

MasterCard Expert Monitoring Solutions™ Fraud Scoring

Sharpen Your Fraud Decisions at the Point of Interaction



Pushing Fraud Prevention to the Point of Interaction

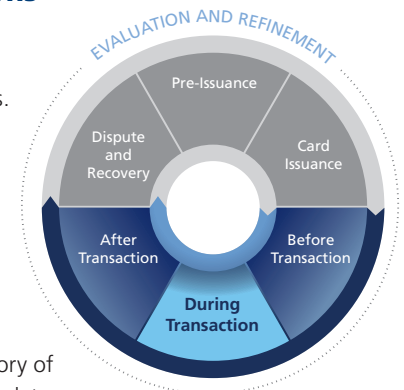
Fraud continues to proliferate with unique and dynamic patterns that morph to accommodate emerging payment channels, new customer behaviors and the latest technology advances. As such, reactive, one-size-fits-all fraud detection techniques aren't delivering the results issuers are looking for. Effective fraud mitigation demands sophisticated monitoring and rapid detection at the point of interaction to interpret and weigh the unique risk of fraud for each transaction profile.

That's why MasterCard developed Expert Monitoring Fraud Scoring — providing you with precise fraud prediction driven by real-time decisions to help you balance the financial impact of fraud against effects on customer satisfaction.

Reveal Risk in Spending Patterns

Expert Monitoring Fraud Scoring leverages state-of-the-art predictive fraud models to reveal the risk based on spending patterns. A powerful combination of Artificial Intelligence (AI) and Smart-Agents technology combined with targeted business rules detects fraud patterns quickly and effectively — continually learning and adjusting to new fraud trends and schemes.

Developed using MasterCard's vast repository of globally integrated authorization and fraud data, Expert Monitoring provides an extensive variety of precisely segmented Network Fraud Models that evaluate risk across multiple dimensions, including geography, product and transaction type. In addition, Custom Fraud Models detect risk based on the specific data in your proprietary portfolios.



Tracking Fraud at the Transaction Level

Transaction monitoring and analytics applied to transaction patterns are the key to successful deterrence of financial crimes. Transactions will become more important as demand for reduced latency in business intelligence and monitoring require more granular knowledge and timely tracking at the transaction level.

Real-time intelligence will be needed in every FSI vertical and across every transaction type from retail deposits and savings to loans, investments, and payments.

Global IT Spending Forecast for Risk Management: A Growth Opportunity for Business and Technology, July 20, 2009, TowerGroup

Drive Detection in Real-Time or Near Real-Time

Using finely-tuned Expert Monitoring Fraud Models, Expert Monitoring Fraud Scoring generates a predictive score in real-time during authorization, or in near real-time shortly after authorization, that indicates the likelihood that the transaction is fraudulent.

Both Expert Monitoring scoring methods can be used simultaneously to score transactions for certain account ranges in real-time and transactions for other account ranges in near real-time based on the unique risk profiles of your portfolios.

Deliver Fraud Loss Savings Directly to Your Bottom Line

Expert Monitoring Fraud Scoring enables faster, sharper fraud decisions at the point of interaction that ultimately reduce fraud losses impacting your bottom line.

With Expert Monitoring Fraud Scoring, you can:

- **Increase your accuracy in fraud detection** with precisely segmented fraud models finely tuned to the unique risk profile of your portfolio to ensure a consistent ROI.
- **Decrease your false positive rates** with highly predictive fraud scores delivered in real-time or near real-time for every transaction, ensuring you can factor any increased risk level into your authorization process.
- **Strengthen your cardholder relationships** with fewer false positives that lessen cardholder inconvenience caused by investigating transactions that appear fraudulent but prove to be legitimate.
- **Lower your manual verification costs** by prioritizing transactions based on fraud probability to focus on higher-risk transactions.
- **Reduce your IT investment in advanced fraud prediction technology** with scalable, turnkey, transaction fraud scoring hosted by MasterCard.

About MasterCard Fraud Management Solutions

MasterCard Fraud Management Solutions Group provides financial institutions with the latest products and services to combat payment fraud and mitigate risk. Our solutions include broad-based risk detection programs, designed to detect and prevent fraud at all stages of the account life cycle.

To find out how you can reduce your fraud losses with efficient fraud detection and decision making, contact MasterCard at riskolutions@mastercard.com or your MasterCard account representative.

The Model for Superior Fraud Detection

Fraud patterns are unique. As such, no two portfolios share the same risk profile. That's why Expert Monitoring Fraud Models are segmented by a wide variety of criteria to address the unique risk profile of your portfolio.

- **Geographical Models:** Region, Country
- **Transaction Type:** ATM, Signature Debit, eCommerce, etc.
- **Product Models:** Corporate, Consumer Credit, Debit, etc.
- **Proprietary:** Standard, Affluent, etc.

Not Your Average Fraud Detection Rates

Using *more than 175 points* of globally integrated authorization and fraud data, Expert Monitoring Fraud Scoring evaluates the risk in *every* transaction processed through the MasterCard Worldwide Network.

Compare Fraud Detection Rates	Industry Standard	Expert Monitoring
	40% or 1 in 30 transactions	44.7% or 1 in 25 transactions

Expert Monitoring Helps Global Issuer Save Millions in Fraud Costs

Opportunity

As a result of the financial crisis, a major global issuer needed to reduce fraud losses associated with double and triple-digit spikes in domestic and cross-border fraud including counterfeit cards, lost and stolen cards, and card-not-present fraud.

Approach

Using Expert Monitoring Solutions, MasterCard developed a custom fraud model to score fraud in over 15,000 transactions in real-time at the point of interaction. The custom fraud model identified three times as many potential fraudulent transactions over the issuer's previous fraud scoring model.

Results

Over three years, the issuer may realize savings:

- Up to \$24M in reduced fraud losses
- At a 6:1 ROI—twice the ROI of its previous fraud scoring solution