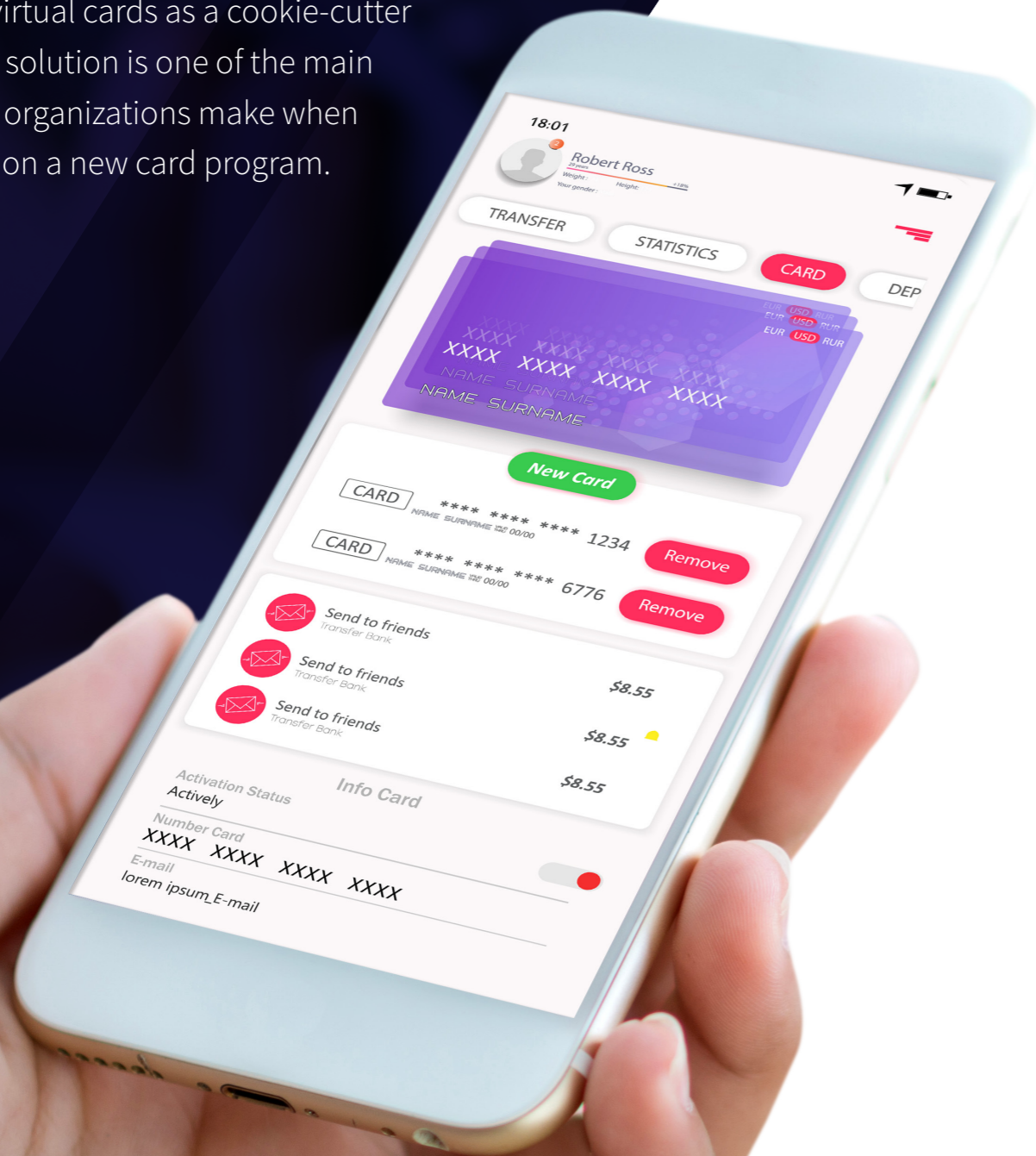


It is easy to assume that one virtual card is just like any other, especially considering the lack of physical distinctions. In fact, viewing virtual cards as a cookie-cutter payment solution is one of the main mistakes organizations make when deciding on a new card program.



# Virtual card programs: 4 pitfalls of a cookie-cutter approach

## The evolution of virtual cards

The most important thing to know about virtual cards is that they come in two varieties. There are traditional virtual cards built on closed, proprietary infrastructure and modern virtual cards created via open APIs that provide developers access to payment services. The former are the original virtual cards, first released at the turn of the millennium as an avalanche of fraud threatened to overwhelm new online merchants.

First-generation virtual cards allowed for a one-time payment with a 16-digit number or multiple payments that were restricted by a particular merchant category code. Both methods increased security. While simple in concept, in practice virtual cards often required lengthy implementations.

Over time, virtual cards evolved more elaborate spend controls, and card issuers or card issuer processors developed a cookie-cutter approach to implementation that was faster and often industry specific. The basic function of the cards remained unchanged, however. Like their physical counterparts, virtual cards replaced payment by cash, check, ACH, or wire. With both physical and virtual cards, the card issuer or the card issuer processor controlled how cards looked and behaved.

Then, at the end of 2014, Marqeta opened up its issuer processor APIs to outside developers. For the first time, businesses could launch card programs and customize the payment services with their own enterprise rules and business logic without having to rely on an external party. They could also choose to offer physical and virtual cards—and manage both payment instruments from a single platform.

Differentiation facilitated new, more flexible ways of doing business. Online travel aggregators could integrate secure virtual payments to airlines and hotels — and also offer immediate relief to distressed travelers. Claim processors could combat payee fraud while providing a personalized experience for everything from payouts to warranty holders to payments to third-party auto repair facilities and building contractors. Accounting departments that previously relied on credit cards to pay bills now had a secure alternative that reduced costs while maximizing money back from interchange fees. Health insurers could launch innovative programs such as cards that let plan members see any doctor and pay on the spot or the insurers could simply reap the benefits of making virtual payments to medical facilities.

With flexibility came adoption. According to organizations such as First Annapolis, Mastercard, and the Mercator Advisory Group, virtual card payments doubled between 2015 and 2018 to about \$160 billion, and they are expected to continue growing, reaching around half a trillion dollars by 2024.



## Cookie-cutter vs. customizable

The results achieved by early adopters of customizable virtual card programs are attracting companies who are new to the payments industry and who are looking to improve their customers' experience and increase operational efficiencies. Both aspiring and current virtual card program providers seek to clearly understand the limitations of off-the-shelf solutions compared to open platforms that support a high degree of customization.

The pitfalls of a one-size-fits-all virtual card program can be summarized as follows.

1

### IT IS WHAT IT IS.

Once you implement a plain vanilla program from a closed technology provider, you cannot easily make changes to it at some later date to match the moves of your competitors. For example, if you are an online travel aggregator, you might be able to easily issue single-use virtual cards to pay suppliers. However, you will likely face an uphill battle if you want to implement a virtual (and/or physical) rewards program for consumers. While your competitors are offering meal vouchers to customers stranded in an airport by mechanical issues or bad weather — and winning their lifetime loyalty—you will be stuck competing on price alone. A second example is retail. For decades, stores have offered customers the opportunity to fill out a credit application. Lately, tech-forward companies have started offering point-of-sale financing delivered through a mobile app via a virtual card that is restricted to paying a particular merchant at a specific moment in time. This is a far better experience for shoppers who get what they want without late fees and penalties. Merchants benefit as well. They ring up more sales for larger amounts—but only if they have access to a modern payment platform either directly or through their financing partner.

2

### CASH FLOW

Virtual card programs have been traditionally funded in two ways. Money to cover payments was deposited in a reserve account, sometimes called a program funding account, or a card program was granted an unsecured line of credit. Both methods had downsides. Prefunded reserve accounts tied up large amounts of capital, while unsecured credit lines required you to undergo an underwriting process and provided very little flexibility, let alone if you didn't qualify. Spikes in demand and corresponding payments required additional underwriting. Many companies prefer Just-in-Time (JIT) Funding instead. The Just-in-Time (JIT) approach typically requires companies to keep a minimal amount in a reserve account — often as little as three days worth of transactions. Transactions are funded at the point of settlement. A cost-effective alternative to prefunding an account and unsecured credit lines, JIT Funding is only possible with very high-performing modern infrastructure.

3

### TRANSACTION VISIBILITY

The difference between reviewing the real-time transactions of a customizable virtual card program and a cookie-cutter card program is the difference between watching a football game live and reading about it after the game has ended. When cards are processed by customizable platforms, the ISO 8583 messages that are transmitted to the processor, the card network, and the issuer bank are also shared with the card program owner as they happen. The card program owner gains the ability to influence the transaction according to their own decisioning logic and also to communicate directly with the cardholder as a transaction happens. For example, a program that sets very granular authorization controls can prevent unwanted transactions from being approved and also explain to cardholders in real time why a transaction is being declined. The card program owner can also append important data, like an invoice number or booking ID, to each transaction, easing reconciliation. Card program owners who choose to implement more basic programs forfeit these capabilities.

4

### SPEND CONTROLS: STATIC VS. DYNAMIC

One of the value propositions of early virtual cards was their ability to restrict payment by a particular merchant category code. These four-digit numbers were assigned by the card network to new members and identified participants by market segment: 4511 for airlines, 5812 for restaurants, etc. Setting this control prevented a card from being used to pay for goods or services in a different category if the card number fell into the wrong hands. But as time went by, organizations launching new card programs began asking for controls that were not only more granular but could also be set in real time. The ability to dynamically configure detailed controls — not only the merchant category, but the merchant name and ID, dollar amount, frequency of payment, geography, time, date, and more — are one of the reasons program owners choose to implement highly customizable card programs. Online delivery services are an example of this benefit in action. After a customer orders a meal, a driver is sent to pick it up. In the meantime, the card program inserts logic into the transaction flow that restricts payment by physical or virtual card to a particular restaurant during a particular window of time and for a specific amount.

Organizations with existing card programs built on older, inflexible infrastructure are weighing the costs and benefits of switching to modern technology providers. While a cookie-cutter solution can be appealing to organizations who want a very basic payment instrument—a virtual card with a handful of fixed controls—there are increasing concerns about hidden costs. A cheaper solution that prevents companies from innovating in response to new market dynamics can be devastating to future growth.



## What about implementation?

Launching a highly customized card program may sound like a lot of work, especially compared to a cookie-cutter solution. But once you have determined your rules and decisioning logic, implementing the program in code is usually a straightforward development project. Modern card platforms like Marqeta offer developers a sandbox where they can write and test code before moving it into production. Virtual cards can literally be created in three clicks.

The most time-consuming aspect of any card program rollout, whether cookie-cutter or customized, is often the due diligence phase. Companies that provide all the required information upfront can complete due diligence in 24 to 48 hours. Bank approvals of a program typically take a week. Delays typically come about when linchpin players on an applicant's side are interrupted by conflicting priorities and diverted from necessary decision-making or information-gathering tasks.

## The bottom line

Businesses that choose a highly customizable virtual card solution versus a cookie-cutter approach will gain flexibility and control without sacrificing speed to market. The key thing to look for is an open API platform with a developer sandbox and public documentation and the ability to inject rules and decisioning at the moment of payment. The virtual cards you generate will function like any other, providing a more secure substitute for cash, checks, ACH, and wire transfers, but they will have advanced capabilities, too. Because they are animated by business logic, they can enable new payment experiences and provide the foundation for new business models. They will enable you to settle accounts within online marketplaces, to pay bills owed to suppliers, to honor warranties and reimburse medical facilities for patient care, but even more than that, they will position your business to thrive in a fast-changing digital world.

