

» Tech brief

Dynamic Spend Controls & Just-in-Time (JIT) Funding

Legacy card programs have long lacked the flexibility and customization that today's innovative companies demand. These cards are governed by simple spend parameters and don't allow for the intricacy that meets the digital payment needs of buy-now-pay-later, gig economy, expense management, challenger banks, and countless other innovators.



Creating unique customer experiences through card programs requires a high level of customization and control to deliver differentiating outcomes. Marqeta achieves this through its dynamic spend controls and Just-in-Time Funding technologies to create card programs that enable digital builders to power their payment needs.

Dynamic spend controls

Marqeta's dynamic spend controls deliver customization and authorization of a card transaction. Spending can be controlled in real time by a number of variables including dollar amount, frequency, merchant ID, merchant category code, time and date, and more. If a transaction falls outside of this criteria, for instance if a commuter benefit card is used at a grocery store, the transaction will be declined. This control helps organizations fight payment card fraud and align spending to their unique business model and rules.

Dynamic spend controls fall into two key categories:



Authorization controls

The business rules around when, where, and by who a card is to be used. Authorization controls include merchant ID, merchant category code, currency type, dollar amount, country, time and date, and user specific information.

For example:

A payment card is issued to a food courier with controls over merchant ID, dollar amount, and timeframe. This combination of spend controls helps to ensure the correct order is paid for by the respective courier and to fight fraud. By ensuring the merchant ID, exact dollar amount, and within the timeframe of the order matches the invoice system data, fraud is significantly reduced from this point of the process.



Velocity controls

These govern card usage by the dollar or transaction amount in a defined period of time. Velocity controls include time and date ranges, frequency of use, and dollar amount. Velocity controls are commonly used in combination with authorization controls.

For example:

An employee gas card is set to only be used while the employee is on the clock - Monday through Friday during working hours. In addition to this velocity control, the card is only accepted at locations matching the merchant category code (MCC) of gas stations. It will not be accepted outside of this time period or at a merchant other than a gas station.

Just-in-Time Funding (JIT)

Just-in-Time (JIT) Funding is the method of automatically funding an account in real time during the transaction process. This means that the cards maintain a \$0 balance up until the time of payment.

Marqeta supports two distinct types of JIT Funding for our customers. Depending on the card program, one of these options may make more sense than the other.



Managed JIT Funding:

The Marqeta platform applies spend controls that have been pre-set to make authorization decisions. This allows you to determine how, where, and when a cardholder can spend. This option is somewhat limited, as you are not able to approve or decline transactions based on real time data.



Gateway JIT Funding:

The Marqeta platform applies the same spend controls but also forwards authorization requests to your system gateway to make funding decisions in real time and based on data that is available to you, such as the geolocation of your cardholder or the name of the merchant. This allows individual transactions to be controlled as they occur and provides transaction details directly from the network to show a full picture of each purchase.

Gateway JIT also enables metadata to be inserted into each specific transaction to append an invoice number or data that can help with reconciliation later on. For instance, a Buy Now, Pay Later company can tie all payments associated with a given loan number.



Additional gateway decisioning

Beyond the JIT Funding decisions examples above, Marqeta can also power your gateway to make non-funding decisions for online refund requests. Leveraging a dual-message approach, where there is a separate authorization and clearing message, merchants can now notify cardholders of a pending refund in real-time.

You have the option to decline those refund authorizations, whereas normal (offline) refunds are always accepted and you only learn about them the day after the request. Online refunds help to improve the overall customer experience, and having your gateway decide to authorize refunds can also mitigate potential fraud with refund requests.

Real world examples

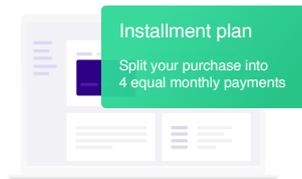
With Gateway JIT, our customers have the ability to include data and insights that exist within their own environments to approve or decline transactions. These insights can be referenced in real time through a direct API at the time of the Marqeta transaction authorization.

Below are several examples of how this comes to life for a few of our customer verticals:



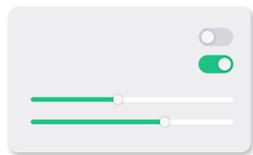
Online travel agencies:

By using the initial transaction ID as an identifier for downstream payments, online travel agencies can quickly approve additional transactions, such as a customer extending their hotel stay. The travel agency verifies the transaction ID against the initial hotel booking in their records and authorizes the request for additional funds as needed.



Buy Now Pay Later (BNPL):

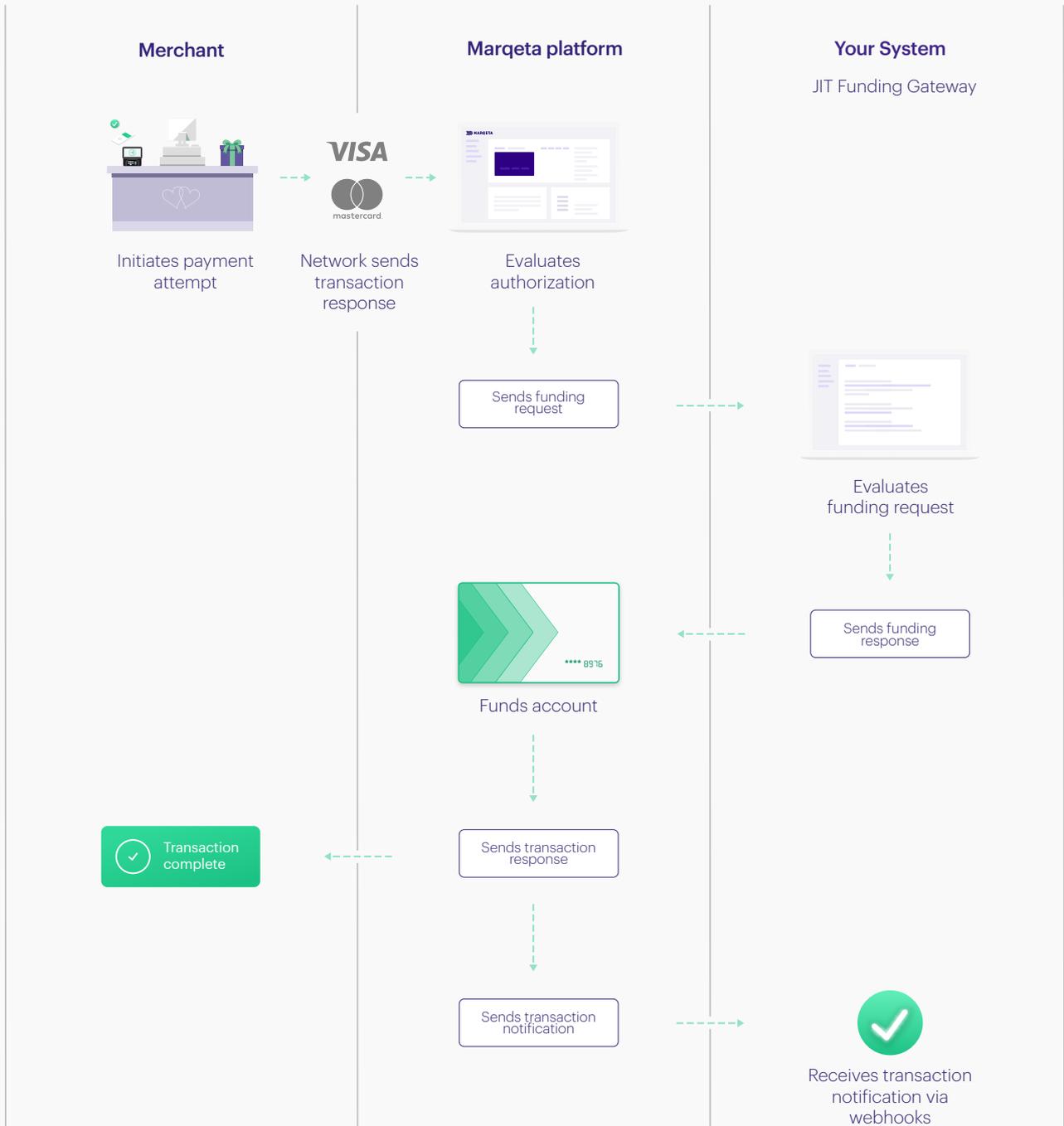
BNPL companies can check alternative data sets to decide the creditworthiness of the borrower and dynamically approve or decline a transaction request at the moment of purchase. Additionally, they can reference the purchase amount to authorize and fund the loan total.



Expense management:

Unique spend rules are essential for expense management companies and many have built their own custom rules engine. These systems can be referenced at the point of authorization to manage the spend limits and rules for each customer or customer group.

How it works



Simplifying transaction data to enable card program customization

When a card issued through Marqeta's platform is used at a merchant, Marqeta passes the transaction authorization decisioning directly to our customer. This authorization happens through ISO 8583 messages, the international standard for card interchange messaging, and includes the transaction type, card number, balance, dollar amount, currency type, and more.

Marqeta ingests the ISO data string and translates it into a readable JSON format with separate fields and expanded results, ultimately delivering a legible structure to our customer's endpoint, clearly laying out each piece of transaction detail. Card programs then have the ability to read and better understand the transaction elements in question, as well as combine it with their own data to make informed authorization decisions.

Additionally, a memo field, such as a loan or invoice number, can be added to the authorization response to help with reconciliation down the road.



ISO 8583 message example:

```
0100388C459342424200000424200000003300  
00037384992827492002827162889q839049f-  
839c01840f108
```

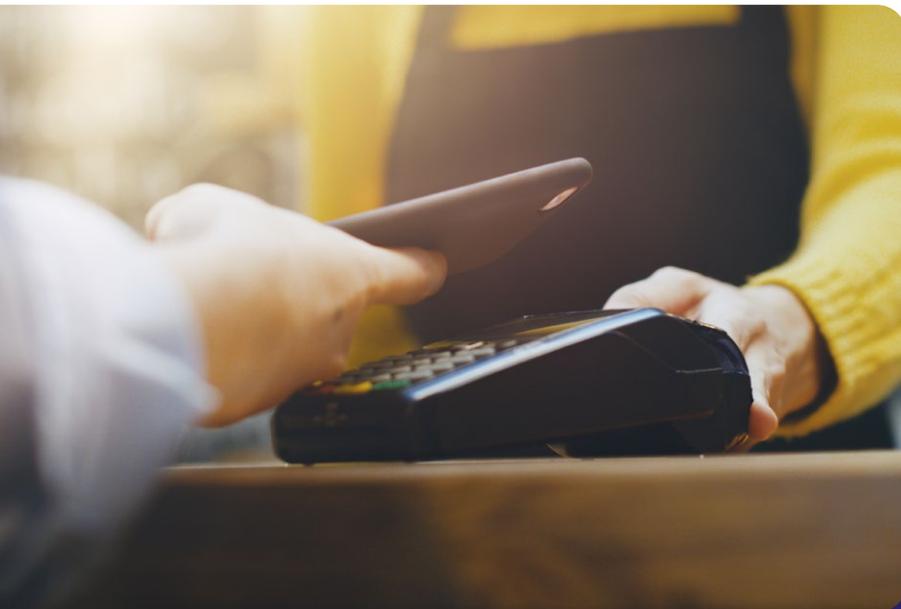
Marqeta JSON example:

```
> Merchant name  
  > Sproutify  
> Merchant ID  
  > 12345  
> Merchant category code  
  > 8899  
> Amount  
  > 45  
Currency  
  > USD  
> Card Network  
  > Visa  
  > network_reference_id":  
303950758447
```

*note: this is a sample for description purposes and is not the full ISO message or JSON response

Benefits of Dynamic Spend Controls and JIT

- ✓ **Mitigate transaction fraud**
Real time control of each transaction ensures alignment with your approval criteria and helps to control fraud. Individual transaction review provides the transparency and insights to make the decisions to protect your organization.
- ✓ **Free up working capital**
Avoid tying up working capital with prepaid card programs. Marqeta's JIT Funding enables you to only use funds that customers are spending and eases cash requirements for these programs.
- ✓ **Easier reconciliations**
Tying metadata to transactions can greatly improve reconciliations and systems of record. Each transaction can have an invoice number or system of record appended into the data to make tracking down a payment, or set of payments, considerably faster and easier. (managing balances with general purpose accounts/cardholder account)



What our customers are saying



“DoorDash uses Just-in-Time funding. [...] Marqeta will send us a request that talks about everything that happened: Where the merchant was, their MCC codes, their MID codes, how much the amount was. We can then cross reference those amounts in our system and that will help us to only authorize charges that are legitimate. It helps us greatly reduce fraud.”

Andrew Foong, Engineering Manager, DoorDash



“A traditional prepaid card processor would decide whether payments will be authorized, but Just-in-Time Funding from Marqeta puts us in control and lets us decide whether to approve each transaction. Empowering us in this way gives us more control over fraud risk and allows us to achieve better cash management for real, bottom-line results.”

Michael Garrity, CEO, Finaceit



About Marqeta

Marqeta is the modern card issuing platform empowering builders to bring the most innovative products to the world. Marqeta provides developers advanced infrastructure and tools for building highly configurable payment cards.

With its open APIs, the Marqeta platform is designed for businesses who want to easily build tailored payment solutions to create best-in-class experiences and power new modes of money movement.

Marqeta built its simple, trusted, and scalable platform from the ground up to help companies design seamless payment experiences, streamline purchase flows, and bring products to market faster, while minimizing fraud risk.

Marqeta's payment APIs enable:

- **Card issuing:** Instant issuance of physical, virtual, and tokenized cards with direct provisioning to digital wallets
- **Card processing:** Real-time funding using our Just-in-Time (JIT) Funding feature with dynamic spend controls to reduce fraud
- **Card applications:** A suite of applications and tools that help you build, manage, and run your card program
- **Modern architecture:** Developer-friendly, modern open APIs, cloud infrastructure and webhooks

Marqeta is headquartered in Oakland, California. For more information, visit www.marqeta.com, [Twitter](#) and [LinkedIn](#).

You see a card, we see endless possibilities