

Acquirers: secure your business against merchant fraud

White Paper

Digital Payments for a Trusted World

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Acquiring, a market at risk

Acquirers should focus on retaining and supporting existing merchants with improved services, while paying attention to areas of risk and where losses can be prevented.

With increasing demand for its services acquirers are in a growth market, where card and electronic payments continue to replace cash and checks.

With the growth of Internet commerce and alternative payment methods the traditional credit and debit card still remains the most popular method for electronic payments. With the increase of prepaid cards, mobile acceptance, and micropayments from emulated cards, electronic payment is expected to continue growing.

Even though acquirers are well positioned in the payment landscape they still have their challenges, including:

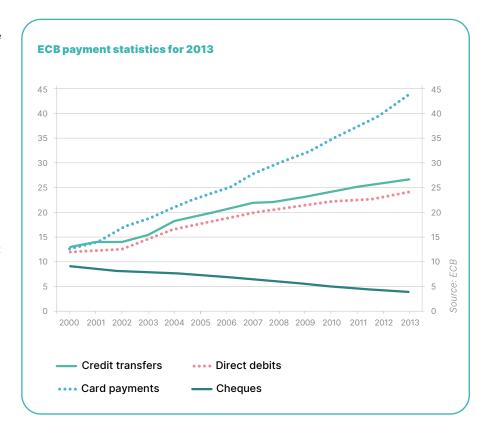
- Increased competition from new entrants
- Impacts from new EU regulation
- Merchant insolvency rates higher than usual
- Criminals and collusive merchants seeking to defraud and exploit the acquiring relationship

With the growth of E-payment new players have emerged and entered the acquiring market with strain on profits and increased competition as a result. Under such conditions mitigation of cost, losses from fraud and insolvent merchants can no longer be compensated through higher processing fees.

Instead, to make their business more viable, acquirers should focus on retaining and supporting existing merchants with improved services while paying attention to areas of risk and where losses can be prevented.

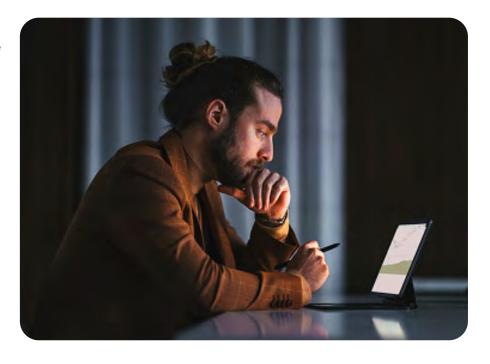
The greatest risk an acquirer faces arises from its obligation to compensate issuers and card holders when merchants cannot or will not fulfil chargeback obligations due to insolvency or planned fraud. It is a liability that is contingent and is carried for as long as 180 days after the transaction date.

In today's economic environment, with a higher than normal merchant attrition rate, it is therefore essential to have mechanisms in place that continuously scan and monitor for signs of merchant distress so that mitigating measures can be taken.



Actual and declared merchant insolvencies pose an immediate concern for acquirers. However, from a fraud perspective, the number of merchants balancing on the verge of insolvency represents an even greater concern as merchants in distress are more likely to resort to fraud.

With chip-and-pin technology successfully having secured the card-present environment and 3D-Secure implementations continuing to secure the Card-Not-Present (CNP) environment, fraudsters are becoming ever more imaginative and are increasingly resorting to 1st party merchant fraud.





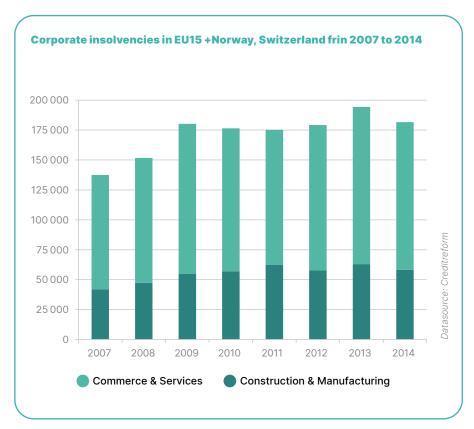
As fraud has become more digitally orientated and its profit potential recognized by organized crime an ecosystem of criminals has emerged. Individuals are teaming up and gangs are orchestrating crimes ranging from sophisticated hacking to using IT expertise to impersonate merchants and physically picking up the proceeds from a hacked ATM, for example.

Risks and threats must be seriously considered by acquirers who find themselves in a double role when servicing their merchants. In one capacity they need to service and protect their good merchants while, in another, protect themselves whilst monitoring and exerting vigilance over merchant activities with fraud potential and other damaging effects, such as violation of card schemes, anti-money- laundering and PCI DSS regulations.

Integrating critical signing policies with in-depth risk assessments and due diligence processes can reduce exposure to fraud. However, ongoing attention to merchant activities and transactional patterns is even more important as, once onboarded, the merchant represents a liability as well as being a potential source and victim of fraud.

While the victim role carries no immediate risk for the acquirer, unless it leads to insolvency, and there are no formal obligations from card schemes to protect the merchants, the acquirers' position in the payment landscape makes it an obvious candidate for supplier of fraud protection services to merchants.

With increased competition, and growing demands from merchants, acquirers have both a commercial and a merchant retention interest in providing fraud related and other services such as 3D-Secure, address verification and tokenization, in addition to core acquiring functions.



Each acquirer's situation and exposure to the above challenges is unique depending on its specific environment and the level to which core acquiring and risk assessment capabilities already have been optimized. Regardless of which adaptive measures that may already have been taken the underlying business and revenue model for acquirers remains the same. It is an imbalanced model where profit is generated as the sum of accumulated small transaction fees but where losses are counted in full, or a pro-rata, share of transaction amounts. Per definition, the Acquiring business model is sensitive to extraordinary losses from fraud and unexpected costs from card scheme fines and non-compliance.

While challenges from increased competition and insolvencies are common, and more or less affect acquirers to the same degree, the increased challenge from merchant fraud is one which the individual acquirer is better positioned to proactively control and mitigate. With the right tools, the right people and a vigilant organization, it is a challenge that can be a differentiating factor and a significant contributor to overall improved competitiveness. With that in mind, the aim of this paper is to investigate the topic of merchant fraud, uncover how it is committed and how it can be mitigated.

Acquirers risk from merchant fraud

Most detection of merchant fraud relies upon proactive and near-real-time monitoring.

Monitoring of merchant websites and sales conditions should be conducted on a regular basis to detect unusual sales campaigns and promotions.



From 2008 to 2011 fraud losses in the EU area were steadily declining. In 2012 overall increases in Card-Not-Present fraud outweighed the positive effects from EMV and 3D-Secure implementations.

With continued roll-out and public embracement of 3D-Secure and other innovations, e.g. dynamic Cardholder-Verification-Codes, the incline is expected to be temporary.

It is an expectation confirmed by more recent numbers for select countries, e.g. in 2014 the French organization 'Observatoire de la Sécurité des Cartes de Paiement' released a report, showing that fraud numbers peaked in 2011 with 0.341% of transactions being considered fraudulent. In 2012 and 2013 the numbers respectively fell to 0.290% and 0.229% which year on year represents a decline on 17.5% and 21.0%.

As both the Card-Present and the Card-Not-Present environments continue to be secured fraudsters will attempt to target and penetrate the payment arena from different angles of which the acquiring path is one.

The acquiring role is governed by the card schemes setting forth obligations, requirements and thresholds for both acquirers and merchants. Obligations exist, from "signup" to "termination" including ongoing requirements

for risk and fraud management. They constitute the minimum requirements for licensing and operation and are supplemented by optional recommendations, best-practices and self-assessment guides.

In some cases, obligations are described in detail with the mandatory actions and measures required to achieve compliance. In other cases they are less explicitly defined leaving room for acquirers own implementation, providing the obligations are verifiably met. As such it is largely, the fraud fighting capabilities of the individual acquirer and the extent to which recommendations and best practices have been followed, that makes the difference between adequate and outstanding acquirers.

If fraud is managed effectively losses will be reduced. Instilled confidence from strong fraud prevention and detection measures will position the acquirer to target merchant segments with more profitable fees structures.

As sales channels and purchasing habits become increasingly digitalized fraud scenarios are becoming more sophisticated and are constantly changing. With such dynamics, and in orderto respond efficiently, acquirers will depend on flexible and configurable IT systems to maintain the effectiveness of their fraud risk management solutions.



Data scientist competencies in the areas of data mining and transaction analysis are essential for a good solution.

Considering the vast number of transactions processed such capabilities are mandatory for early detection and reaction to real-time occurring abnormalities. In background mode analysis on historic data, and in particular on data linked to actual fraud cases, can identify trends, similarities and other inconspicuous patterns. Findings and outcomes from this analysis can be translated into new rules and directly injected into a fraud detection engine.

A fraud risk management solution must also have skilled and vigilant experts who can react quickly to such findings, and if necessary create new rules.

Having experienced personnel throughout the merchant solicitation, due- diligence and risk-assessment phases is invaluable. This accumulated experience, will contribute significantly to minimizing the acquirers' exposure and vulnerability to fraud.

Most detection of merchant fraud relies upon proactive and near-real-time monitoring of turnovers, transaction volumes and other characteristics (origin, brand, time etc).

Deviations and anomalies from normal transaction patterns and averages are regarded as indicators for potential fraud and will normally trigger an investigation.

If results from such investigations reveal nothing suspicious, a relaxed attention to the given merchant risks being the outcome, next time alerts from it are triggered.

However, continued surveillance should be exerted as sustained periods of lower than usual sales, and/or, sudden increase of sales, from discounting practices, could be indicators of a merchant in financial distress. The merchant may resort to drastic measures, which from an operational and transactional perspective are difficult to detect, but ultimately extends the acquirers' liability. Deep discounting (e.g. buy one-get one free), change of 'Terms of Service' (e.g. postponement of delivery) could be ways of overcoming immediate cash flow problems.

Monitoring of merchant websites and sales conditions should therefore be conducted on a regular basis to detect unusual sales campaigns and promotions.

Bust-out merchants

It is important to have mechanisms in place that are capable of identifying unusual transaction and chargeback patterns.

Bust-out merchants» is a type of fraud where criminals disguise themselves as legitimate merchants through false applications, and where acquirers bear the costs of the fraud as a result of their contingent chargeback liabilities.

What this means is that fraudsters will approach banks and acquirers to setup accounts and an acquiring relationship for the sole purpose of generating transaction volume. They proceed to collect the revenue and then disappear sooner than the acquirer is able to discover and react to the fraud.

Before the scam can be executed two prerequisites must be in place:

- A legitimate merchant identity with trustworthy credentials, credit worthiness and a plausible business model
- A genuine, but dispensable storefront with a credible appearance and infrastructure.

Depending on the fraudster's network, patience and willingness to invest in the scam, it can be carried out with greater or less complexity. The challenging

part of the scam is to establish an inconspicuous history with the acquirer and escape initial vigilance exerted toward newly onboarded merchants. The scam can be short-term, with

the aim of generating transaction volume as quickly as possible and then 'busting out'. Or it can be longer term by initially accepting transactions from cardholders in collusion with the fake merchant, thus establishing a good history with the acquirer. Once that has been done transaction volumes are increased using falsely obtained or compromised credit card account numbers. This typically happens at the beginning of a month as it prolongs the period for which the scam can remain operational and undetected.

When card holders begin receiving their statements and detect unrecognizable transactions the normal chargeback process begins. With the sudden upsurge of chargebacks the acquirer soon realizes that something is not right and suspends further settlements. However, by this stage the merchant will already have transferred previously settled funds, have disappeared, and left the financial repercussions with the acquirer.

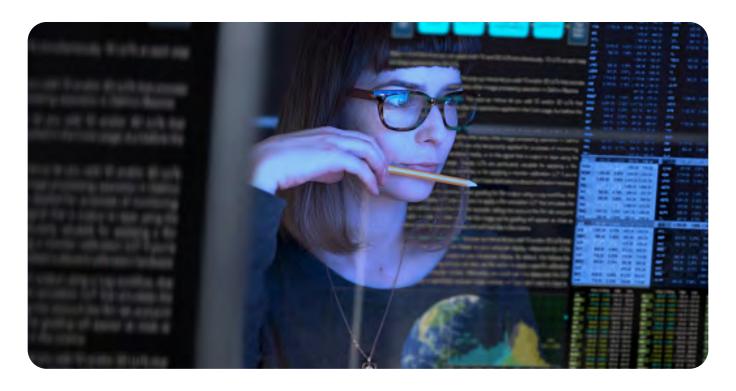
This type of fraud is typically masterminded by criminals who have the necessary network and resources to plan and successfully execute it. Considering their professionalism and experience from previous

scams it can be difficult to expose a prospective bust-out merchant upfront. Therefore conducting a careful due-

diligence prior to merchant sign-up is imperative and a crucial first line of defense. While it is important to be vigilant of newly onboarded merchants, the risk of an existing and long-standing merchant becoming a bust-out merchant still exists.

Acquirers typically have an incremental due-diligence process that is more or less comprehensive depending on the risk profile associated with the merchant's business model. Business models with immaterial service delivery and fluctuating transaction patterns from seasonal or event driven sales are ideal, as spikes in transaction volumes are expected and a normal occurrence, behind which a merchant bust-out attack can be disguised. However as fraudsters are aware of the added scrutiny merchants are subjected

to when choosing a model like that, they may attempt to assume a less conspicuous model to deflect attention. Consequently, even for less obvious business models, the assessment process should be designed and applied as if a prospective bustout merchant could be behind the application. In this regard, and beyond having a capable fraud and risk department, it is equally important to have a trained and vigilant sales force that already in the merchant solicitation phase understands and can identify potentially risky merchants.





Although no process can guarantee detection, a thorough assessment of the merchant applicant can expose and identify those with questionable backgrounds or where further inquiries or documentation should be requested before deciding if an acquiring relationship should be established.

Assessment should try to verify the merchant's background, business model and physical aspects of the business such as:

- Are the merchant and key personnel's history and records checked in company formation, insolvency, criminal and fraud registers?
- Does the merchant demonstrate true business knowledge; are expectations of transactions volume and turnover realistic?
- Are supply, manufacturing and delivery channels documentable?
 Are store or office premises and utility bills verified?

Should a bust-out merchant successfully manage to trick and deceive the assessment procedure it is equally important to have mechanisms

in place capable of identifying unusual transaction and chargeback patterns. Early detection and containment of the attack is crucial. Fraudsters will continue exploiting the opportunity until effectively stopped. Alerts and suspension of automatic settlement procedures may limit impacts but unrecoverable losses may sometimes be unavoidable.

In a specific case, fraudsters had created an E-business for rental of camp-site holiday homes on the Mediterranean coast where customers were required to pay an advance deposit upon booking. Fundamentally an intelligent scam as the website was easily implemented using captured photos from genuine camp sites. By choosing a business model with latedelivery as its nature the scam would only be detected in the spring, when customers would start heading south to camp and enjoy the warm climate. However from a lack of dedication to the scam, by failing to respond and communicate with customers after their bookings, an excessive number of chargebacks were recorded.

Investigations quickly identified the merchant as a bust-out fraudster who progressively had transferred incoming

funds to a different account. Although losses were moderate, the case demonstrates how easily a scam from a business model with an immaterial and late delivery service can be exploited.

In the given case the fraudulent merchant was boarded from a different geographical area than that of the acquirers' traditional one. It had been solicited by a local independent sales agent. This also demonstrates the risk of using third party sales forces for merchant solicitation as their priorities not necessarily are the same as the acquirer. So although liberalization has opened up new markets and expanded the potential merchant base it carries the risk of attracting merchants with questionable intents.

If differences in business practices or language impede normal screening and risk-assessment processes there is a greater need and incentive to carefully monitor newly on-boarded merchants.

Considering the bust-out methods fraud potential and the relative ease by which it allows determined and capable criminals to profit it is one of the most serious threats acquirers are facing in today's market place.

Payment Facilitators



Acquirers should assess the adequacy of their organization and risk management systems to the extra dimension that payment facilitators represent in the classical acquiring model

Payment facilitation originally emerged as a way for entities with a non-classical merchant background to benefit from the eco-system of payments. By assuming an intermediate role and undertaking processing capabilities on behalf of institutions such as the public sector and utility companies a facilitator, as a registered merchant with an acquirer, could act as a gateway and provide transaction handling, billing, recurring payment and interfaces to proprietary IT systems.

Facilitators still play an important although dwindling role performing the above original activities. However with E-commerce, online payment and consumer expectancy of payment per card in traditional cash and check environments, a new business opportunity and aspect of the facilitating role has emerged.

This role is referred to by various names: Payment service provider, Third party processor, Aggregator, Master or Super merchants, with 'Payment Facilitator' appearing to have gained most widespread usage. Regardless of the name the underlying nature of their service remains the same.

A gateway service, providing smallsized merchants the option to accept payment without a direct acquirer relationship and without the need of setting up a traditional merchant account with an acquiring bank.

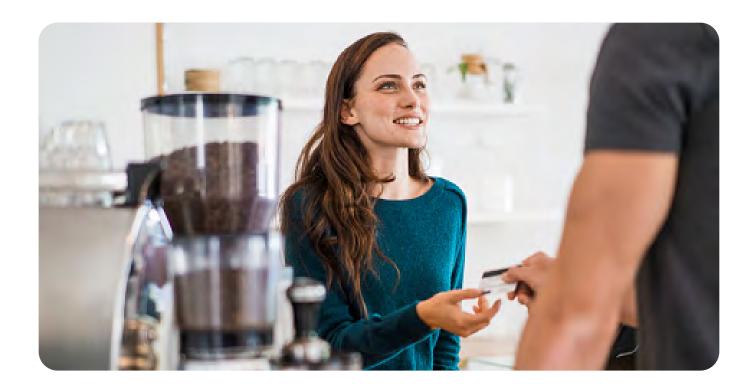
Visa and MasterCard currently define small-sized or sub-merchant differently. For MasterCard the turnover threshold is one million dollars per year whereas Visa has a threshold of one hundred thousand dollars per year before the schemes require the sub-merchant to sign a normal merchant-acquirer agreement.

Furthermore, at this threshold MasterCard, but not Visa, require that settlements must be done directly from the acquiring bank to the sub-merchant bypassing the Payment Facilitator.

A sub-merchant's reason for choosing to open an account with a payment facilitator rather than with a normal acquiring bank could be one or several of the following:

 Business is a personal and unregistered legal entity as normally required by the card schemes.

- Business has low transaction volume making it more attractive to pay per transaction rather than paying a recurrent monthly acquirer subscription fee.
- Merchant has insufficient credit worthiness to obtain a true merchant account.
- Merchant business is considered too risky for a bank or an acquirers liking and an agreement is either not possible or only possible at disproportionately high cost.
- Merchant has a history and appears on a merchant black list file.
- More commonly, and at a more practical level, the facilitator is a supplier of another primary service to the sub-merchant and payment is offered as a secondary, but complementing, service e.g. webhosting for online dating, gambling etc.
- Further, the payment facilitator may provide assistance with implementation of the as analytical and marketing tools which a traditional acquirer does not.



Payment facilitators provide a legitimate and alternative acquiring option to small sized merchants, entrepreneurs and specialized businesses with limited turnover. Thanks to mobile terminals, the internet and E-commerce platforms, it has become possible to establish or equip an existing business with electronic payment methods being it a face-to-face or an E-business.

For acquirers, Payment Facilitators provide a cost effective way of gaining business and transaction volume without having to sign and onboard a multitude of new merchants. Considering that the administrative burden and cost from signing and onboarding a merchant is roughly the same, regardless of its size, but revenue earning from these small-sized and low-volume merchants is limited, the incentives to sign them directly is low. By letting an intermediate entity manage the relatively costly signup and day-to-day management of the sub-merchants, while only maintaining a single merchant relationship with the Payment Facilitator, all parties benefit.

Card schemes recognize this model and today's rules and regulations are adapted accordingly, setting forth obligations and responsibilities for both the Payment Facilitator and the sponsoring acquirer. In short, and excluding the specifics in relation to turnover thresholds, the governing rules state that a Payment Facilitator undertakes the same obligations and responsibilities toward its sub-merchant's as an acquirer undertakes towards its merchants. While this distribution of responsibility principally provides a sound foundation for a delegated acquiring model, the rules also state, that a Payment Facilitator is regarded as a merchant and that the acquirer is liable for all acts and omissions by a Payment Facilitator AND any of its sub-merchants. So, although the Payment Facilitator commits itself to screen and monitor its sub-merchants and their submitted transactions, the acquirer ultimately risks being subject to fines, having to implement compliance plans or having its acquiring status re-evaluated due to activities beyond its immediate control. Excessive chargeback ratios, fraudulent activity, money laundering, signing of banned merchants or PCI DSS violations could be reasons for submerchant and Payment Facilitator misconduct that could reflect negatively on the acquirer's status.

Therefore, before any acquirer decides to offer its services to Payment Facilitators, it should consider these aspects and

perform a self-assessment of whether its organization and risk management systems are adequately adapted to manage the extra dimension that Payment Facilitators represent in the classical acquiring model. For example: how is alignment of assessment and risk criteria between acquirer and Payment facilitator ensured? Are existing merchant reviews and audit procedures applicable for merchants (payment facilitators) with processing capabilities? Are tools in place, e.g. website monitoring solutions, to monitor sub-merchant activities with regard to sales of illegal goods, brand or other damaging activities? Does the risk management system recognize sub-merchant transactions, chargebacks, etc.?

Considering that the revenue model of payment facilitators is based upon fees from the number of transactions processed and interest earnings from retention of funds in the settlement process there is an inherent business conflict with the card schemes imposed restrictions on turnover thresholds. When thresholds are surpassed, sub-merchants must set-up a normal merchant account with the acquirer.

Furthermore settlement must be done directly with the sub-merchant as mandated by MasterCard. For both the Payment Facilitator and the sub-merchant this imposes a disruption to their existing agreement and, for reasons of either convenience or revenue retention, the practice of load-distribution is sometimes used as a method to circumvent the threshold rules. Load-distribution by the payment facilitator can be done by splitting transactions from one sub-merchant onto other sub-merchants accounts. Load-distribution by the sub-merchant can be done by spreading the transaction volume onto new sub-merchants accounts, which in fact are shell accounts with no employees or genuine operation. Both methods are prohibited and card schemes expect the acquirer to have procedures in place to monitor and detect such practices.

As with turnover, thresholds also exist with regard to chargebacks and fraudulent activity. To stay below threshold limits load distribution may also serve as a circumventing method and in this context the acquirer is also expected to be able to monitor and have tools in place to detect such practices. Otherwise, penalizing chargebacks, re-assessment of the acquirer or other disciplinary actions could be a consequence.



Third party acquiring

It is essential to have a vigilant dispute handling team paying attention to chargebacks that appear inconsistent with the registered business model of the merchant.

While payment facilitators and other niche typed merchants, such as terminal rentals for fairs and other once off events, play a legitimate merchant role more traditional types of merchants can also accept payments on behalf of third parties. Whether it is being done through website redirection or from a displaced POS device, it is an illegal practice. It prevents both card holder and acquirer from knowing who they are actually doing business with.

From the acquirer perspective it is particularly risky as the business or ownership of the third-party merchant could be one that would normally not qualify for a merchant agreement. A history of insolvency, fraudulent intent or

selling of prohibited items could be reasons why a third party merchant would want to solicit, pressure, or pay, a merchant in good-standing to capitalize from an already established acquiring relationship.

Identifying merchants presenting transactions from a third party can be difficult. Sudden changes in turnover and/or transaction volumes could be a possible indication to look out for.

Having a vigilant dispute handling team in place to analyse chargebacks that appear to be inconsistent with the registered business model of the merchant involved is essential.



Identifying collusive practices is best done through pattern analysis and triangulation, looking for similarities between transactions that have already been reported fraudulent for CNP reasons.

While some incidents of CNP fraud are friendly, with an opportunistic true account holder being the perpetrator but claiming innocence, other incidents are committed by criminals using compromised card holder authentication data. Authentication data that may have been obtained through a fraudsters own engineering, e.g. hacking, or from accomplices somewhere in the transaction processing chain.

Not only does the merchant suffer from the cost of lost goods he also carries the chargeback compensation liability and incur a chargeback fee from the acquirer.

The pre-requisites for CNP fraud can be as minimal as an account number, an expiration date and a card verification number. This information has therefore become much sought after and highly rewarded when traded on the darker side of the internet by so called 'Carders'. When information is enriched with brand, card holder name, address and zip code, as the merchant source is in a unique position to do, the information becomes even more valuable.

Detecting the actual handover of information is impossible and acquirer's chances for identifying collusive practices is best done through pattern analysis and triangulation, looking for similarities between transactions that have already been reported fraudulent for CNP reasons. If card numbers in such transactions appear to have a common history of having been used at the same merchant there is a possibility of either a collusive behavior or an insecure infrastructure, allowing third party access to what should normally be secure data. While the lattercan be

established and rectified through an audit or inspection, the first possibility can be more difficult to prove.

However, even if concrete proof may be difficult to establish, direct contact to the merchant and employees will demonstrate the acquirer's vigilance which in itself has a preventive and deterrent effect. In other cases, such as with a consistent overlap of transaction timestamps and the work schedule of specific employees or a delivery address coinciding with that of an employee, evidence can be gathered and submitted to authorities for further investigation.

Successful triangulation at acquirer level depends on the number of merchants served and the number of CNP fraud cases the acquirer has visibility over. If the data-set is limited then the identification ratio will also be limited.

Acquirers that are small, or operating in a fragmented market space, should therefore consider exchanging fraud cases with fellow acquirers to increase their possibilities.

Acquirers also need to be vigilant of fraud from merchants and account holders in collusion. Collusion that may be executed by presenting transactions from card holder accounts created for a bust-out purpose.

That is, accounts where the account holder has no intention of paying the accumulated credit. Fraudsters will open an account, typically at several different banks, and after a period of normal and inconspicuous activity, apply for an increase of credit limits. Once obtained a systematic shopping

spree at a collusive merchant will take place. As proceeds from the factitious sales are received by the merchant, funds are divided according to a prearranged agreement.

Losses can be significant, as an estimated 200 million dollar scam involving complicit merchants bears witness to. In February 2013 the New Jersey district of the U.S. Department of Justice charged eighteen people in a scam involving creation of thousands of false identities and card accounts.

Cards that were subsequently used at complicit jewelry merchants, where the proceeds were shared between the perpetrators.

Fraud of the above magnitude sometimes becomes public knowledge through filings or press releases whereas other, less significant but still sizeable, scams remain publicly unknown. For reasons of image protection, ongoing proceedings or hope of recovery, acquirers may choose to report losses to charge-off, deliquency or credit-loss accounts rather than to a fraud-loss account.

While it is typically card holder authentication data being exchanged between collusive parties, merchant identification data is also an asset that can be of value to fraudsters. Using a compromised merchant or terminal id the fraudster may approach the acquirer pretending to be a legitimate merchant. Merchant identity theft like this can be used as a way of obtaining sensitive information or, with further social engineering, to open new merchant accounts benefitting from the legitimate merchants good standing with the acquirer.

Business-format change

The acquirer is mandated and required to conduct regular reviews of the nature of their merchant business.

As some goods and services are explicitly illegal and others considered so risky that a merchant contract can only can be obtained at comparable high fees and with collateral requirements s ome merchants may be tempted not to disclose the true nature of their business.

Examples of prohibited goods and services are: drugs, weapons, counterfeit goods, infringement of copyrights, and circumvention of product licenses.

Examples of goods and services considered high-risk and where ongoing review of the merchants' activities and financial soundness is required are: adult content, gambling, pharmaceuticals, payment facilitation and uncommon charities.

Other merchants may attempt to set up businesses with a covert purpose, such as: money laundering, off-loading of stolen goods or the financing of illegal organizations. Careful signup and due-diligence processes are essential to prevent onboarding of ill intended merchants. However, some may elude detection and others may transition from good to bad merchants. This is why continuous attention to a change of business format practices must be undertaken.

Regardless of the purpose for a format change an acquirer risks being subject to fines, and added regulatory oversight, resulting from breach of card scheme rules and failure to comply with e.g. anti-money laundering and terrorist financing laws. Furthermore an acquirer may suffer reputational damage by being associated with certain business types, jeopardizing overall competitiveness.

Identifying a business format change is not done through one process alone. It is a combination of procedure and vigilance that, together with ongoing monitoring, may detect indicators hereof. Once a merchant has passed initial due-diligence, has been boarded and operative without raising suspicion, most merchant contact is sporadic.

Exceptional events like changes to aggregates and / or transaction disputes may trigger contact. However a merchant that, otherwise does not attract attention, and perhaps does it utmost not to, can therefore change its business format without it being observed.

For merchants in the high-risk category, the acquirer is mandated and required to conduct regular reviews of the nature of their business. However, regardless of business category, and as common practice

when investigating alerts from unusual transaction patterns or aggregates, a change of business-format should be considered as a potential cause. Likewise when investigating transaction disputes attention to chargebacks and merchant responses that somehow appear inconsistent with the declared business format should give cause to a closer examination of the merchants' true dealings.

Changes to ownership, address and telephone number etc. are also possible indicators of a potential format change.

For merchants with no or only basic, internet presence such an examination may include contact, interview and inspection of merchant premises. For E-commerce merchants with full internet exposure a web-site inspection may also reveal business conduct changes or altered product offerings.

While performing the above examinations in alert and reaction mode changes to business-formats may sometimes be detected proactively, by employing a web crawling tool looking for e.g. redirections to alternative web pages, or for specific revealing keywords. In one example a drug selling merchant was identified by a webcrawler configured to look for slang words referring to marijuana.



False transactions

Acquirers should pay attention to unusual transaction patterns and put a closer fraud and risk analysis of the merchant in place

Insertion of false transactions is typically done by merchants attempting to abuse the payment system or looking for ways of boosting turnover to overcome an immediate liquidity issue.

As a 'profiting' method it has limited potential as cardholders in most cases will react and initiate a chargeback process which eventually places the liability for the transaction with the merchant. Only in undetected cases or when the acquirer, on its own discretion, accepts liability for the transaction can it be profitable.

Consideration may be shown when the acquirer chooses to authorize a transaction that, under normal conditions, would have been declined e.g. when issuers ACS were not responding, when there was a transaction timeout or when a blacklist was not consulted.

As turnovers are monitored constantly and excessive movements trigger alerts, injection of false transactions can only be done on a smaller scale without being immediately detected. However if done conservatively it may initially remain undetected. This is why acquirers should pay attention to unusual transaction patterns such as the ones mentioned below.

- Unusual numbers of declined authorizations indicating attempts to push transactions
- Unusual numbers of chargebacks for authorization reasons
- Unusual numbers of manually entered transactions
- Unusual frequency of the same account number in transactions
- Unusual numbers of first swiped and then key entered transactions
- Unusual transaction and batch capture time compared to business hours
- Unusual occurrence of even numbered amounts in transactions or batches

- Unusual numbers of transactions with amount exceeding normal average amounts
- Unusual transactions with discrepancies in authorization and clearing elements.

If such patterns are identified, settlement payouts should be suspended and a closer fraud and risk analysis of the merchant put in place.

Another type of transaction, which should be monitored carefully, is credit / refund, transactions as they are interesting for a number of reasons.

With set card scheme thresholds for the monthly number of acceptable chargebacks before a merchant becomes subject to fines and extra scrutiny, the merchant may seek to resolve card holder disputes directly with the customer without involving either issuer or acquirer. Resolution may be done through credit transactions, so that a chargeback handling fee is avoided and the dispute case remains uncounted as a chargeback incident. As chargebacks are an important instrument for both card schemes and acquirer's to measure the soundness of merchants, an unusual high number of credit transactions could indicate a habit of rule circumvention and obscure the true risk liability the merchant represent.

Furthermore, with credit transactions being comparable to money transfers, they provide a way of redirecting funds.

Funds that, with todays' clearing speed, can be exchanged for cash within a day or two and therefore should be monitored actively to prevent them for being used fraudulently. The merchant itself may use them as a mean of withdrawing funds that would otherwise be regarded as taxable revenue. However, the most common exploit is seen from employees submitting credit transactions to own, or accomplice's, accounts. Examples exist, where false credits, submitted conservatively in terms of amount and frequency, over a number of years have totaled several hundreds of thousands euros before being detected.

Where merchants and employees previously were the source for falsified credit transactions, third party fraudsters now also use the method as a way of routing and siphoning funds from the payment system.

From hacking, phishing or other social engineering, fraudsters may gain access to a merchant's IT-systems or terminals and in that way submit false credit transactions to accounts owned by the fraudster or their accomplices.

To mislead detection procedures, the fraudster may even in some cases have conducted a legitimate, low amount, sales transaction to justify the credit transaction.

To prevent merchants from being targeted acquirers should actively educate and make merchant's aware of the risk from weak infrastructure, system credentials and phishing methods. Additionally, explaining the risk which transactions from stolen terminals and unknown IP addresses might represent.

Should falsified credit transactions succeed in being submitted the acquirer should pay attention to the following indicators:

- Credit transactions without preceding sales transactions
- Credit transactions with amounts higher than original sale transactions
- Credit transactions to an account number different from the original sales transaction
- Credit transactions with amounts higher than average sales transactions
- Credit transactions benefitting the same account numbers repeatedly
- Credit transactions from stolen terminals with incorrect merchant name, terminal ID etc.

If alerts from such indicators are received, transactions should be suspended from automatic clearing until manually investigated.



Keeping the upper hand in the fraud fight

Fraudsters are following the market trend: becoming more agile, leveraging the systems complexity to find new fraud techniques, exploiting digitalization to invent new tactics. Acquirers constantly need to adapt their prevention strategy and leverage technology to create flexible and powerful fraud fighting measures.

Acquirers often find themselves caught between conflicting objectives of different stakeholders, such as those of merchants and payment schemes, while they need to keep an eye on the risk of their own exposure to fraud.

Payment schemes impose more stringent directives in order to protect their businesses and brands, and acquirers are therefore expected to monitor their merchants.

At the same time merchants are not fully aware of the threats they are facing and expect more and more support from the acquirer's side in this area. Several fraud detection solutions are available on the market that can help acquirers to improve the level of accuracy in identifying payment fraud and increase the detection capabilities.

However as fraud becomes radically more complex,we believe that offering a "one-size-fits-all" approach, with static and slow-changing intelligence used to examine suspicious behavior across huge numbers of transactions, is no longer sufficient in combating fraud.

The constant need for greater flexibility and high-alert data accuracy can only be provided by an intelligence-based approach which links monitoring

technology, both real-time and nearreal-time, with business expertise and strong workflow capabilities complemented by strong governance to support effective investigations.

It is of utmost importance for acquirers to re-assess their fraud situation and take stock of relevant processes, tools and measures they already have in place. These may have delivered soothing results in the past but

have to be checked regularly to anticipate changes and opportunities that technological evolutions and fraudsters' ingenuity may bring to the acquiring arena.

With 40 years of experience and expertise beyond payments, Worldline is ideally positioned to support and contribute to the success of your acquiring business with optimized fraud control and detection services from professionals with a high degree of experience.

Worldline has designed and deployed a powerful fraud-fighting strategy.

As a result, we offer services, tools and fraud experts with an excellent fraud-fighting knowledge covering the entire Fraud Risk Management value chain.

You can rely on Worldline to successfully face the challenges of fighting merchant fraud.





Financial Processing & Software Licensing

Financial processing provides banks and other financial institutions with a comprehensive set of services to help them and their customers manage their cashless payments. Our services and innovative software solutions support the full range of card and non-card payments for acquirers and issuers. By combining our core services with a growing list of value-added services and full integration with in-house systems, we help our clients offer their customers a customised, profitable, secure, extensive and innovative product portfolio.

About Worldline

Worldline [Euronext: WLN] is the European leader in the payments and transactional services industry and #4 player worldwide. With its global reach and its commitment to innovation, Worldline is the technology partner of choice for merchants, banks and third-party acquirers as well as public transport operators, government agencies and industrial companies in all sectors. Powered by over 20,000 employees in more than 50 countries, Worldline provides its clients with sustainable, trusted and secure solutions across the payment value chain, fostering their business growth wherever they are. Services offered by Worldline in the areas of Merchant Services; Terminals, Solutions & Services; Financial Services and Mobility & e-Transactional Services include domestic and cross-border commercial acquiring, both in-store and online, highly-secure payment transaction processing, a broad portfolio of payment terminals as well as e-ticketing and digital services in the industrial environment. In 2020 Worldline generated a proforma revenue of 4.8 billion euros.

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