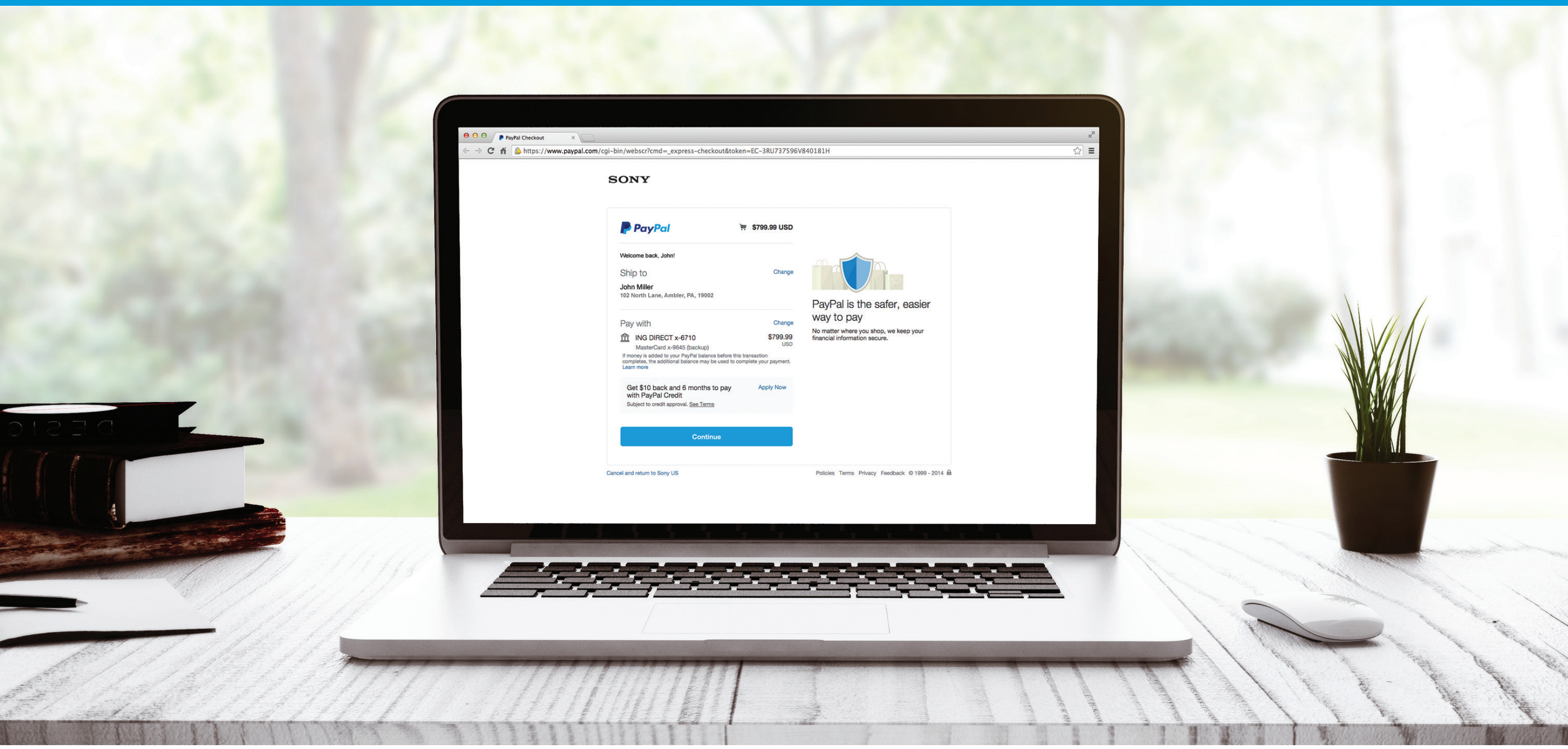
Insights for Businesses

How Online Payments Really Work



If you’re thinking about setting up an online store, you’re in good company.

Shoppers are increasingly turning to online options, as their access to technology and their comfort with current technology grows. Businesses that want to compete effectively need to set up their online shops to allow their customers to check out quickly and securely.

The success of your online business starts with making smart choices about payment processing. So, we’ve put this document together to help walk you through the process of setting up online payments and finding the best-possible pricing and partners for your business. If you’re unfamiliar with some of the payment terms we’re using, just check the Quick Reference Guide at the end for full definitions and additional tips.

1 The Players

Who and what enables payments and delivery

Meet the partners that help you get paid. When you're ready to start accepting credit and debit cards, you're bound to encounter many of these characters in the payments landscape—from the technology pieces at work to help you take payments to the institutions that process and protect them.

The Merchant (That's You)
When you get started, you may work with a merchant bank (aka merchant acquirer) that will set you up with a merchant account—which links to your payment processor, enabling you to collect funds. Or, you'll choose to work with a company like PayPal that acts as your merchant account, gateway, and processor (more about this to follow). Once you're up and selling, other players get involved. After a payment has processed, the funds are debited from your customer's account by the issuer—the bank that gave them the actual card. Then the acquirer is responsible for depositing them into your account.

The Technology
A payment gateway connects your website to the payment processor (effectively connecting you to your customer)—moving money from a consumer's account via an issuer into your merchant account. In addition to authorizing transactions, it also protects electronic payments that come through your website. If you want to accept in-person online payments, you can also manually enter card information on a virtual terminal. But if you're looking to take payments on the go or have a brick-and-mortar shop, a card reader (aka dongle) is a good idea. Many payment providers offer them for free, and you'll simply pay a per-swipe fee whenever you process a card payment.

Your Customers
The beauty of electronic payment processing is that it's all behind the scenes from your customers' point of view—they just check out and it's fast and secure. When customers choose to shop with credit or debit cards, their transactions are governed by several players: the issuer, the Card Associations (Visa®, MasterCard®, etc.), and the Payment Card Industry (PCI). Together, these companies have created a set of rules and regulations about encrypting and protecting data. If you want to accept credit cards, you're required to follow them.

A Helpful Tip

What's the difference between using a merchant acquirer or a payment provider? They both provide a lot of the same financial business products, but payment providers like PayPal can set you up with additional built-in ecommerce options, like templates for your online store, integrated checkout, shipping, and even a payment gateway. With a merchant bank, you'd need to shop around for those services separately.

2 The Payments

The flow of money from your customer to you

Most of a payment's journey is completely invisible to consumers and businesses. Whether you're keying-in your customer's card or your customer is hitting a "Buy Now" button, payments go through a series of stages before they reach your account. By understanding the different stages, you'll have a better sense of what the players are doing (and charging you for), and how to negotiate the best payment processing for your business. The following is a typical flow of a traditional transaction process.

Step 1
Your Customer Pays

Your customer has just made a purchase on your site using credit or debit. The transaction begins its journey through your payment gateway.

Step 2
Encryption

When your customer's personal information and payment transaction data goes through the payment gateway, it's encoded to ensure secure transmission across the Internet.

Step 3
Authentication

The payment processor validates (aka "authenticates") that the payment data is being sent by its claimed source, as a way to curb fraud.

Step 4
Authorization

The payment processor requests the issuing bank to authorize a specific amount of funds from your customer's credit or debit card. The issuer checks to make sure the customer has enough credit to make the purchase and sends back an approval or decline. This entire process takes only a few seconds.

Step 5
Settlement

Settlement occurs when the card issuer sends the appropriate funds to your acquiring bank, which then deposits them into your merchant account. It can take a few days to complete.

Step 6
You're Paid

The funds are accessible in your merchant account. Yay! But you may notice that some of the funds are not available, as most payment processors hold back a reserve temporarily to make sure you can take care of any liabilities like chargebacks or reversals.

Some Helpful Tips

1. Talk to your payment processor and ask them to review the reserve limit on your business. They may be able to lower it or remove it altogether.

2. Different providers offer different levels of customization. For example, when you choose PayPal as your provider, you can set up a Buy Now button in about 15 minutes, or set up a fully customized checkout with easy cart integration and a built-in payment gateway. Either way, you can start accepting online payments quickly and securely—and the checkout is optimized to make it easy for your customers, too.

3 The Pricing

How rates and fees really work

You've learned about how you get your money, and now you want to know: what does it cost? It's no surprise that everyone who touches the transaction wants to get paid, including the issuing bank, the credit card associations (Visa, MasterCard, etc.), the merchant bank and the payment processor.

Breaking down the fees

At its most basic, every time you process a transaction, you pay several fees:

Interchange fee:
The issuer gets paid by taking a percentage of each sale, called the interchange. This fee varies depending on a bunch of things, such as industry, sale amount, and type of card used. At last check, there were almost 300 different interchange fees!* The fee could look like this: 2.0% of the volume + $0.10 per transaction.

Assessment fee:
The credit card association (Visa®, MasterCard®, etc.) also charges a fee, called an assessment. For example, 0.10% + $0.02. This rate is usually bundled with (and called the same thing as) the interchange fee.

Markup fee:
This is a set of fees charged by everyone else who moves the transaction through the network, including your merchant bank, the gateway, and the payments processor (who might all be the same company). The amount of the markup fee varies by industry, amount of sale, monthly processing volume, etc. This is really the ONLY fee where you have the ability to negotiate. Again, it is usually structured as a percent of the sale amount and a per-transaction fee (for example, 0.25% + $0.10).

Other fees:
There can also be fees charged for setup, monthly usage, hardware, and even account cancellation.

How processors package the fees

When researching what type of credit card processor is best for your needs, you'll likely run into a variety of pricing models for processing transactions. Understanding how these rate structures work can help you choose what's best for your business – without unnecessary costs weighing you down. See below for an outline of three main structures that are common in credit card processing.

Flat-rate pricing

Flat-rate pricing is the easiest pricing model to understand. It involves paying the processor a flat fee for all credit and debit card transactions, which covers all the fees mentioned above. At PayPal, our flat-rate pricing structure for businesses that have under $3,000 monthly in sales volume is 2.9 percent plus $0.30 per transaction. See the chart below for an illustration of how this flat-rate pricing might play out. (Note that fees for cards that are swiped through a terminal, instead of entered online, could be higher.)

Your monthly sales volume	Flat fee per transaction	Fee examples
$0 to $3,000	2.9% + $0.30/transaction[1]	$3.20 fee on a $100 sale
$3,000 to $10,000	2.5% + $0.30/transaction[1]	$2.80 fee on a $100 sale
$10,000+	2.2% + $0.30/transaction[1]	$2.50 fee on a $100 sale

Visit our fees page to get the full details on our flat-rate pricing.

Interchange plus pricing

As we mentioned above, every time your customers pay with a credit or debit card, their card issuer charges you a percentage, called an interchange. In addition, the association (Visa, etc.) adds on a fee, called an assessment. (People usually lump the two together as the "interchange fee.")In an interchange plus pricing model, your payment processor adds a fixed markup on top of the interchange fee, instead of bundling a fee directly into the interchange.

For instance:1.8% for interchange fees + a markup of 2% + $0.102 = $3.90 fee on a $100 sale
While this pricing model gives you a bit more visibility into the breakdown of your rates, the tradeoff is that your statements are more complicated to figure out and reconcile.

Tiered Pricing

In a tiered pricing model, the processor takes the 300 or so different interchange rates and lumps them into three buckets (or pricing tiers): qualified, mid-qualified, and non-qualified, usually based on the amount of risk associated with the transaction.

This makes it simpler for you (and them) to understand. However, since the processor defines the tiers however it wants, it can be expensive and lead to a lot of frustration when you get your monthly statement. Here's an example. In general, there are three tiers:

Qualified Rate

Transactions swiped into a physical terminal with a standard (non-reward) consumer credit card are usually considered qualified. Since these carry the lowest risk, they are processed at the lowest rates. If a customer uses a reward card at a terminal, however, that bumps it up to the non-qualified rate.

Note: This is usually the first rate a processor will quote to you—make sure to dig deeper, since it's likely your transactions will not fall into this bucket very often.

Mid-Qualified Rate

Transactions that don't qualify for the lowest rate fall into a mid-qualified rate. For example, if key-enter a customer's credit card number, such as for phone and direct mail orders, you'll pay this higher rate. (Since there's no physical card present, this process brings more risk of fraud, hence the higher rate.) Some processors place rewards and business card transactions in the mid-qualified bucket.

Non-Qualified Rate

Transactions that don't qualify for the above buckets fall into a non-qualified tier, the highest rates you can pay. Many rewards, corporate, and signature card transactions might be considered non-qualified (depending on the processor). Additionally, ecommerce transactions are typically considered non-qualified. That means that even if someone is using a plain old consumer credit card, a payment made online will generate the highest fees for you.

For reference, a qualified card might have a 2.25 percent transaction rate, while a non-qualified card could have a 3.25 percent rate, depending on the credit card processor.3 Here's how that might look:

Qualified	Mid-qualified	Non-qualified
2.25% + $0.25[3] = $2.50 fee on a $100 sale	3.00% + $0.25[3] = $3.25 fee on a $100 sale	3.25% + $0.25[3] = $3.50 fee on a $100 sale

A note on fees

When comparing different types of pricing structures, be sure to keep in mind that some processors charge additional fees, and these can be buried in the fine print. For example, a processor may charge a cancellation fee if you decide to terminate a contract, even if you've been unhappy with their services.

You may also get charged a withdrawal fee for moving funds from your payment processing account to your business bank account, even though that's a standard activity for sellers. Before signing any contract, look for hidden fees, because they could significantly affect your profits.

In general, understanding pricing models and fees can help take the mystery out of choosing a credit card processor and help you find a service that's right for your business.

[1] This is an example for illustrative purposes only and is subject to change without notice. These fees apply to domestic payments in US dollars. There is typically an additional charge for any currency conversion and a charge to receive payments from another country. Rates and fees may vary based on the company, card type, and pricing structure. Be sure to ask your provider for details.

[2] This is an example for illustrative purposes only, and is subject to change, using an average interchange rate of 1.8% for MasterCard or Visa transactions in the United States, though it varies widely across card types. This often also includes a fixed fee on top of the 1.8%, but it depends on the type of card and transaction. On average the interchange rates in the US are 179 basis points (1.79%, 1 basis point is 1/100th of a percentage) and vary widely across countries. There is typically an additional charge for any currency conversion and a charge to receive payments from another country. Rates and fees may vary based on the provider, card type, and pricing structure. Be sure to ask your provider for details.

[3] This is an example for illustrative purposes only and is subject to change. The qualified example above is based on a non-rewards card swiped transaction, and the non-qualified example above is based on a rewards card swiped transaction. There is typically an additional charge for any currency conversion and a charge to receive payments from another country. Be sure to read the provider's Merchant Processing Agreement for the exact criteria used to classify each transaction.

Quick Reference Guide

Payment processing terms

Once you've got the language down, you'll gain a better understanding of the flow of payments—how the funds go from your customer's account to yours—and tips you can use to get the right payment processing for your business' needs.

Acquirer or Merchant Acquirer

In this sense, to "acquire" means to "accept" payments. So, an Acquirer is a banking partner for businesses. They take the risk that you're going to be a trustworthy business (aka underwriting).

Authentication

When a customer submits a payment, the payment processor needs to validate (aka "authenticate") that the payment data is being sent by its claimed source. Payment processor companies use this process as a best practice to curb fraud.

Authorization

The first half of transaction processing, authorization is a request from the payment processor to the issuing bank to authorize a specific amount of funds from your customer's credit or debit card.

Batch Processing

A method used by the payment processor to process all the day's transactions at once. The acquiring bank uses this to help drive operational efficiency for your business. In the online world, transactions are usually processed at the same time they're authorized.

Tip: Make sure you check with your processor regarding settlement—failure to settle transactions on a daily basis could result in higher fees.

Card Association or Credit Card Network

Companies, such as MasterCard and Visa, that set the rules and standards for processing transactions. See PCI Compliance.

Discount Rate

This is a percentage of every sale that you pay to your acquiring bank for accepting consumer credit cards (like Visa, MasterCard, etc.). All applicable fees are bundled into a single percentage rate (aka "the discount rate"), which typically includes interchange, assessments, and processor fees. For example, if the discount rate is 2.5% on a sale of $100, the cost will be $2.50.

Tip: Only work with payment service providers that are transparent about their fees. Types of payment structures that commonly exist include flat-fee/flat-rate pricing, percentage rates, and tiered-pricing.

Dongle (aka Card Reader)

A small accessory that you plug in to your mobile device to securely process in-person payments—either with a physical card or electronically. Once you've got your system all set up, it comes with other perks for your business, such as enabling your shoppers to find and check in with you on their phones and receive personalized offers.

Encryption

The process where your customer's personal information and payment processing transactional data is encoded to ensure secure transmission across the Internet.

Tip: Encryption is an important part of what's known as PCI compliance. And keep in mind that not all payment processors are PCI compliant. This can lead to unexpected fees (and complications) for you, so it's a good idea to choose one that can help with your PCI compliance needs.

Flat-Rate Pricing

A highly transparent pricing model where you pay the payment service provider a flat percentage on the transaction volume for all credit and debit cards. (This is generally preferred by businesses over other more complicated ways to pay for credit processing.)

Interchange Plus Pricing

When your customers make a credit or debit card purchase, their bankcard association charges a percentage of the transaction—this is called an interchange rate, and it varies based on the card category. With the Interchange Plus Pricing, a fixed markup is added by your payment processor on top of that interchange fee. (This is also sometimes called "cost plus pricing.")

Issuer or Issuing Bank

This is where credit and debit cards come from. An Issuer is any financial institution or company that issues physical cards to cardholders.

Merchant Account

If you want to accept credit and debit cards, you need a Merchant Account, a special bank account set up between you and your acquiring (or merchant) bank. The bank is responsible for debiting the funds from your customer and depositing them into your account.

Tip: If you're seeking a new merchant account, look for accounts with simple, straightforward fee structures (see "Flat-rate pricing"). That way, you can eliminate the guesswork in how much it will cost.

Payment Gateway

A Payment Gateway is the software that connects your website (or cash register) to the processing networks. When you process a credit card (or other form of electronic payment) the Payment Gateway securely authorizes cards and electronic payments by encrypting and protecting the customer's sensitive information—like credit card numbers and other account information.

Payment Processor

A Payment Processor is the company that actually gets the work done. It is responsible for moving the transaction from point A to point B and back again. They handle the authorization and settlement, figure out how much to charge you for each transaction, and transfer the money from your customer's bank to your merchant bank. You may not know who your payment processor is, unless you work with a provider like PayPal, as the processor's relationship is often with your acquiring bank, not you directly.

Payment Card Industry (PCI) compliance

If you want to take credit or any other electronic payment, you'll need to follow the rules set by the Payment Card Industry (PCI). PCI compliance is mandated by all card brands to protect and encrypt card information during and after a financial transaction. All organizations or businesses, regardless of size or number of transactions, are required to follow the rules to be PCI compliant if they accept, transmit, or store any cardholder data.

Tip: Some payment providers offer built-in features within their payment solutions that can help you reduce your PCI compliance workload—and make your life a lot easier. Be sure to ask your provider for details.

Reserve

Most payment processors hold back a percentage of the transaction or a flat amount—and this amount is called a Reserve. It's important to note that this is NOT a fee—it's still your money. However, you cannot access it for a certain amount of time. Why do they do this? They need to ensure that you can meet liabilities that may incur from a chargeback, claim, or bank reversal. Reserves are a common industry practice and are used to create a safer shopping experience.

Tip: The reserve limit is often set based on processing history or if the business/industry is deemed higher risk. So, it's a good idea to talk with your payment processor and ask them to review the reserve limit on your business—in some cases they can lower or eliminate it.

Settlement

The last step in card processing, settlement occurs when the card issuer sends the appropriate funds to your acquiring bank, which then deposits them into your merchant account.

Tiered Pricing

This is a rate structure for fees you pay the payment processor for every card or electronic payment transaction. Rate structure criteria are based on a system of qualification. While it's complicated than this, there are generally three tiers (also called buckets):

1. Qualified rate: This is sometimes called a card-swiped rate, since it is (usually) applied to a transaction where businesses swipe the credit card through a terminal. Since businesses can easily verify that the shopper is the owner of the credit card, the incidence of fraud is quite low—so, the rate is the lowest.

2. Mid-qualified rate: This rate is usually applied when businesses key-enter a customer's credit card (in phone or mail order sales, for example). Since there is no physical credit card present, the risk is higher—and so the rate is also higher.

3. Non-qualified rate: Transactions that are processed without supplying the customer's billing address are often downgraded to the non-qualified rate, which is not surprisingly the most expensive fee. E-commerce transactions fall into this category. Rewards cards and commercial card transactions do, too.

Tip: Beware: Most payment processors with tiered pricing may offer low "show rates" (aka "teaser rates") to entice busineses. Also, since the rules for qualification vary from processor to processor, it's virtually impossible to decipher which processor will give you the best overall rates. Perhaps the wisest thing you can do is to avoid a tiered-rate relationship altogether, in favor of a Fixed-Rate or Interchange Plus pricing plan.

Transaction Fee or Authorization Fee

This is a flat service fee (e.g., $0.30 per transaction), you pay the payment processor every time you send a customer's card details to your payment gateway, regardless of the outcome. For example, customer tries to buy something from you, but their card is declined. You, the business owner, still pay a transaction fee to cover the cost of the processor handing that transaction.

Tip: There are almost as many transaction fees out there as there are transactions. When shopping around, be sure to look for payment providers that offer completely transparent fees and no hidden charges.

Virtual Terminal

An online way to accept in-person payments. It's the electronic equivalent of a physical point-of-sale terminal that retailers use to swipe cards. Instead, you manually enter the card information. Virtual terminals let you take your business on the road—all you need is an Internet connection.

Tip: Virtual Terminal processing usually comes with its own set of pricing. Be sure to check with your merchant service provider. Also, if you want to swipe credit cards using your mobile phone or tablet—and take advantage of lower, card-swiped rates—you can download an app and get a credit card reader (or dongle).

Visit www.paypal.com/business to learn more.