The Ultimate Guide to

Credit Card Processing

versapay®

sentinel TECHNOLOGY GROUP, INC.

Contents

Overview

You don't need to have intimate knowledge of how credit card processing works to choose the right credit card processor for your business. Having a general understanding, however, is important, as credit card processing is complex. Having a lay of the land will give you a leg up in identifying and evaluating different payment processing solutions.

Choosing the right credit card processor can have a significant, positive impact on business costs, and there are tactics you can implement, and advantages that certain processors provide—such as **interchange optimization**—that can keep your processing costs as low as possible.

This guide will help you understand how credit card processing technology can speed up and automate payments, reduce manual processes, accelerate cash flow, drive more revenue, and empower your crucial staff to perform more strategic and impactful activities. It'll also explore:

- The rise of credit card use
- The entities involved in the credit card processing ecosystem
- The different processing fees and pricing models
- How you can save money through interchange optimization
- How to prevent security breaches and data theft
- How to ultimately choose the right credit card processor for your unique business

The popularization of credit card processing

People pay with credit cards because it's simple, reliable, and fast. In the business-to-consumer (B2C) world, credit cards are the payment method of choice, and the COVID-19 pandemic has only accelerated their use. When brick-and-mortar shops were closed and handling cash took a back seat to contactless payments, debit and credit processing became synonymous with making and receiving payment for goods and services.

This trend is not unique to just consumer goods either—in fact, the business-to-business (B2B) world presents many similarities, along with many opportunities for further transformation. As businesses scale, so does the complexity of their accounts receivable (AR) operations. Despite the presence of hurdles not typically faced by B2C merchants—such as managing cash around accounts receivable and collecting on late payments—the B2B buying experience isn't much different than its consumer-focused counterpart, and accounting and finance teams are increasingly seeing this.

Research from Gartner points to the "consumerization of the B2B commerce experience," where "businesses that support and encourage digital commerce and digital payment will see faster growth and increasing market share compared to those that do not."

When businesses transact with one another, they have the same needs of speed, ease of use, security, and convenience as consumers do. Beyond that, with businesses striving to increase accounts receivable productivity and deliver major improvements in efficiency, accepting digital payments like credit cards becomes a necessity.

"With businesses continuously looking to drive efficiency and accelerate cash flow, accepting credit cards is critical to increasing speed of payment. By accepting and processing credit cards, you not only meet the demands and expectations of your customers, but also directly impact your profitability and ability to accelerate cash flow."

— Kyle Waltz, VP of Engineering, Versapay

The state of credit card use

The credit card processing system we know today goes back decades. American Express issued the first plastic credit card in 1958, and revolving balances and finance charges were introduced a year later. Today, credit card use is ubiquitous, and it would be hard to imagine life without them. Hundreds of institutions around the world—including banks, credit unions, retailers, and finance companies—offer credit card products.

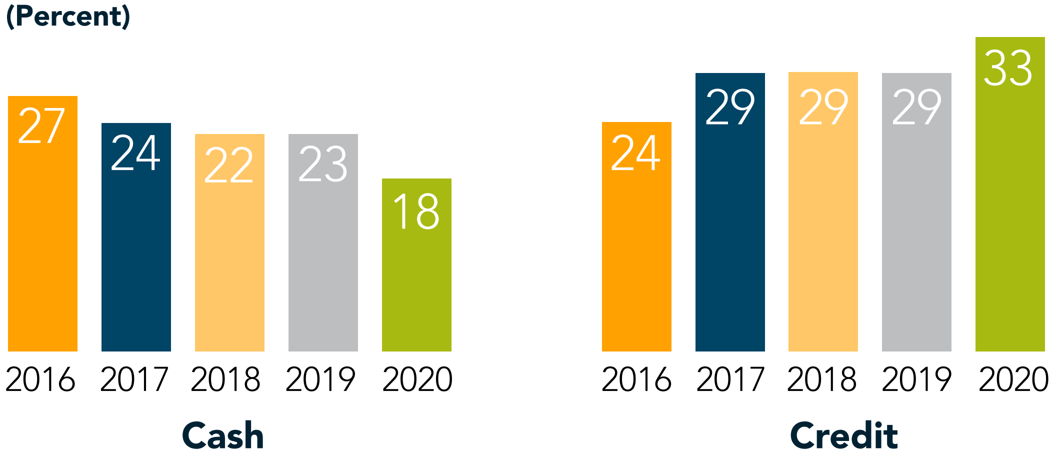
1.1 trillion
Number of credit cards in the United States

191 million
The approximate number of Americans who have a credit card

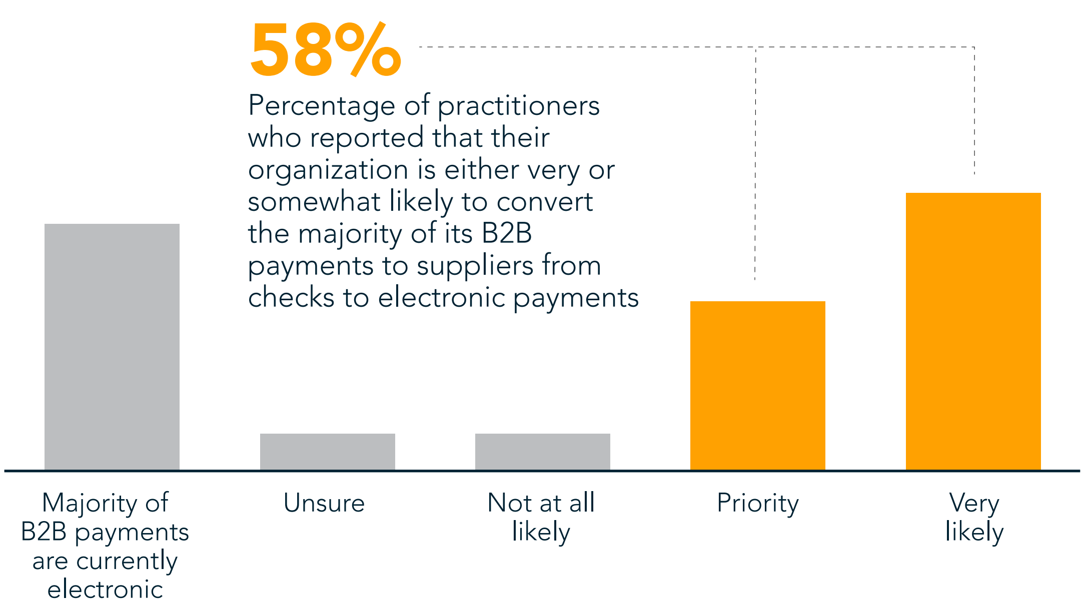
61%
Percentage of Americans who have at least one credit card, with the average person having four

In the past five years, the use of cash among consumers has declined in the United States, while the use of credit has increased.

(Percent)

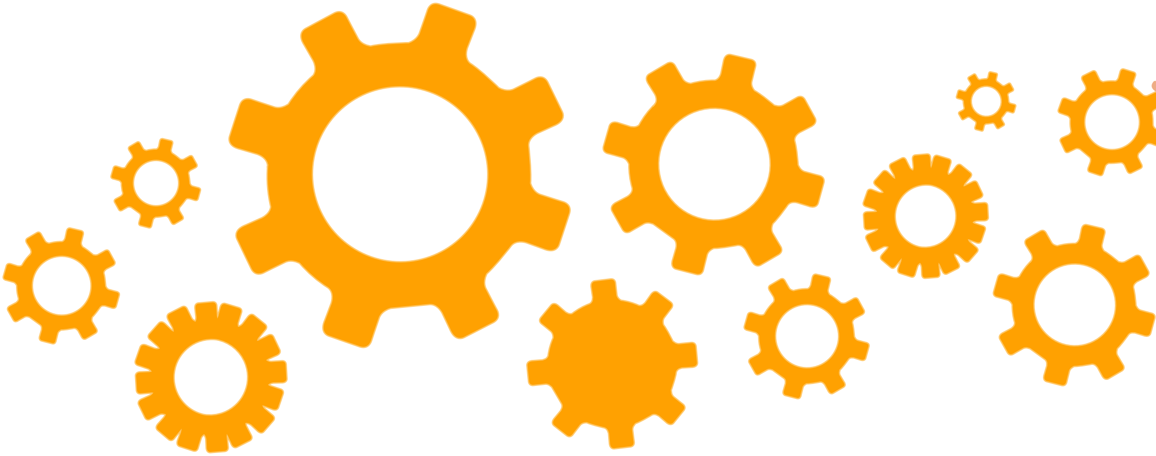


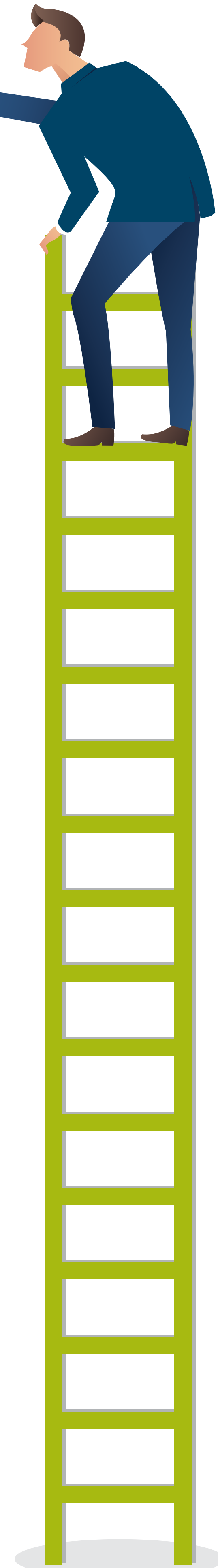
Likelihood of organizations converting B2B payments from checks to digital payments



“Accepting payments from your customers in an efficient manner and allowing customers to self-service and pay the way they want to pay is a huge differentiator for businesses in the market. In the B2B space it could significantly reduce your time to collect payment, and in the B2C space it could be the difference between closing the sale and having the dreaded shopping cart abandonment.”

— Jayme Moss,
EVP Payments Operations and Strategy, Versapay





The entities involved in the credit card processing ecosystem

Over the decades, an advanced—yet highly complicated—web has been built to facilitate and handle the processing of credit cards. So, when a credit card transaction occurs today, the payment—and accompanying payment information—is subsequently routed through numerous channels and governing bodies. These entities all work together, and include:

The cardholder: The consumer or business making the purchase.

The merchant: The business owner selling the product or service.

The acquiring bank: The merchant's bank (where the money goes).

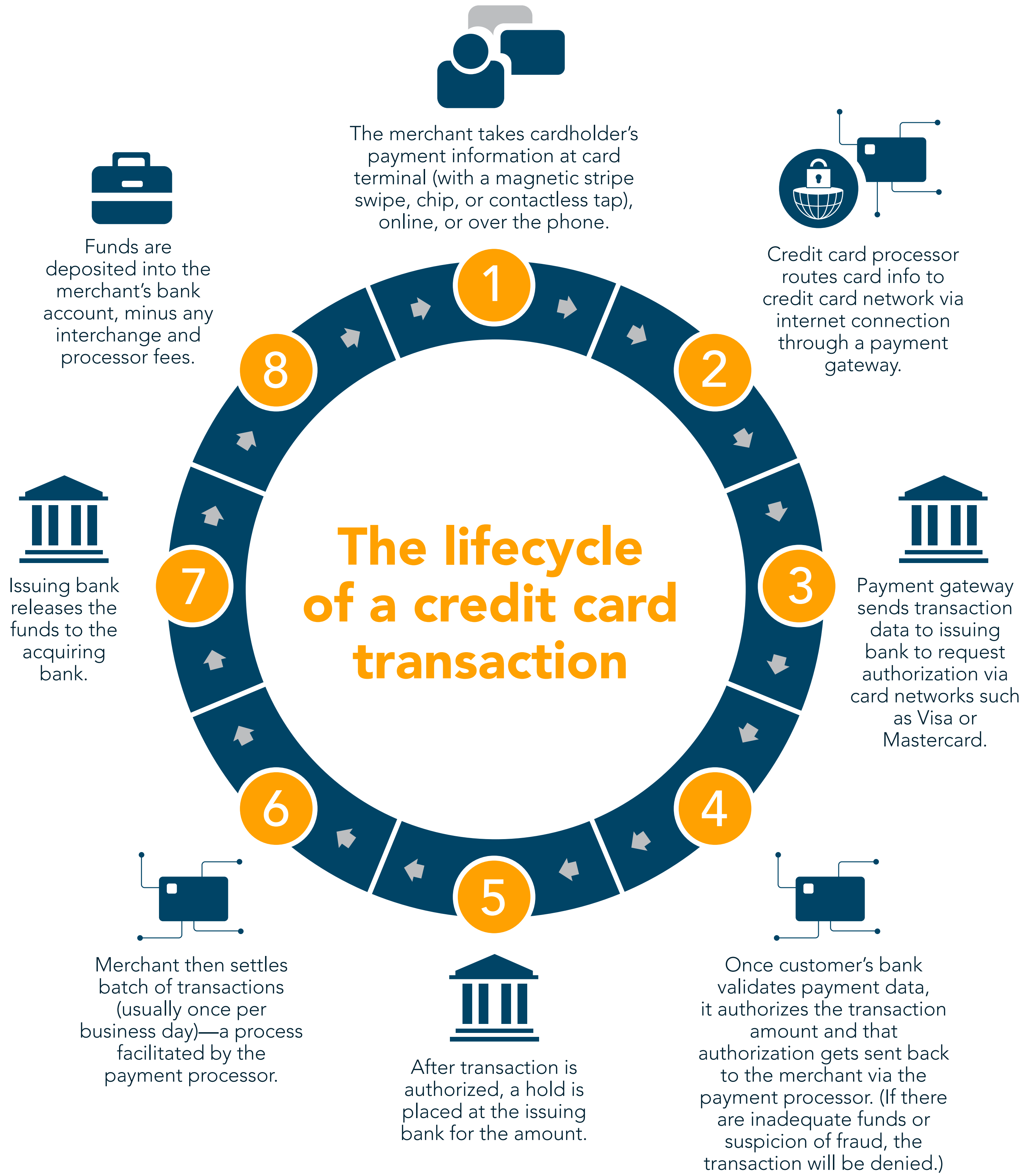
The payment processor: The processor that routes the payment data to the card network and helps facilitate communications during a transaction.

The payment gateway: The technology that creates a secure connection between the merchant's site and the processor.

The card network: The credit card operating networks, including Visa and Mastercard.

The issuing bank: The bank that issues the credit card being used (or the customer's bank)—where the money comes from.

It generally just takes seconds for a credit card transaction to be authorized. Once transactions are settled, it takes an average of two business days for the payment to be deposited into the merchant's bank account. Some processors offer same-day or next-day deposits, while some situations might require a longer payout time period.


The lifecycle of a credit card transaction
1
The merchant takes cardholder's payment information at card terminal (with a magnetic stripe swipe, chip, or contactless tap), online, or over the phone.
2
Credit card processor routes card info to credit card network via internet connection through a payment gateway.
3
Payment gateway sends transaction data to issuing bank to request authorization via card networks such as Visa or Mastercard.
4
Once customer's bank validates payment data, it authorizes the transaction amount and that authorization gets sent back to the merchant via the payment processor. (If there are inadequate funds or suspicion of fraud, the transaction will be denied.)
5
After transaction is authorized, a hold is placed at the issuing bank for the amount.
6
Merchant then settles batch of transactions (usually once per business day)—a process facilitated by the payment processor.
7
Issuing bank releases the funds to the acquiring bank.
8
Funds are deposited into the merchant's bank account, minus any interchange and processor fees.

Processor vs. gateway: the two critical links in the payment processing chain

Of the seven main entities involved in processing a credit card transaction, the ones that are most crucial to making the fast and secure transactions your business needs are the credit card processing company and the payment gateway.

What is a payment processor?

This is the company that handles the credit card and debit card transactions for a business. Front-end processors maintain connections to card networks and manage merchant accounts, while back-end ones settle the transactions by moving money from the issuing bank to the merchant bank. If you want to accept credit and debit card payments from your customers, online or on the phone, you'll need to partner with a payment processor.

What is a payment gateway?

This is the technology that creates a secure connection between your business's website or browser and your credit card processing company. This secure connection is used to encrypt credit card data for every transaction, verifying the authenticity of a transaction and keeping sensitive information secure. Once the encrypted data is delivered, your customer's card is charged the appropriate amount, and the funds are delivered directly to your business' bank account, minus any interchange fees and processing costs.

Often, you can set up a payment gateway in partnership with your chosen credit card processing company through your merchant account provider, which can have some real advantages as compatibility issues are less likely and it can be more cost-effective. In particular use cases, a payment processor may possess its own proprietary payment gateway, helping to further control the transaction and securely transmit data.

Understanding the fees

Of course, the benefits of accepting credit cards come with a price. As the merchant, you pay certain fees with every transaction you run. But fees can vary between processors and among different pricing models. There are transaction rates, monthly fees, and other charges. Interchange fees are paid to the issuing bank and the card brands set the rates.

The credit card processors' fees

Payment processors' pricing and fees vary depending on the amount and value of the transactions you process and the pricing model you choose. Generally, payment processors charge a percentage of each transaction, often adding a small per-transaction fee as well, and a few other fees, such as a monthly statement fee or a monthly minimum fee.

$92.68 billion

The amount merchants paid in processing fees in the U.S. in 2019, up 7.3% from 2018

Interchange fees

These are the fixed fees issuing banks collect for credit card transactions, with the credit card companies setting the rates. They've risen exponentially over the years and show no sign of abating.

80%

Approximate percentage of total processing fees that interchange fees make up

The composition of interchange fees

Interchange fees cover the costs associated with the risk involved with approving a payment. It's what's paid to the issuing bank—the cardholder's bank—by the acquiring bank—the merchant's bank.

1. The interchange rate

The interchange rate is a fee that the merchant is required to pay with every credit transaction—it's also referred to as a swipe fee. The rates are set by the card networks and are revised periodically. When someone swipes a Visa, for instance, that network will collect a fee. Interchange rates are typically a percentage of the transaction plus a flat rate and can differ depending on whether the customer is using a debit, credit, or business card, as well as whether the transaction is keyed in or swiped.

2. The assessment fee

The assessment fee is based on the total monthly sales for each credit card brand and is paid entirely to the credit card associations. Like the interchange rate, the assessment fee is not something that you can change because it is related to the payment networks. This fee is usually paired with the interchange rate, and together they comprise the interchange fee.

3. Other additional charges and fees

Markup fees

These are paid to the processor per transaction and are an expense that offset the company's profits.

Flat fees

Some processors charge a monthly service fee to use their platform and software.

Monthly minimum fees

Some processors may require that you process a minimum amount per month to avoid a fee being added your bill.

Batch fees

Some processors may charge for each time you send over a batch of payments (usually daily).

Equipment leasing fees

To accept credit card payments at a physical retail location, a payment device might be required. Consider the costs associated with renting or buying the terminal outright.

Chargeback fees

These occur sometimes if a customer disputes a charge and it results in a refund.

Payment gateway fees

If your payment processor uses a third-party gateway, there might be an additional fee for that service.

How to save money on credit card processing

If you're looking to save on costs for credit card processing—as B2B companies especially are—you'll want to know about interchange optimization.

B2B businesses often rely on corporate and commercial cards, whose interchange rates can be higher than consumer cards. But that rate can be substantially reduced by passing more information to the credit card brands.

Most transactions pass along basic data—known as Level 1. But there are other levels of data—Level 2 and Level 3—and passing along high levels of data makes the transaction more secure. And the more secure your transactions are, the less risk there is to credit card companies, which leads them to reward you with lower interchange costs

	LEVEL 1	LEVEL 2	LEVEL 3
Total purchase amount	●	●	●
Date	●	●	●
Merchant name	●	●	●
Sales tax amount		●	●
Merchant's ID number		●	●
Customer accounting code		●	●
Ship from ZIP code			●
Destination ZIP code			●
Product codes			●
Invoice number			●
Order number			●
Freight amount			●
Tax rate			●

** the actual data that's passed in a transaction might vary depending on your credit card processor*

The most sophisticated payment processors offer interchange optimization as a service to help businesses save on processing fees—in some cases, up to 40%. Reducing interchange fees by as little as one percent can be invaluable when dealing with transactions of large value—as is usually the case in B2B—and can boost your bottom line or help you direct your money to other much-needed areas of the business.

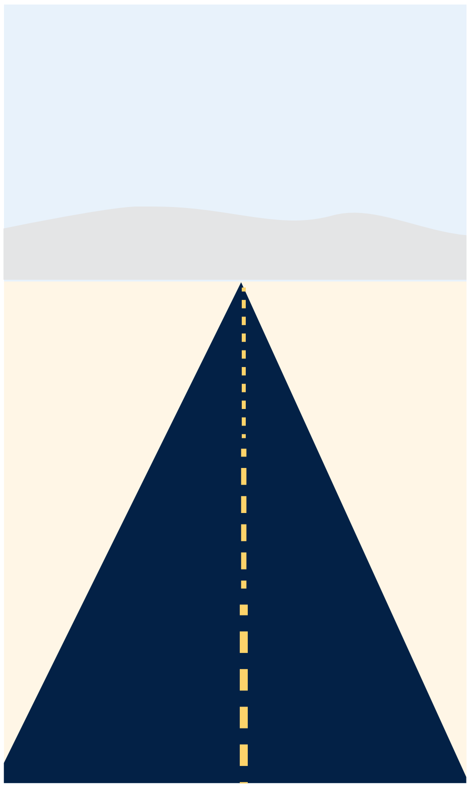
“

Interchange optimization starts with understanding and managing interchange fees, and this is what we consider our secret sauce. There's a lot of information sent with a transaction—address, sales tax, line-item details—and we're able to capture that data and leverage it to optimize your interchange rates and maximize your overall savings.”

— Jayme Moss, EVP Payments Operations and Strategy, Versapay

The three types of pricing models

Now that you have a sense of the fees associated with credit card processing, you'll need a good understanding of the different pricing models that processors might offer. It's wise to evaluate how each pricing model might work for your particular business.



1. Flat-rate pricing

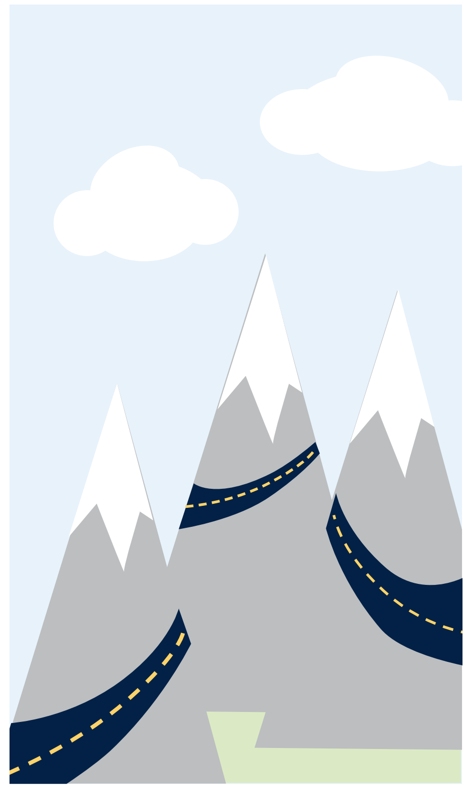
You pay the same fixed fee per transaction, including the interchange fees, which keeps things simple and is good for businesses with low transaction volumes. And these types of processors usually don't have a high monthly fee. But, the cost per transaction is usually higher than other models.

Pros: easy to understand and predictable
Cons: lack of transparency and some transactions are more expensive than others

2. Cost-plus pricing

Cost-plus pricing (also called interchange-plus pricing) is transparent in that you'll see an itemized breakdown of your transaction fees. It will include the interchange rate plus the processor's markup. A hybrid type also adds a monthly subscription fee. The more transactions a company has per month with this model, the more money it saves.

Pros: transparency and some transactions are more affordable
Cons: more complex that flat-rate and some transactions can be pricier



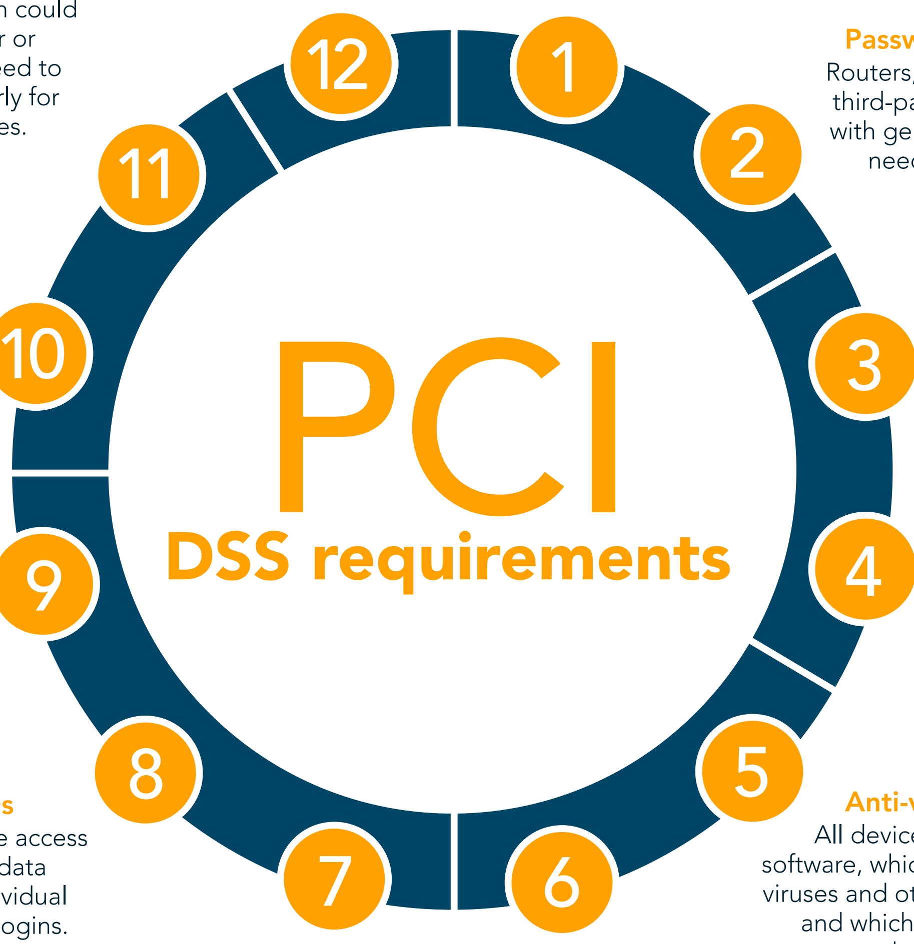
3.Tiered pricing

This is the most complicated of the pricing models. Each credit card transaction is classified as qualified, mid-qualified, or non-qualified, and the transaction fee is different for each.

Pros: you pay less per transaction and it's customizable
Cons: can be less transparent and hard to understand

Secure and protect sensitive credit card data

In the digital world, where very sensitive cardholder data is being transmitted, protecting that data is crucial. The Payment Card Industry Data Security Standard (PCI DSS) is the global set of requirements intended to ensure that all companies process, store and transmit credit card information in a secure environment. There are 12 main requirements for PCI DSS compliance that apply to merchants and credit card processors:



Firewalls
These block access to anyone trying to access private data and are the first line of defense against hackers.

Password protections
Routers, modems, and other third-party products come with generic passwords that need to be changed.

Cardholder data protection
All card data must be encrypted.

Encryption of transmitted data
The many channels that cardholder data gets transmitted across must ensure security and be encrypted.

Anti-virus software
All devices should have this software, which detects and removes viruses and other malicious software, and which should be regularly patched and updated.

Updated software
All software products such as firewalls should be updated to address vulnerabilities and enhance security.

Restrictions on access to data
Cardholder data should be accessed only by those who need it, and that list should be well-documented and regularly updated.

Unique IDs
All those who have access to cardholder data should have individual credentials and logins.

Secured locations
All data, whether physical or digital, should be kept in a secure location with restricted access.

Access logs
PCI Compliance requires documenting how all data flows in and out of your organization.

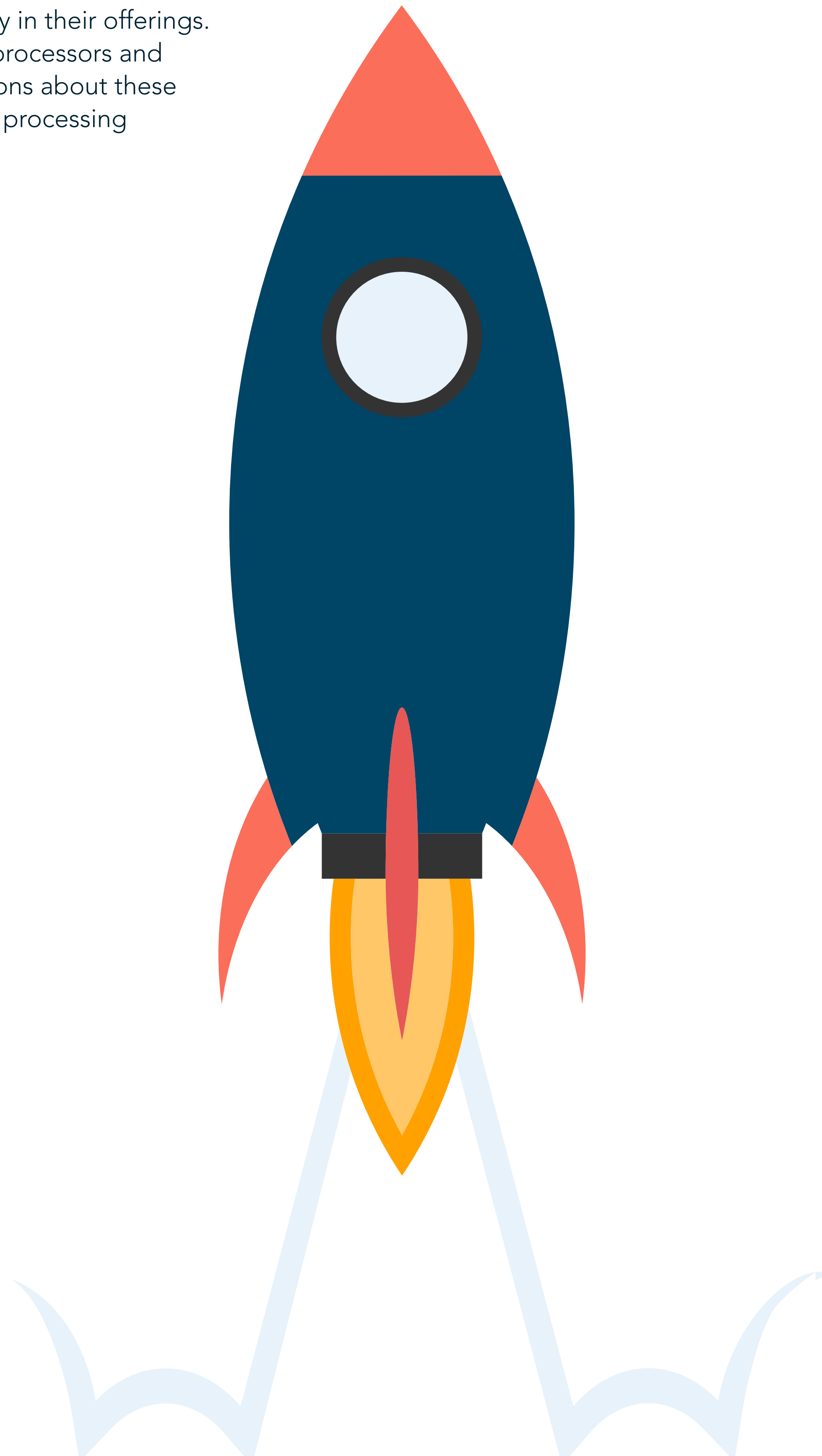
Vulnerability testing
Transactions involve many people and software products, all of which could be prone to error or malfunction and need to be scanned regularly for any vulnerabilities.

Documentation
Documentation needs to exist for all equipment, software, and employees with access, as well as how information flows in your company and how it's used and stored.

Your business should at minimum be PCI-compliant—this is the starting point for securing your systems and data. If your customers trust you with their sensitive data, that translates to increased confidence and repeat business. It also makes you a partner in the global effort to prevent security breaches and data theft.

How to choose the best credit card processor for your business

Like any service, credit card processors vary in their offerings. So, when evaluating potential credit card processors and merchant acquirers, you should ask questions about these critical areas where the quality of payment processing matters most to your business:



Exceptional transaction speeds

Customers appreciate the ability to pay with debit and credit cards and expect payment—and the overall transaction experience—to be fast. Even short delays can create big annoyances. You'll want to choose a processor that's proven to process large volumes of transactions safely, accurately, and quickly. What counts as "fast enough" is a bar that's always on the rise. Today, credit card processors commonly complete transactions in under two seconds. That said, you'll want to ensure your credit card processor doesn't sacrifice security over the prioritization of speed. Consumers are as concerned about security as they are about convenience. Your credit card processor should deliver both.

Fair and transparent rate structure

Credit card processing can be complex, but the cost of that service should be clear and straightforward. The rates and fees you'll pay depend on many factors, starting with the interchange category applicable to your business. Interchange pricing varies based on the risk factors of different types of businesses. Ask for clear, concise and complete explanations of rates and fees from any credit card processor you may consider.

Omnichannel acceptance

Any payment processor should be able to handle payments in a variety of ways without sacrificing speed, convenience, or service. Nowadays it also includes invoicing, recurring billing, mobile payments, and more. If you want to accept different kinds of payments, you could work with a processor and also get separate merchant accounts for each acceptance method, but better yet is to work with a processor that offers an all-in-one payment processing solution.

ERP system integration

An Enterprise Resource Planning (ERP) platform generally refers to business management software that companies use to collect, store, manage, and interpret data for many of their accounting activities. It's meant to simplify and centralize processes like purchasing and inventory management and is deployed either on-premises or hosted by a third party in the cloud. ERPs also connect all the IT systems and applications in your business so that they work together, eliminating the need to input the same information into two or more systems. A payment processor that seamlessly integrates with your ERP supports interchange optimization, because all that additional data such as customer codes or invoice numbers is already captured in the ERP. That makes it easy to send that data with the transaction automatically.

Access to top-of-the-line customer support

Chances are your business is built at least in part on strong customer service, and you should expect the same from any provider you partner with. The credit card processor you choose should be able to explain its processes and rate structure clearly and understand the ins and outs of your business well to deliver on your company's needs. Bonus points if they're willing to provide you with a detailed cost analysis of the savings they can help you with before you even become a customer. An ongoing support system that is available to answer questions and troubleshoot any issues with an empathetic approach is key to a successful relationship.

Start accepting credit card payments today

Credit card processing is vital to your business. It's a necessity for businesses looking to reduce manual accounts receivable processes, save substantially on payment fees, and accelerate payment collection. The credit card processor you choose should be a partner in maintaining and growing your business. A fast, reliable, and secure payment experience for both your team and customers will save you time, help you remain competitive, and help you improve your bottom line.

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