Case Study

Case study at a glance

Multicarta

www.multicarta.ru

Client:
MultiCarta (TransCreditBank)

Goals:
- for Russian Railways to accept cards from around the globe
- to address continuously changing methods used by fraudsters
- to reduce fraud on the RZD.ru portal whilst maintaining reputation of Russian Railways

Implementation:
- implementation of Compass Plus e-commerce solution as a platform for internet acquiring
- support of 3D Secure to ensure safe online shopping and secure payments by cards
- utilising Compass Plus e-commerce solution to prevent fraud and manage investigations

Results:
- new scheme developed to analyse order numbers and IP addresses, enabling TCC to see if somebody has attempted to pay for a single order using multiple cards and IP addresses
- fraudulent card data and IP addresses are put on the black list
- utilising Compass Plus e-commerce solution and switch to react quickly in response to detected fraudulent actions
- an increase in efficiency of fraud prevention

COMPASS PLUS

MultiCarta (formerly TransCreditBank): Ensuring effective fraud prevention

The client

MultiCarta Ltd. was established in 1994 and has grown to be one of the largest third party processors in Russia: at the end of 2013 it processed transactions for over 12,000 ATMs and 24,000 POS terminals. The company is a subsidiary of VTB Bank and part of VTB Group, the second largest banking group in Russia, offering a comprehensive range of services to credit and financial institutions in more than 20 countries across CIS, Europe, Asia and Africa.

In 2013, MultiCarta completed Russia's largest merger of two payment technology companies – TransCreditBank and VTB24 with the integration of TransCreditCard (TCC), which was a processing centre for TransCreditBank. TransCreditCard was also a Compass Plus customer and utilised its products for card processing.

TransCreditBank was established in 1992 and is the strategic partner of Russian Railways, the second largest rail network in the world with 17 railway lines spanning the entire country. The country's huge territory, sparsely populated areas and poor road conditions means much of the population relies on the rail network, which includes the longest rail line in the world – Moscow to Vladivostok (9,298km).

A long-standing partner

In 2007, Compass Plus helped TCC enable Russian Railways to sell railway tickets on the internet by implementing Compass Plus' e-commerce solution, which provided the processing of e-commerce transactions. This successful partnership has led to the implementation of a number of additional projects including the launch of EMV credit cards with Mastercard PayPass contactless technology for TransCreditBank. When Russian Railways decided to accept card payments from across the globe through its online portal, the need for a more effective approach to fraud detection and prevention became apparent and the processor turned once again to Compass Plus.

A complex landscape

Fraud detection and prevention in e-commerce involves the constant monitoring of operations to work out efficient ways to minimise fraud. Whilst 3D Secure technology is an effective solution for this, fraudsters are continuously changing their methods to stay ahead of the measures taken by financial institutions to prevent fraud. For example, previously fraudsters would counterfeit a pool of more than 200 cards from an American bank to buy Russian Railway tickets online, which would have instantly attracted the attention of fraud analysts. Today, fraudsters are running much more intelligent operations: using one counterfeit card with one IP address to perform one operation, making fraud detection more difficult. As Russian Railways has such extensive routes covering vast areas and with the rail network used mainly for long-haul journeys, tickets can be approximately $1,000 for a single journey, making the company a key target for fraudsters.

When TCC and Russian Railways first embarked on the project to accept international cards, they utilised 3D Secure for protection against fraud losses. Whilst 3D Secure really provides a higher level of security for card-not-present transactions and is an effective tool for fraud prevention, exceeding the thresholds of fraudulent transactions can entail fines imposed by payment systems. Furthermore, the processor discovered that 70% of fraud from abroad came with full 3D Secure authentication. Therefore, as the processor could not rely on 3D Secure alone, they decided to take action and implement additional anti-fraud tools.

One of the key problems was the interaction between Russian Railways and agents. Since Russian Railways have agents selling tickets across the globe, fraudsters were taking advantage by using counterfeit cards to purchase legitimate tickets through these agents, before selling the ticket on. The organisation's customer care policy stated that the customer who bought the ticket from the fraudster was not knowingly at fault and must still travel, so as not to affect their reputation.

In addition, the agents access the RZD.ru portal to order tickets for their customers, and in many cases use one card to make multiple transactions, which in itself would be a sign of fraudulent transactions if analysed by standard rules. The card-not-present nature of the transactions on the portal means the processing company is not provided with the information it needs to analyse the legitimacy of the transactions, and instead only receives the card number and authorisation status. In addition, the transaction data supplied by Russian Railways contains just two parameters, the IP address and order number, which are of no use in detecting the constantly changing fraudulent schemes. The complexity of the operation and difficulties it creates for fraud monitoring is very attractive for fraudsters.

Implementation and results

To address such a complex problem, the following fraud detection scheme has been implemented. TCC receives an order number from Russian Railways; then it establishes whether several cards have been used to pay for this order; then it establishes how many IP addresses were used to pay with these cards. Based on the analysis of this information, TCC utilises Compass Plus' fraud management system to process the transaction, i.e. the processor can use the information to see if any previous operations have been executed using the cards or IPs to build up a picture indicating whether the transaction is fraudulent.

Following this, card data and IP addresses considered to be fraudulent are put on the black list, alerts are generated, cards are added to stop-lists, analysts are informed and the attributes of detected fraudulent transactions are assigned a fraud class, which improves the accuracy of assessment for the future. The new rule and algorithm has increased the efficiency of fraud detection on the portal, with the rule success rate up to 50%, depending on the fraudster's behaviour.

Kirill Sviridenko, CEO at MultiCarta, said: *"We had to solve a rather complicated task that required a creative approach both in terms of technical solutions and methodology to combat fraud. Additionally, we had to allow for very serious limitations associated with the specifics of the Russian Railways business. Compass Plus' fraud management system enables us to analyse separate transactions and transaction flows in depth, utilise flexible algorithms and rules and, ultimately, effectively prevent a significant portion of illegal operations. An essential component of the system is the functionality associated with the business process management of the investigation, from the generation of alerts on suspicious transactions to the analysis displaying the effectiveness of the company's employees working with the incidents. When TransCreditCard merged with MultiCarta, the scale of the task reached a whole new level. We are pleased to note that Compass Plus solutions comply with the advanced industry standards and meet the requirements of the VTB Group's retail business, both in terms of processing capabilities and additional functionality, such as anti-fraud solution, which is essential for us."*