

ABSTRACT

EMBEDDING INFERRED REACTION CORRESPONDENCE FROM DECLINE DATA

A computer-implemented method of using past transaction declines to predict future fraudulent behavior. A transaction has been declined for an account is determined, and a risk score is determined. The risk score is compared to a risk threshold. The transaction is compared to one or more transactions in a transaction profile for a past fraudster in response to the risk score being determined to be over the risk threshold. A best fit of the transaction profiles of the past fraudster is determined and a measure of success for the best fit of the transaction profiles of the past fraudster is also determined. If the measure of success is over a threshold, the method updates profiles of past fraudsters based on the transaction to include the transaction that has been declined. The method predicts future fraudulent transactions and attempts to stop future fraudulent transactions based on the predicted future fraudulent transactions.

[Figure 3]