



Addressing Fraudulent Payment Activity with Advanced Decision Management Analytics

CONCLUSIONS PAPER

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Introduction

We all face decisions in our daily lives. Some are relatively easy, some very tough. Some may have financial ramifications, and some may even lead us to face our own mortality.

I was faced with that very situation. About six months ago I had symptoms – in business we call them “pain points” – that I didn’t address. That bad decision could have cost me my life.

Ignoring the symptoms led to a heart attack. Good decisions led to rapid diagnosis and treatment – including placement of a stent.

I’m in great health now, but there’s a lesson in this: Listen to the symptoms and pain points, address them effectively, and you’ll be able to overcome them. Ignore them at your peril.

If you work in the financial services industry – or you have ever turned on the news – you know about pain points, especially in the unforgiving economic and regulatory climate we’ve seen since 2008. Organizations in all industries have been tasked to do more with less, under leaner market conditions and with stricter regulatory oversight. It’s the proverbial perfect storm, one that requires organizations to make better and faster decisions with unprecedented volumes of data.

Enter decision management analytics.

Simply put, *decision management analytics* is using predictive analytics to make key strategic and operational decisions at the executive and/or operational management levels. It’s about trying to forecast an outcome using a variety of statistical techniques such as modeling, machine learning and data mining to analyze current and historical facts to make predictions about future events.

I have focused my career on applying decision management analytics for improving performance and reducing fraud and risk in financial services organizations. I spent seven years at Premier Bankcard, and before that held a similar role at the Mutual of Omaha insurance company. My experiences working with these companies and others cemented my belief in the power of analytics – as well as the very understandable reasons analytics are not more entrenched in the industry. Getting it done can be tough, but the results are worth it.

For example, consider a credit card company that serves customers with less-than-perfect credit. If the company issues too many cards to those who aren’t ready to reclaim creditworthiness, it faces losses and challenges from regulators. If it focuses exclusively on people who have nearly finished their climb into the prime market, it won’t earn money from renewal revenue, because customers will soon graduate to prime card issuers.

In an informal poll during a recent Association of Certified Fraud Examiners (ACFE) webinar, when asked to pick only one pain point category where decision management analytics could help, 73 percent of the audience pointed to fraud detection. Of course, the results are skewed because it was an audience of fraud specialists, but nonetheless, fraud is an area where analytics has delivered impressive results.

Decision management analytics can find that sweet spot of card product applicants – customers who will renew and aren't likely to become delinquent. Analytics can then be applied to help mitigate fraud losses. For one company, these analytics-driven initiatives and others led to millions of dollars in new revenue and/or expense reduction.

Challenges to Implementing Decision Management Analytics

In spite of the rapid payback seen from decision management analytics, implementing these strategies can be a challenge. From a tidal wave of big data to a lack of proficiency with sophisticated software, some projects just seem to stall out and never get up and running.

In an informal poll conducted during an ACFE webinar, 70 percent of the audience indicated that their organizations “only moderately” rely on analytics to make decisions; another 17 percent said “not at all.” There is a ready opportunity to move those “moderately” analytics-driven organizations to the next level. I have seen several approaches to ease that evolution.

A common pain point is the inability to get operational areas to support the concept. Sometimes the issue is an individual's pride or ego. People can be overly protective of their particular silos in the organization. If the owner of an operational area isn't on board, it can be difficult to implement an analytics solution.

Other obvious issues are lack of financing, fear of change and concern for the downstream impact on business operations. These are understandable issues. I allowed pride, fear and financial concerns to get in the way of addressing my cardiac pain points, but that almost cost me my life. When we're talking about a significant cost to the business – the risk and lost opportunities associated with suboptimal decisions – we need to overcome these roadblocks.

Establish an Analytics Team Structure with Clear Accountability and Committed Resources

The first step is to establish an analytics team structure that supports implementation plans, with clear lines of accountability and committed resources. Figure 1 shows how an organization can mobilize a team for its fraud identification processes:

- The MIS Data/Info **Core** Team provides management information systems (MIS) support for all operational areas of the company, such as marketing, customer service and collections. The analytic tasks to support these functions occur in a centralized location, and the information is fed out to internal customers.
- The MIS Data/Info **Extended Development** Team enlists representatives from IT/MIS or technically oriented business analysts to do model management, database administration and other functions that make the analytics work.
- The MIS Data/Info **Extended Support** Team focuses on prioritization, technical assistance and training, while being completely integrated into the core team structure.

When we're talking about a significant cost to the business – the risk and lost opportunities associated with suboptimal decisions – we need to overcome the roadblocks to implementing advanced decision management analytics.

