

Payments 101 for fast-growing businesses

Payments: Your competitive edge

Your 101 guide to payments: How they work and how they'll help you grow your business.

There's a lot to think about when you're growing your business: Distribution and logistics, marketing communications, and customer service. And as you expand to new markets, the complexity only increases with language barriers, cultural nuances, local regulations, and local partners to deal with.

It can be easy to overlook payments and leave them to the last minute. But if you do this, you're missing a huge opportunity.

Payments will increase your revenue and drive your growth

A report by Forrester found that businesses working with Adyen typically increased revenue by 1%. So, if your annual revenue is \$50 million, you're looking at an additional annual revenue of \$500,000.

Not bad for a few hours development work. But how? Payments have the potential to unlock more revenue and give you an edge over the competition by:

- making buying easy with an optimized checkout
- increasing conversion rates with local payment methods
- recognizing loyal shoppers and blocking fraudsters
- getting the best deals on international card fees
- ensuring valid payments are authorized quickly
- giving rich data insights into customer behavior

Quick links to chapters

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- **Chapter 2** Streamline point of sale payments
- **Chapter 3** Expand with local payment methods
- **Chapter 4** Fine-tune your risk management
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How payments work

Before we dive in, it's important to understand what actually happens from the moment your customer hits "pay". Here's a breakdown of the payment process.



Shopper

The shopper hits "buy" or enters their card into a pin terminal.



Gateway (or Checkout)

The gateway is the interface between the payment process and your shopper. To keep things simple, we'll call it your checkout.



Risk assessment

If the payment is online, the risk assessor checks the transaction to make sure it's not fraudulent.



Acquiring

If it's a card payment, the acquirer connects to the shopper's issuing bank and requests authorization.



Processing

The payment processor receives a response from the acquirer and either processes the payment or lets you know it was declined.



Settlement

If the payment is authorized, the money will be settled into your bank.

Each step along the way provides opportunities for optimization. The following chapters will explain how.

Chapter 1

Optimize your checkout

The checkout page is where your customer lands when they hit “buy”. Here they enter their payment and delivery details before completing the purchase. This is the narrowest part of your sales funnel. It’s the culmination of all your hard work. But you haven’t closed the sale yet...

In this chapter you'll learn:

- Best practices for mobile payments
- How to support secure one-click payments
- How to keep your online checkout clean and simple

45% of shoppers in the UK have abandoned a purchase because of a payment issue. This can be anything from a poorly designed payment form to insufficient payment options or too many steps in the process. The good news is that these issues are easily fixed. Here's how to create a checkout that will keep your customers coming back again and again.

Be mobile-friendly

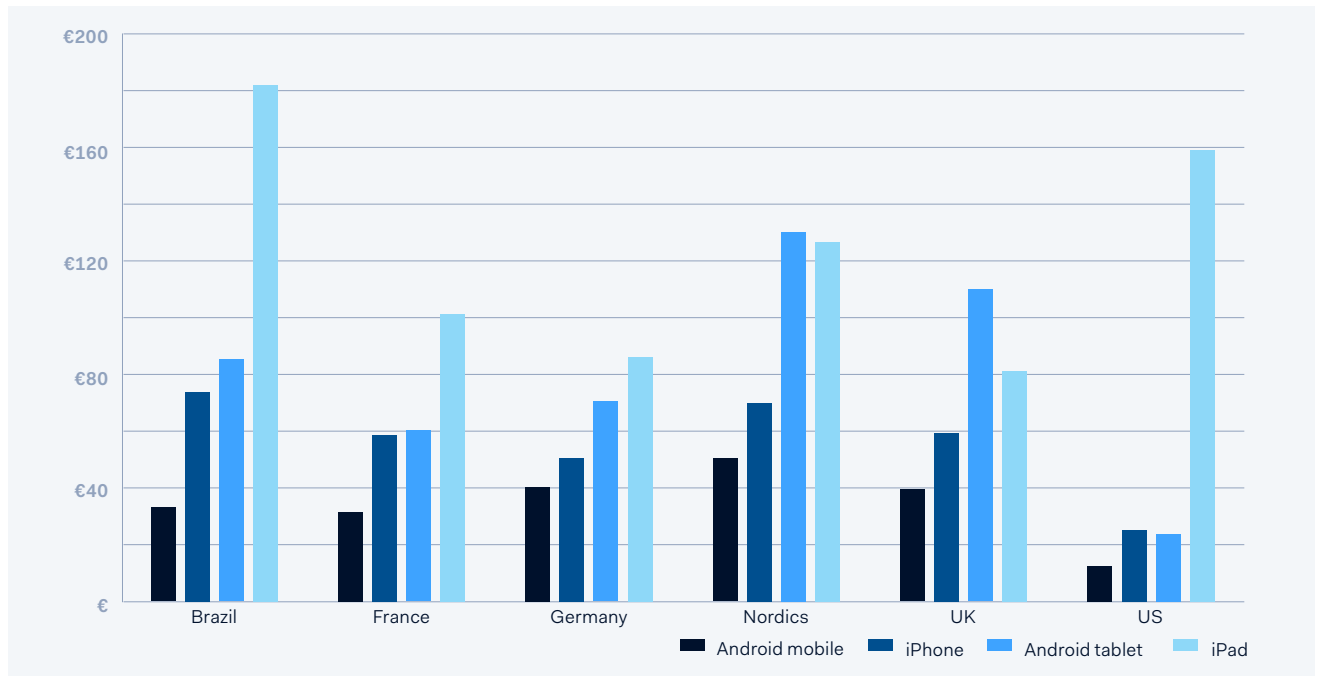
Today everyone's increasingly tied to their mobile devices. According to GSMA Intelligence, over half of the world's population (some 5 billion people) are mobile internet users. Statista Worldwide predicts mobile payment revenue will surpass \$1 trillion USD in 2019. So it's no longer a matter of just supporting mobile, you have to do it really well.



Average transaction value and screen size

As you can see in the graph below, consumers still tend to be more comfortable making expensive purchases on large-screen devices.

Average transaction value among Adyen's merchants



Make sure your payment experience is optimized for all screen sizes by creating dedicated interfaces for each device. The best option is a response design that automatically detects the screen size of the device and adjusts the payment process accordingly.

Chinese shoppers: Big mobile spenders

Not all high-value purchases are reserved for larger screens. Chinese shoppers are increasingly used to paying for expensive items on their smartphones. Mobile wallets Alipay and WeChat Pay are showing high average transaction values (ATV) on the Adyen platform. So don't overlook these methods if you're selling high-value items to Chinese shoppers.

Use digital wallets

Digital wallets (Apple Pay, Google Pay, Samsung Pay, Alipay, WeChat Pay) make it easier than ever to pay on mobile, both online and in store. With these, the card information is securely stored on a shopper's device and released after authentication (usually via a fingerprint or a passcode).

Support one-click payments

Entering payment details is the least fun part of shopping, especially on mobile. In some emerging markets where internet infrastructure is unreliable, you risk a time-out before the purchase can be completed.

The answer is one-click payments, where the customer enters their payment details once only. The information is then securely stored for subsequent purchases, which they can complete with a single click (or tap of their finger).

Keep customer card data safe with tokenization

The challenge with one-click payments is how to securely store customer card data. Fortunately, this is made easy with tokenization technology. Payment details are captured by your payments provider and replaced with an encrypted token, which you can use to charge transactions. So your customers can pay with one click and your payments provider shoulders the responsibility of keeping the data safe.

Be aware of security concerns

In some markets, one-click payments might undermine the perceived security of the transaction. Be sure to display security icons and explain your data protection policy clearly. Also, make sure your customers have access to swift, flexible customer service, and make it easy to cancel orders at any time.

The more you know about your customers and their habits the better. For example, if an online food delivery marketplace knows what someone ordered last month, they can offer a one-click payment flow for the same order made today.

Keep the customer on your site

Redirecting your customer to another page with a different URL can be fatal, especially on mobile where slower load times or (worse) time-outs are more likely.

Today, it's possible to cut the redirect and host the entire payment on your site. You don't have to worry about compliance (known as Payment Card Industry or PCI compliance). You can accept cards and local payment methods by embedding secure hosted fields into your page. Your payments provider should handle the bulk of PCI compliance.

Hosting the payment on your site also means you have total control over branding and layout. And, since you have all the data, you can use conversion analytics and A/B testing to identify areas for improvement.

Optimize your online checkout with Adyen

Adyen Checkout is the fast, secure, developer-friendly way to accept payments anywhere, on any device. You can create a secure, mobile-optimized checkout in minutes, with just a few lines of code. For customized mobile checkouts, our SDK comes with a suite of tools to fine-tune the experience. Everything is hosted on your site, so you benefit from on-page analytics to start A/B testing and find the best payment flows.



Chapter 2

Streamline point of sale payments

Just like your online checkout, the point of sale checkout is the narrowest part of your sales funnel. Your customer is in your store, they have the product in their hand, and they're ready to buy. Don't waste all your hard work by losing them now.

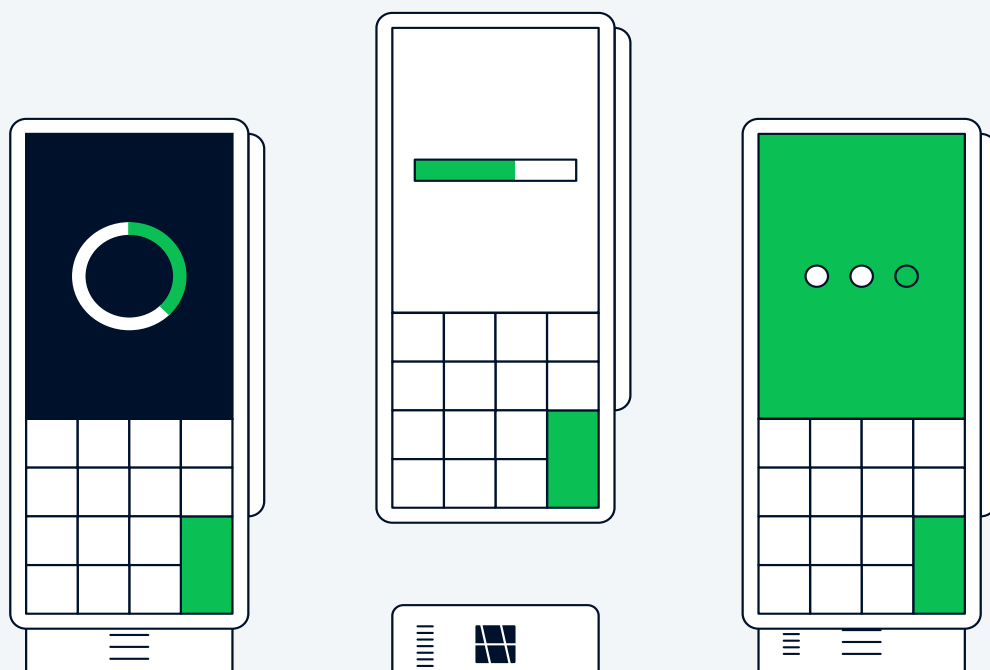
In this chapter you'll learn:

- How to eliminate checkout queues in store
- How to make international shoppers feel at home
- How payment data can help you deliver personalized services

Let them skip the line

Few things are more off-putting than a long checkout queue. According to our 2017 shopper surveys, 57% of British consumers say queuing is their biggest frustration, and it will drive four out of five US shoppers out of a store.

Eliminate checkout queues with mobile point of sale (mPOS) terminals. These make it possible to take a payment from anywhere in the store (a preference for 42% of US shoppers). You can even skip this step entirely, letting shoppers scan QR codes and checkout in app.



Give them access to your online stock

Out-of-stock issues are frustrating for both you and your customers.

Today, 42% of UK shoppers and 75% of US shoppers want to order out-of-stock items directly from the store. This is made easy with endless aisles: in-store kiosks or tablets where customers can browse and order items online.

Welcome international shoppers with local cards

Make international shoppers feel at home by giving them the payment options they're used to. For example, if you get a lot of Chinese shoppers in your store, be sure to support Alipay, UnionPay, and WeChat Pay.

Make it personal

Customer personalization is a hot topic at the moment. The key is to surprise and delight your shoppers without intruding on their privacy.

Based on our US shopper survey and external research, here are some examples of customer personalization that shoppers actually want:

- Link loyalty to the shopper credit card. This lets you apply loyalty to all channels. Shoppers don't have the frustration of forgetting their loyalty card, and it saves you money as well.
- Be contextual. 50% of US shoppers want location-based discounts and coupons sent to their smartphones.
- Anticipate shopper needs. Use your shopper trend data to ensure your store is prepared for your regular shoppers.
- Be relevant. Greet online shoppers with a targeted selection of items based previous purchases.

Streamline your point of sale payments with Adyen

Adyen makes Unified Commerce easy by connecting your online and point of sale payments in one platform. With just one partner you can expand quickly into new stores and new markets and manage everything centrally. This not only streamlines your business and cuts costs, but gives you a single view of your shopper data. So you can optimize and future-proof your business.

Chapter 3

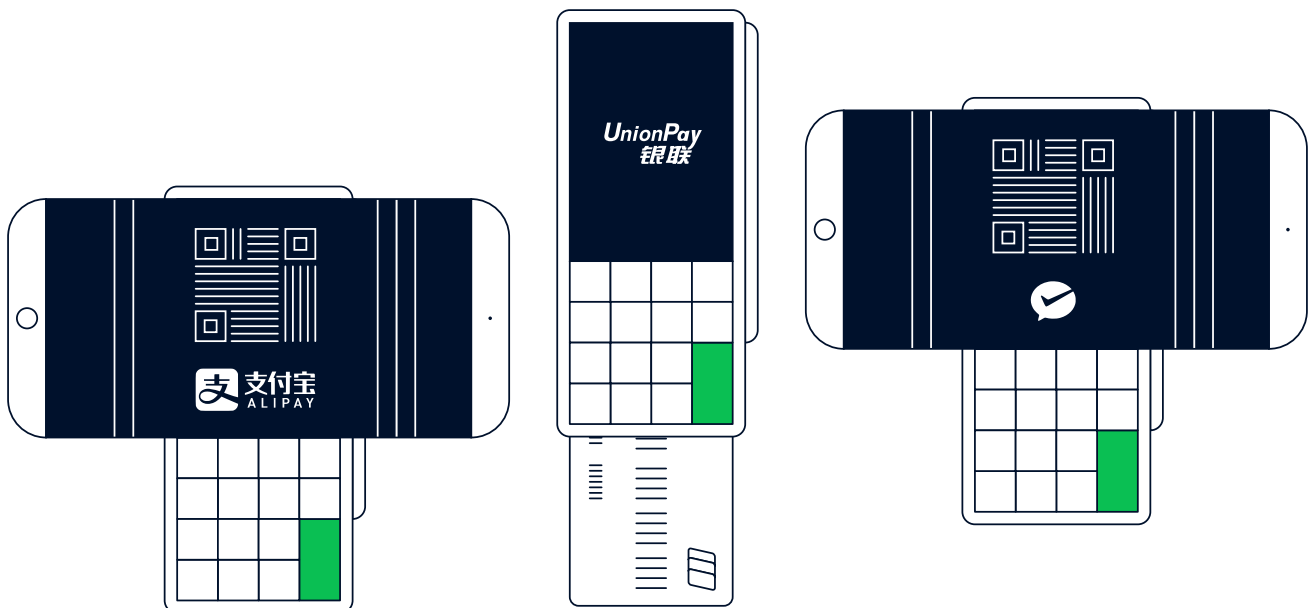
Expand with local payment methods

It's an exciting time for cross-border ecommerce. The global ecommerce market is projected to double, climbing from \$2 to \$4 trillion by 2020. On top of that, a report by McKinsey predicts that the flows of goods and services across borders will triple.

In this chapter you'll learn:

- How to evaluate which payment methods to support
- How to integrate new methods

Businesses of all sizes are expanding across borders to reach shoppers around the world. But before you rush to launch localized websites and set up entities in new markets, it's important to consider how these international shoppers want to pay.



Different payments around the world



Hundreds of millions of your potential customers don't use international credit cards. Instead, shoppers use an array of local payment methods, like online banking, open invoice, e-wallets, cash and local card schemes.

So, to reach your full potential in new markets, it's vital that you offer the payment options your local customers know and trust.

- **In China**, Visa and Mastercard make up a tiny proportion of online payments.
- **In Brazil**, most cards issued are not enabled for international use.
- **In Germany**, three-quarters of shoppers prefer not to pay with credit cards.

And don't forget mobile

Many local payment methods offer a mobile-optimized integration. So don't forget to integrate with mobile in mind.

Since iDEAL developed a mobile-friendly payment flow, 50% of iDEAL payments are made on mobile. And mobile apps that support iDEAL tend to have a higher conversion rate in the Netherlands.

Chinese mobile wallet Alipay, with a reported 520 million active users worldwide, accounts for almost half of the \$500 billion ecommerce market in China. And WeChat Pay (part of the WeChat app) is China's fastest-growing payment method. Both are supported online and in store. So, if you want to expand into China or serve Chinese tourists, Alipay and WeChat Pay are must-have options.

One size doesn't fit all

When evaluating which payment methods to support, it's important to consider your own business model. If you're a subscription business, for example, some payment methods won't work for you as they don't support recurring payments. So make sure you understand the functionalities and restrictions of each method you support.

So how do you support local payment methods?

You have two options:

- Go to the payment method directly and integrate each one separately.
- Integrate via your payments provider

Integrating each payment method separately is fine if you're only selling in one market. But as you expand it becomes very time-consuming. Not only does it take a lot of development work to integrate each method, but you'll have to maintain the integration as regulations change and updates occur. You'll also have to manage separate contracts and reporting for each method.

It's much easier if your payments provider can handle all this for you. But it's important to ensure they provide a good, well-maintained integration with an optimized payment flow that works on mobile. It's also worth checking if they'll take care of reconciliation.

Another important factor is pricing. You may suppose that you'll get a better price by going to each payment method directly. But payments providers that process for many large merchants have strong leverage to negotiate lower fees. So, while they will charge you a mark-up, you should offset this with the lower fee they'll negotiate and the time you'll save in terms of development hours and reconciliation.

Support local payment methods with Adyen

One contract and one integration with Adyen gives you access to all key local payment methods around the world, optimized for mobile and ready to go out-of-the-box. No need to set up a local entity in each new market; going live is as simple as flipping a switch.

You can even serve up a targeted list of payment methods based on your customers' location, device, and basket value. So each customer only sees the payment methods relevant to them.

Chapter 4

Fine-tune your risk management

In this chapter we'll explore how to maintain the balance between blocking fraudsters and letting legitimate customers pay unhindered.

In this chapter you'll learn:

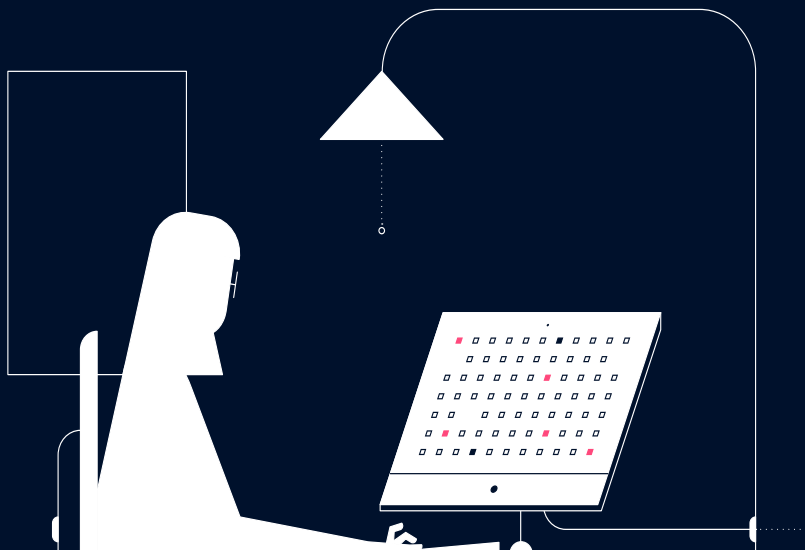
- How payment data is used to prevent fraud
- How to increase conversions with Dynamic 3D Secure
- What's coming in 3D Secure 2.0

The next step along the payment flow is risk. This is when your risk system assesses the transaction to check for fraud.

Fraud is a pain for any business. According to the 2018 AFP Payments Fraud Survey conducted by J.P. Morgan, 78% of organizations were hit by payments fraud in 2017.

As your businesses grows, the threat only increases. Naturally the temptation is to ramp up your risk settings to keep fraudsters out. But this comes at the cost of your conversions as you're more likely to block legitimate customers accidentally (this is known as a false positive).

Risk management is both a science and an art, and it's important to find the right balance between security and your conversion rates.



Use data to block fraudsters, not shoppers

Research company Edgar Dunn & Company (EDC) found that 24% of businesses reported that more than 10% of the transactions they rejected as fraudulent were actually legitimate customers.

So how do you get the balance right?

Best practice is to use data from multiple sources. The more data that's collected, analyzed, and linked, the more likely you are to spot fraudsters.

Here's an example.

It's common for fraudsters to use stolen credentials across multiple businesses. They can test a credit card at a music streaming site in the US and then use it to purchase an airline ticket from Germany to Japan. The trick is to work with a risk management solution that spans multiple markets and industries. That way a single fraudster can be tracked across multiple accounts on its platform.

"To minimize false positives, you need to understand the user pattern — how much they spend, how frequently, etc. You should remember the user's last local payment method. Also, inform users that 3D Secure is for their protection. As a matter of fact, some users actually prefer 3D Secure for security purpose."

fave

Make use of Dynamic 3D Secure

3D Secure is that step in the payment flow when you're redirected to "Verified by Visa" or "Mastercard Secure Code" page.

It was developed by the major global card networks as an additional security layer. If you use it, the liability shifts from you to the card issuers, so you won't be liable for any fraudulent chargebacks. But it can also be a conversion-killer, especially on mobile.

The best approach is to use Dynamic 3D Secure, where transactions are assessed in real time and only those that meet agreed criteria will pass 3D Secure.

Some 3D Secure best practices:

- Customize your fraud prevention strategy based on your specific business needs (industry, business model, countries of operation, sales channels, customer payment preferences, etc.). So, rather than applying 3D Secure to all transactions, you can use it selectively on high-value or high-risk transactions.
- Educate consumers on the benefits of this extra layer of security.

- Regularly monitor and re-assess your strategy as market conditions change.
- Closely coordinate with your payment partners to better understand the impact of 3D Secure in specific countries or for specific issuing banks.

"Since implementing Dynamic 3D Secure in Germany, we have seen 60% fewer chargebacks. Importantly, it has had zero impact on our conversion rates. It is an effective way of blocking fraud without unnecessarily disrupting the order process."



3D Secure 2.0

This latest version of 3D Secure will apply from April 2019. It was created to optimize the process and adapt to the fast-growing trend of mobile and the IoT.

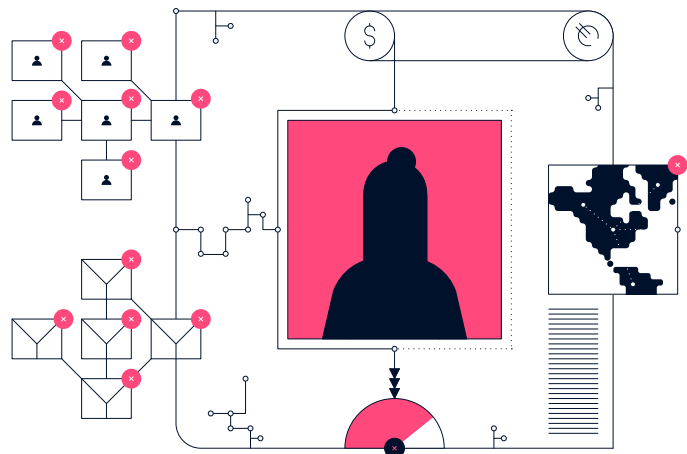
3D Secure 2.0 comes with many improvements, including software development kits (SDKs) to support app-based authentication and integration with digital wallets. Importantly, it will eliminate the need for the redirect. The goal is to use richer shopper data during the transaction and fewer password interruptions so secure shopping is easier than ever.

Manage risk with Adyen RevenueProtect

Get smart fraud defense built directly into your payments solution with Adyen RevenueProtect.

RevenueProtect produces a global, real-time "graph" that spans verticals and geographies, allowing us to see trends before any other provider. You can then easily build intelligent rules tailored to your business to identify fraudsters. And, to keep your business up-to-date, our rule-based Risk Engine uses machine learning to learn and optimize risk checks in real time.

We'll also help you find the right balance with 3D Secure, and ensure you're 3D Secure 2.0 ready. As a result, your fraud will be down and your revenue will be up.



Chapter 5

Get the best from your card processing

In this chapter we'll look at how card processing works under the hood, the multiple parties involved, and how to make sure customers' payments go through smoothly.

You'll learn:

- How card processing works
- How to reduce your costs
- How to increase your authorization rates
- How to ensure recurring card payments are uninterrupted

It's likely that credit and debit card transactions account for the majority of your payments. So it's important that (where possible) these are authorized without a hitch.



How does card processing work?

Card processing works as follows.



Payment processor passes transaction details to the acquirer.

Acquirer sends a request to the customer's bank (the issuer).

Issuer reviews the transaction and comes back with a response: Approved or declined.

What's an acquirer?

An acquirer is a bank or financial institution that acquires funds from a shopper. It's responsible for sending the authorization request to the issuer and passing the response back to the merchant.

To get the best from your card processing, it's important to understand the factors that impact the end result. These are processing costs and authorization rates.

Card processing costs

Credit cards come with fees.

- **Processing fee:** Charged by your payment provider for processing the transaction.
- **Card scheme fee:** Charged by the card schemes for using their network.
- **Interchange fee:** Charged by the issuing bank.

These fees vary depending on the type of transaction, your location and business model — to name but a few. It's confusing, but it can have a significant impact on your bottom line. The good news is that, when it comes to interchange fees, there are things you can do to bring your costs down.

Interchange fees explained

Interchange is usually the biggest expense when it comes to card processing. It's also the biggest headache, since the structure and fees vary for each market, and they change all the time.

Fortunately efforts are being made to standardize interchange with stricter rules and the introduction of fee caps in various markets. Europe kicked this level of standardization off back in 2015, and Australia jumped on the bandwagon in 2017.

There are other factors that impact how much interchange you pay.

Domestic processing

Just like mobile roaming fees, transactions are generally cheaper if processed locally. So it's better to use a local acquiring connection if you can to benefit from local regulations and incentivized rates.

Incentivized rates

Interchange fees vary from market to market. In the US and Australia, for example, Visa and Mastercard grant lower rates to specific businesses like charities, travel agents, streaming services, and utilities. So you want to ensure your transactions are going through under the correct category.

Any savings made will be passed onto you, if your payment provider bills you using the interchange++ pricing model.

What is interchange++ pricing?

This is a pricing model that adjusts based on the interchange rates.

Interchange++ vs Blended

With a blended rate you pay an average processing cost, plus a fixed markup. You're charged the same price for every transaction, which keeps things simple, but you're also likely to be subsidizing larger businesses that have the leverage to negotiate lower fees.

Interchange++ pricing tracks the interchange rates. So when they go down, your costs go down. And you get to see exactly what you are charged for every transaction — so there's no danger of hidden costs or additional surcharges.

Card authorization rates

25% of declined transactions lack valid reasons.

Of course there are good reasons to decline a transaction, like insufficient funds or suspected fraud. But often the card is declined because there was a temporary outage somewhere in the network, or the issuing bank's interpretation of the payment request was different to the acquirer's.

So what can you do about it?

The key lies in understanding why the card was declined in the first place. If you have this information, you'll know if the decline is valid and if not, be able to take action.

This is where your acquirer comes in.

The acquirer is usually another 3rd party provider in the payment process. But, in Adyen's case, acquiring is built into our platform and we pass the information from the issuing bank directly to our customers. So you can see which card payments were unsuccessful and why.

Here's an example.

An Italian issuer was declining recurring transactions outright because no CVV was submitted. Once we knew this, we submitted the payment with the CVV field included (even though it was left blank). After that the issuer started to approve transactions.

"Our overall authorization improved by 20% since we started working with Adyen."

O'NEILL 

Get the best from your card processing with Adyen

You don't have to be a payment whiz to turn declined card payments into approvals. And you don't have to spend time worrying about fluctuating interchange fees. We'll do it for you.

Our smart data tools are designed to detect downtime and spot irregularities in banking systems. We then use this information to adjust payment requests in real time, maximizing the chance of an approval. We'll keep you informed about any changes to interchange rates that will affect you, and our dedicated team monitors rates and regulations to ensure you get the best deal. Plus, our local acquiring licenses in key markets around the world give you access to lower domestic rates.

Chapter 6

Manage your recurring card payments

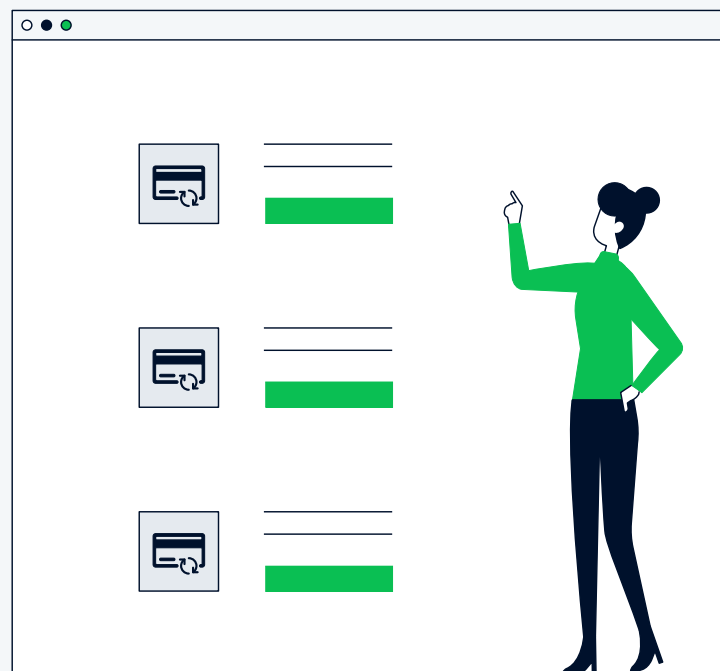
If your business model depends on regular, repeating payments, you don't want these unnecessarily interrupted — and neither does your customer. For this reason many businesses decide to keep their cards on file.

You'll learn:

- How to ensure recurring card payments are uninterrupted

Keep your cards up-to-date

When storing the cards on behalf of your shoppers, you have to make sure their details are up-to-date — even in if the card is lost, stolen or expired. For this purpose the card schemes provide Account Updater services that let businesses and acquirers replace invalid card numbers with new ones



Adyen Account Updater

Adyen Account Updater works in real-time to ensure your cards-on-file are valid. We connect you to Visa and Mastercard Account Updaters without you having to formally enroll with the schemes and demonstrate compliance, which is handled by us. So, whether the transaction happens today or two years from now, you can be sure the card is up-to-date.

Automatic retries

Payments often fail because of an outage or downtime in the patchwork of legacy systems that make up the traditional payment flow. To limit the impact it's worth retrying payments that fail because of technical reasons.

Here's an example.

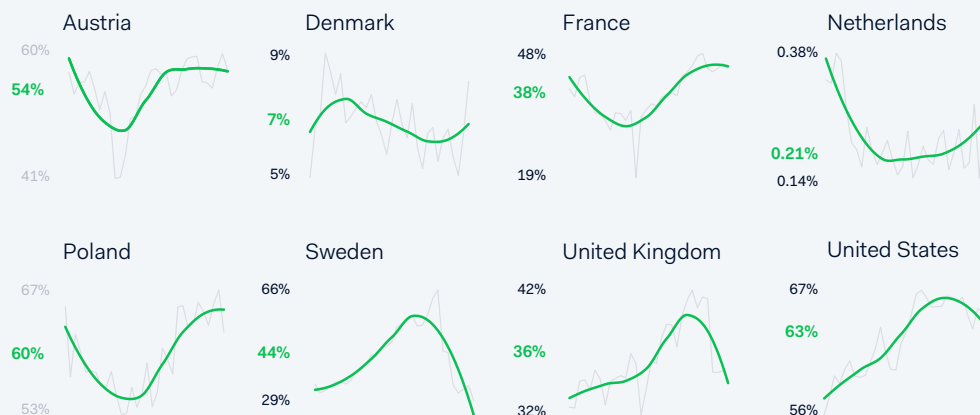
HelloFresh was experiencing a high rate of refusal due to technical issues. To combat this, Adyen identified when and why the transaction had failed, and retried it immediately again via a different acquiring route.

Fine-tune your billing strategy

There's not much you can do if your customer has insufficient funds. But you might be able to increase the odds of a successful payment if you bill them at the right time of the month.

The graph below shows the refusals due to insufficient funds in different countries. The UK, for example, sees a spike in refusals toward the end of the month, just before payday.

Refusals due to insufficient funds



"Retention is obviously our primary goal, and the optimum outcome for that would be a successful authorization on the first rebill attempt... But if you're looking for one key metric to base your rebill strategy around, country is definitely the most important and where you'll find the most consistent trends in behavior."



Process subscription and recurring payments with Adyen

Adyen offers integrations to key subscription management systems, including Aria, Salesforce Commerce Cloud, Magento, and Zuora. You'll benefit from a range of features like Adyen Account Updater, and Auto Retries.

Discover more about subscription and recurring payments. Download our Ultimate Guide below:

Chapter 7

Get the best from your payment data

In this chapter we'll look at how payment data can be used to help your business in several ways.

You'll learn:

- What customer insights you'll have at your fingertips
- What "unified commerce" is and why it's important
- How payment data can help you provide a more personalized experience

Finally, the payment has gone through, the money is taken from your customer's account and credited to yours. Now what you have is data.

You can learn a lot about your customers from your payment data:

- Where they are
- How much they're spending
- How often they buy from you
- What device they're using
- Which channels they prefer
- What payment methods they prefer



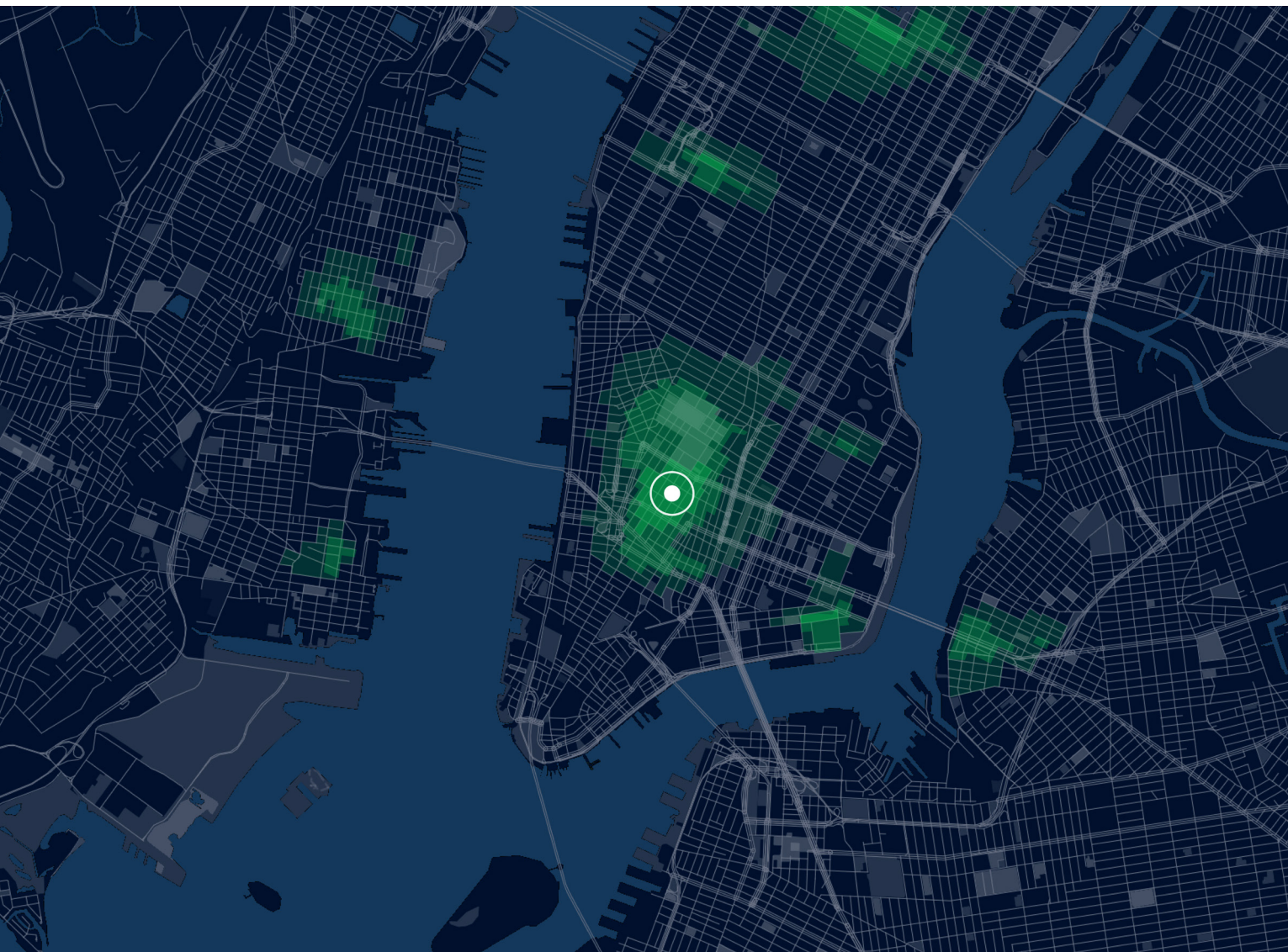
If your payment data from all devices, channels, and markets feeds into the same platform, you'll have a global snapshot of your customers in one place. This is gold dust. You'll be able to paint a detailed picture of your customers' needs, wants, and preferences; target specific customer segments; and deepen existing relationships.

Unified commerce

It used to be multichannel, then it became omnichannel, and now it's unified commerce. In simple terms it means everything is connected: Your customer can buy via multiple devices and channels, and across multiple markets. And, instead of each interaction being managed by separate systems, it's all consolidated into one.

Unified commerce gives you some really interesting insights from your payment data. For example, if you have an ecommerce site and physical stores you can:

- Measure the impact a new store has on your ecommerce sales
- Identify clusters of online shoppers to help you decide where to open a new store
- See what proportion of your in-store shoppers come from overseas

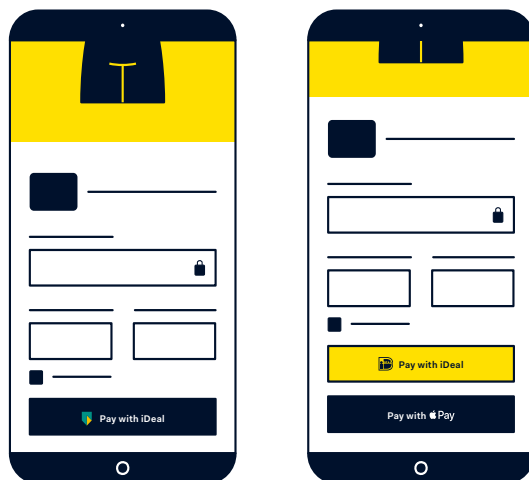


Customer personalization

Insights from your payments data will let you create tailored experience for all your customers. In fact you can be so targeted that no two customer journey's need look the same.

Personalized checkouts

Take a look at the two checkout flows below. This is the same checkout, but two different customers. The checkout has adapted to the customer's location and the apps they have installed on their smartphone.



Contextual marketing

This is all about sending the right messages to the right shoppers at the right times. 50% of US shoppers want location-based discounts and coupons sent to their smartphones.

You can do this in different ways. One example is to send push notifications to shoppers near your store, enticing them inside with a discount on an item they'd been browsing online. Or, since most new payment terminals come with beacons installed, you can recognize your shopper at the point of sale via their mobile app. You can then give them the option to pay in-app and relinquish points they've accumulated.

Get powerful customer insights with Adyen

Adyen gives you a single view of customers across devices, channels, and markets, helping you to build a deep understanding of your customers. Our comprehensive reporting is available in one back-office. So you have all the information you need to win more customers, build loyalty, and increase your revenue.

About Adyen

Adyen is the payments platform of choice for the world's leading companies, providing a modern end-to-end infrastructure connecting directly to Visa, Mastercard, and consumers' globally preferred payment methods. Adyen delivers frictionless payments across online, mobile, and in-store channels.

With offices across the world, Adyen serves 9 of the 10 of the world's largest Internet companies. Customers include Facebook, Uber, Netflix, Spotify, Casper, Bonobos and L'Oréal.

We'd love to set up a call to discuss how we can help you reach your business goals. Visit [adyen.com](https://www.adyen.com) to get started.

