Analysis of data mining

Technology

ITKM Analysis of Data Mining The article Data Mining by Christopher Clifton analyzed how different types of data mining techniques have been applied in crime detection and different outcomes. Moreover, the analysis proposed how the different data mining techniques can be used in detection of different form of frauds. The analysis gave the advantages and disadvantages of using data mining in different operation. The major advantage was that data mining enables analysis of large quantities of data. This is important since such data cannot be analyzed manually since the data is often complex for humans to understand.

However, data mining techniques have been used for deceitful purposes such as inappropriate disclosure of private information. The article analyzed different data mining techniques. Predictive modeling is one such technique used in estimation of particular target attribute. Descriptive modeling was another technique, which entails dividing data into groups. The other techniques described include pattern mining used in identification of rules relating to different data pattern and anomaly detection, which entails determining the unusual instances that, may arise when using the different data-mining model.) What is the title and what was the objective of the study/analysis) The title of the article was data mining. The article focused on skills in knowledge discovery can be used in analysis of large volumes of data sets. According to the article, data mining was invented about one and a half decades ago due to the advances inartificial intelligence. Discovery of expert system, genetic algorithms, neural networks, and machine leaning led to develop ways to adapt these schemes and use them for data mining purposes.

Related article: What Business Can Learn From Text Mining

The objective of the article was to give a history of data mining, the different types of data mining and the application of data mining in different fields such as business, scientific research, as well as by security agents in detection of crimes and terrorist activities (Clifton Web). Regarding the history of data mining, the article stated that data mining was first implemented in credit card fraud detection. The 2) What data mining algorithm was used (i. e. cluster analysis, decision tree, neural network, other) and describe the algorithm?

The analysis used both decision tree algorithm and clustering algorithm. By using decision tree algorithm, the information regarding data mining techniques was grouped by making use of predefined knowledge. The analysis entails description of different crime detection techniques. Moreover, the most appropriate technique for detection of different types of crimes was suggested based on the profitability of using any single technique. Using clustering technique, the data was divided into different groups to obtain certain patterns. Such pattern included classification to data mining techniques based on their uses.

This was used to develop ways in which the different techniques can be applied in business (Clifton Web). 3) What was the outcome of the analysis, and how did it benefit the business, if there was a benefit? The analysis identified the various data mining techniques, their applications, strengths and weaknesses. The analysis was important to the business world. For example, the analysis on use of data mining in detection of credit card fraud identified the challenges involved on the process. This was crucial since it

gave insights on how different techniques can be developed to make data mining more effective in credit card fraud detection.

Another reason why the analysis was important to the business world was that it analyzed the different data mining approaches such as predictive modeling, descriptive modeling, pattern mining, and anomaly detection. The analysis explained how the different techniques work. Moreover, the analysis was crucial since it provided insights on how different techniques can be used in detection of fraud crime in different types of business transaction. Moreover, it highlighted the shortcoming on the different techniques. This is crucial since it provided intuitions on areas that can be improved to make the techniques more effective (Clifton Web).

An additional reason why the analysis was important is that it pinpointed the issues that arise when using data mining techniques in fraud detection. One such issue is privacy concern. This was crucial since it gave insights on how the business world can continue using data mining techniques to combat crime without risking loss of reputation. Moreover, the companies can use data mining for fraud detection crimes while making less error such as those of biasness (Clifton Web). Conclusion Data mining has undergone modification with technological advancement. Data mining play a great role in enabling detection of problems such as frauds.

This is because it enables analysis of large and complex quantities of data. In the article about data mining, Clifton used both decision tree and cluster analysis to assess the different types of data mining. By using decision tree, the author group data mining based on the techniques used. By using clustering, the data was grouped to obtain certain patterns. The analysis was

important to business world since it provided insights on how the different data mining techniques work. Works Cited Clifton, Christopher. " data mining . " Encyclopedia Bratanicca (n. d.): 1-3. Web. .