Strategies to Effectively Mitigate Fraud



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Overview



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- Visa's objective is to educate acquirers and merchants of fraud and chargeback issues which may arise during the holiday shopping season
 - Retailers may realize significant increase in holiday sales from October to January with corresponding fraud and chargebacks increases in October to March
 - Merchants have an opportunity to optimize consumer experience and reduce falsedeclines while minimizing fraud losses
- Criminals take advantage of the holiday season to maximize use of stolen payment card data
 - Most criminal syndicates are knowledgeable of issuer authorization practices, acquirer acceptance practices, and merchant store policies and procedures
- Acquirers and their merchants should carefully tune their security and fraud prevention tools to screen out risky transactions
 - Avoid shutting off security tools
 - It's better to avoid potential disputes (fraud or chargeback) than try to manage it in the back office



Targeted Industries and Products

- Key Sales Channels Covered:
 - Card Not Present eCommerce, MO/TO, and Recurring Payments
- Targeted Industries and Products:
 - Gift cards
 - Funds transfers
 - Electronics including phones, tablets, video game systems and software
 - High-end and luxury goods
 - Jewelry
 - Airlines, travel agents, concert ticket distributors
 - Other fungible goods such as popular toys, cell phone minutes, etc.



Why are we talking about CNP?



Challenge: Optimize authorization and fraud management practices to maximize the growth of ecommerce and digital payments

Source: eMarketer July 2015, includes online and mobile ecommerce



Card Not Present Retailers eCommerce, MO/TO, and Continuity Merchants



Card Not Present Fraud: Identifying Potential Red Flags

- Transactions from "unusual" IP addresses
 - Some online retailers have received fraudulent transactions from a foreign country thousands of miles away
- Shipping and billing addresses mismatch
 - In some cases, ship to and billing addresses are separated by significant distances
- Unusual transaction activity from new customers
 - Very large total spend spread across multiple transactions
 - In some cases, these transactions occur in a short period of time (e.g., couple of days)
 - "Rush" or "overnight" shipping
 - Orders made up of "big-ticket" items
 - A holistic review of the account's purchasing pattern will reveal any unusual activity





Card Not Present Fraud: Addressing Red Flags

- Adopt a KYC "Know Your Customers" mentality and assess how customers access your website
 - Use "strong" and unique passwords with customers (e.g., letters, numbers, special characters, upper and lower cases) to prevent account takeover attacks
 - Analyze customer data:
 - Review any unusual or out of pattern purchases; Are customer purchases consistent with past history (e.g., ticket size, transaction velocity)
 - Verify customer email addresses and obtain secondary contact info (e.g., cell phone)
 - Validate any unusual activity with the customer via email, text message, or direct call
 - Shipping / Billing addresses are you shipping to a different location from the customer?
 - Cross reference Internet Protocol (IP) addresses; Is the web domain consistent with where your customer is located?
 - Track how customers make purchases; Phone, tablet, PC, website, mobile app, or call center



Card Not Present Fraud: Addressing Red Flags (cont.)

- Avoid lowering settings on fraud strategy tools
 - Many merchants that relax setting to maximize holiday sales were identified in Visa's fraud / chargeback monitoring programs
 - Merchants should consider fine tuning the settings on their fraud tools based on projected holiday sales
 - If needed, train staff to review orders and screen out suspicious and potentially fraudulent transactions
 - Use online tools to optimize your current processes (e.g., do online satellite images show the shipping address as a large vacant field?)



Card Not Present Fraud: Addressing Red Flags (cont.)

- It's better to avoid a fraudulent transaction and related chargeback than try to manage it in the back office
- Use the right set of tools for your environment and business line
- In the United States, Card Verification Value 2 (CVV2) and Address Verification Service (AVS) are the minimum set of security tools
- If you're in a line of business which may be targeted by fraudsters (e.g. gift cards, jewelry, money transfer), employ additional security tools to screen out the fraud
 - -For acquirers, even if your merchant isn't in one of the targeted lines of business, their website could be used to test account data
- In the end, the right set of security tools will make most merchant websites an unattractive target for fraudsters



Card Not Present: Minimizing Chargebacks

- Will there be product shortages due to increased sales resulting in fulfillment related chargebacks?
- Are the refund and return policies clearly disclosed, prominently displayed to the consumer, and easy to understand? Are they well executed?
 - Some merchants have had significant chargeback issues due to poor customer service practices
- Screen out potentially fraudulent transactions
 - Review any unusual / suspicious transactions manually
 - When in doubt, contact the customer to confirm the order
 - Screen out these potentially fraudulent transactions before requesting an authorization



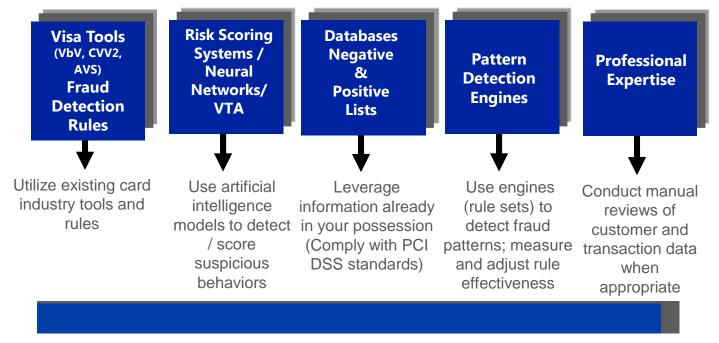


Card Not Present: Minimizing Chargebacks for Continuity Merchants...

- Memberships and subscriptions are common holiday purchases
- Acquirers should review their continuity merchants (e.g. memberships, subscriptions, etc.) business practices:
 - Are there clear and easy to understand terms and conditions in the merchants disclosures?
 - Are all of the charges and future charges clearly defined with amounts and dates?
 - Do the continuity merchants reach out to their customers before renewing the membership or subscription?
 - Is there enough lead time to process cancellations and refunds?



Effective Fraud Management Requires a Layered Security Strategy



Effectiveness Against Fraud



Fraud Detection Engines Key Components

- 1. IP Tracking: This has many purposes, for example not accepting sales from similar IP's without reviewing the details, geo tracking for known "High Risk" hot spots.
- **2. Velocity Checking:** Account number, IP Address, number of transactions etc.
- 3. BIN and BIN Country verification checks: What is the Issuer BIN country? Does this verification raise concern?
- 4. BIN Tracking and Customer Performance tracking: Review for anomalies and follow-up requirements.
- **5.** Use of "Positive-List" and "Negative-List": Track and check sales and recurring payments against previous reported fraud / chargebacks, refunds, IPs, emails, good customer data etc. The goal is to reduce fraud as a percentage of sales while minimizing the impact of this effort.



Fraud Detection Engines Key Components (cont.)

- **6. Shipping:** Ship to billing address. Variances should be scrutinized and further risk assessment made.
- Email confirmation: Consider cancelling or refunding orders if e-mail verification bounces back.
- 8. Email Domain verifications: Ensure domains and IP's are to major ISP's (Caution should be exercised for those customers using free emails).
- **9. Balancing:** Systems should be capable of tracking refunds requested to refunds processed.
- **10. E-mail/SMS reminders:** For recurring transactions, it is a best practice to send the consumer reminder several days before a recurring transaction is initiated.



CyberSource Risk Management Solutions

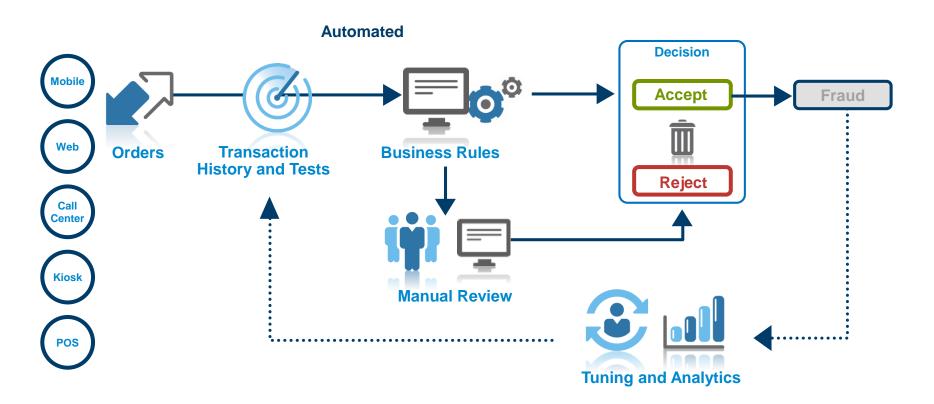
Cory Siddens

Sr. Director

Product Management

CyberSource®

Fraud management process



CyberSource Decision Manager





Detection Radar

- Proven risk model
- Detection insights from over 68 billion Visa and CyberSource trans
- Global multi-merchant data
- 260+ detection tests
- Device finger-print analysis





Rules **Engine**

- Flexible rule building
- Change rules instantly
- Use our risk score or customize your own





Case Management System

- One console with all necessary data sources to make decision
- Manage review queue priorities and team assignments





Tuning and Analytics

- Real-time reporting suite: financial, operations, review team analysis
- Fine tune with passive testing without impacting operations



Transaction history

- · Purchase velocity
- · Shipping method data
- · Bad customer list
- · Good customer list

More data improves accuracy



- Billing/shipping histories
- · Email address histories
- · Name histories
- Online/mobile
- Online (POS)

Popular detection tests

Phone data

ExisNexis

OLDVA"

- Address validation
- Device fingerprint
- Packet signature inspection IP geolocation data

Service checks

- Card # / address match (AVS)
- Card verification number
- Valid account number

CyberSource[®]

- · BIN checks
- Chargebacks and more...



3rd-party data sources

Acordia.

SREEL RUTH DATA . ONLINE & POS . DEVICE BEHALING

ne Ghar.

WORLD'S FRAUD

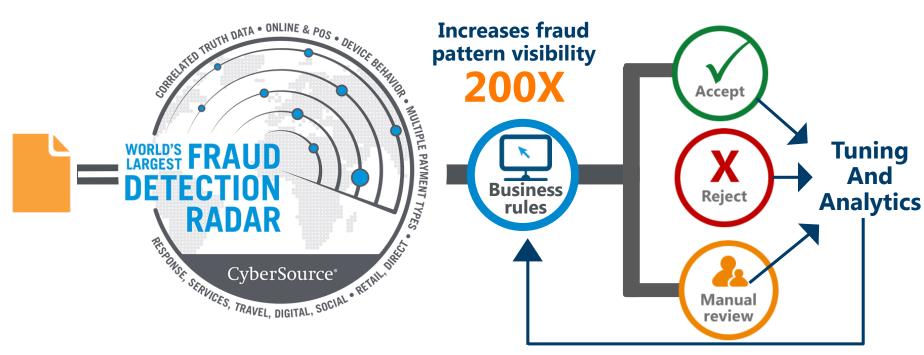
DETECTION

RADAR

Threat Metrix.

All brand names and logos are the property of their respective owners and the above-mentioned reference does not imply product endorsement or affiliation with Visa

Improved accuracy increases automation



Compares with insights from over...

68B
annual Visa and CyberSource
transactions worldwide

260

real-time correlation tests

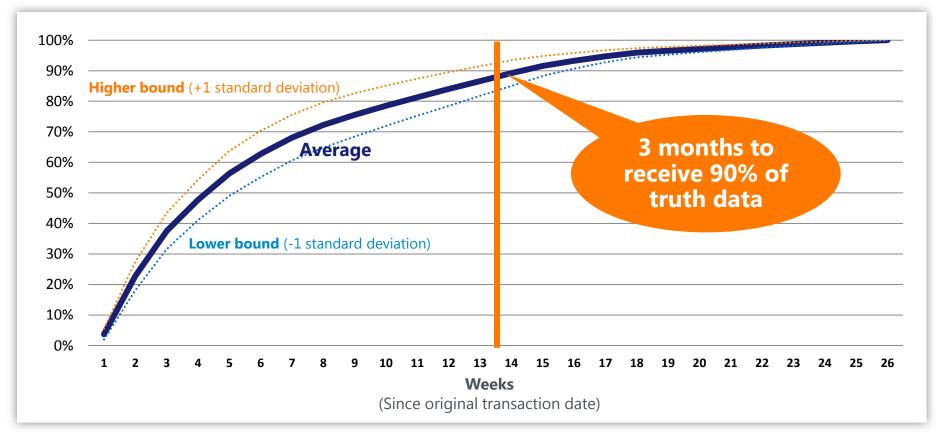
VTA

Merchant Risk Score

*Source: CyberSource North America Merchants Fraud Benchmark Report 2015

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Cumulative chargeback percentage rate



Note: This graph is illustrative of the chargeback rates typically seen by CyberSource across its merchant base over a 26 week time frame.



Strategy tuning

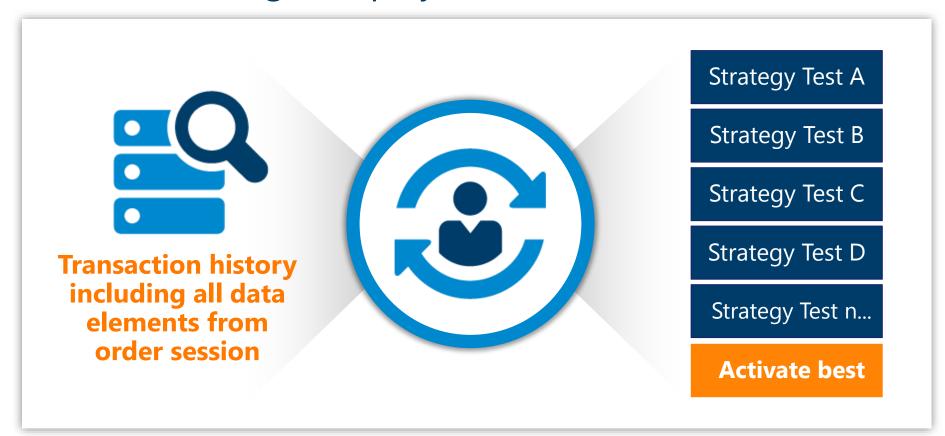
Current state







Decision Manager Replay



Allows comparing before/after and triggered rules

Before Replay

Current strategy

GRAND Total
\$798,823.76

Accept	Reviewer Accept	Review	Reviewer Reject	Reject
\$425,148.18	\$55,436.14	\$82,573.33	\$27,721.54	\$207,944.57
(53.22%)	(6.94%)	(10.34%)	(3.47%)	(26.03%)

After Replay



•		•		\blacksquare
\$390,215.17	\$24,434,93	\$33,633,32	\$9,511.83	\$25,876.91
(-8.22%)	(+44.08%)	(+40.73%)	(+34.31%)	(+12.44%)
\$30,695.04	\$30,695.21	\$44,817.01	\$17,058.72	\$32,522.80
(+7.22%)	(+55.37%)	(-45.72%)	(+61.54%)	(+15.64%)
\$4,237.97	\$306.00	\$4,123.00	\$1,150.99	\$149,544.86
(+1.00%)	(+0.55%)	(+4.99%)	(+4.15%)	(-28.08%)

Show in parenthesis

(-23.36%)

- % Change (before vs. after)
- Change in transaction count
- % of total before
 - % of total after

- Transaction amount (US\$)
- Fraud count

Note: This data is illustrative of an order disposition for a mid-sized merchant typically seen by CyberSource across its merchant base



Account Takeover Protection

- Keep customer accounts safe and protect against the fraudulent use of accounton-file payments
- Identify fraud at account creation and login, and monitor for suspicious account changes
- Decision to Accept, Reject or Challenge
- Enables you to monitor activity to enhance the security of your customer accounts

CyberSource Decision Manager helps bring balance to your business...



...helping your business gain efficiencies and optimize profits **Profit Optimization**

Minimize operational costs

How to get started

- Ask if your organization is optimized
- Are you operating with a balanced view
- What's your fraud pattern visibility
- Are you reducing friction
- What's your tuning frequency
- How accurate is your forecasting

CyberSource®

To Learn More Visit

cybersource.com/products/fraud_management/



Visa E-Commerce Merchants' Guide to Risk Management

Merchant Resource Library

https://usa.visa.com/support/merchant/library.html

Direct link

https://usa.visa.com/dam/VCOM/downlo ad/merchants/visa-risk-managementquide-ecommerce.pdf





Questions?

