

Data mining as the process

Technology, Information Technology



Irrespective of the technique, data mining can be broadly carried out in three steps in generic terms: classification (applied to group data based on set rules), association (the relation between objects within the group is identified) and sequence analysis (the sequence in which a data repeats itself is identified).

Pitfalls:

The major pitfall for data mining is that, in some cases, the process becomes disorganized without any set goals or objectives. This results in wastage of time, effort and investment. The other pitfall is that the programmers involved in the data mining process may not have sufficient business knowledge to understand the objectives or the information that can be retrieved. Sometimes, for a given data mining problem, the relevant data in the available data can be insignificant.

Frequent Flier - Case:

In the case that has been presented, the airline utilizes the data available about its customers that were collected via the frequent flier program to identify patterns in consumer behavior. The airline employed data mining process in order to increase the responses from the customers and also to increase the value of the response. Based on this information, the airline can then propose offers based on the results. This will increase the response rate as the offers are planned based on the results of customer preferences.

Other Sectors:

Data mining can be widely applied to many industrial sectors. Retail and Telecommunication companies can make use of data mining in a number of ways to increase their revenue. Retail companies have a vast amount of data on customer preferences and their purchase patterns. This data can be mined to identify consumer behavior. In the telecommunications sector, the companies can mine the data they have about their subscribers to make value-based propositions targeted at the customers who are of high value to the company.