Data Mining

Data mining is to process of analyzing data from different perspectives and summarizing it into useful information, including discovery of previously unknown interesting patterns, unusual records or dependencies.

1. Potential Business Benefits from effective data mining

* Identify previously unseen relationships between business data sets
* Better predict future trends & behaviors
* Extract value(e.g. performance insights) from big data sets
* Generate business actions built on data insight

1. Some examples of how data mining can help a business improve competitiveness

* Sales forecasting analyzing when customers bought to predict when they will buy again
* Database marketing examining customer purchasing patterns and looking at the demographics and psychographics of customers to build predictive profiles.
* Market segmentation a classic use of data mining, using data to break down a market into meaningful segments like age, income, occupation or gender
* E-commerce basket analysis using mined data to predict future customer behavior by past performance, including purchases and preferences.

1. The classic example of data mining

Dunnhumby pioneered data mining to help Tesco better understand its customers.

Dunnhumby launched the Tesco Club card loyalty program. Using data about past customer purchase habits, Tesco was able to stock its stores based on predictions about what customers might want in the future. It was revolutionary for the UK retail market.

1. Example of Data mining

As a result of its data mining, US supermarket giant Walmart discovered that sales of Strawberry Pop-tarts increase by seven times prior to a hurricane.

Since this discovery, Walmart places the Strawberry Pop-tarts at the checkouts prior to a hurricane.