

Data Mining in brief

Nowadays, data mining is applied in all human undertakings including scientific research, medical science and practice, public security and most business sectors. Data mining is most useful where changes occur rapidly; come to mind the stock market, financial services, e-sales and marketing. Data mining helps predict consumer behaviors. Acumen from easier interaction between vendors and consumers and more personalized marketing benefit both parties.

Data mining consists of scrutinizing large data sets in order to discover new insight. The discovery of patterns, trends and correlations enhances business decisions. Reliable and timely information allows for the development of profitable marketing strategies. Moving toward one-on-one communications with customers and prospects is becoming practical as more and more interactions get automated. Database Marketing and Customer Relationship Management are made easier with data mining which is a real driver of profitability.

Through data mining, one can determine where, when and why a given product or service sells. Historical purchases, demographics and psychographics are used to build a customer behavior model as well as sales predictions. Marketers then conduct small-scale tests, measure results and make timely adjustments to the message or the targeting. After a few iterations, one can target the most valuable sub-groups and launch ever more relevant promotions. The cost-efficiency of marketing campaigns constantly improves, yielding more net profit.

Customer-centric programs strengthen customer loyalty since quality interactions lessen the negative impact of mass advertisement and promotions.

Prediction models can also factor in 'external' variables related to economic indicators, market evolution and competition.

Marketing strategies

Marketers need to know whether they should endeavor to attract new customers or attempt to increase loyalty. Choosing the right strategy is made easier with data mining. Smart strategic choices reduce your marketing costs and improve the efficiency of your promotion campaigns.

Automated data mining will track the effect of your decisions, and make it easier optimize pricing, range of products and services, cross-selling, up-selling, promotions, advertisement, communication channels, etc.

The syndrome of the forest hidden by the trees

Data overload makes it hard to sort out what really matters. Data mining will highlight the useful information from the mass of data, enabling marketers to identify likely responders and reduce mass advertising.

Data mining can help you find reliable answers to such questions:

- Which customers are likely to become disloyal and **why**?
- Which customers are most profitable for our company?
- Which customers are least profitable for our company?
- Which customers are most likely to purchase additional products?
- Which purchase behaviors matter to our company?
- Which product a given customer is likely to buy?
- How can we optimize pricing?
- Which combination of products a given customer is likely to buy?
- Why is this retail outlet more/less profitable than the others?
- What is the efficiency of our latest promotion campaign?
- How can we lower our marketing unit costs without affecting revenues?
- How can we personalize our promotions?
- Which customer segments are likely to respond to a given promotion?
- Which products are likely to run out of stock within two weeks?
- Which click sequences lead to a sale?
- How can we prevent web visitor dropouts?
- How can we improve consumers' perceptions of our products and services?

Data mining will help in solving a wide variety of business problems in diverse domains.

For additional information, please visit our web site www.axoneintelligence.com or contact us.

Denis Proulx, co-founder, Axone Intelligence Inc.

