is well above 7%. As with all the areas examined, this sector is particularly fragmented however, in addition to the platforms just mentioned, we should mention MyBank with a weight of over 3%, Satispay (A2A platform used by Italian consumers) with over 3%, and PayPal "Pay in 3", a BNPL payment tool, which is close to 3% of the total.

Ecommerce in the *Consumer Electronics* sector are amongst the online stores with the highest volumes for wallets and alternative methods in general. Stores that have integrated PayPal through Axerve register more than 35% of their turnover with this method.





Among instalment payment solutions, the choice to integrate Klarna as a payment option proves to be a winner, considering that this BNPL solution reaches 22% of collections, while PayPal 'Pay in 3', in some cases comes close to 12% of the transaction total.

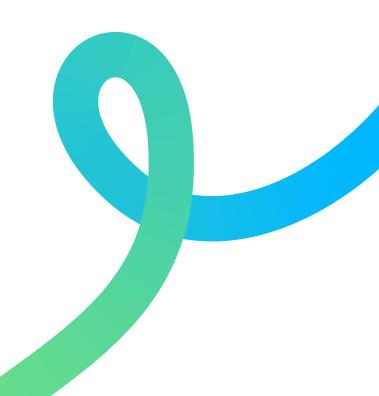
In online stores selling *Beauty* articles, i.e. cosmetics and personal care products, **PayPal** is still the platform with the highest volumes: more than **26%** of the total. Among the other noteworthy payment methods, are: **iDEAL** (in some cases even more than **7%**), **Klarna BNPL** (which hits peaks of more than **6%**) and, exclusively for the Italian market, **Satispay** (on average around **5%** of volumes).

The Travel&Transport sector, like the Fashion sector, is among the most heterogeneous in terms of alternative payment adoption, mainly because a lot depends on the target markets merchants address. It is interesting to note that A2A payments (BANCOMAT Pay, Giropay, iDEAL, MyBank, Satispay and Sofort by Klarna) together account for almost 13% of the transaction total. In this sector, it is payments such as Alipay and iDEAL, aimed respectively at China and the Netherlands, that record the most significant volumes: 42% and 39% of the total. PayPal accounts for more than 21% of the total collections of those who have integrated this solution, while MyBank exceeds 11%.

On the other hand, if we take into account all companies operating in the B2B market, regardless of the product sector, companies that have integrated PayPal record around 24% of their turnover with this method. It is also worth noting

that PayPal BNPL (Pay in 3) exceeds 4% of the collected revenue when integrated as a payment option. MyBank, an ideal tool for this sector, also thanks to allowing higher amounts than those typical of credit cards, comes in at just under 3%.

Furniture and Homeware stores also see PayPal excel among digital wallets, with the highest average share of almost 46% (only large-scale retailers come close, with a figure of just over 45%), while the other payment methods' shares are very fragmented and cards, as in all the other sectors surveyed, still remain the preferred payment method. For the Insurance sector, recurring SDD debits are significant, accounting for about 7% of payments, again in terms of volume.





Conclusions

Thirty years have passed since the first forms of alternative payment were introduced, and since then, developments in this area have been unceasing. The **constant increase in Ecommerce sales** and technological progress have led consumers and companies to be more and more demanding also when it comes to the payment phase, online and in-store.

Precisely for these reasons, the market is turning to collection solutions capable of managing different channels, like points of sale, websites, totems, landing pages and vending machines, to name but a few. At the same time, the offer of alternative tools is growing, to respond to an increasingly heterogeneous public, in terms of preferences, geographical origin and type of product or service purchased.

Digital payment volumes will continue to grow: by 2027 they will be worth more than \$9 trillion online and almost \$6 trillion in-store. Digital wallets will drive this growth globally, with a market-share of 53% for Ecommerce and 39% for in-store payments.⁴ Data that is also confirmed by Axerve's observations which highlight the adoption of alternative methods in all product industries and in particular in Fashion, which is proving to be one of the most dynamic sectors: suffice it to say that those who have integrated **Klarna**, in the instalment formula, have reached transaction peaks of up to **54% with this solution**.

As mentioned above, in the coming years we can reasonably expect a heavily fragmented landscape in terms of alternative payments worldwide, which is why it will be essential for merchants to equip themselves with collection platforms capable of orchestrating a multitude of solutions, in an increasingly complex ecosystem also with regard to the supply chain of related services - acquirers, fraud prevention solutions, integrated alternative payments. In this context it will be crucial to have the resources to move quickly in order to optimise sales and reduce costs.



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