A guide to payment methods

Businesses can use this guide to discover, understand, and select the right payment methods for them to reach a broader audience.
Introduction

Supported by widespread access to high speed internet and the insatiable appetite of customers for convenience, online commerce is progressing rapidly around the world and estimated to reach $4T (Source: eMarketer) in 2020. But when it comes to payments online, businesses expanding internationally and taking advantage of the increased reach that online commerce provides them with are met with widely varying customer preferences. Not only can delivery terms be quite different (pay after delivery, for example, common in Europe and Asia, requires businesses to only expect payment once they’ve shipped goods) but the payment methods used for online transactions themselves vary too. Credit and debit cards, not always the most trusted option, only account for half of online transactions globally. Bank payments, digital wallets, and cash are in strong customer demand, and can even offer additional benefits to businesses such as lower risks and transaction costs.

To fully realize the potential of online commerce, businesses must adapt to an eclectic audience and harness this diversity of payment preferences. This guide underlines the characteristics of payment methods that intrinsically determine their relevance to a given business model, helps identify questions that businesses should ask when considering adding payment methods to their checkout, and provides an overview of the payment methods Stripe supports.

1. Deciding on the right payment methods

As businesses seek to increase their audience, robust payment method coverage can play the role of a catalyst. Whether to improve conversions in their domestic market, or to achieve successful geographical expansion, businesses’ ability to adapt the options available to customers at the time of checkout to their preferences is key. But depending on the nature of a given transaction, certain payment methods may be relevant or not depending on their specific characteristics. Businesses should take into account their business model and operational constraints to evaluate the value, to them in particular, of additional payment methods.

1.1. Starting from the customer

As mentioned previously, the relevance of a payment method will depend on the geographic and demographic audience a business is looking to reach.

Payment method fragmentation varies strongly by geography. While some payment methods, such as major credit cards brands, have become internationally available, others have remained
confined to a single country, or even a single segment of the population in that country. Therefore, identifying their target audience is an important first step for businesses to decide which payment options to focus on. The distribution of payment methods used in online commerce varies dramatically by region of the world, but also within specific regions.

As an example, while major brand credit cards are used for more than 80% of online transactions in France, this figure is less than 25% in neighboring Germany. Meanwhile, in Germany, bank-based payments (direct debit or credit transfers) are used for almost 40% of purchases and no single payment method in Germany makes up more than 25% of online purchases.

Another consideration driving payment decisions is the business model itself. Some payment methods, popular digital wallets for example, are designed for individual consumers and limit support for large transaction amounts or business-to-business payments. Others, like invoicing via bank transfers, are inconvenient for instantaneous mobile purchases and best suited for business-to-business transactions. For a given business vertical, the specific order value of transactions can further play a role: for example, retail companies with higher average order value transactions may consider offering a consumer credit payment option at checkout to increase conversions.
Finally, customer preferences may have deeper roots that businesses should be sensitive to. In certain markets such as Poland, for example, customers have traditionally relied on digital wallets to limit businesses’ ability to store payment credentials for further use. This has supported the rise of payment processing options such as PayU or Prezlewy24 which process transactions without enabling businesses to retain payment details after a customer’s checkout.

1.2. Keeping the checkout experience in mind

Given the specific properties of payment methods, businesses may have to adapt their checkout to support them.

A first element of consideration is currency handling. Indeed, certain payment methods only support payments in a limited number of currencies, and ensuring that customers see a price they can relate to all through their purchase experience, especially as they select their payment method, is important. This is the case with iDEAL for example, a popular payment method in the Netherlands for which businesses need to create Euro-denominated transactions.

Beyond this, the customer journey at checkout may need to be adapted. Payment methods that involve redirecting customers to another app or site to complete their payment fall in this category. As an example, payments with popular Chinese wallet Alipay will include a mandatory redirect to a separate webpage where customers will be prompted to enter in additional credentials. This requires the business to have robust order management in place, so as to provide customers who fail to complete a redirect with a consistent experience. More generally, redirects will limit businesses’ ability to control their customer’s checkout from end-to-end: while they may complete their payment, they may never return to the original site, and any effort to collect additional information from them should be completed ahead of the payment.

Furthermore, payment methods may limit the possibility to complete payments without a customer’s explicit confirmation, a hindrance for subscriptions. With payment credentials accessible to a business, recurring charges can be handled seamlessly at a time designated by the business. For some payment methods however, it is a requirement that customers confirm each individual transaction, thus making recurring charges more difficult. Therefore, businesses that rely on generating payments “in the background” without a customer’s direct involvement will need to adapt the experience they provide in order to support payment options that allow for recurring payments.
1.3. Managing risk, fraud, and disputes

Businesses can anticipate and manage the risks associated with accepting payments online by choosing payment methods that match their risk preferences. As a general rule, the better the level of authentication required of a customer at the time of payment, the lower the likelihood of fraudulent payments with that payment method.

Businesses need to take into account which payment options may increase the likelihood of fraudulent transactions, and where liability rests in the event of disputed payments. The credentials required to complete transactions with some payment methods can be stolen and used without their rightful owner’s consent. This is the case for bank account details or credit card details. For this reason, payment schemes provide customers with the ability to dispute payments made using their credentials, and funds may be automatically recovered from businesses. Other payment methods, however, require that customers execute payment instructions themselves, with an authentication step that makes it unlikely the instructions weren’t indeed sent by them. These payments are generally irrevocable. Bank credit transfers, where customers push funds to a specific bank account from their own bank account, are an example of such payment method. These payment options don’t relieve businesses of the responsibility to deliver products and services as expected, but it gives them more control over the management of disputes and exceptions, as the funds can’t be taken from them automatically. Event ticket companies and online marketplaces for luxury goods, for understandable reasons, are examples of businesses with a strong preference for authenticated or irrevocable payment methods.

1.4. Understanding the true cost to support payment methods

Businesses will need to holistically take into consideration the costs and benefits of adding payment methods to their checkout.

First and foremost, businesses need to anticipate the cost of the technical integration of an additional payment method itself. This, as we’ve shown above, can include more than the simple inclusion of a new payment option logo on a business’s website: it may also impact the range of currencies that the price needs to be displayed in, the design of the checkout flow itself, and even—as we’ll see later—the expected timeline to fulfill completed orders.

Businesses should also account for the ongoing internal costs borne to support operations with multiple payment methods. Transaction monitoring, payments reconciliation, and customer support associated with new payment methods are examples of internal costs tied to the management of multiple payment options. Controlling how transaction reports are generated, the way in which funds are collected, or even how refunds are initiated and managed are
important elements to appreciate here.

Last but not least, payment methods have inherently different cost transaction structures which should be taken into consideration given the business model, margin, and average transaction value of a specific business.

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2. Payment method taxonomy

Given a payment method, three questions can help businesses better understand the checkout experience their customers will have using it, as well as the implications of accepting it.

2.1. How is the payment completed?

A challenge for businesses accepting payments online is to ensure that they can provide a pleasant payment experience for their customers. A business can distinguish between three types of payments, which will shape the flow of their checkout:

1. **BUSINESS-INITIATED**

   The customer provides payment details to the business, who can initiate payments at their own convenience. This is the case for credit card payments for which only the card details are required, or bank direct debit payments for example. Importantly, in the case of business-initiated payments, a business may not have the ability to formally confirm that either the customer authorized the transaction, nor that the payment details were indeed provided by their owner. As detailed above, these payment methods can present additional risks of fraud and disputed or revoked payments for businesses.

2. **CUSTOMER-AUTHENTICATED**

   The customer both provides payment details and authenticates that they are the owner of these payment details. Examples include payment methods that have customers receive and type a one-time password, or that require customers to log in to their account on a separate app or website. These payments often require more complex checkout experiences, and require the explicit intervention and consent of customers for each payment but—as we’ve seen—offer businesses additional guarantees that the payment details weren’t used fraudulently, shifting the burden of liability away from them in the case of disputes.
The customer is required to take all the necessary steps in order to send funds themselves to a receiving “destination” specified by the business. This is the case for bank credit transfers, in which the “destination” provided is simply a bank account. Bitcoin payments are also customer-initiated, as the customer is given a particular address to send funds to. As these payment methods require the customer to take action, there may be additional delays in payments being received. However, an important benefit to businesses is that they are in principle irrevocable by customers: funds received cannot be taken back inadvertently.

2.2. How do businesses learn they’ll be receiving funds?

An important step in an online purchase experience for businesses is the decision to fulfill an order. This is generally done once the business receives a confirmation that gives them sufficient confidence that the payment has been completed by the customer and that funds from the transaction will eventually be paid out to them. A business can distinguish between two cases:

1. **IMMEDIATE CONFIRMATION**

   The confirmation of payment completion happens at the time of checkout. This is the case for credit card payments: businesses receive notice from the card network that the payment was successful, and can proceed to fulfill the order. This does not mean that the funds have actually been received by the business yet (a step which can take days). Rather, it’s an authoritative message from the payment method to confirm that the eventual settlement of the transaction will occur.

2. **DELAYED CONFIRMATION**

   The completion of a payment is communicated to a business hours, days, sometimes weeks later. In these cases, businesses will need to decide whether or not to fulfill “optimistically” at the time of checkout or wait until they’ve received payment confirmation to proceed, since the payment can still ultimately fail. As an example, bank direct debit payments—where the business pulls funds from the customer’s bank account—require several days after a payment is initiated for the customer’s bank to accept or reject the debit. Similarly, bank credit transfers—payments in which the customer sends funds to a bank account—are also delayed to either the end of day, or next day. (While end-of-day or next-day credit transfers are still the norm in the US, close to real-time credit transfers schemes are progressively being introduced worldwide, such as the Faster Payments System in England, or Faster Payments in Singapore. Wire transfers, which are sent on a dedicated network, are also close to real-time.) In the meantime, businesses need to architect the checkout flow to let the customers know that their order has been received and again notify them of fulfillment once the confirmation has been received.
2.3. Can the payment credentials be stored on file and reused?

Businesses that offer subscription services and those looking to optimize the checkout experience for future transactions will want to consider whether or not the payment details can be stored on file and reused. Two cases are to be taken into account:

1. **YES, PAYMENT DETAILS ARE REUSABLE**

   Having the ability to store a customer’s payment credentials (keeping them “on file”) gives businesses the latitude to create business-initiated payments as described above, without requiring any additional effort of their customer. Card payment details (without the use of 3D Secure or CVC) can be considered “reusable” since a customer, once having provided them, is not required to take further action for future payments. Bank direct debit payments, in which the customer provides their bank account details for the business to debit from, are also made using “reusable” payment details.

2. **NO, PAYMENT DETAILS ARE SINGLE-USE**

   In these cases, the customer decides on the successful completion of each payment. The easiest example would be cash: a business only receives funds if and when the customer hands the money towards them. Other examples of single-use payments include bank credit transfers where the customer gives a one-time instruction to their bank to send funds to a recipient bank account. Both customer-initiated and customer-authenticated payments are “single-use”: the customer needs to explicitly authorize each transaction, either by creating the payment themselves, by signing in to an app, or by typing in a one-time passcode. Businesses will not be able to make further use of the payment details provided by the customer, and will need to rely on them authorizing future payments individually.

The above three questions can help to categorize unfamiliar payment methods for businesses, and help them decide whether or not they are likely a good fit for their specific business. Later, we’ll use these properties to describe the payment methods Stripe supports.
3. Industry considerations

Customers expect greater speed and convenience when interacting with businesses online. Enabling the best customer experience requires taking the business’s vertical, the primary interaction channel, and the business's risk preferences into account. Below are a few guidelines that businesses can take into consideration.

3.1. Mobile commerce

Businesses built around mobile commerce experiences focus on ease of conversion with limited screen real estate and ease of data input at checkout. Payment methods for which customers have a mobile app installed can offer a simple purchase experience, all while providing the benefit of reduced fraud with verified payments, as customers confirm their payment from the app. These payment method apps—such as Alipay in China, Bancontact in Belgium, or Klarna in Sweden—offer fallback mobile web payment experiences for customers who haven’t installed the app, with the same payment guarantees.

3.2. On-demand economy

With instantaneous fulfillment at the heart of their experience, on-demand economy businesses need to encourage conversion—often on mobile—while managing fraud risk. Payment methods that offer immediate confirmation that the transaction was successful are a priority for the on-demand economy. Storing payment details on file to enable one-tap confirmations, as is the case with credit cards or even bank direct debit payments will further enable businesses to shorten the checkout experience.

3.3. Software-as-a-service and non-profits

Software-as-a-service businesses and nonprofits alike focus on subscriptions as well as larger payments that may be settled by bank transfer. Supporting reusable payment details such as credit cards and bank direct debit payments facilitates charging customers or donors on a regular basis. Meanwhile, supporting bank credit transfers in countries where enterprise customers are based also enables higher order value payments to be settled at lower cost, in an irrevocable way. For a software-as-a-service business, offering additional payment methods is often one of the only barriers to increasing the conversion potential of its audience.
4. Why Stripe?

Businesses should carefully weigh the following considerations as they evaluate integration solutions to support additional payment methods: ease of onboarding, ease of integration, and ongoing operational complexity of multiple payment methods.

4.1. Quick and simple onboarding

Adding payment methods is a tedious and complex process that requires businesses to establish both a contractual and operational relationship with the payment scheme that can take weeks. This involves company due diligence, review of technical specs, and negotiation of commercial and payout terms, to name a few. Stripe wants to make this process a lot simpler so businesses can quickly add and scale payment method support without laboring through a new process each time. For an active user, Stripe’s onboarding process only requires activating the desired payment method in the Stripe Dashboard. This means no one-off onboarding process, no lengthy underwriting timelines, and no effort spent on tedious contract negotiations. This in turn allows businesses to be more efficient with software and business development resources. A simplified onboarding is especially valuable for platforms and marketplaces that wish to give access to various payment methods to their “sellers”: each seller will benefit from the same streamlined activation.

4.2. The easiest way to integrate a new payment method

Supporting additional payment methods is fraught with technical integration risks and complexity. This is particularly true if each payment method requires integrating either a new API or a new payment service provider. To reduce the risks and complexity of technical integration, Stripe’s Sources API supports accepting any payment method—both cards and non-cards—through a single API. This means businesses can develop against a unified framework that allows them to easily scale support for all payment methods. The only efforts required to add a new payment method are consistent and reduced code changes, sometimes even as limited as a single line of code. This leaves businesses with a simple and elegant integration that involves minimal development time and remains easy to maintain, regardless of which payment methods they choose to implement.

4.3. Unified monitoring, reporting, and payouts for all payment methods

Payments made with any payment method using the Sources API, including cards, will appear consistently in the Stripe Dashboard, largely reducing operational complexity and allowing for lightweight financial reconciliation. This enables businesses to develop standardized processes
for typical operations such as fulfillment, customer support, and refunds. These payment methods also work with the rest of the Stripe stack so you can enable them for subscriptions or as part of a Connect platform. With Stripe Connect in particular, the ability for platforms to manage the access of multiple payment methods for each of the marketplace members, while controlling their boarding experience, is a key advantage. Lastly, since Stripe abstracts away the complexity of dealing with each payment method provider, businesses also benefit from one single point of escalation and accountability on elements such as disputes or other exceptions they may need to address when working with payment methods from around the world.
5. Payment method fact sheets

ACH credit transfers

The Automated Clearing House (ACH) network in the US enables customers to send funds from their bank account to a US-domiciled bank account. To collect a payment with ACH credit transfer, businesses provide a routing and account number to their customer, who then initiates the payment from their bank account.

Transactions via ACH credit transfer are irrevocable and low cost, making them suitable for business models looking to avoid disputed payments or high transaction fees. For this reason, ACH credit transfers are common with business-to-business and high average order value business-to-consumer transactions. Since September 2016, the ACH network has introduced same day ACH credit transfers allowing for the accelerated movement of funds from customers’ accounts: payments are cleared twice a day and can be received the same day by businesses’ bank.

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**CUSTOMER-FACING FLOW**

- Selects ACH credit at checkout
- Receives business’s bank details for payment
- Sends money to business’s bank
- Receives confirmation of funds sent

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**RELEVANT PAYER GEOGRAPHY**

US

**PAYMENT METHOD TYPE**

Bank Transfer

**PAYMENT COMPLETION**

Customer-initiated

**PRESENTMENT CURRENCY**

USD

**PAYMENT CONFIRMATION**

2-3 business days

**DISPUTES**

No

**REFUNDS / PARTIAL REFUNDS**

Yes / Yes

**RECURRING PAYMENTS**

Requires payer action

**SUPPORTED BY STRIPE**

Yes

**SIMILAR PAYMENT METHODS**

SEPA Direct Debit

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*stripe* A guide to payment methods
ACH debits

Direct debit payments on the Automated Clearing House (ACH) network, or ACH debits, allow businesses to collect funds from their customers in the US who provide their bank account details and authorize businesses to debit them. Confirmation for ACH debit payments is delayed and can take up to 5 business days.

ACH debits can fail, or can be disputed by customers after the payment was initially completed. Businesses should carefully consider accepting ACH debit payments. Software-as-a-service subscriptions or regular donations to not-for-profit organizations are examples of business models adapted to ACH debits. Some of the risks associated with ACH debits can further be mitigated by using third party services to verify the ownership of account credentials.

RELEVANT PAYER GEOGRAPHY
US

PAYMENT METHOD TYPE
Bank account debit

PAYMENT COMPLETION
Business-initiated

PRESENTMENT CURRENCY
USD

PAYMENT CONFIRMATION
5 business days

DISPUTES
Yes

REFUNDS / PARTIAL REFUNDS
Yes / Yes

RECURRING PAYMENTS
Yes

SUPPORTED BY STRIPE
Yes

CUSTOMER-FACING FLOW

Selects ACH debit at checkout
Enters bank account details
Recieves payment initiation confirmation
**Alipay**

Alipay is a popular digital wallet in China, operated by ANT Financial Services Group, a financial services provider affiliated with Alibaba. Launched in 2004, Alipay currently has over 450 million active users. Businesses looking to grow their presence with the increasingly active Chinese audience transacting online both within China and around the world should consider offering Alipay.

Chinese consumers using Alipay transact most frequently in e-commerce, travel, online education, online gaming, and food/nutrition. Alipay wallet holders can pay on the web or on mobile using their login credentials or their Alipay app. Another benefit of Alipay lies in the reduced risk of fraud: payments are authenticated with the customer’s login credentials and dispute rates are very low.

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**RELEVANT PAYER GEOGRAPHY**
- China

**PAYMENT METHOD TYPE**
- Digital wallet

**PAYMENT COMPLETION**
- Customer-authenticated

**PRESENTMENT CURRENCY**
- USD, EUR, GBP, CAD, AUD, SGD, HKD, JPY, NZD

**PAYMENT CONFIRMATION**
- Immediate

**DISPUTES**
- Limited

**REFUNDS / PARTIAL REFUNDS**
- Yes / Yes

**RECURRING PAYMENTS**
- Yes

**SUPPORTED BY STRIPE**
- Yes

**SIMILAR PAYMENT METHODS**
- WeChat Pay

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**CUSTOMER-FACING FLOW**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selects Alipay at checkout</td>
<td>Selects Alipay at checkout&lt;br&gt;Enters code from mobile into redirect page</td>
</tr>
<tr>
<td>Gets redirected to Alipay and scans QR code</td>
<td>Gets notification that payment is complete&lt;br&gt;(Optional) Returns back to business’s site</td>
</tr>
</tbody>
</table>
Android Pay

Android Pay is a digital wallet launched in 2015 that enables customers to pay using their Android phone, tablet, and watch. Android Pay does not allow users to hold a balance, but rather lets them store credit or debit cards to their device and use them to make payments online. It eliminates the need for users to remember and manually enter their payment information.

To make a payment online, customers select Android Pay as the payment method and authorize the transaction via fingerprint ID or PIN. In addition to payment information, a business can request the customer’s billing and shipping address, and contact information. Supporting Android Pay reduces the friction points of the checkout process and increases conversions for businesses with conversions from Android mobile devices or an Android mobile app.

RELEVANT PAYER GEOGRAPHY
Where Android Pay is supported

PAYMENT METHOD TYPE
Digital wallet

PAYMENT COMPLETION
Customer-authenticated

PRESENTMENT CURRENCY
USD, GBP, EUR, AUD, HKD, SGD, NZD

PAYMENT CONFIRMATION
Immediate

DISPUTES
Yes

REFUNDS / PARTIAL REFUNDS
Yes / Yes

RECURRING PAYMENTS
Yes

SUPPORTED BY STRIPE
Yes

SIMILAR PAYMENT METHODS
Apple Pay

CUSTOMER-FACING FLOW

Selects Android Pay at checkout

Enters Android Pay credentials

Gets notification that payment is complete
Apple Pay

Apple Pay is a digital wallet that enables customers to pay using payment details stored on their iPhone, iPad, or Apple Watch. Launched in 2014, Apple Pay lets users add credit or debit cards which can be used to make payments in iOS mobile apps. In 2016, Apple extended support for Apple Pay to include web payments on Safari on iPhone, iPad, or Mac OS.

To make a payment online, customers select Apple Pay as the payment method and authorize the transaction via Touch ID, PIN, or a passcode. In addition to payment information, customers can also store their billing and shipping address, email, and phone number. By automatically providing relevant customer information at the time of payment, Apple Pay reduces checkout friction and can meaningfully increase conversions for businesses driving transactions from their iOS mobile app or a website visited on the Safari browser.

<table>
<thead>
<tr>
<th>RELEVANT PAYER GEOGRAPHY</th>
<th>Where Apple Pay is supported</th>
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</thead>
<tbody>
<tr>
<td>PAYMENT METHOD TYPE</td>
<td>Digital wallet</td>
</tr>
<tr>
<td>PAYMENT COMPLETION</td>
<td>Customer-authenticated</td>
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<tr>
<td>PRESENTMENT CURRENCY</td>
<td>USD, GBP, EUR, AUD, CHF, HKD, SGD</td>
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<tr>
<td>PAYMENT CONFIRMATION</td>
<td>Immediate</td>
</tr>
<tr>
<td>DISPUTES</td>
<td>Yes</td>
</tr>
<tr>
<td>REFUNDS / PARTIAL REFUNDS</td>
<td>Yes / Yes</td>
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<tr>
<td>RECURRING PAYMENTS</td>
<td>Yes</td>
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<tr>
<td>SUPPORTED BY STRIPE</td>
<td>Yes</td>
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<tr>
<td>SIMILAR PAYMENT METHODS</td>
<td>Android Pay</td>
</tr>
</tbody>
</table>

### CUSTOMER-FACING MOBILE FLOW

1. Selects Apple Pay at checkout
2. Enters Apple Pay credentials (Touch ID)
3. Gets notification that payment is complete

### CUSTOMER-FACING WEB FLOW

1. Selects Apple Pay at checkout
2. Enters Apple Pay credentials (Touch ID)
3. Gets notification that payment is complete
Bancontact

Bancontact, founded in 1979 and formerly known as Bancontact/Mister Cash, is a leading payment method in Belgium, where it is used in up to a third of online transactions. Bancontact payments are authenticated by customers and immediately confirmed to businesses. Bancontact is offered as a payment option by more than 80% of online businesses in Belgium, and processed more than 27 million payments in 2015.

In 2014, Bancontact introduced a mobile application to streamline its payment experience. Using their mobile app, customers can identify by scanning a QR code presented at the time of payment. Each transaction is then confirmed with a PIN. The app has seen a successful rollout and is used in more than 50% of transactions on desktop, and 90% of transactions on a mobile or tablet device. Ecommerce and on-demand platforms are businesses for which Bancontact is an adapted checkout option.

While Bancontact payment details are single-use, each transaction can allow businesses to retrieve the bank account details of customers, enabling subsequent payments to be completed via SEPA Direct Debit with the appropriate mandate authorization.

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**CUSTOMER-FACING FLOW**

Selects Bancontact at checkout

Gets redirected to Bancontact and enters credentials

Gets notification that payment is complete

(Optional) Returns back to business’s site for payment confirmation

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**RELEVANT PAYER GEOGRAPHY**

Belgium

**PAYMENT METHOD TYPE**

Authenticated bank debit

**PAYMENT COMPLETION**

Customer-authenticated

**PRESENTMENT CURRENCY**

EUR

**PAYMENT CONFIRMATION**

Immediate

**DISPUTES**

No

**REFUNDS / PARTIAL REFUNDS**

Yes / Yes

**RECURRING PAYMENTS**

Require payer action, or via SEPA Direct Debit

**SUPPORTED BY STRIPE**

Yes

**SIMILAR PAYMENT METHODS**

Giropay, iDEAL
Bitcoin is a cryptocurrency invented in 2009 by an individual or group under the pseudonym Satoshi Nakamoto and released as open source software in 2009.

Bitcoin payments are peer-to-peer, and do not involve an intermediary institution like a bank or payment scheme. All Bitcoin transactions are recorded in a distributed ledger, the blockchain. Bitcoin payments are irrevocable: payers send the designated amount to a recipient address with no ability dispute the payment at a later date. Hundreds of thousands of businesses now accept Bitcoin as a form of payment on their site.

Particularly attractive to a global crowd of digital enthusiasts, Bitcoin can be a compelling payment method to businesses looking to reach a technologically-focused audience around the world. The immediacy of confirmation of Bitcoin payments and their irrevocability also provide strong guarantees to businesses with risk-averse business models.

### Customer-Facing Flow

- Selects Bitcoin at checkout
- Receives Bitcoin address for payment
- Sends from Bitcoin wallet
- Gets notification that payment is complete

### Relevant Payer Geography
- Global

### Payment Method Type
- Cryptocurrency

### Payment Completion
- Customer-initiated

### Presentation Currency
- USD

### Payment Confirmation
- Immediate

### Disputes
- No

### Refunds / Partial Refunds
- Yes / Yes

### Recurring Payments
- Require payer action

### Supported by Stripe
- Yes
Cards

Cards (Visa, Mastercard, American Express, Discover, Diners Club, JCB) are a dominant payment method globally. Credit cards are issued by banks and allow customers to borrow money with a promise to pay it back within a grace period to avoid extra fees. Consumers can accrue a continuing balance of debt, subject to being charged interest on the amount. Debit cards offer the convenience of card payments but are linked to a bank account, where funds are drawn directly from the linked account at the time of payment.

Visa and Mastercard are the largest card networks in the world. Both function exclusively as payment processing systems and do not issue cards to consumers directly. Instead, they allow banks and financial institutions to brand and distribute their cards. American Express is also a payment processing system that—unlike Visa and Mastercard—issues its own cards directly to consumers. American Express is generally adapted to high value shoppers, as the average cardholder spend is higher than Visa or Mastercard cardholders.
Giropay

Giropay is a German payment method based on online banking and introduced in 2006. It allows customers of most Sparkassen and cooperative banks in Germany to complete transactions online using their online banking environment, with funds debited from their bank account. Depending on their bank, customers confirm payments on Giropay using a second factor authentication or a PIN. Payments are immediately confirmed to the business and irrevocable.

Giropay accounts for just under 10% of online checkouts in Germany, and is suited to business models that require the funds to be guaranteed.

RELEVANT PAYER GEOGRAPHY
Germany

PAYMENT METHOD TYPE
Authenticated bank debit

PAYMENT COMPLETION
Customer-authenticated

PRESENTMENT CURRENCY
EUR

PAYMENT CONFIRMATION
Immediate

DISPUTES
No

REFUNDS / PARTIAL REFUNDS
Yes / Yes

RECURRING PAYMENTS
No

SUPPORTED BY STRIPE
Yes

SIMILAR PAYMENT METHODS
Bancontact, iDEAL

CUSTOMER-FACING FLOW

Selects Giropay at checkout

Gets redirected to Giropay and enters bank details

Receives SMS on mobile and enters into redirect page

Gets notification that payment is complete

(Optional) Returns back to business’s site for payment confirmation
iDEAL

iDEAL is a Netherlands-based payment method that allows customers to complete transactions online using their bank credentials. All major Dutch banks are members of Currence, the scheme that operates iDEAL, making it the most popular online payment method in the Netherlands with a share of online payments close to 55%.

In order to pay with iDEAL, customers are redirected to their online banking environment where they can authenticate the payment using a second factor of authentication. The exact experience customers go through will depend on their bank. While the iDEAL payment flow may not appear seamless to some businesses discovering it, it is well understood and appreciated by Dutch customers. Payments are irrevocable and immediately confirmed, two strong value propositions of iDEAL for businesses.

While iDEAL payment details are single-use, each transaction can allow businesses to retrieve the bank account details of customers, enabling subsequent payments to be completed via SEPA Direct Debit with the appropriate mandate authorization.

**CUSTOMER-FACING FLOW**

Selects iDEAL at checkout — Gets redirected to iDEAL and chooses bank or gets redirected to bank straight away — Enters account credentials

Completes authorization process (with scanner or SMS) — Gets notification that payment is complete — (Optional) Returns back to business’s site for payment confirmation

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**RELEVANT PAYER GEOGRAPHY**
The Netherlands

**PAYMENT METHOD TYPE**
Authenticated bank debit

**PAYMENT COMPLETION**
Customer-authenticated

**PRESENTMENT CURRENCY**
EUR

**PAYMENT CONFIRMATION**
Immediate

**DISPUTES**
No

**REFUNDS / PARTIAL REFUNDS**
Yes / Yes (on Stripe)

**RECURRING PAYMENTS**
Require payer action, or via SEPA Direct Debit

**SUPPORTED BY STRIPE**
Yes

**SIMILAR PAYMENT METHODS**
Bancontact, Giropay
SEPA Direct Debit

The Single Euro Payments Area (SEPA) is an initiative of the European Union to simplify payments within and across member countries. They established and enforced banking standards to allow for the direct debiting of every EURO-denominated bank account within the SEPA region.

In order to debit an account, businesses must collect their customer’s name and bank account number in IBAN format. As part of their payment confirmation, customers must accept a mandate that gives the business an authorization to debit the account. Stripe is able to generate this mandate for businesses to present to their customers.

Customers are able to dispute a SEPA Direct Debit transaction within 8 weeks on a “no questions asked” basis: funds will automatically be returned to them. Beyond that point and over the following eleven months, they are still able to dispute transactions that were not backed by an appropriately authorized mandate. During that period, the arbitration process involves both the bank of the creditor (business) and the customer (debtor). After 13 months, disputes are no longer possible.

SEPA Direct Debit is an important method for any business interested in recurring billing.
SOFORT

SOFORT is a bank transfer-based payment method with significant market share in Germany and Austria. In order to pay with SOFORT, customers are redirected to SOFORT’s site where they enter their bank login credentials. Upon authentication, SOFORT initiates a bank credit transfer from their bank account.

One important detail for businesses to realize is that although successful authorization indicates a very high likelihood of payment, funds are not guaranteed to businesses until they are actually received, which is typically 2 business days later (but can be up to 14 days later). Once received, payments cannot be reversed except by Business-initiated refunds. For the sale of low value or high margin items, businesses typically consider the initial authorization to be authoritative and do not wait for the receipt of funds.

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RELEVANT PAYER GEOGRAPHY
Germany, Austria

PAYMENT METHOD TYPE
Bank credit transfer

PRESENTMENT CURRENCY
EUR

PAYMENT COMPLETION
Customer-authenticated

PAYMENT CONFIRMATION
Immediate directional confirmation; definitive confirmation delayed by typically 2 but up to 14 business days

DISPUTES
No

REFUNDS / PARTIAL REFUNDS
Yes / Yes

RECURRING PAYMENTS
No

SUPPORTED BY STRIPE
Yes

CUSTOMER-FACING FLOW

Selects SOFORT at checkout → Gets redirected to SOFORT to choose bank → Enters account credentials → Gets notification that payment is complete → (Optional) Returns back to business’s site for payment confirmation
# WeChat Pay

As China’s largest internet company, Tencent offers a number of web and mobile products across social networking, communications, media, games, finance, and more. WeChat, owned by Tencent, is China’s leading mobile app with 889 million monthly active users.

WeChat is a leading lifestyle ‘super app’ used for messaging between people, as well as connecting people, services and businesses in China and around the world through a number of e-commerce and social features inside the app. WeChat Pay, the payment wallet inside the WeChat app, has over 600 million users.

Chinese consumers can use WeChat Pay to pay for goods and services inside of businesses’ apps and websites. WeChat Pay users buy most frequently in gaming, e-commerce, travel, online education and food/nutrition.

<table>
<thead>
<tr>
<th>RELEVANT PAYER GEOGRAPHY</th>
<th>China</th>
</tr>
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<tbody>
<tr>
<td>PAYMENT METHOD TYPE</td>
<td>Digital wallet</td>
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<tr>
<td>PAYMENT COMPLETION</td>
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<tr>
<td>PRESENTMENT CURRENCY</td>
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<tr>
<td>PAYMENT CONFIRMATION</td>
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<td>DISPUTES</td>
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<td>REFUNDS / PARTIAL REFUNDS</td>
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<td>RECURRING PAYMENTS</td>
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<tr>
<td>SUPPORTED BY STRIPE</td>
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<tr>
<td>SIMILAR PAYMENT METHODS</td>
<td>Alipay</td>
</tr>
</tbody>
</table>

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### CUSTOMER-FACING FLOW

1. Selects WeChat Pay at checkout
2. Gets redirected to WeChat Pay and scans QR code
3. Enters code from mobile into redirect page
4. Gets notification that payment is complete
5. (Optional) Returns back to business’s site
6. Availability

Stripe currently supports popular payment methods around the world. Stripe will continue to evaluate locally relevant payment methods and support those that meaningfully increase conversion rates for its users over time.

<table>
<thead>
<tr>
<th>Country of business:</th>
<th>US</th>
<th>EU</th>
<th>Rest of world</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACH credit</td>
<td>• Private beta</td>
<td>• No</td>
<td>• No</td>
</tr>
<tr>
<td>ACH debit</td>
<td>• Yes</td>
<td>• No</td>
<td>• No</td>
</tr>
<tr>
<td>Alipay</td>
<td>• Yes</td>
<td>• Yes</td>
<td>• Yes</td>
</tr>
<tr>
<td>Android Pay</td>
<td>• Yes</td>
<td>• Yes</td>
<td>• Yes</td>
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<tr>
<td>Apple Pay</td>
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<td>• Yes</td>
<td>• Yes</td>
</tr>
<tr>
<td>Bancontact</td>
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<td>• Yes</td>
<td>• No</td>
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<td>Bitcoin</td>
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<tr>
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<tr>
<td>Giropay</td>
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<td>iDEAL</td>
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