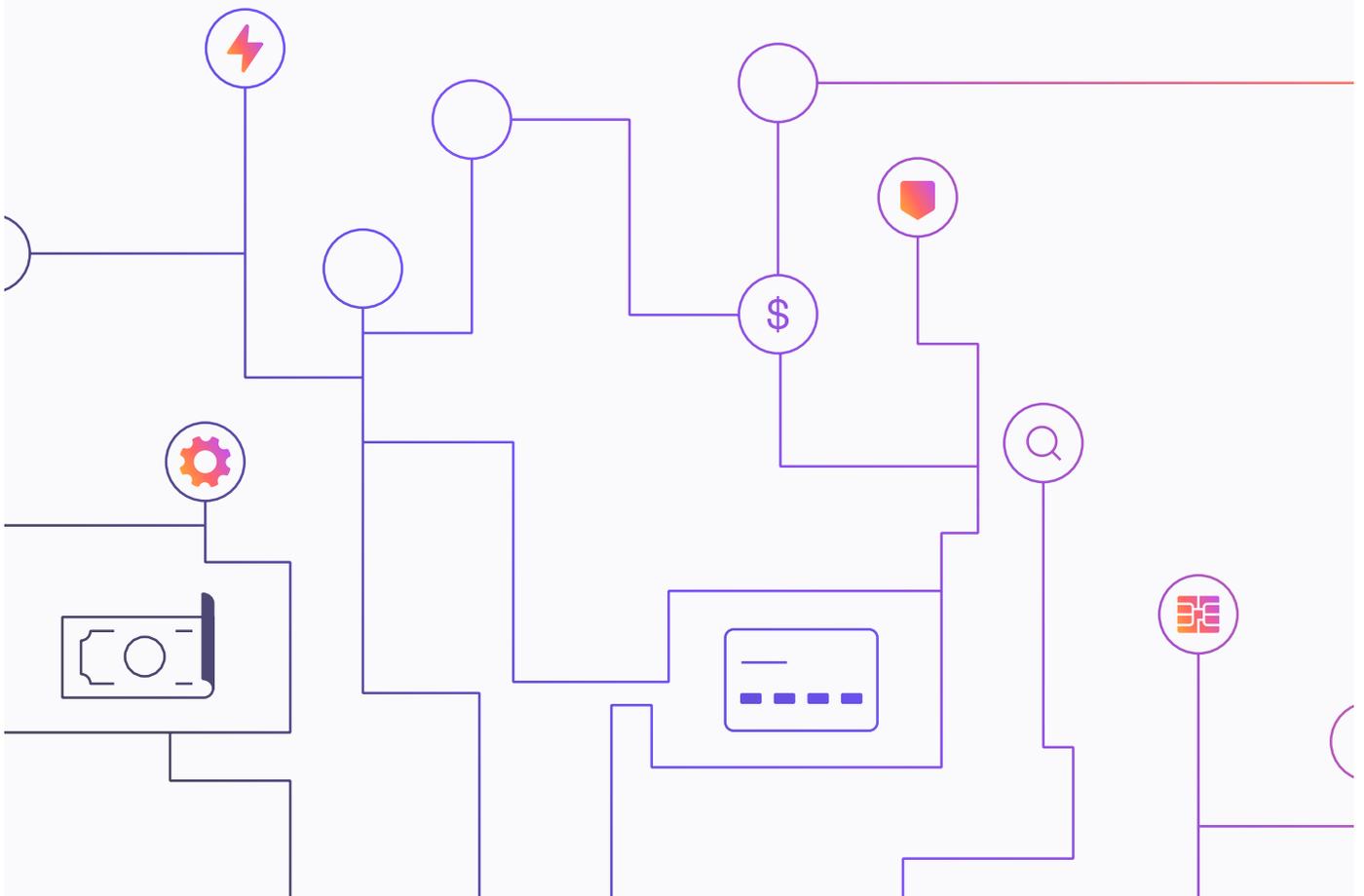
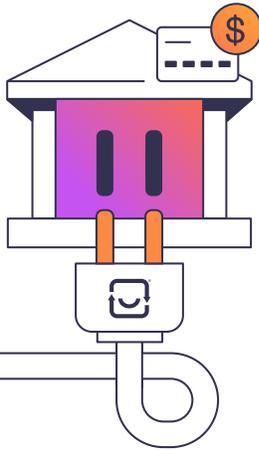

B2B INSIGHTS

Understanding the Credit Card Process

A look at the key players and costs, and how B2B companies can securely accept digital payments and save money on credit card processing fees





The credit card process explained

The credit card transaction process varies according to where the transaction takes place, what type of card is used, and more. One of the biggest differences, for example, is whether the transaction happens online or in person. And for that in-person transaction, the process will differ depending on whether the physical card is used or if a digital wallet is used.

But across all the variations, the overall transaction process generally involves a consistent set of entities and steps. Here is a simplified overview that includes:

1. The key players in the process
2. The steps in the process
3. The fees involved in the process

The key players in the process

THE OBVIOUS PLAYERS

To begin, there are two main entities required for a credit card transaction: the cardholder and the merchant.

- **Cardholder:** The cardholder is the customer who owns the credit card and uses it to make purchases for goods or services.
- **Merchant:** The merchant is the business, person, or service provider that accepts credit card payments from cardholders in exchange for goods or services. The merchant uses a Point-of-Sale (POS) system (hardware) and/or a website, mobile application, or other internet-connected device (software) to accept and process credit card transactions.



BEHIND-THE-SCENES PLAYERS

There are multiple entities who facilitate the transaction process, each potentially taking a part of the transaction costs.



- **Merchant Services Provider:** The Merchant Services Provider (MSP) is the entity responsible for setting up merchants to process transactions and providing the merchant with their merchant account. MSPs collect the processing fees for each transaction and distribute them to the issuing bank, card network, and other participating parties. There are many different types of MSPs, including banks, Independent Sales Organizations (ISOs), Payment Facilitators (PayFacs), and other financial companies, but each type's primary role is to provide the means necessary for merchants to accept credit card payments.



- **Payment Gateway:** The payment gateway securely transmits payment information between the merchant's hardware/software and the credit card processor.



- **Credit Card Processor:** The credit card processor, also known as the "payment processor," works with the card networks and issuing banks to authorize, capture, and settle credit card transactions on behalf of the merchant.



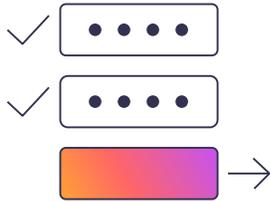
- **Card Network:** The card networks—Visa, Mastercard, American Express, and Discover—facilitate communication between the credit card processors and the issuing banks. They also set the governing transaction rules and standards for processing credit cards.



- **Issuing Bank:** The issuing bank (also "issuer" or "card issuer") is the financial institution that issues the credit card to the cardholder. It authorizes and approves transactions and typically carries the largest part of the transaction risk, because they ultimately have the responsibility of collecting the funds from the cardholder.



- **Acquiring Bank:** The acquiring bank (also "acquirer" or "merchant bank") is the merchant's bank, which settles transactions with the issuing bank and deposits the funds into the merchant's account.



The steps in the process

The simple 3-step process

As mentioned previously, there are multiple ways of looking at the steps in a credit card transaction, and the entire process will vary depending on where a transaction takes place, what type of card is used, etc.

But let's start with the basics: the credit card process verifies that the customer has money and then transfers that money to the merchant. There are other steps, some of which can be combined, and some that take a matter of seconds. But at its simplest, the credit card transaction process is:



Step 1: Authorization

Checks to see if the customer has sufficient funds for the transaction



Step 2: Capture

The transaction is approved or declined, and funds are taken from the customer, if approved



Step 3: Settlement

The funds are transferred to the merchant

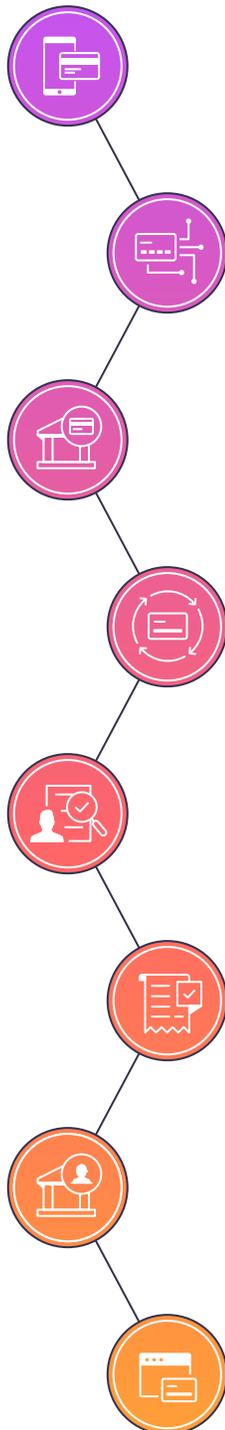
Note:

Many merchants do steps 1 and 2 at the same time, however, it's possible to do them hours, days, or weeks apart. This is helpful for merchants who don't immediately provide the goods or services. We'll cover this more later in the ways to reduce expenses section.



An expanded look at the process

Now let's explore a more detailed play-by-play of who does what in an expanded look at the credit card process:



1. Initiation

The cardholder uses their credit card to pay a merchant. For in-person transactions, this can be swiping, inserting, or tapping their card. For online transactions, this can be typing the card information manually or by choosing a card from a list of stored credit cards.

2. Data transfer

The merchant's POS system and/or payment gateway securely sends the transaction details and card information to the credit card processor.

3. Authorization request

The credit card processor sends the transaction data to the correct card network, which routes the authorization request to the issuing bank.

4. Transaction decision

The issuing bank verifies the cardholder's information, checks for sufficient funds, screens for possible fraud or security issues, and either approves or declines the transaction. The decision is sent to the card network, which routes it back to the credit card processor.

5. Response

The credit card processor sends the response, either "approved" or "declined" to the merchant's POS system and/or payment gateway. An approved response means the merchant can complete the sale, while a declined response will be accompanied by a decline code the merchant can use to proceed.

6. Settlement

Once a day, the merchant submits a batch of all approved transactions to the credit card processor for settlement. The processor forwards the transaction details to the card networks.

7. Funds transfer

The card networks coordinate with the issuing banks to transfer the actual funds for the transaction to the merchant's bank, which distributes the funds to the merchant's account.

8. Cardholder billing

The issuing bank adds the transaction details to the cardholder's monthly statement. The cardholder is then responsible for paying the credit card bill.



The fees charged in the process

As with the players and steps, the credit card processing costs can vary according to what type of card is used, the amount of transactions a merchant processes, and more. It's incredibly important for merchants to understand what costs they may be charged so that they can make educated decisions and take steps to minimize their processing costs, which we'll cover in the next section.

Below are the main types of credit card transaction fees a merchant may encounter:



Interchange fees

Interchange fees are usually a percentage of the transaction amount, plus a fixed, per-transaction fee. The card associations set new interchange rates twice a year that outline hundreds of different interchange rate categories and associated fees. The interchange fee varies depending on the card type (Visa, Mastercard, etc.), the merchant's industry, whether the transaction is in-person ("card present") or online ("card not present"), credit card reward programs, level of fraud risk, etc. Every transaction is assigned a rate depending on these factors.

The issuing banks receive the largest percentage of interchange fees because they not only take on the most risk in the transaction, but they also provide incentives to cardholders to use their cards via various rewards programs.



Assessment fees

The card networks often charge assessment fees to use their platform. These fees are typically a small percentage of the transaction amount and vary according to which network is used and the merchant's overall transaction volume.



Processor fees

Credit card processors and merchant services providers charge a fee for their services, which includes authorization, settlement, and data transmission to the card networks and banks. This fee can be a percentage of the transaction amount, a per-transaction fee, or a monthly fee.



Payment gateway fees

A payment gateway provider typically charges a monthly fee and/or a per-transaction fee for their services in transmitting information to the processor.



Terminal & equipment fees

Depending on what POS terminal, card reader, or other equipment a merchant uses to accept credit card payments, these costs cover purchasing or leasing equipment, along with regular software updates.



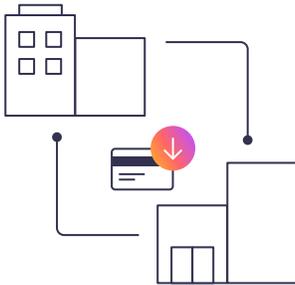
Other fees a merchant may see

Chargeback fees

If a customer disputes a transaction, the merchant may be charged a fee for the chargeback/dispute process.

PCI compliance fees

To ensure the security of cardholder information, merchants must comply with the Payment Card Industry Data Security Standard (PCI DSS). Many processors charge a fee for PCI compliance, while others may include it.



How B2B companies can reduce the costs of accepting credit cards

With so many players in the process, and each taking their own fee for their services, it's wise for merchants to take advantage of any opportunity to reduce their costs. Even if it's only a small percentage, the savings add up quickly.

Next, we'll look at the most common ways to save money on transactions:

- High-ticket items and tokens
- Interchange Optimization
- Authorization then capture vs authorization/capture transactions types
- Surcharging

High-ticket items and tokens

For businesses that regularly deal in high-priced items, there are large-ticket interchange rates available from Visa and Mastercard. These rates can help bring down the total cost of acceptance for a merchant when compared to the standard interchange fees. Merchants should contact their merchant service provider to see what is required of them to access these rates.

Tokenization is a more common saving method for merchants. By using tokens as part of the transaction (meaning they are using stored payment information from customers who have been verified), merchants can qualify for discounts, as well.



Interchange Optimization

B2B and B2G transactions are classified differently than consumer credit card transactions, which is great news for savvy merchants. Qualifying B2B/B2G cards, such as corporate and purchasing cards, allow more detailed transaction and customer information to be submitted. This lowers the risk of fraud, which in turn, decreases processing fees. The transactions can be categorized into one of three levels: level 1, level 2, or level 3. As each transaction progresses to the next level, the rate gets better due to more information being submitted.

Interchange optimization is a way to ensure that all transactions are automatically submitting the data fields required for a transaction to qualify for the best rates. Manually managing this process can be tedious and time-consuming, but when merchants use a service that automates the work for them, they save hours of work while simultaneously qualifying their transactions for the best interchange rates.

INTERCHANGE OPTIMIZATION FIELDS EXAMPLES

In general, here are the data levels explained along with the kinds of transaction data required to qualify for each level's associated rate (these are examples only and subject to change):

Level 1 Data

Level 1 card data is the most common type of credit card transaction data. The data fields required to qualify for Level 1 are:

- Merchant DBA name
- Billing ZIP code
- Transaction amount



Level 2 Data

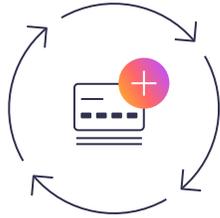
Level 2 card data is the next step up, meaning if a transaction qualifies for Level 2, processing fees will be lower than a Level 1 transaction. Level 2 data includes all of Level 1, in addition to the following fields:

- Sales tax amount
- Customer reference number or PO number
- Merchant postal code
- Tax ID
- Merchant minority code
- Merchant state code

Level 3 Data

Level 3 data provides line-item details typically beyond what is required for consumer card transactions. This data is generally equivalent to the info found on an itemized invoice. Level 3 data includes Levels 1 and 2 fields, plus the following data fields:

- Quantity
- Product code
- Product description
- Ship-to ZIP
- Freight amount
- Duty amount
- Order/ticket number
- Unit of measure
- Extended item amount
- Discount indicator
- Discount amount
- Net/gross indicator
- Tax rate applied
- Tax type applied
- Debit or credit indicator
- Alternate tax identifier



Authorization then capture vs authorization/capture transactions types

B2B companies that do pre-processing or ship orders out a few days or weeks after orders are placed usually authorize a transaction first to ensure there are enough funds on the card, and then capture the transaction later when they are ready to fulfill the order. These types of transactions may be charged a higher rate than transactions that are fulfilled immediately (when the transaction is authorized and captured at the same time).

There are rules regarding distribution as to when you can authorize and capture, so a merchant may not see a lot of room for improvement in this regard. But overall, it's good to evaluate which transactions are being authorized and captured at the same time vs which ones are being done separately to make sure the best rates are being realized.

Surcharging

Prior to 2013, merchants were not allowed to charge their customers for using a credit card, and were, in many cases, fined if they were found to be doing so. But in 2013, the practice of surcharging became an allowable practice. Though the rules and regulations vary from state to state, in essence, merchants can now add a **surcharge**, up to 3% of the transaction amount, to a customer's order anytime a customer uses a credit card for payment. Surcharges help merchants offset the credit card interchange fees they pay to accept credit cards.



Review statements regularly

Merchants should regularly review their monthly statements to see what fees they are being charged and whether there are areas they can improve to receive better rates. Again, even if only a few small tweaks can be made here and there—whether it's using tokens, or getting Level 3 rates, or adding a surcharge—those savings will start to add up over time. Especially for merchants processing a high volume of transactions.

At PayTrace, we are always happy to review your current statements with you to see what areas can be improved.

[Feel free to contact our B2B payments experts today!](#)



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