



Understanding the Ins and Outs of Credit Card Payment Processing





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Introduction

Online and offline credit and debit card transactions have grown exponentially over the past two decades. Why? To put it simply, paying by credit or debit card is convenient for consumers. In addition, credit card issuers are encouraging more usage via a wealth of incentives such as points-based programs and cash-back rewards.

Although the benefits of credit cards are straightforward, the ecosystem of electronic payment processing is not. This is especially true for the new merchant or nonprofit organization in the early stages of credit card acceptance.

This eBook was created to serve as a guide to the main components of credit card payment processing. A basic understanding of the players and how the electronic payment ecosystem works will empower you to ask the right questions of potential payment processing partners. As a result, you will be better prepared to create the system that is best suited for your needs and budget.

Players: Who Does What in this Complex System?

The Customer

The person who wants to use their credit card to pay you for your goods or services.

The Issuer

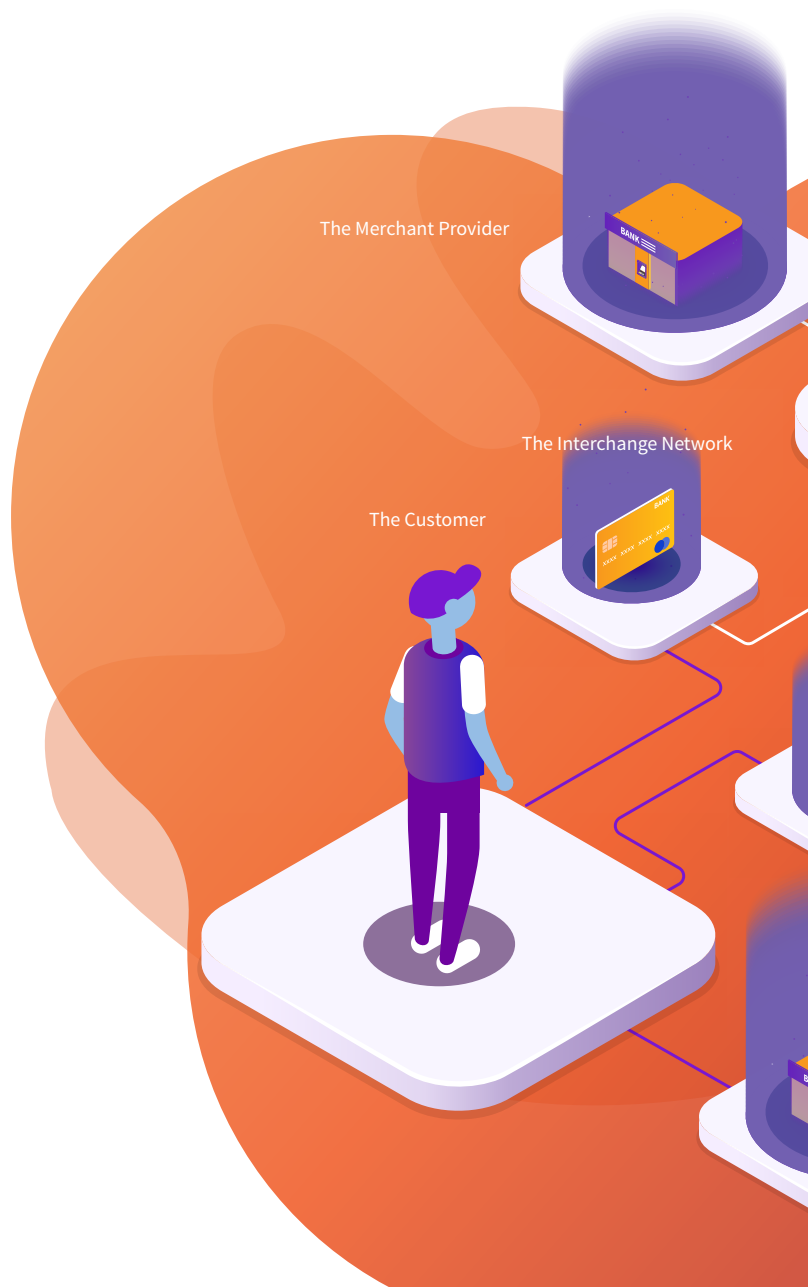
The Issuer is the entity or bank that grants credit to a Customer and issues a credit card. The Issuer typically partners with Visa or Mastercard. Discover and American Express are examples of private label cards that a Customer applies to directly.

The Merchant Provider

The bank or agent of a financial institution that supplies you with your merchant account is the Merchant Provider. Merchants negotiate an agreement with the Merchant Provider for the purpose of accepting credit cards. The Merchant Provider represents the Merchant's interests and supports you through every step of the process — from installation to day-to-day service calls. The Merchant Provider also receives deposits through the Interchange Network from each Issuer and transfers them into the appropriate merchant accounts.

The Interchange Network

Visa, MasterCard, American Express and Discover make up what is referred to as the Interchange Network or “The Network”.



The Merchant

That's you. A Merchant is any company that enables Customers to purchase goods or services using a credit or debit card.

The Processor

A Processor is an intermediary that enables transactions to flow through the system to obtain authorizations and deposits via the Interchange Network. There are several major Processors that facilitate this movement. In most cases, Merchants do not choose their Processor. It is usually determined as a result of which bank or financial institution your bank or Merchant Provider represents; however, this is transparent to you.

The Payment Gateway

A Payment Gateway is a software service and set of APIs that enable the Merchant to access the systems needed to transmit a request for payment. The moment card data is received via swipe, key, dip, or tap, the Gateway securely transmits the information via the Processor to the Issuer for authorization. The Issuer returns the authorization back to the Payment Gateway through the Processor.



Process: The Four Primary Steps of an Electronic Payment Transaction

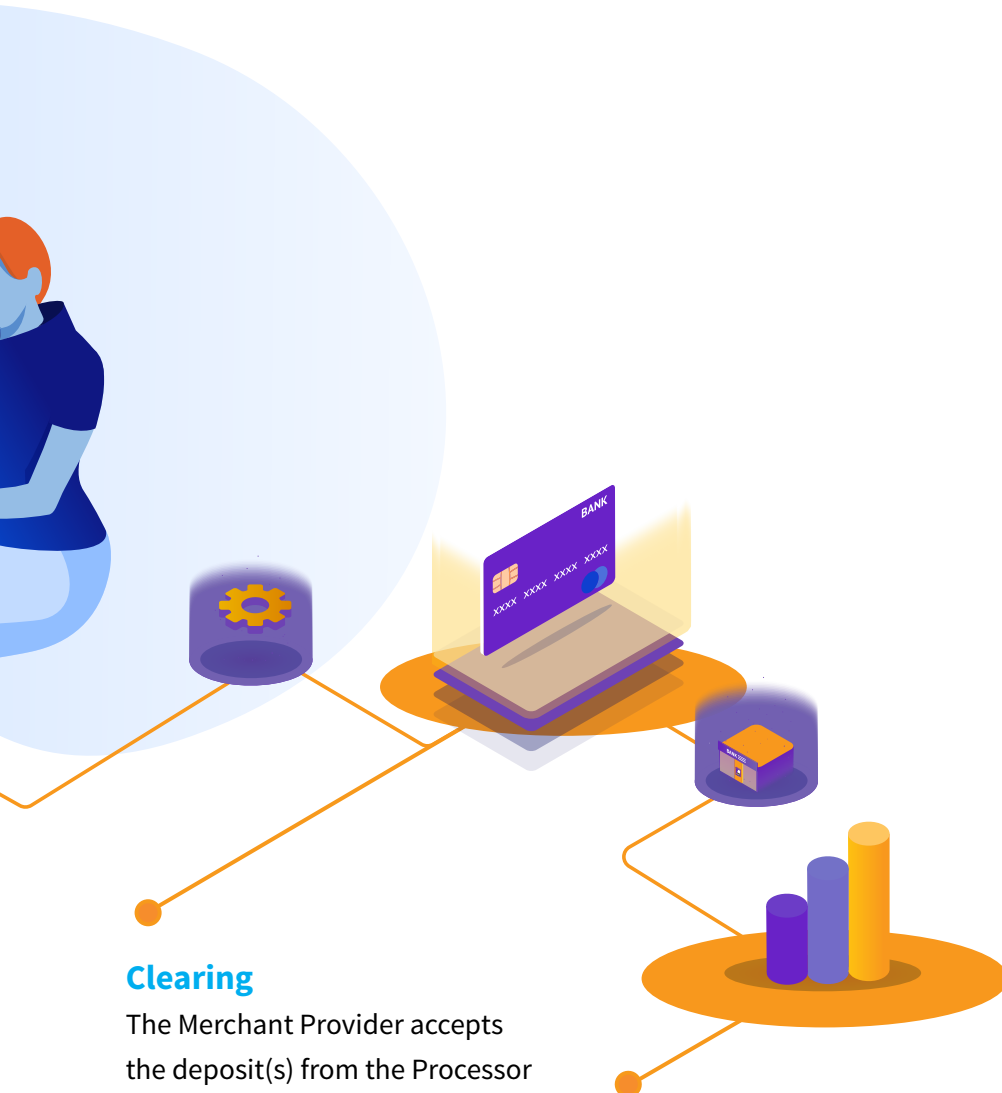
An illustration of a person with red hair sitting at a desk, working on a laptop. To the left of the person, there are three gold coins on a small orange platform, a purple server rack, and a purple receipt emerging from the laptop. Orange lines connect these icons to the 'Payment' and 'Batching' text blocks. The background is a light blue gradient.

Payment

When a Customer uses a credit card to pay for your goods or services, or make a donation, the transaction must be authorized by the bank that issued the credit card. This ensures that credit is available to the cardholder and that the purchase amount is within the cardholder's credit limit.

Batching

At the end of each day, Merchants batch and send captured credit card transactions through the Processor to their Merchant Provider for deposit. The Payment Gateway will automate this process behind the scenes.



Clearing

The Merchant Provider accepts the deposit(s) from the Processor and forwards them to the Card Networks. The Card Networks then distribute the transactions to the corresponding Issuer. The Issuer debits the amount of the transaction from the cardholder's account.

Funding / Settlement

The issuing banks send the card payments back through the Network to the Merchant Provider, who then transfers the payments to the appropriate Merchant's account. The funds are typically available within 24 to 48 hours.

Payment Gateways and Merchant Accounts

Payment Gateways

The Payment Gateway sits between the Merchant and the Processor, who passes transactions to the Network (MasterCard, Visa, American Express, Discover, etc). The role of the Payment Gateway is that of a secure information conduit that complies with credit card processing security rules and regulations. Once the card information is entered, the Payment Gateway transmits the card data to the Network who then passes it on to the card's issuing bank for authorization. All of this happens in the blink of an eye using encryption technologies to ensure confidential cardholder information is never exposed.

Payment Gateways work across all payment environments: desktop, mobile, brick and mortar, bricks and clicks and even voice recognition-enabled payment processes. White label Gateway options will even allow you to apply your graphic user interface (GUI) or page template online to create a seamlessly branded experience for Customers engaging with your company or organization.

In addition to transmitting payments, the Payment Gateway also provides credit card payment management tools such as reconciling and reporting, and automated account updating — proactively tracking down outdated credit card information to maintain your recurring payments.

Merchant Accounts

The merchant account serves as a repository for credit card payments and is linked to your bank account. Merchant accounts are set up directly with a Merchant Provider.



Payment Processing Pricing Models & Fees

There are two basic pricing models related to merchant account services:

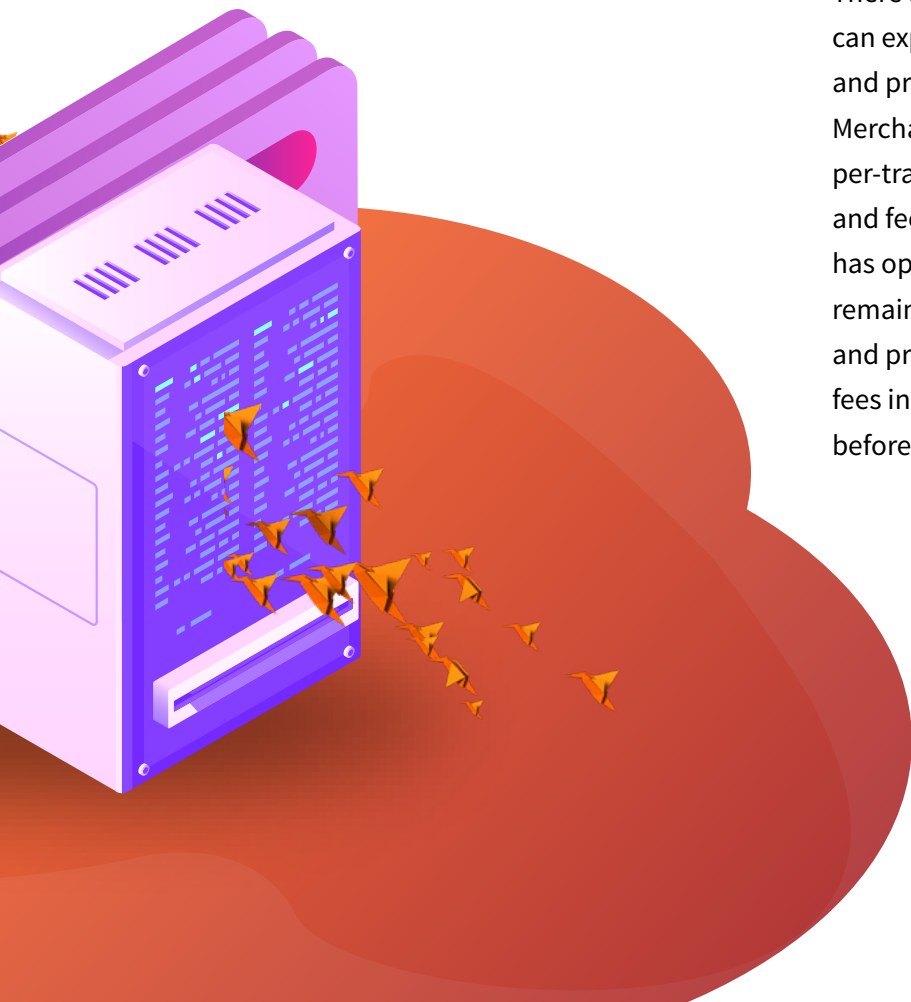
Bundled, Also Known as Tiered Pricing

Bundled pricing is when the Merchant Provider combines all the interchange fees and processing fees into one bundled rate. As a result, the Merchant isn't able to clearly see what they are paying for.

Cost-Plus Pricing, Also Known as Transparent Pricing

Cost-plus pricing is a more transparent and trustworthy pricing model. The merchant's statement plainly shows how the fee for each and every transaction is calculated, so that Merchants know the service charges they're paying are accurate and fair.

There are three categories of fees that a Merchant can expect to pay — gateway fees, interchange fees, and processor fees. The Gateway typically bills the Merchant for its service fees, which can include a per-transaction fee, a monthly maintenance fee, and fees for value-added services the Merchant has opted for. The Merchant Provider bills the remaining two categories of fees — interchange and processing fees. It is important to factor these fees into your overall credit card processing costs before selecting providers.



Evaluating Payment Processing Service Providers

By now, you realize that credit card payment processing is an industry unto itself. There are a host of service providers/partners including banks, Payment Gateway providers, merchant account providers, processors, consultants, and other intermediaries. Merchants typically have two options for approaching their credit card payment system:

À la carte Solution

The advantage of an à la carte approach is that it allows you flexibility in vendor choice. The trade-off is having to monitor and manage separate relationships, reconcile separate reporting systems, and make sense of separate fees.

Full-Service Partner

A 'full-service partner' is a third party provider that offers both the Payment Gateway and merchant account together as one service package. This solution offers the simplicity of dealing with one provider. Often, the full-service option is more cost effective, since the partner is accustomed to negotiating the pricing and fees associated with your solution on your behalf.

Whether you choose to partner with a Merchant Provider/bank and a separate Payment Gateway provider, or choose the full-service route, the vendors are authorized by the Network the same way. They are legally bound (as are you as a credit card acceptor) to operate according to the terms set forth in their agreements.

When you choose a full-service partner, you get a Gateway and a merchant account partner in one, and one central point of contact for help.




Know Your Security and Encryption Requirements

Personal credit card information is highly vulnerable to fraud and theft and, therefore, must be protected. Payment Card Industry Data Security Standards (PCI DSS) allow for consistent data security measures while at rest and during transmission. No matter how small or large your business is, all Merchants that accept credit cards are required to demonstrate (and pay for) PCI compliance. If your business stores any (less sensitive, yet still personal) cardholder data, you will also need to allow for an approved scanning vendor to scan your business once a quarter.

P2PE and Tokenization

Most security experts agree that just meeting PCI DSS compliance guidelines doesn't go far enough to protect consumer credit card information. Two additional technologies — P2PE (point-to-point encryption, also called end-to-end encryption or E2EE) and tokenization can provide an extra layer of security pre- and post-authorization.

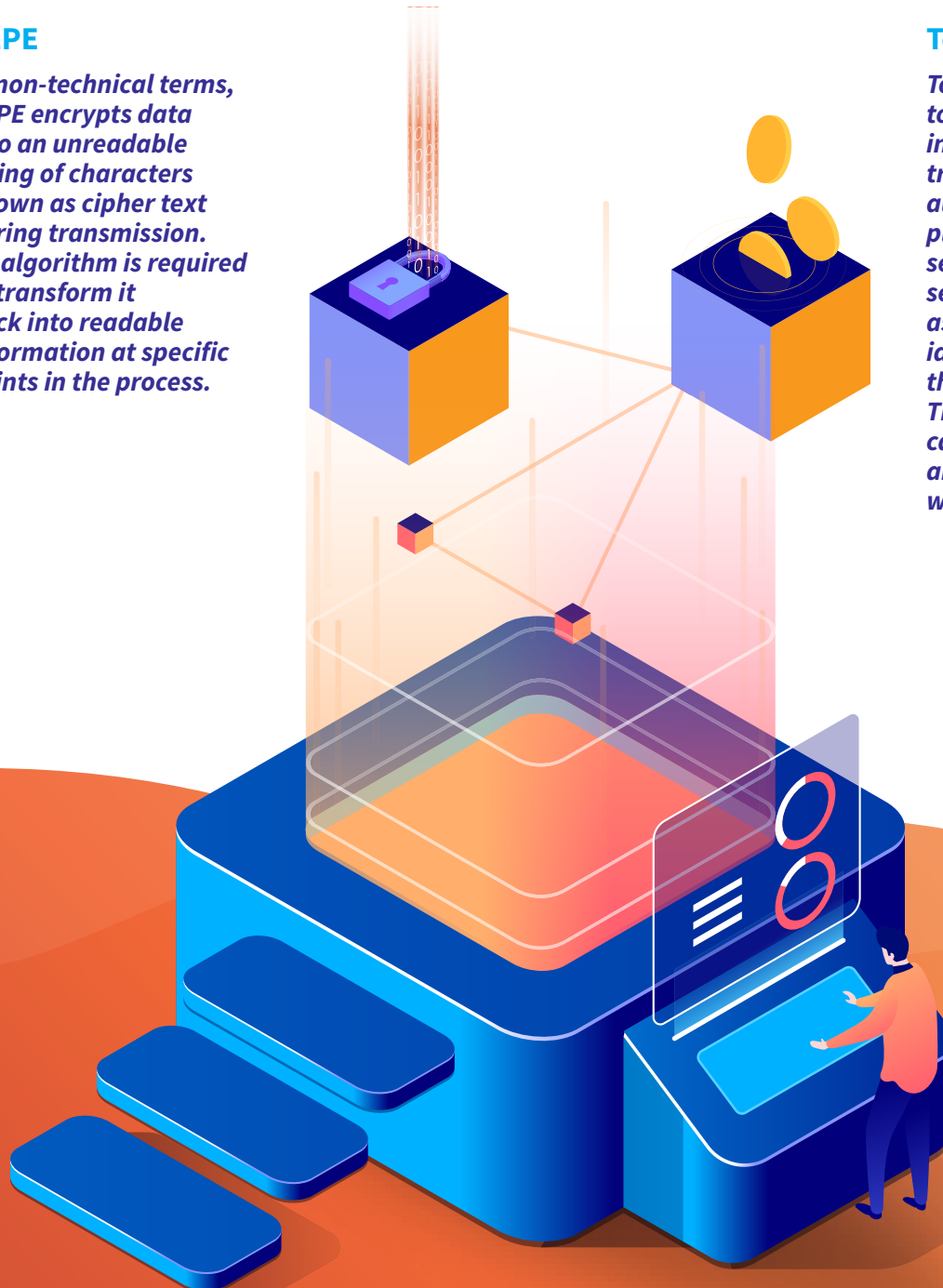
A large, abstract, organic shape in shades of orange and red, located in the bottom right corner of the page.

P2PE

In non-technical terms, P2PE encrypts data into an unreadable string of characters known as cipher text during transmission. An algorithm is required to transform it back into readable information at specific points in the process.

Tokenization

Tokenization is used to protect credit card information once the transaction has been authorized. The data is placed into a highly secure, cloud-based server or “vault” and assigned a unique identifier or “token” that works as an alias. These tokens, which cannot be monetized, are useless to any would-be cyber thieves.



Where Do You Go from Here?

Chances are, you're either considering changing credit card payment processing partners or you're a Merchant looking to start accepting credit cards. Either way, you want to get it right and avoid the frustration of having to search for new partners all over again a year or two down the road. Prepare your vendor search the way you would prepare to buy a car. Start by determining your preferred type of service and pricing model and then select vendors with proven track records for consistency and accuracy. Ask about services such as onboarding, customized reporting, and automated account updating for recurring transactions. If a vendor is not interested in your business model — only what and how much you process — then you're probably not going to get much in the way of proactive, value-added service. On the other hand, a potential partner who demonstrates a willingness to learn about your business model and your acceptance of credit cards as a tool for growing your business, definitely belongs on your short list.



About Payway®

Payway is a proven payment service provider offering a highly secure and versatile environment to help subscription businesses simplify and accelerate transaction processing leading to improved cash flow and significantly lowering the costs associated with accepting recurring payments.

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