

## Research White Paper

WP108



## Data Mining:

How and why to develop effective data mining  
in the Financial Services sector

Prepared in cooperation  
with Mungo Dunnett Associates Ltd, UK



---

# Index

---

1. Introduction
2. The commercial importance of data mining
3. Start point: establishing the need for information
4. Selecting the technology you need
5. The most effective analytical techniques
6. The main ways in which data mining creates value
7. Creating profitable marketing campaigns
8. Creating profitable segmentation activity
9. How to manage a data mining team
10. Creating organisational support
11. Typical data mining errors



---

# 1

## Introduction

---



### The problem

Increasingly FS companies are recognising the need for greater understanding of their customer base and sources of profit, but they often struggle to turn this into information that influences business decisions. Companies are uncertain what technology to buy, what techniques to use, and how to convert data mining into profitable activity.

### Purpose

The purpose of this Research White Paper is to:

- Explain the commercial importance of effective data mining in the FS sector
- Identify the ways in which data mining efforts typically fail
- Highlight the most effective ways to select software, use analytical methodology, and create value for the business

### Approach

The approach has involved:

- Collation of detailed information about the ways that data mining activity is undertaken within financial services organisations, based on a combination of original research and extensive client work across numerous countries
- Identification of relevant approaches and technical methodologies
- Identification of key success criteria
- Utilisation of anonymous case studies
- Presentation of actionable insights, offering financial services companies the opportunity to see how the recommendations would apply specifically to an organisation like their own

# 2

## The commercial importance of data mining



FS organisations spend too much of their time treating customers the same. Data mining lets them see customers as individuals...

At the most basic level, data mining is simply another way of allowing an organisation to look at the facts. But one of the distinctive weaknesses of the financial services sector is that, while it is hugely rich in data, it is not good at turning the data into facts, and turning the facts into information that can be used to help the business be more successful. The FS sector is not even particularly good at trying to look for facts in the first place, and often makes important strategic decisions based on management opinion rather than a careful exploration of the variables.

### Commercial damage that occurs without effective data mining

Data mining is one of the important ways in which organisations can stop doing the things that so often destroy value – such as badly informed changes of strategic direction, or badly judged changes to customer service – and start focusing the business on the most effective activities aimed at the most profitable products and customers. Without the facts, FS organisations have a tendency to commit the same type of mistakes:

- Failing to identify the customers responsible for the majority of organisational profit – and, by treating these customers the same as all other customers, destroying profit
- Creating new products or types of service experience that are not based on the way customers actually buy and use financial services, and what they prefer to do
- Failing to understand their own customers as well as their competitors do

### Identifying the customers you really want

One of the effects of the economic downturn was an increased need for FS organisations to consider the fundamental aspects of their business: who they wanted to do business with, how, and how could they achieve that most effectively? This is the territory where data mining operates. It is often misunderstood as being simply a 'marketing' function that sends out direct mail, or a 'back office' function that produces data reports but is nowhere near the front line of the business. Instead, data mining – when used properly, by organisations that realise its value – carries out one of the most important tasks of all for a FS organisation fighting for market share and margin: it identifies the most important customers, tells the organisation what these customers are likely to be interested in, and measures the effectiveness of the organisation in focusing its efforts.

**The  
sequence  
of activities  
that bring  
focus**

An organisation cannot be effective in handling customers profitably without understanding the differences between these customers: what they want, how they buy, and whether they are worth the organisation spending precious money on attracting and keeping.

Organisations simply cannot afford to treat all customers the same. They will not be equally responsive, nor will they be equally profitable. For the organisation, it does not make sense to treat customers as if they were bottles in a bottle factory, even though that appears to be the cheapest way to run the operation. For the customer, an organisation that treats him or her the same as any other customer is extremely unappealing. The purpose of data mining, therefore, is to allow the organisation to do a sequence of four things:

- To understand which customers to spend extra time and effort attracting and keeping
- To understand exactly what messages, services, experiences and channels it should use, to attract and keep these customers
- To identify groups of customers who are sufficiently similar that they can be treated the same
- To build processes that enable this approach to be more cost-effective than attempting to deal with each individual customer differently

**The main data sources, and what happens without customer knowledge**

**Four main  
sources of  
customer  
information**

In order to create a reliable view of individual customers, showing both their overall value to assemble information from a number of different sources. Data mining does not simply involve the analysis of data, therefore; it also involves the collection of data, so that as rich a picture of customers can be created as possible. Once the data is assembled its commercial value becomes obvious. The most important data comes from four sources:

- Account, professional and domestic information already received from the customer during product applications or other discussions