

IBM business analytics-case analysis



**ASSIGN
BUSTER**

The Monogram brand is recognized throughout the world as a leading global payment services company. The diverse array of products and services we offer enables consumer and businesses to make payments and transfer money around the world. From New York to Russia or London to India - in more than 197 countries - Monogram's money transfer service moves money quickly and easily around the world. The payment services also help businesses operate more efficiently and cost effectively.

We offer our products and services to consumers and businesses wrought a worldwide network of agents and financial institution customers. Ted Predestine, systems development manager at Monogram? a leading global payment services company? underscores the Importance of fraud detection with the story of a 100-year old grandmother who had contacted Monogram after receiving a call that her grandson had been arrested and needed US\$JAZZ for bail. Behind the scenes, Monogram's fraud detection system flagged the transaction as suspicious.

Analysts determined that it was likely part of a telephone scam and a Monogram representative contacted the customer to let her know that the wire had been stopped and her money was being refunded. Worried about her grandson's safety, she threatened to take her business elsewhere if Monogram didn't wire the money. The company representative Implored the woman to contact a family member and verify the story. " She called back three days later in tears to thank the representative personally," recalls Predestine. " She did verify that it was a fraud.

She lives on Social Security and could not afford to lose money. The call was emotional and heartwarming. " Monogram has gained clear visibility into the orientations history of each customer and insight into " who's who? ", " who knows whom? ", and " who does what? " as it analyzes money transfers. The company's new fraud prevention system (known as the Global Compliance project during implementation) helps stop fraud in its tracks and reduces the overall time and work required to respond to new regulatory mandates, such as new requirements for International Automated Clearing House Transactions.

The system scans each transaction looking for signs of fraud and identifies suspicious or high-risk transactions based on established criteria. If fraud is detected, the system alerts analysts, who place the transaction on hold until a representative can confirm whether the transaction is legitimate or fraudulent. If fraud is detected, the company refunds the money to the sender. Once accurate identity is established, the system can determine whether people are, or ever have been, related in any way and apply complex event processing to evaluate all transactions of the entity and of associated entities.

The rules engine also provides the business logic to alert staff when a transaction or the aggregation of a specific customer's transactions exceeds a specific threshold. Additionally, the solution gives Monogram the ability to respond quickly to new and different kinds of frauds. For instance, in 2010, Monogram noticed that fraudsters were receiving transactions in California. In early November 2010, Monogram analysts added a rule to the system that flagged transactions above a certain dollar amount sent to California.

That simple change prevented IIS\$1 . 7 million in suspected fraudulent transactions in just three months. " We can now react within hours or minutes, changing rules or implementing new rules, if an analyst identifies a new tatter of behavior," says Predestine. This new flexibility is helping the company increase customer satisfaction and stay a step ahead of fraudsters. Consumer complaints of fraud in January 2011 compared to January 2010 dropped 72 percent, with the most significant reductions in Canada, Nigeria, the United States, and the United Kingdom. Genealogy accounted for a 40 percent increase in IBM Global Center for Smarter Analytics 11 Monogram's ability to identify and interrupt potentially fraudulent transactions. " We are able to detect and respond to fraud faster than fore to protect our consumers as well as our global network of agents," says Predestine. " We must remain ever vigilant in the face of more sophisticated financial fraudsters.

The solution stopped IIS\$30, OHO of fraudulent transactions on the first day and within 17 days of operation, it had stopped IIS\$1 million of fraudulent transactions. We've already stopped more than IIS\$37. 7 million in all in fraudulent transactions and prevented thousands of customers from losing funds to fraud. " Business Objectives Detect signs of fraud and money laundering QUESTIONS 1 . Identify how predictive analytics was used to solve the business problem. Explain how the predictive analytics solution works.

Money Gram International standing firmly at 230, 000 locations in 197 countries is indeed a leading money transfer worldwide, and with such large constituency, is faced with pressure to keep away from fraud as well as

compliance with regulations affecting the international business transactions. Because of the nature of Money Gram's business, which is of course money transfer which solely uses computer system to speed transactions, there is no single data element that associates an individual with one or more transactions as that individual interacts with the system.

As a result, it was extremely difficult for analysts to identify overall how much each customer wired during a specified time period. Good news is that as the firm engaged in Predictive Analytics, it transforms its operations to obtain a clear view of its customers and confidently predict and prevent fraudulent behavior. This work includes creating a system which is primarily in charge of detecting the identity of real customers of Money Gram, identify and stop redundant transactions, unauthorized money transfers and the like for the welfare and security of the customers that would also render benefits back to Money Gram.

With the case given above, Monogram's fraud detection system flagged the transaction as suspicious. Analysts determined that it was likely part of a telephone scam and a Monogram representative contacted the customer to let her know that the wire had been stopped and her money was being refunded. With 230, 000 locations in 190 countries and territories, Monogram has always had a robust fraud and anti-money laundering (AMYL) program.

However, the company's IT staff found that the existing infrastructure wasn't flexible enough to keep up with rapidly changing compliance regulations and constantly evolving fraud tactics. " There were no specific customer identifiers," says Predestine. These data are used leading Money Gram

International to working with Predictive Analytics, the company has gained clear visibility into the transaction history of each customer and insight into " who's who? ", " who knows whom? ", and " who does what? " as it analyzes money transfers. The company's new fraud prevention system (known as the Global

Compliance project during implementation) helps stop fraud in its tracks and reduces the overall time and work required to respond to new regulatory mandates, such as new requirements for International Automated Clearing House Transactions. The system scans each transaction looking for signs of fraud and identifies suspicious or high-risk transactions based on established criteria. If fraud is detected, the system alerts analysts, who place the transaction on hold until a representative can confirm whether the transaction is legitimate or fraudulent. If fraud is detected, the company refunds the money to the sender.