Visa Consulting & Analytics

# Authorization Management

## Risk, customer experience, and the COVID-19 pandemic

**The COVID-19 crisis represents one of the biggest disruptions in the history of the electronics payments sector.**

**With GDPs falling, a global recession underway, and a change in consumer behaviors likely, many aspects of credit card lending will be impacted. Most importantly, the risk of increased credit losses may be significant.**

## Visa Consulting & Analytics (VCA) has investigated the changing face of electronic payments risk from several angles. In this paper, we consider authorization management, and the implications for both risk and customer experience.

Almost every accomplished risk manager will have some experience of working through an economic downturn. Some may also have coped with a full-blown economic crisis, such as the global financial crisis of 2008 and 2009. While we have yet to determine the full extent of this unprecedented crisis, what is remarkable is the impact on everyday consumer behaviors.

A case in point is the shift to ecommerce, a category of spending which is strategically significant to almost any payment card issuer, but which presents distinct risk management and customer experience considerations.

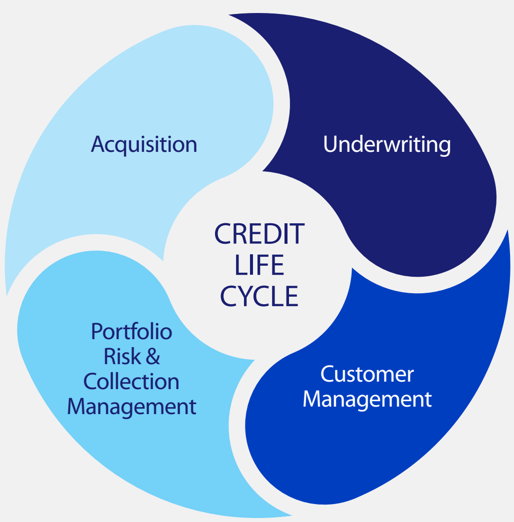
Figures from Visa Inc. have indicated the global extent of the shift. In Latin America for example, 13 million Visa cardholders made eCommerce transactions for the first time ever during the March quarter and, in the US, non-travel digital commerce spending during the month of April rose by 18%[1]. Meanwhile, the payments industry news service PYMNTS.com reported that, in a period of just eight weeks, it had observed "six times more consumers working from home, four times more consumers buying groceries online instead of going into the grocery store, four times more consumers ordering takeout from aggregators or their favorite restaurants, and three times more consumers shopping online for things other than groceries." [2]

For a risk manager it is a perfect storm. It is putting extreme pressure on all the phases of the credit life cycle, all at the same time. To aggravate matters, there is uncertainty as to how the crisis will evolve, how long it might last, or what the recovery could look like.

### The COVID-19 crisis puts extreme pressure on all four phases of the risk cycle

With a shift in the economic fundamentals, there's a need to re-think the risk appetite, tighten the acquisition policy, and reduce the cost of acquisitions.

As new risks materialize, there's a need to re-work underwriting models, think harder about risk-based pricing, and pay particular attention to origination fraud.




With increased risk across the portfolio, volume is pushed towards the collections function —which is the final back-stop in protecting performance and reputation.

As customer behaviors evolve, customer management practices must follow suit —including credit line management, repayment plans, authorization management, and fraud detection.

1 "Visa sees 'massive' digital acceleration with millions trying e-commerce for the first time", MarketWatch, 14 May 2020, https://www.marketwatch.com/story/visa-sees-massive-digital-acceleration-with-millions-trying-e-commerce-for-the-first-time-2020-05-13
2 "Why Consumers Aren't In A Rush To Reopen The Economy PYMNTS.com", 4 May 2020, https://www.pymnts.com/coronavirus/2020/no-rush-to-reenter-physical-world/

We are therefore experiencing a deep and sudden shift in the nature of credit card risk. In the short-term, this shift is set to have a profound impact on the overall performance of any credit card business. In this paper, we focus on the third phase of the credit lifecycle – namely, customer management, which encompasses authorization management.

There are three key points in regards to authorization management:

## 1

**First, and most significantly, risk managers have had to respond to a surge of payment volume in the very payment channel they tend to be most cautious of, namely eCommerce.**

While most of this new volume will be legitimate, it will most likely be masking an increase in attempted fraud as fraudsters seek to take advantage of the confusion, distraction and vulnerability stemming from the COVID-19 crisis.

The authorization system acts as a critical last line a defense against the heightened fraud risk.

## 2

**Second, alongside the fraud risk comes a commensurate increase in credit risk.**

A proportion of customers, and possibly a sizeable proportion, will be facing real financial hardship. Under these circumstances, consumers may attempt transactions they cannot afford – and the authorization system can act as a safety net, preventing them from veering too far off course.

On the flip side, because many more people are turning to the eCommerce channel for their everyday spending, they may inadvertently find themselves on the wrong side of an authorization parameter, even though their spending is, in fact, entirely affordable.

The challenge for the authorizations team is to deduce which side of this line each transaction falls, and falls on to act accordingly.

## 3

**Third, the way an issuer chooses to manage its authorizations has a significant impact on customer experience. Even at the best of times, declined transactions are a huge market irritant.**

During the COVID-19 crisis, when payment choices may be more limited and consumers more stressed, there could be even less tolerance for inappropriate transaction declines.

The challenge for the risk manager is to be extra-vigilant, and adapt to the new risk environment, but also to maintain the quality of the customer experience. At a time when payment behaviors are changing, and new long-term habits are likely to be formed, an over-zealous approach to authorization management could easily nudge a consumer towards using a different card.

Of course, this is easier said than done, especially if an issuer is constrained in its ability to respond to the crisis or to gear-up its operations. Also, the specifics of the response will be determined by the issuer's circumstances, the size and character of its portfolio, the risk environment in which they operate, and the severity of the crisis in its home markets. That said, we have compiled seven imperatives that, we believe, are relevant to any issuer operating anywhere.

# Seven imperatives for authorization teams in the COVID-19 pandemic

## #1

### Acknowledge the strategic significance – and convene an Authorizations Committee

Most fundamentally, your organization should acknowledge the strategic significance of your approach to authorizations – and the fact that your authorizations strategy should be directly aligned with your organization's broader strategic response to the COVID-19 crisis.

More specifically, the way you manage your authorizations should be a direct reflection of your organization's risk appetite, its customer service ethos, and its digital ambitions.

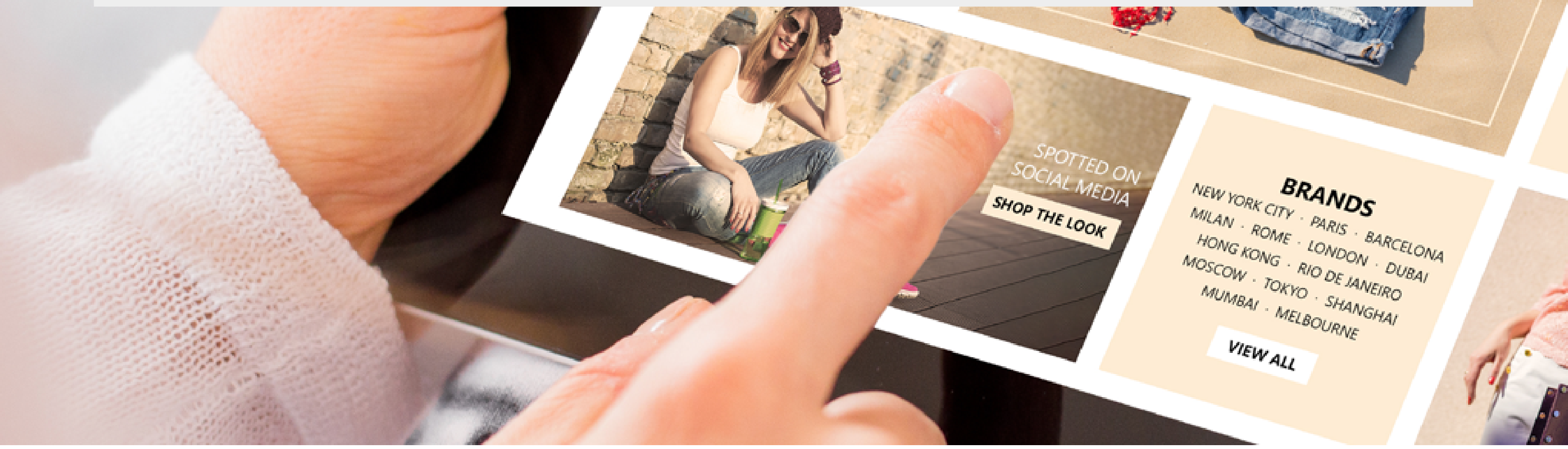
If you have not already done so, you should therefore form an Authorizations Committee with representatives from key teams from across the business – and ensure that it is empowered to implement the necessary changes.

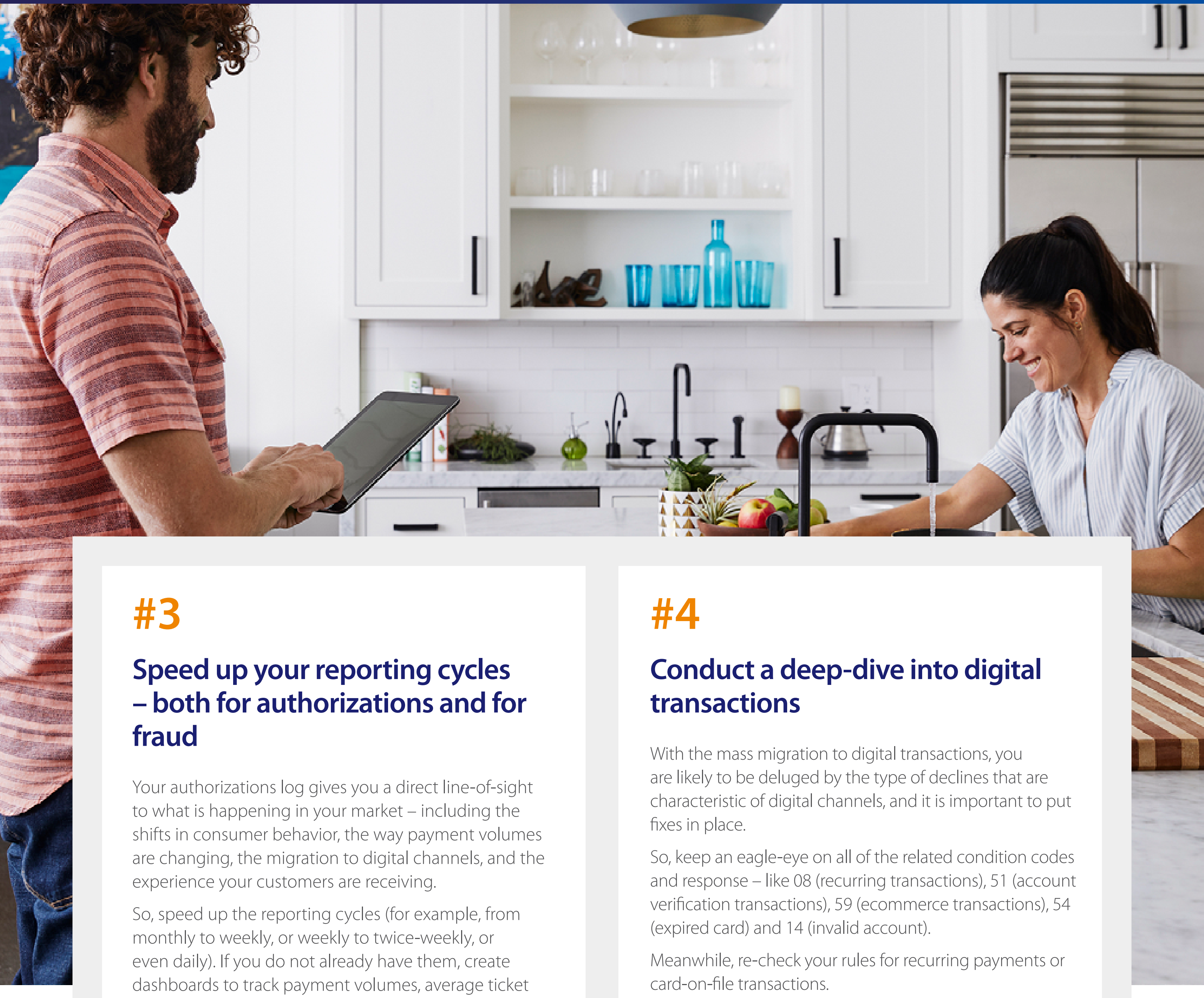
## #2

### Review your Stand-in Processing (STIP) parameters

If you have not already done so, now would be a good time to review and re-fresh your STIP parameters.

Through these parameters, you give VisaNet some very clear instructions of how to deal with your transactions at peak times and/or if your own systems are unavailable. In the face of the COVID-19 crisis, your approach will almost certainly be different in some way – and your STIP parameters should be adjusted accordingly.





## #3

### Speed up your reporting cycles – both for authorizations and for fraud

Your authorizations log gives you a direct line-of-sight to what is happening in your market – including the shifts in consumer behavior, the way payment volumes are changing, the migration to digital channels, and the experience your customers are receiving.

So, speed up the reporting cycles (for example, from monthly to weekly, or weekly to twice-weekly, or even daily). If you do not already have them, create dashboards to track payment volumes, average ticket values, transaction frequencies, and those all-important approval and decline rates. Pay particular attention to decline reasons and merchant concentrations – as these will be key to determining your response.

Similarly, you should build new fraud reports for card not present (CNP) transactions, and review them on at least a daily basis (and possibly more frequently). By understanding what types of transactions are fraudulent, you can better understand the type that are not, and update your rules accordingly.

## #4

### Conduct a deep-dive into digital transactions

With the mass migration to digital transactions, you are likely to be deluged by the type of declines that are characteristic of digital channels, and it is important to put fixes in place.

So, keep an eagle-eye on all of the related condition codes and response – like 08 (recurring transactions), 51 (account verification transactions), 59 (ecommerce transactions), 54 (expired card) and 14 (invalid account).

Meanwhile, re-check your rules for recurring payments or card-on-file transactions.

Also, re-visit your approach to expired card transactions. Check whether your system has a "blanket decline" approach to account verification transactions.

Whenever you do decline an expired card transaction, you should tell your customer about it, ideally with a real-time message. If the transaction is genuine, it will give them a chance to update their details and rescue the transaction accordingly – which benefits everyone.

Again, the COVID-19 crisis is accelerating the shift to digital, and their experience could determine whether your customers stay loyal to your brand or begin to migrate to another issuer.

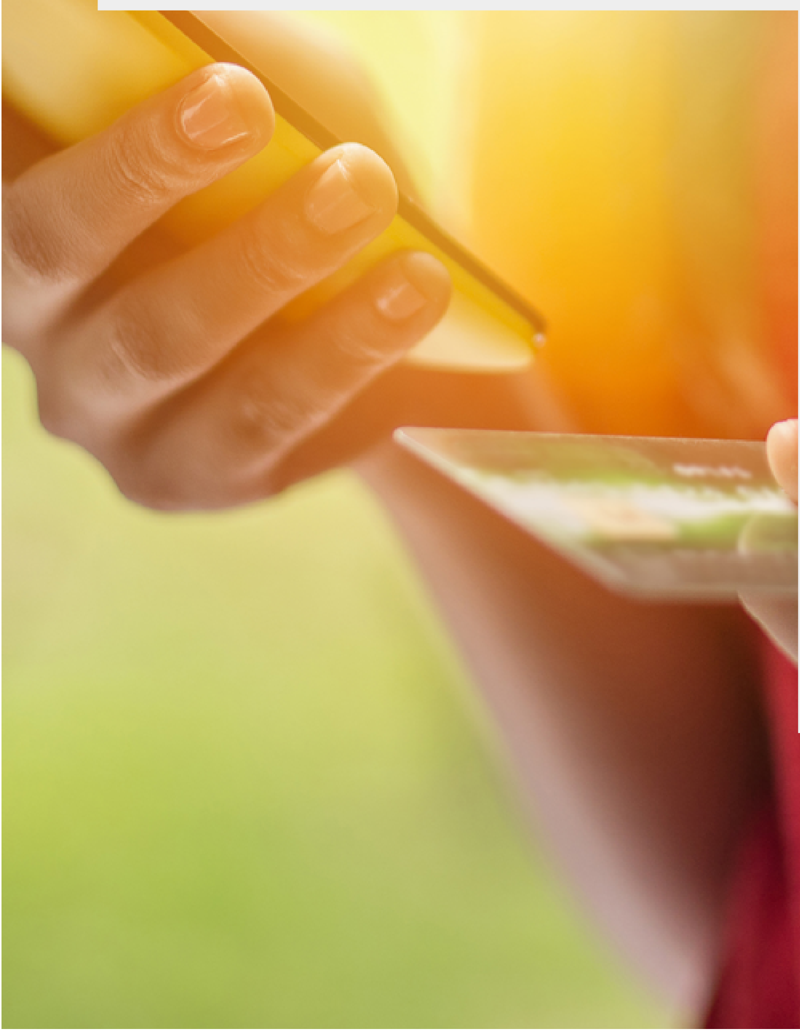
# #5

## Take a long, hard look at your peak periods

It is likely that, in response to the crisis, transactions may become concentrated during particular times of the day – or night.

You should run a time-analysis of transaction counts and average ticket values and check for any issues.

Look in particular at the percentage of declined-versus-approved transactions by hour. It could be that your velocity checks need to be reviewed in both your authorization and your fraud detection systems.



# #6

## Review your over-limit strategies, and think more creatively about affordability

With more customers using their cards for more of their everyday spending, it is likely that an increasing number and proportion of your declines will be due to "insufficient funds."

Some of these may represent an unappetizing level of credit risk – and some further investigations may help to reveal customers who are getting into difficulty.

However, in many cases, these transactions should be perfectly affordable and you can consider several strategies.

For example, if you use a behavioral scoring system, this is likely to automatically assign a recommended incremental credit limit (or overdraft limit) to each of your cardholders. But, for such a limit to take effect, the cardholder will need to give their explicit consent. So, consider how you could automate the process. For example, if a transaction is declined, you could send a real-time message offering a temporary credit limit increase, and give cardholders a quick and easy way to follow-through.

You should also take a closer look at how you deal with so called 'shadow' limits. For example, you could segment cardholders according to their risk profile, and either increase or reduce the shadow limit accordingly. Or you could perhaps be more lenient in your approach to essential transactions (based on merchant category codes, such as pharmacies or grocery).

In each case, it is a delicate matter of weighing up customer experience versus credit risk. By thinking laterally, you should be able to make well-informed decisions.

# #7

## Communicate, communicate, communicate (and, wherever possible, take advantage of two-way communications)

Whenever you decline a transaction, it is always best practice to tell your customers why (indeed, you could think of it as a common courtesy). This could also turn into an opportunity for you to enhance the customer experience, rescue transactions that could otherwise be lost, and build customer loyalty.

If you are not already doing so, you should make use of your existing cardholder messaging engines. Because they are already used to generate real-time or near-real-time transaction alerts, these messaging platforms are already plumbed-in to many issuer authorization systems. Operationally, it is a small step to use cardholder messaging to resolve (or at least relieve) the declines dilemma.

At the very least, you should tell customers why a transaction has been declined (it could, for example, be due to a simple mis-typing of an expiry date or CVV2, or because a card-on-file has expired).

You could go one step further and give them some proactive suggestions. For example, you could encourage them to apply for a temporary credit limit increase, ask if they would like to transfer additional funds to their account, or ask them if they would like to increase any daily spending or transaction caps.

Again, declines can be a big irritant to all parties in the transaction chain. By intervening with some appropriate communications, it can possible to turn an issue into an opportunity.

# How Visa can help

## Bringing greater accuracy to post-COVID Visa Advanced Authorization risk scores

A key component of many authorization systems is the fraud detection component. An analytical risk tool that can routinely scrutinize each transaction for signs of fraud and allocate a risk score, which will then be factored into the authorization decision.

The thing is, these risk tools typically look for out-of-pattern spending. Yet, in the depths of a crisis, almost all spending is out-of-pattern. So, the proportion of false-positives may spike, and the tool's effectiveness in identifying fraud needs to be revalidated. Visa has been conducting in-depth analysis during COVID-19 and concluded that while genuine cardholder spending patterns have decreased significantly for card present and cross-border channels, the overall volume of suspicious transaction activity for card present and cross-border has remained consistent with prior to the COVID-19 (i.e., transactions scoring in the higher risk score bands). In summary, 'fraudsters aren't staying home'.

The Visa Advanced  Authorization (VAA) score provides issuers with a sophisticated in-flight fraud score for targeted and better informed authorization decisions. It evaluates more than 500 unique attributes per transaction in about a millisecond, utilizing cloud-based fraud risk models that use neural networks, artificial intelligence and machine learning methodologies. VAA allows issuers to manage high and low risk activity to improve authorization rates while detecting more fraud at lower false positive rates.

## Conducting a complete authorization performance review

Authorization optimization is a core area of competence within VCA, and several related services are available to customers.

For example, with the Authorization Decline Experience Optimization service, VCA consultants can conduct a full review of an issuer's authorization decline performance and the business impact – not just in terms of payment volume lost from unnecessary or inappropriate declines, but also the impact on subsequent cardholder behaviors.

The knock-on effect can be significant, because Visa analysis demonstrates that cardholders who have experienced a decline are four-times more likely to become dormant.

Through such a review, VCA can provide tailored recommendations to improve the authorization decline experience which, in turn, will decrease the risks of attrition and dormancy and increase revenues.

While the COVID-19 pandemic has affected businesses everywhere, opportunities can arise from challenging situations. Visa Consulting & Analytics can advise on how your business can best respond to the COVID-19 pandemic.

## Fraud prevention for the authentication of transactions

The ecommerce environment has evolved significantly over the last decade and more recently, it has seen a dramatic change in the COVID-19 pandemic as cardholders changed their spending behavior patterns.

The Visa Consumer Authentication Service (VCAS) is a hosted 3-D Secure solution which provides issuers with multiple layers of protection against fraud in debit and credit e-commerce transactions where cards are not physically present at a point of sale.

VCAS provides fraud prevention for the authentication of transactions, which occurs before the process of authorizing the transaction. Leveraging historical transaction data from Visa's network along with user and merchant specific device and session information, one of the VCAS platform's core capabilities is the computation of a risk score to indicate the likelihood of fraud for any given e-commerce transaction.

The VCAS risk score is calculated using machine learning to identify patterns in cardholder past transactions, which are then applied to future authentication requests. Because fraudulent card activity tends not to be targeted based on card issuer, the VCAS model is developed at the network level. The VCAS risk score is completed in less than one second, and issuers then use the score to decline or approve the authentication request on the VCAS platform using issuer custom rules.

The current environment has put immense pressure on the risk management function, in particular around authorizations management. The good news is that Visa has identified several imperatives to support you in addressing authorization related issues including many actions you can take on your own today, with our teams ready to assist if you need more help.

# About Visa Consulting & Analytics

We are a global team of hundreds of payments consultants, data scientists and economists across six continents.

- Our consultants are experts in strategy, product, portfolio management, risk, digital and more with decades of experience in the payments industry.
- Our data scientists are experts in statistics, advanced analytics and machine learning with exclusive access to insights from VisaNet, one of the largest payment networks in the world.
- Our economists understand economic conditions impacting consumer spending and provide unique and timely insights into global spending trends.

The combination of our deep payments consulting expertise, our economic intelligence and our breadth of data allows us to identify actionable insights and recommendations that drive better business decisions.

**For help addressing any of the ideas or imperatives above, please reach out to your Visa Account Executive to schedule time with our Visa Consulting & Analytics team or send an email to VCA@Visa.com. You can also visit us at Visa.com/VCA.**

