

#### AFP Payments Guide

# **Better Card Management Solutions**

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The payments landscape is undergoing a major transformation at a rapid pace which is fueled by new technologies, mobile applications, and faster payment systems. At the same time, companies are innovating and adapting to drive success in this new environment.

It is essential that Corporate Treasurers and CFOs have the latest information on new developments as they navigate the evolving payments landscape. To address this need, MUFG Union Bank, N.A., is pleased to sponsor our fifth AFP Payments Guide: Better Card Management Solutions.

Corporate executives are pursuing best practices in managing their corporate card programs to best serve the business objectives of their clients, partners, and their own organizations—today and with a look to the future. This *AFP Payments Guide* for financial professionals provides corporate examples, strategies, and the latest trends in the interconnected card and global payment systems.

This guide can serve as the start of conversations within companies and with partners to help make payment operations more efficient and effective, while mitigating risk. We commend the AFP for its continued commitment to providing financial professionals with the latest developments in payments.

Best regards,

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## Ever-Rising Costs Push Merchants Toward Better Card Management Solutions

#### Managing Payment Costs Rises to the Executive Suite

s payment processes and technology become ever more sophisticated, the rules and fees related to cards continue to multiply, as do the opportunities for fraudsters to find cracks in the system. Fortunately, the technology and services to manage card-related costs are also advancing.

This guide will look first at the structural changes companies are making (or want to make) at the executive level to enable more effective management of card-related fees and other costs. It will then explore in detail the type of research and analysis merchants must pursue, and the steps they can take, to manage and reduce fees and other costs arising in the card ecosystem, as well as from fraud and chargebacks. Finally, the guide will look ahead at how the push for a faster payment system in the U.S., along with other developments, will impact the card industry and the merchants accepting those payments.

## Card management responsibility rises up the executive ladder

A coffee chain's promotion offering an extra \$5 credit for filling up a stored-value card using a credit card may be a no-brainer for customers who regularly stop on their way to work. Behind the scenes at headquarters, however, a complicated dance occurs to ensure the promotion doesn't conflict with other promotions, either technically or from a marketing perspective. The company must make sure its technology partners and credit card processor can handle the surge in transaction volume that the promotion is likely to cause, and its fraud-prevention experts must carefully coordinate their efforts with those of the marketing department to carefully monitor related activity for signs of fraudulent transactions.

The majority of sales of the coffee chain's products occur through franchisees, which in some respects complicates payment issues and in others eases them. Supplies are handled by the franchisees through a single payment mechanism unrelated to credit cards. In addition, franchisees use a unified point-of-sale (POS) system, mitigating one aspect of the card payment process that can result in higher fees. Meanwhile, the parent company



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manages the agreement with one U.S. card processor, which verifies the details of card transactions and essentially acts as an intermediary between the merchant, the issuer (usually a bank), and the credit card network (or brand).

However, consumers' increasing use of mobile payments, along with many retailers' desire to speed up checkout lines, has necessitated more cross-functional coordination. Siloed financial, marketing and technology departments have become highly inefficient, and instead they must work closely together.

"The payments landscape has become increasingly complicated over the last 10 years, which has created a need for easier access and greater transparency into payments performance."

The coffee chain has recognized this for years, and about three years ago it formed a cross-functional payments steering committee co-chaired by the company's CFO, CIO, and head of digital marketing. The steering committee meets once a month, but under each executive there are specific teams that focus entirely on payments. For example, under the CFO there is an electronic payments group comprised of a four-strong team that works on areas including credit and gift cards, payment-related projects and financial analysis. Under the CIO are several employees whose sole responsibility is to support any of the payment initiatives from a technology standpoint.

"Each of these groups really partner together, and they have several meetings throughout the week and work very cohesively," the assistant treasurer said. "I believe that this is because of the information shared with the three chairs on a monthly basis and the support that is given to the program from the leadership team."

The executive said the groups partner together on any promotions the company is offering as well as issues such as network brand management, acquirer management, loss prevention and fraud. They meet on a regular basis to understand what the other departments are doing, enabling them to prioritize projects and complete them more efficiently.

For years, credit and debit cards, along with other payment forms, were essentially viewed by companies as a utility—the cost of doing business. Since the emergence of cashless payments, card costs have risen steadily. At the same time, ACH payments are able to settle on the same day the transaction was made, and alternative payment methods have exploded. As a result, some global companies have developed teams specifically focused on payments management and optimization to oversee the many aspects of their payments makeup.

"The payments landscape has become increasingly complicated over the last 10 years, which has created a need for easier access and greater transparency into payments performance," said Jason Pavona, co-founder and CEO of Pazien, a merchant-facing platform that automatically gathers provider reports and delivers interactive, actionable analytics to payments teams. The product was developed when Pavona and fellow co-founder, Dave Burrows, saw first-hand the frustrations finance teams were having when it came to making sense of their data.

"The ability to make change and boost the bottom line of payments has become a critical function," Pavona said. "Worldwide brands have identified the need for executive-level team members dedicated to payments strategy."

Verizon has pursued that path. Charles Ellert, payment strategy leader for the communications giant, said the company has had people focused on payment strategy in different lines of business for more than 10 years. However, "It has only been in the past year that the role has shifted to an enterprise function looking holistically across all business lines," Ellert said. "I've been in this [current] position for nearly three years, but started in a role just focused on our Wireline business that supports Fios and landline services."

In recent years, Pavona has seen a surge in payment managers and directors of payments in both large and small businesses. Subscription-based businesses, in Pavona's experience, were the first to cross into payment management teams in order to effectively generate new subscribers and efficiently collect payments from existing subscribers. Since then, a wide variety of companies have pursued a similar path.

Anand Goel, CEO of Optimized Payments Consulting, has also seen the trend and estimates that today 5-10 percent of large companies have created a dedicated payment-professional position. Traditionally, he said, the treasurer along with another executive on his or her team has overseen payments, in addition to their many other responsibilities.

"I think that it's absolutely true that as budget line items keep going up for card fees, you will see more focus put on them from the standpoint of analysis, reporting and management," Goel said.

#### Tiffany & Co.'s Deep Dive to Manage Payment Costs Finds Savings

Tiffany & Co.'s Laura Woop, director of risk management, payments and credit services, supports the notion of an executive focused specifically on cards. Her support comes in part from a deep plunge the company began a few years ago into understanding the cost of card payments, unearthing the extent to which it was paying unnecessary fees and ways that payment form could be better managed.

"[Managing payments] has taken on a new life internally, but we're not in a place yet where we have senior leadership focused on payments," she said, adding, "I think there should be."

Tiffany's card-cost analysis was prompted in large part by the steady increase in card-related costs. Goel at Optimized Payments Consulting said that card network fees between 2008 and 2014 increased to \$0.08 per transaction from \$0.06, an annual growth rate of more than 4 percent that has continued. If credit interchange fees are included, the growth rate ranges between 2 and 5 percent. Such growth has been well above the rate of inflation, and makes up an increasingly larger line item that treasury must explain to the C-suite and Wall Street.

In order to manage those costs more effectively, companies must first understand precisely what they are:

- American Express (Amex) charges higher fees than cards bearing the Visa or Mastercard logos, but a luxury retailer such as Tiffany can't realistically decline the card if customers present it, so it must pay up.
- There's more room for managing fees from cards issued by banks and merchants that carry the Visa or Mastercard logo.

"When a company is looking to optimize card payments, the first thing it must do is identify its weighted average cost of those payments, and then parse all the data into three buckets," Goel said.

He added that those buckets are:

- The interchange fee paid to issuers that represents over 85 percent of card-related costs.
- Card network assessments and dues, at around 10 percent of costs.
- The acquiring fees paid to payment processors, averaging 5 percent of costs.



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### Optimizing the interchange's cacophony of rates and downgrades

Tackling the interchange fee is the most complex part, and bringing in third-party expertise would likely benefit most companies. Visa and Mastercard update their interchange rates every April and October and publish those rate tables on their websites. So, the goal for corporates isn't necessarily to negotiate lower rates but instead to optimize them, given that each transaction could face multiple rates. For example, a retailer may pay 1.7 percent when the customer swipes a card, but if the same retailer's cashier has to key in the credit card number the rate may jump to 1.9 percent. If the customer's billing zip code isn't submitted with the authorization request, the rate could jump again, perhaps to 2.3 percent, and if the merchant didn't settle the day's batch of transactions overnight, the rate could rise further still.

How a company completes the card authorization process and the data elements it sends in the settlement process determines the rate it pays. The more elements that are missing, the more transactions are "downgraded," and the higher the costs.

"The goal of optimal authorization and settlement processes is to adhere to all the standards from the card networks to get the best qualification," Goel said. He added that, with the exception of grocery and small ticket verticals, if the overall effective rate remains below 1.8 percent, the company is generally doing well, and a rate above that percentage should prompt it to seek improvement.

Tiffany hired a third-party consultant to help it with a fee study. Woop said the exercise confirmed many of the problems her group already understood, but it defined them more clearly and the stamp of an expert on the issue provided the impetus to make changes. For example, the company focused more aggressively on why certain transactions were being downgraded, and in one instance it discovered that all e-commerce Mastercard transactions were being downgraded because a data field was missing in the settlement file. "We save about \$350,000 annually on just that one issue," she said, adding that a separate data-element issue with Amex transactions has saved the company \$200,000 annually.

Goel noted an online travel company with upwards of \$9 billion a year in card sales that discovered sending "level-three" data, which includes more data elements than levels one and two, could save the company \$5 million a year in interchange fees. "Once the company knew that was an option, it developed and tested a fix, and within about two months it was able to implement the solution and started to see those savings," he said.

#### Consolidating and "RFPing" processors can lower downgrades

To date, there has been no single processor of credit card transactions that operates in every country. But consolidating merchant-acquiring service providers can greatly facilitate providing the necessary data to avoid downgrades.

Having one acquiring partner across an entire system allows a company to negotiate processing rates based on total system volume. The coffee-chain parent has a team devoted to payments to manage its one processing agreement in the U.S., and it does quarterly reviews of interchange fees, including downgrades. It looks for trends in each category, comparing the current quarter to the previous quarter and previous year. Significant changes could indicate improvement or fees that need to be re-examined for ways to manage them better. In addition, the company closely monitors transactions to ensure it's receiving the best qualified rates.

"We'll look to make sure that well over 90 percent of our transactions are qualifying for the best pricing that's available for those particular card types," the assistant treasurer said.

Tiffany has multiple processors, each with different data requirements. In Europe, for example, it has a different processor for each country. Since its deep dive into card costs, Tiffany is focused on consolidating its processors, first for the Asia-pack region and is in the process of identifying another for Europe. Still to come in terms of consolidation is the Americas, where different countries still work with multiple firms.

For merchants whose POS systems are unable to send adequate data, Goel said that there are "workarounds" companies can deploy to add the necessary data elements, typically by using third-party vendors to append it.

Regulated utilities tend to have fewer concerns regarding the interchange fees. James Gilligan, assistant treasurer at Great Plains Energy Inc., the holding company of Kansas City Power & Light Company, noted that more than a decade ago, Visa campaigned to get utilities to accept cards—a payment form they had avoided because of the difficulty of including variable interchange fees in their rates. The card network countered by offering a low, flat rate to such companies, and Mastercard followed suit.

Nevertheless, the cost of processing credit card transactions is still significantly higher than alternatives, such as debit cards and old-fashioned checks. For companies accepting monthly payments, such as utilities, ACH transactions are the least costly, and they typically settle by the next day whereas as credit card payments are more likely to settle in two days.

"We encourage customers through a variety of marketing approaches to pay electronically, hopefully using ACH," Gilligan said, adding that checks make up only a quarter of payments today, while credit and debit cards are almost 20 percent, and the rest are electronic, mostly ACH payments.



The next biggest card-related cost for most companies, making up approximately 10 percent of fees, are the card network assessments and dues. Those fees are publicly available and typically not negotiable.

## Networks and processors offer some negotiable fees

The next biggest card-related cost for most companies, making up approximately 10 percent of fees, are the card network assessments and dues. Those fees are publicly available and typically not negotiable. Goel said there are approximately 30 such fees, and the assessments levied by Visa and Mastercard

typically range from 12 bps to 14 bps per transaction, with authorizations each costing around 2 cents.

Several small fees, such as the Visa Misuse of Authorization fee, can be avoided by ensuring each authorization has a corresponding settled transaction. For example, when merchants seek a payment authorization without a corresponding settlement, Visa and Mastercard charge them approximately 9 cents, Goel said. That can occur when a customer registers a new credit card with an e-commerce merchant, and the merchant seeks an authorization to be sure the card is real and has credit.

"A company should either do the authorization for zero dollars, which will validate the card [without the Misuse fee], or have a process to settle the transaction or reverse it if the company doesn't plan on continuing with it," Goel said.

As a part of its quarterly review of fees, companies should also review network-related fees. In one instance, the application it uses to perform the analysis revealed that a company was being charged an integrity fee because it wasn't settling authorizations.

"Once that was identified, we were able to partner with our technical team and change the way we were authorizing transactions, and that fee went away," the executive said.

Goel's advice removes the integrity fee and avoids a potentially problematic experience for customers—and the company's reputation—since authorizations reduce their "open to buy," or available credit, and could stand in the way of them making future purchases with the card.

The final bucket of fees, representing about 5 percent of charges, comes from the merchant's processor(s), including the largest national banks and nonbanks such as Vantiv, First Data and Cielo. The fees these entities charge are for services such as authorization and settlement, and monthly service reporting. One executive stated some of those fees are negotiable, especially if the company has high transaction volume, but it also helps to be "fluent in credit card speak" and be familiar with all the various charges a company faces.

#### Bigger picture card savings can outweigh fee reductions

Because of rising card costs, one area of focus for these teams is optimizing fee rates and negotiating fee levels. However, as Pavona at Paizen pointed out, optimizing fees doesn't mean simply looking at fees insularly. To fully understand the impact of fees, payments teams have to look across the board at things



"One of the keys when we talk about cost of payments is the need to look at the overall cost of payments. Things like how many transactions refunded, how many chargebacks processed, and how many authorizations approved all have an impact."

such as authorization rates. If, for instance, a merchant is able to target and amend areas of consistent or problematic declines in their business, the merchant has the potential to vastly improve their authorization rate, which could far outweigh the benefit of incremental fee savings.

"One of the keys when we talk about cost of payments is the need to look at the overall cost of payments," Pavona said. "Things like how many transactions refunded, how many chargebacks processed, and how many authorizations approved all have an impact."

The most important factor, Pavona said, is having access and insight into all aspects of payments, and therefore the ability to analyze and optimize performance across the board. Rather than looking at pieces of payments singularly to make baselevel changes, payments should be treated as the cycle that they are to improve the business.

Another key element is the refund rate. Online retailers will almost always have a much higher refund rate than a luxury retailer such as Tiffany, with its high-touch sales process, or a utility or telephone company that is mostly getting paid for a service after the fact. In any case, the merchant is paying fees for that refund to occur, but it should double-check to make sure interchange fees are returned, since that's not always the case, according to Pavona.

#### Fraud: 3-D Secure and EMV dissemination still faces hurdles

Another bigger-picture element is fraud and the fees it can generate for a merchant. Companies must regularly examine fraudulent payment trends and seek to educate their colleagues on how to identify and mitigate them. However, given the long string of cyberattacks at major retailers and other companies holding customers' credit card information, it is inevitable that fraudsters will seek to use stolen credit card numbers to make purchases.

When the actual credit card holder finds out, he or she will likely request a chargeback from the issuing bank, resulting in the bank returning funds to the customer. Issuers typically penalize the merchant with a chargeback fee, and they can be significant—in the \$20 range; however, chargeback fees can be negotiated down and even eliminated completely, but mostly for very large merchants.

Ellert at Verizon said the phone company is a "big fan" of both 3-D Secure and EMV technologies to combat fraud. Not only do they effectively reduce fraud, but employing the technologies helps reduce merchants' interchange fees. And there's another major incentive to use them: "Both of those technologies help shift the liability of fraudulent transactions on to the issuer. If we had not implemented these solutions, we would be eating the fraud," Ellert said, adding that a challenge for merchants is that marketing executives are concerned with perceived customer friction.

"We're not seeing that, but then you have to be able to prove it to the marketing folks that you're not losing customers because of the additional friction," he said, adding, "Customer's enrolled in 3-D Secure may even expect a routine challenge."

EMV technology—named after its original developers, Europay, MasterCard and Visa—is quickly becoming the global standard. A computer chip stores the card data that previously resided on the magnetic strip, making it difficult to counterfeit the card. The chip produces a one-time use code for each transaction, allowing for more secure processing, and it can enable a one-time-use code for mobile, "card-not-present" transactions as well as support other security measures, such as tokens.

Goel said that EMV is not a silver bullet. Merchants still see fraud, although typically at significantly reduced rates, when fraudsters seek to emulate a chip, or they may find a way to convince the merchant's terminal that the chip is malfunctioning, prompting the cashier to resort to the less secure magnetic strip. In addition, converting to EMV

is expensive, potentially costing the merchant millions of dollars. The merchant must purchase not only the appropriate payment terminals, but if those terminals touch the company's POS solution or switch, that technology must be updated as well, Goel said. Merchants seeing a reduction in retail fraud tend to see an increase in online fraud, and EMV does not provide any fraud protection for e-commerce transactions.



A significant number of merchants in the U.S. have yet to adopt EMV technology, and even fewer have adopted 3-D Secure, which was mandated in Europe and is widely used there.

Plus, converting to EMV technology can be long and tedious. Tiffany embarked on a road to most effectively securing payments, including the implementation of EMV technology, but there is more to be done to ensure that the cost of acceptance is optimized and customer experience is where it needs to be.

"Phase 2 is part of our road map," Woop said, "but work efforts must be balanced against resources."

A significant number of merchants in the U.S. have yet to adopt EMV technology, and even fewer have adopted 3-D Secure, which was mandated in Europe and is widely used there. The secure protocol, which first arrived in the early 2000s, and that all the networks currently support, aims to enhance security and authentication for debt and credit transactions done over the internet.

One of the concerns among retailers about adopting the protocol in the U.S. is the additional information it seeks from customers and thus the "friction" it creates in the checkout process. The next version is supposed to address that concern and should facilitate online ordering, but its arrival date is uncertain. "We're watching that and learning as much as we can about it," an executive said.

Ian Poole, director of technical product management at CardinalCommerce, a wholly owned subsidiary of Visa, said U.S. companies are increasingly adopting the 3-D Secure programs, due in part to the liability shift for fraudulent

chargebacks, as well as the lower interchange costs that some networks provide. Today, he said, companies are using it "more intelligently," applying it to certain transactions with a rulesbased approach to help reduce fraud.

"In the early days it was more the high-risk merchants and high-ticket items, such as electronics and airfare, but in recent years we've seen more comprehensive adoption across verticals," Poole said.

Poole added that the reduction in interchange costs stemming from 3-D Secure adoption ranges between 5 bps and 50 bps. The wide range stems from the long list of relevant factors, including the type of card and how the transaction was authenticated.

#### Faster payments and new technology pushes cards into new realms

There's no doubt: Payments are going through a revolutionary period, driven by new technology, and card networks and issuers are seeking their place in it.

The faster payment initiative in the U.S. has been organized by the Fed, but driven by industry participants. The Faster Payment Task Force (FPTF), with over 300 members including the card networks, published its final report in July 2017. Its deadline for implementing what ultimately will be a multifaceted faster payment system by 2020 is not far off.

Another FPTF member was Vocalink, a technology vendor providing the system already powering the U.K.'s payment system, as well as that of Sweden and Singapore. In the U.S., The Clearing House's real-time payment (RTP) system also employs Vocalink technology and is expected to go live soon. It aims to provide real-time payment and settlement for consumers and businesses.

Meanwhile, the 16 published faster-payment system proposals reviewed by the FPTF, some in operation or in the testing stages and most still under development or in the conceptual stage, may be providing new payment solutions. Those solutions range from digital currency-based solutions such as nanopay and Ripple, to the North American Banking Co.'s more conventional solution to facilitate payments through the ACH network, following the arrival last fall of same-day ACH payments.

Goel of Optimized Payments Consulting said the push for faster payments will likely have the biggest impact on insurance disbursements and time-sensitive bill payments (e.g., utilities), where there are many use-cases for them,



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such as customers getting their heat turned back on as soon as possible after paying an overdue bill. Visa and Mastercard transactions typically take one or two days to settle, and it's even longer for American Express.

On the other hand, Goel said, most retail sales are card based and less impacted by faster payments initiatives that are currently focused on bank transfers, or ACH payments. He added that same-day credit card transactions face hurdles because current card network rules require real-time authorization and batch settlement. Settlement typically occurs in batches overnight after merchants have sorted out their credit cards sales.

"The faster payments initiative's likely impact [on cards] will be to shrink the window for merchants getting paid to one day, rather than two or more," Goel said.

Rather than competing with faster payment solutions by directly revving up its card rail, Mastercard decided to join them in July 2016 by acquiring Vocalink, a merger that was approved by U.K. authorities in April of this year. Vocalink has specialized in making ACH-type payments between bank accounts faster and more efficient.

Peter Gordon, vice president of product development and innovation at Mastercard, noted in an email that Mastercard foresees the future of payments as about choice, but today those choices are fragmented across different providers and brands.

"We believe there's a benefit to having card- and account-based payments under one roof and to become a network of networks," he said. "By strategically going to market with our fast ACH capabilities, alongside our core card and services businesses, we will have a comprehensive global catalog of card and ACH solutions to drive value for Mastercard and our partners."

Mastercard's chief product officer, Michael Miebach, published a note on the company's website in late July explaining the concept behind the acquisition's strategy, which stated that payments, whether making or receiving them, will increasingly require a seamless experience based on choice.

Further integrating faster-payment solutions, SWIFT announced on August 15 that it had struck an agreement

with The Clearing House to provide corporate customers with a single payment platform. Called the Alliance Messaging Hub, companies will be able to pursue costlier "high value" payments over the SWIFT rails or repetitive "low value" payments through the RTP network.

Alongside the faster payment initiative, SWIFT has also been pursuing its global payments innovation (gpi) initiative. The first phase is now live, providing clients with sameday use of funds, greater transparency of fees, end-to-end payment tracking, and unaltered remittance information. A second phase in the works will enable companies to stop payments immediately, transfer richer payment data, and improve straight-through processing, while a third phase is exploring the use of new technologies such as blockchain/distributed ledger, according to SWIFT.

Technology is clearly changing the card business in other ways. Companies' adoption of EMV and 3-D Secure technology is expected to continue. In fact, adoption of EMV spurs adoption of 3-D Secure, since reducing card fraud in the physical space has shifted fraudsters' attention to online fraud, noted Poole at CardinalCommerce.

Near Field Communication (NFC), a short-range wireless communication standard enabling an NFC-enabled card or other device to communicate with a terminal in close proximity, also has the potential to impact the card business. The two dominant terminal manufacturers, Verifone and Ingenico, have incorporated EMV and NFC capability in all the terminals they manufacture and deploy today. However, card manufacturers have been less enthusiastic about imbedding NFC capability, due to the extra cost.

Their reluctance also stems from consumers' apparent preference at this point to employ NFC capability from mobile devices, such as the iWatch or iPhone—not their cards. In addition, said Goel, NFC capability just isn't a priority for many retailers, especially retailers of larger ticket items, such as Tiffany diamond rings, where consumers aren't in a hurry to buy the items and payment convenience is secondary.

Goel added that his NFC-enabled iWatch certainly came in handy during a recent visit to Epcot Center in Orlando, with a camera in one hand and kids in tow. Rather than having to reach for his wallet every time he made a purchase of snacks, souvenirs or tickets, he simply had to double click a button on his iWatch and place it close to the terminal.

"It was cool and enhanced my experience," Goel said. "So, I think in industries where speed of service is important, it will play a role."



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