Fraud prevention is becoming a critical driver for the financial services industry. In Europe alone fraud in the private sector now costs an estimated 90 billion Euros a year.

The figures are staggering - but nothing compared to the real costs in lost productivity and damage to reputations and customer confidence. Then there is the fraud that goes undetected, impossible to account for and assess.

The ramifications are far-reaching: regulators demand that financial institutions hold more capital – and get more proactive about tackling fraud. Financial services organizations need to show they can measure and manage risk with active programs that deliver proven benefits.

Fraud also damages financial performance at a time when organizations are being compelled to reduce their cost-to-income ratios. Reputational damage is hard to repair and leads rapidly to loss of customers and market share.

The industry is crying out for better ways to fight fraud, without excessive costs or shackles that prevent organizations from offering new and innovative services.

**Challenges and opportunities in fraud detection**

When it comes to fraud detection, most financial services organizations face similar challenges: disparate transaction systems, piecemeal fraud detection solutions and high operational costs.

Capgemini and SAS are helping financial services firms transform their fraud management capabilities, delivering lower costs and greater protection for customers and reputations.
Then there is the challenge of balancing customer experience with added security. Customers, naturally, seek faster and easier processing of transactions – in direct conflict with fraud prevention solutions that impose more security steps.

An effective fraud management system is essential for financial institutions. Failure in this area brings financial, reputational, and punitive risks.

But there is an opportunity here too – because getting it right can deliver competitive advantage, through improved customer confidence and better customer experience.

The right fraud solution could deliver huge benefits across the business - driving down costs and risks, improving customer satisfaction and enabling innovation. To achieve this, the new solution must be able to:

- **Integrate disparate data sources** (including unstructured text such as notes fields and call center logs) to enhance the credibility of information.
- **Detect fraud faster with real-time integration** to authorization systems and on-demand scoring of all purchases, payments and non-monetary transactions.
- **Improve behavior monitoring** of individuals to incrementally detect fraud and reduce false positives by using data across all of a customer’s accounts and transactions.
- **Uncover hidden relationships**, detect subtle patterns of behavior, prioritize suspicious cases and predict future risks using advanced analytics – including unlimited rule writing capabilities.

**Figure 1: Emerging Trends in Fraud Management**

- **Centralization of Fraud Management Operations**: To effectively fight fraud, forward-looking financial firms constantly update fraud management systems with new rules, statistical models and acquired knowledge. This process becomes easier and more efficient with centralized systems.

- **Usage of More Real Time External Data**: Several financial services institutions are no longer content with just using regular transactional data to fight fraud and are also looking at external information obtained from third party vendors and intelligence from social networking sites to improve their capabilities in fraud detection.

- **Rise of Cyber Crime increased by the adoption of mobile devices and the use of external data**
  - Computer hacking, virus attacks, websites and email spams

- **Out of pattern analysis**: Comparing customer activity with peer group behavior, and also with the customer’s own past behavior to identify outlying transactions.

- **Linkage analysis**: Identifying other entities associated with known types of fraud, as well as practices used by fraud-linked entities – sometimes using analysis of social networking activity – and developing strategies to counter these practices.

- **Model development**: Creating fraud-scoring tools and detailed statistical analytics to provide quantitative insight into possible fraud activity.

- **Rule development**: Creating and applying rules for basic business activities to spot unusual trends, as well as specialized rules for specific transactions.
The way forward: Capgemini & the SAS® Fraud Framework

The SAS® Fraud Framework helps detect, prevent and manage fraud across your enterprise and incorporates a unique hybrid approach to analytics, including: business rules, anomaly detection, predictive analytics, text mining and social network analysis, which reveals hidden relationships and suspicious associations among customers, accounts or other entities. The solution also provides visibility of overall exposure across all channels and includes a suite of tools for effective fraud management, including case management and workflow.

Capgemini has developed a comprehensive approach to help financial services firms transform their fraud management capabilities using the SAS® Fraud Framework. We set up a four step approach to delivering powerful, agile fraud management:

1. **Fraud diagnostic** assesses the current state of fraud management and designs a blueprint for the future
2. **Threat assessment** identifies current and future risks and vulnerabilities
3. **Analytics innovation** brings advanced analytics to bear on issues related to both consumer and fraudster behavior
4. **Optimization of fraud management processes and tools** to develop appropriate customer authentication strategies, business rules and other anti-fraud measures

**How it works – a complete fraud prevention solution**

Our approach to fraud prevention provides a full package implementation service. This includes everything from pre-study to go-live including program management. It addresses both Business and IT demands to create a solution that delivers business outcomes and a healthy return on investment.

We recommend running these programs using an agile methodology to accelerate delivery, maximize business value, enhance user satisfaction and minimize project risks. We also look to work collaboratively to ensure progressive knowledge transfer that leaves our clients self sufficient.

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**Figure 2: Capgemini’s Fraud Management Systems monitors all data sources and converts them into actionable insights**
Benefits
Effective fraud detection can transform business performance for financial services organizations.

Implementing a comprehensive and structured program to detect and prevent fraud has become a core driver in business growth, delivering real competitive advantage.

Capgemini and SAS combine system integration with the best in analytics technology to provide a holistic solution for fraud management. We will help you to achieve:

- Faster and more effective fraud detection
- Higher visibility of exposure across channels
- Reduced total cost of ownership of fraud solutions - by consolidating disparate systems enhancing staff productivity and reducing the total cost of fraud activities
- Improved customer retention
- Protection for your brand and reputation
- Reduced financial loss due to fraud - leading directly to improved financial performance and greater value for shareholders.

Capgemini performed a global roll-out of SAS® Enterprise Fraud Management for credit card transaction fraud management for a major multi-national bank. We steered the first ever deployment of SAS® Enterprise Fraud Management and developed a global version to deliver faster deployment across multiple countries.

Capgemini implemented a fraud reporting solution for a leading financial services company in the UK. It provided a unified view of fraud across various portfolios and faster ad hoc reporting capabilities.

Capgemini implemented world-class fraud analytics for a large mortgage group of a Dutch Bank. We used models based on quantitative analysis developed in SAS to improve fraud detection capabilities.

About Capgemini
With more than 130,000 people in over 40 countries, Capgemini is one of the world’s foremost providers of consulting, technology and outsourcing services. The Group reported 2013 global revenues of EUR 10.1 billion.

Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

For further information visit
www.capgemini.com/bim
or contact us at
bim@capgemini.com