LEVEL 0 SUMMARY TEMPLATE

Instruction

This summary will be shared with L1, L2 and L3. Keep in mind that these levels do not have a full understanding of the subject. Try to write something easy to understand but not simplistic. Your summary should explain the main contribution of the paper with your own words. Furthermore, you can use simple examples, if necessary, to better explain the main ideas. Your grade will take into account the quality of your summary, the formal English language in which it has been written, and whether it helps the levels above in their own work.

Name of student: Sanaa Dahour

Name of your Level 1: L0

Source (e.g. scholars.google.com): Google scholars

Paper title: Artificial Intelligence in Data Mining & Big Data

Keywords specific to the paper:

Summary of the main contributions:

(Use text paragraphs, tables and if necessary, figures):

- AI model used (e.g. Neural network, etc.)
- Introduce the AI models
- How do they contribute the idea proposed by the paper?

Supported by a software application? (If yes, provide more details) NO.

The paper Artificial Intelligence in Data Mining and Big Data offers a thorough examination of the ever-evolving field of data mining which includes high-performance computing statistics machine learning and machine learning. This highlights how important data mining techniques are for identifying patterns and structures in large-scale datasets. The incorporation of artificial intelligence into big data analytics and data mining is one of the documents main topics.

The incorporation of this integration has shown to be crucial in tackling intricate problems in various fields. In order to efficiently process enormous amounts of data in order to derive insights spot trends and make predictions the paper emphasizes the importance of artificial intelligence machine learning algorithms and neural networks.

The document provides definitions in relation with data mining and big data, including:

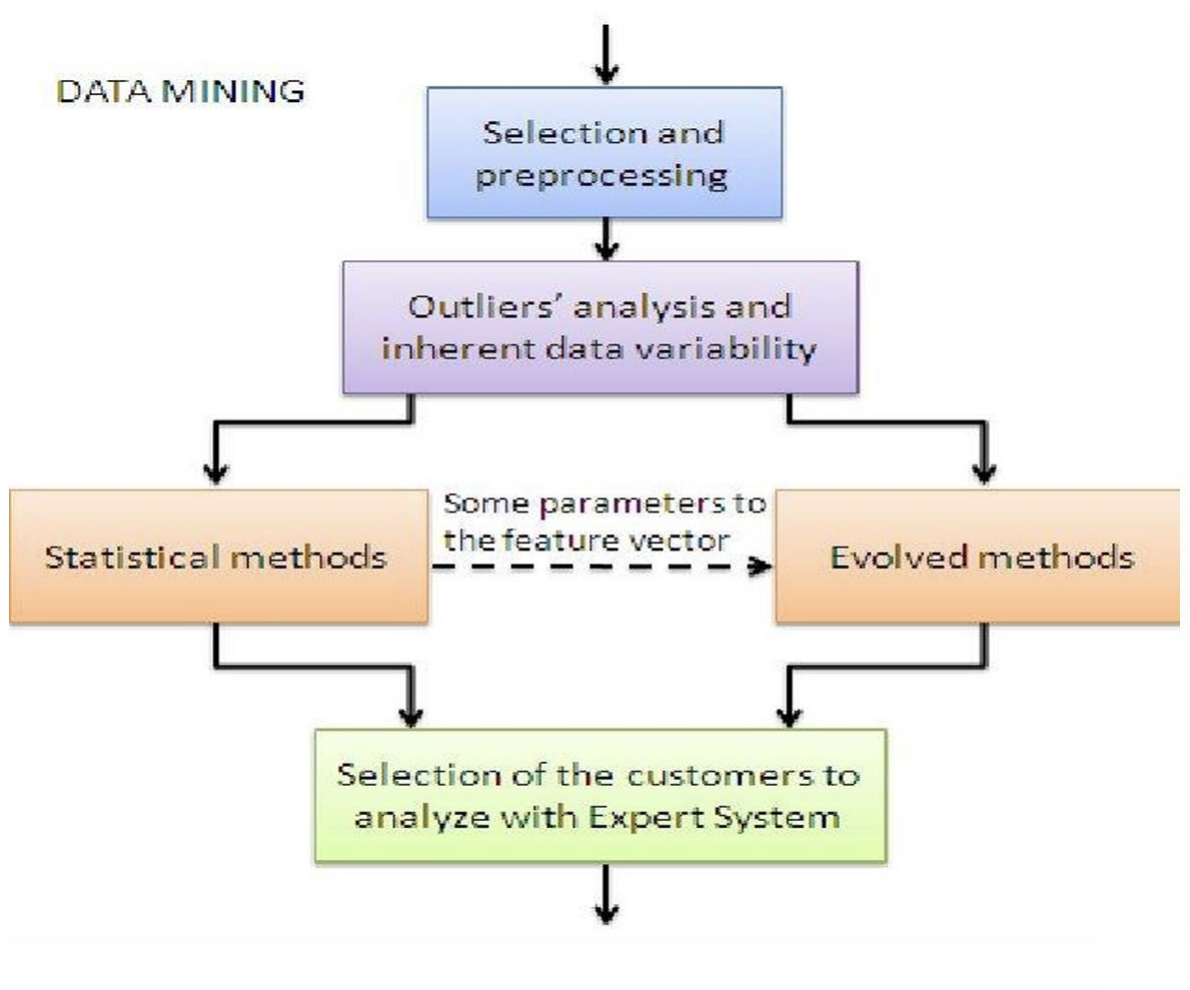
1. **Classification**: Model building is the process of predicting an objects category when its class label is unknown.

2. **Prediction**: involves using the data at hand to identify distribution trends. Data cleansing integration selection transformation pattern recognition pattern analysis and visualization techniques are some of the steps in the data mining process.

3. **Limits of Data Mining and Big Data**: The idea of garbage in garbage out (GIGO) which emphasizes that the quality of historical information determines the quality of data obtained through data mining is one of the limitations mentioned. Data mining can only extract information from historical data it may not be able to quickly adopt new trends.

In the document we also talk about the relationship between AI and big data. The relationship between the two is explored including how big data is necessary for AI applications and how AI can process large datasets effectively. The paper emphasizes how artificial intelligence (AI) is essential for processing vast volumes of data in order to extract insights trends patterns and forecasts.

Some of the drawbacks of conventional data mining techniques are also discussed in the paper including possible problems with historical data quality and difficulties adjusting to new trends. Ultimately the paper emphasizes how important it is to use sophisticated data mining methods and artificial intelligence to extract useful information from massive datasets. The aforementioned data is of utmost importance for a wide range of applications spanning multiple industries and domains thereby demonstrating the continuous development and significance of these technologies within the field of data analytics.


DATA MINING
Selection and preprocessing
Outliers' analysis and inherent data variability
Statistical methods
Some parameters to the feature vector
Evolved methods
Selection of the customers to analyze with Expert System