



THE ULTIMATE GUIDE TO CREDIT CARD PROCESSING

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THE ULTIMATE GUIDE TO CREDIT CARD PROCESSING

Credit card processing is one of the most confusing and complicated parts of owning a restaurant, but it's also one of the most important business aspects restaurateurs should be literate in.

As a point of sale company, we are often asked by restaurant owners how credit card processing works. TouchBistro integrates with a number of payment processors, and as such, we have a unique perspective on the complex business of credit card payments. That's why we decided to create this actionable guide to demystify the world of credit card processing and answer some of the most commonly asked questions.

In this Ultimate Guide to Credit Card Processing you'll learn how rates are determined, where the money goes when customers pay by card, security necessities to protect your business, how to choose a processor that's right for you and so much more!





PARTIES INVOLVED IN EACH TRANSACTION

Every time your restaurant accepts a plastic payment, there are multiple parties involved in receiving and processing the payment. This is what the breakdown looks like:

Issuer: This is the financial institution or credit union that issues credit cards directly to consumers and services the accounts from card networks such as Visa, American Express, Discover and Mastercard.

Card Brand: This is the brand associated with the card being used — Visa, Mastercard, American Express and Discover are the main and most renowned card brands. These brands are issued to consumers from the banks affiliated with them.

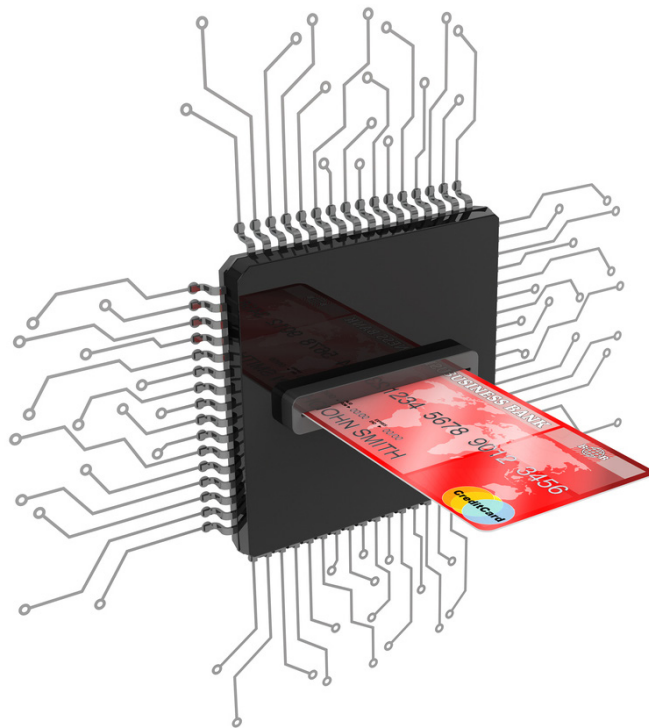
Cardholder: This is the consumer who owns the card being used to make payments.

Merchant: This is the business owner who is accepting the card payment.

Acquirer: This is the merchant's bank, for example Chase or First Data. The acquirer is the institution that enables businesses like yours to process credit and debit card transactions. Once the card is swiped, the acquiring bank passes the information over to the issuing institution to receive payment.

Payment Processor: This is the processor utilized to handle the processing and batching of credit, debit and gift card payments. For example, Square, PayPal, Premier Payments, Moneris, Vantiv and Cayan are all payment processors. The processors negotiate processing rates, equipment costs, and offer set-up and support help for the merchant's account. The payment processor works as a middleman between merchants and their banks.

Payment Gateway: This is technology that links a cardholder's financial institution to the merchant's when processing a payment. All payments are made using a gateway and the payment gateways are generally bank neutral, allowing the merchant to plug it into essentially any acquiring bank in North America.





HOW PAYMENTS ARE ACCEPTED

When it comes to processing card payments, there are a variety of options available. Here are the five most common ways payments are accepted:



Manual Entry: These payments are done by manually keying in the card information. Generally speaking, this is the last resort when it comes to accepting a payment because it's time consuming and can cause errors.



Swipe: This is the most common method of processing a payment in the U.S., although that's changing. When a card is swiped, the magnetic stripe on the back of it is read when it comes into contact with a credit card reader.



Dip and Sign: Dip and sign payments are gaining popularity in the U.S. with the introduction of EMV readers. Rather than swiping, customers dip their card into an EMV reader and then sign to complete their transaction.



Chip and Pin: This is the preferred method of accepting payments in countries like Canada and the UK because it's considered to be extremely secure. In this scenario, the card is dipped into an EMV reader and processed only after the customer enters their pin rather than giving a signature.



Tap: This can be done one of two ways — either through a mobile phone or the debit or credit card itself. It's done through a mobile device when a customer has their credit or debit card information stored on their phone and when they make a payment they unlock their phone and hold it above a contactless payment reader.

Tap-and-go is done with a card containing a computer chip and antenna. When tapped against a card reader, this technology sends data wirelessly to a terminal within close proximity and completes the purchase through a process known as near-field communication.





HOW PROCESSING RATES ARE DECIDED

If you're in the middle of selecting your credit card processing company, one of the first questions you're going to ask is "What are the rates I will be paying per transaction?".

This is a fair question because the majority of western consumers pay with credit and debit cards now, and each card has a fee associated with it.

So how will your rates be decided?

Generally speaking, rates are determined by the average ticket size and volume of your business. Ultimately, the higher your restaurant's average ticket size, and the busier your restaurant is, the lower your rates tend to be. However, there are exceptions, processors such as Square have flat rates set regardless of volume and transaction size.

If you don't like the initial proposal you receive, don't be afraid to negotiate! Processors that don't have flat rates usually have meet or beat guarantees and a little bit of negotiation could save your restaurant thousands of dollars annually.



CARD RATE VARIANCE

Not all credit, debit and gift cards are created equal when it comes to rates. Rates can fluctuate based on the type of card your customers are paying with and how the card is processed.

Visa, Mastercard, Amex, Discover and gift cards all have different fees associated with their brands. These fees are known as “interchange fees”; these fees are not determined by the credit card merchant service provider. Instead, interchange fees are determined by the card brand; these fees go directly to the bank that houses that specific card brand and not to the credit card processing company.



For example, Visa has an interchange fee that varies depending on if it's a debit card, business card, credit card or gift card, if it's keyed in during the checkout processing or dipped/swiped, or if it's used internationally.

Here is an example of what credit card variance rates may look like:

Visa Credit	
Retail Swipe	
Visa CPS Retail	1.510 % + 10¢
Visa Rewards Traditional	1.650 % + 10¢
Visa Rewards Signature	2.300 % + 10¢
Visa Rewards Signature Preferred	2.100 % + 10¢
Visa Corporate	2.100 % + 10¢
Visa Business	2.200 % + 10¢
Visa Purchasing	2.400 % + 10¢
Keyed	
Visa Keyed CPS Retail	1.800 % + 10¢
Visa Keyed Rewards Traditional	1.950 % + 10¢
Visa Keyed Rewards Signature	2.700 % + 10¢
Visa Keyed Rewards Signature Preferred	2.300 % + 10¢
Visa Keyed Corporate	2.950 % + 10¢
Visa Keyed Business	2.950 % + 20¢
Visa Keyed Purchasing	2.950 % + 10¢



PCI-COMPLIANCE

[PCI-Compliance](#) is a security standard set by the payment card industry in an effort to protect businesses and consumers from cybercriminal activity. All businesses that accept, store and transmit card payments must be PCI-Compliant and follow the 12 step regulation process as outlined by the payment industry. The purpose of the 12 steps is to ensure data is protected before, during and after transactions occur.

Here are the 12 steps of PCI-Compliance:

- Install and maintain a firewall configuration to protect cardholder data
- Do not use vendor-supplied defaults for system passwords and other security parameters
- Protected stored data
- Encrypt transmission of cardholder data across open, public networks
- Use and regularly update anti-virus software
- Develop and maintain secure systems and applications
- Restrict access to cardholder data by business need-to-know

- Assign a unique ID to each person with computer access
- Restrict physical access to cardholder data
- Track and monitor all access to network resources and cardholder data
- Regularly test security systems and processes
- Maintain a policy that address information security

Each individual card brand is responsible for ensuring compliance. Some point of sale companies also have to be PCI compliant because they store card information in their own systems. While this does offer some advantages, such as being able to retrieve credit card information or close out a tab without the physical card, it also creates risks. Onsite and cloud connected POS systems that store customer information can become honeypots for hackers and thieves. Other companies, including TouchBistro, choose to remain out of the PCI scope. These POS companies are implicitly more secure because they don't handle or store any sensitive payment information.





TOKENIZATION

Imagine the following scenario: You've just swiped a customer's card with the number 6117 0987 2342 1800. Someone hacks into your server hoping to gain access to this card information so they can copy it and use it. But, because your payment processing company utilizes something called 'tokenization', that card number is no longer stored on-site — it's instead pushed off-site to an ultra secure location. A "token" or unique set of numbers and letters sits in place of the original number — perhaps something like HIUQ129D7805.

This token is generated at random, and does not represent nor have the capability to be decoded back into the original card number. Regardless of whether the card was swiped or dipped, the card information is still protected from cybercriminal activity.

Tokenization is one way merchant service providers can keep card data secure throughout the transaction process because it protects the data even when the point of sale is at rest.



POINT-TO-POINT ENCRYPTION

Point-to-point encryption (P2PE) is the standard set by the [PCI Security Standards Council](#) as another way credit card processing companies can protect user information. When the card is swiped through the card reading device via the point of sale system, the card reader instantly encrypts the card data. The encryption becomes a code which is then securely sent to the payment processing company for decryption.

Unlike tokenization which turns card information into a random set of numbers and letters that can't be decoded, P2PE uses an algorithm to make card data unreadable to everyone except for the end receiver of the information who is able to convert it back into its original form.

P2PE protects both merchants and cardholders from cyber security breaches making every transaction more secure.



EMV

EMV stands for Europay, MasterCard and Visa because those are the card brands who developed it, but it's also commonly referred to as chip cards. Although EMV is a new introduction in America, it's been around in most other European and Western Countries for years.

The ability to accept chip cards is vital to a restaurant operation because although the United States account for [25 percent](#) of the global credit card payments processed annually, it also accounts for 50 percent of the fraudulent charges. That's because the magnetic stripe cards are easily copied and stolen, resulting in direct losses to the merchant due to chargebacks.

EMV solutions offer more security for both businesses and consumers because when they are dipped into an EMV reader, they create a unique one-time only transaction code that can't be replicated making the data per transaction more secure.

EMV also refers to chip cards, which are gaining traction in the United States because chip cards are harder to be copied and used for fraudulent charges.

If your restaurant isn't equip with an EMV reader and a customer makes a fraudulent charge, as of October 2015 the fraud liability now falls onto you as the restaurant owner — meaning if the card owner calls into their bank and says they didn't make a purchase at your venue you will probably have to eat those charges.



CHARGEBACKS

Chargebacks were created to protect consumers from fraudulent charges. They occur when a cardholder disputes certain charges made to their account. When a chargeback is issued due to a lost or stolen card, the bank literally issues a reversal of funds which means if chargebacks happen at your business, you are responsible for soaking up whatever costs are associated with each chargeback.

If your venue doesn't have an EMV reader, and a dispute is made, the liability typically falls onto you as the business owner to pay for the cost associated with the chargeback.

If your venue has an EMV reader and is compliant with the chip and dip technology, then the liability typically falls to the consumer.





INTEGRATED PAYMENT PROCESSORS

Integrated payment processing companies work directly with your point of sale system to ensure seamless transactions and eliminate manual entry error. Your staff simply swipe or dip the credit card, and the processing company is able to communicate with the POS to get all of the information needed to close out the transactions.

UNINTEGRATED PAYMENT PROCESSORS

Unintegrated payment processing companies are those who do not communicate with your point of sale system and require manual entry to process a transaction.



OUR PARTNERS

Although we are a credit card neutral company (meaning you can use any credit card processor with TouchBistro), we do work with several credit card processing companies that are directly integrated into our software.

If you're not interested in using a gateway and want your POS and payment processor to be directly integrated, here are five great [credit card](#) processing companies we work closely with:

CAYAN™

With tens of thousands of restaurant, bar, and food-service merchant accounts, [Cayan](#) understands how the hospitality industry operates and has tailored its services to ensure seamless transactions, ease of use and security. All of Cayan's services from sales to support to technology are conducted in house rather than being outsourced.

How are rates decided through Cayan?

Cayan negotiates with merchants to determine processing rates. The most commonly used methods of determining rates are volume, number of transactions, average ticket size and industry type.

How long does it take to receive funds?

When funds are batched out at the end of the night they typically will arrive in the merchant account 24 hours later. However, delays can occur due to batches being left open which may delay the arrival of funds by an additional day.

How secure is Cayan?

Cayan is a reputable, secure, and reliable processing company that goes above and beyond the PCI security standards to ensure its merchants and their customers are protected from cyber criminal activity and fraudulent charges.

Security is one of Cayan's top priorities, that's why Cayan offers an integrated [EMV](#) solution with TouchBistro customers and P2PE. These technologies help secure transactions and protect against chargebacks, theft, and fraud. All of Cayan's card reading devices are encrypted to protect merchant and consumer information.

What are the contracts like?

Cayan works with customers to build a customized plan around what works best for their business. Typically, Cayan offers two options: Merchants can use the [Genius Platform](#) or the [iDynamo](#).

Both of these options are competitively priced, honor meet or beat guarantees on processing rates and fees, and provide flexibility for merchants to decide on the best option.

What's Cayan's support like?

Support with Cayan is sourced in-house and it's 24 hours a day, seven days a week.



If you'd like to learn more about how Cayan can help your restaurant visit [their website](#).



[PayPal](#) has become a payment transaction powerhouse with worldwide presence and a massive variety of merchant accounts and users. PayPal offers a multitude of options for merchants from mobile payments, to online payments, to in-house point of sale payments.

How are rates decided through PayPal?

[PayPal](#) offers flat-rate fees of 2.7% for swiped and dipped transactions, and 3.5% plus 15 cents for transactions that are keyed or scanned.

How long does it take to receive funds?

Generally it takes 24 hours to receive funds through PayPal, however it can take up to five business days depending on when the transactions were batched out.

How secure is PayPal?

PayPal monitors transactions 24/7 to keep customers and merchants protected. Additionally, PayPal also offers an integrated EMV solution with TouchBistro to reduce the risk of chargebacks.

What are the contracts like?

There are no long term commitments with PayPal.

What's PayPal's support like?

Live customer support is available through PayPal 24 hours a day, seven days a week.



If you'd like to learn more about how PayPal can help your restaurant visit [their website](#).



[Square](#) is one of the fastest growing credit card processing companies around with more than 2 million active merchants in hospitality, retail and other service sectors. Not only is Square's hardware simple, lightweight and attractive, its software is also easy-to-use, extremely secure, and fast.

How are rates decided through Square?

Square's credit card rates are based on a flat-fee of 2.75% for every swipe, dip, or tap transaction. For manually entered transactions, the rates go up to 3.5% plus 15 cents per transaction.

How long does it take to receive funds?

Typically, it takes one business day for funds to arrive into the designated merchant account. However, delays can occur if the merchant bank is closed for a holiday, more information is required such as a missing deposit, or if the batch out time is customized.

How secure is Square?

Square is serious about [security](#), that's why all payments are encrypted and all information remains encrypted throughout the transmission process from the reader, to the application, to Square's servers.

On top of that, Square uses live monitoring programs to analyze incoming transactions and detect fraud. These programs help intercept suspicious activities before charges occur and protect sensitive data from being breached at the consumer and merchant level.

Square also has an EMV solution available that integrates directly with TouchBistro to help ensure transactions are even more secure and authenticated.

Merchants that follow Square's best practice and receive chargebacks are allotted up to \$250 a month for eligible chargebacks through Square's Chargeback Protection program. Square has an entire team of specialists dedicated to working with and guiding sellers through the dispute process.

What are the contracts like?

Square doesn't require contracts meaning services can be stopped and started at any time. Square's [seller agreement](#) contains all of the terms and conditions related to using its services.

What's Square's support like?

All Square customers can speak with a live agent from Monday to Friday from 6am until 6pm Pacific Standard Time. Merchants can also reach Square through email and social media.



To learn more about how Square can help your restaurant visit [their website](#).

vantiv®

[Vantiv](#), formerly known as Mercury, is the third largest credit card processing company in the United States, with more than 800,000 active merchant accounts — many of which are bars and restaurants, although Vantiv also works with retailers, grocers, and various other businesses too.

How are rates decided through Vantiv?

Vantiv has a “meet or beat” guarantee when it comes to signing up new merchant accounts meaning if you are in the market and get a quote from another processing company, Vantiv will either offer you the same rates or offer you lower rates. While Vantiv won't grandfather customers into set rates, it will match any competing rates offered by other companies.

How long does it take to receive funds?

Funds typically arrive into a restaurant's merchant account 24 hours after they have been batched out, however this deposit time may be delayed if the transactions are not settled in time.

How secure is Vantiv?

Vantiv protects merchants and consumers through Tokenization, P2PE and [OmniShield Assure](#).

Currently, Vantiv does not have an integrated EMV solution with TouchBistro, but if merchants use the OmniShield Assure they will be protected from data breaches, EMV disputes, and chargebacks up to \$100,000.

What are the contracts like?

Merchants can sign up for a month-to-month account, which requires a 30 day notice prior to cancellation, or a one, two or three-year contract. The benefit of signing a longer contract is being locked into set rates for the duration of the contractual agreement. Vantiv also offers free gift card processing as an added benefit which can save restaurant owners thousands of dollars in processing fees each year.

What's Vantiv's support like?

In addition to Vantiv's impressive amount of merchant accounts, they also have a 24-hour support team available seven days a week. Any payment processing related issues or questions that arise can be answered anytime free of cost simply by calling Vantiv's support line.



If you're interested in learning more about how Vantiv can help your restaurant visit [their website](#).



Being a food-service business that accepts card payments, understanding how credit card processing works is a crucial part of managing your venue's overall bottom line and financial success. By reading and referencing this ultimate guide, you'll always be in the know when it comes to payment processing.



TouchBistro is an iPad POS and integrated payments solution built for restaurant people, by restaurant people. It helps thousands of restaurateurs across the world run better businesses and makes managing a restaurant easier.

www.touchbistro.com | Speak to a Software Sales Representative today **1-855-363-5252**