THE EFFECTIVENESS OF DATA MINING IN QUERY OPTIMIZATION

HASSANIEH MOHAMMED NAJI¹ & ZAHRAA NAJM ABDULLAH²

¹Department of Telecommunication & Information Technology, Prime Minister’s Office, Iraq
²Department of Computer Science, College of Science, University of Karbala, Iraq

ABSTRACT

Data mining is a computerized process which is defined as the process of analyzing the big amount of data, and it is a secondary statistical process. Query flocks algorithm is proposed in this research as a data mining technique, which is a generate-and-test model for variety types of patterns, it can be used in facing data mining problems, also it allows the declarative, systematic optimization, and affective processing of a huge set of mining queries. The research specifies the A-priori algorithm, which is the most well-known and primary method in data mining association rules.

The research first defines data mining process and aims from different resources, in addition to clarify the Knowledge discovery Process in Data mining (KDD) and its role in extracting knowledge from data in large database case. Also, the research proposes query flocks framework as a data mining technique here, its algorithm step by step, and its uses. The study results indicated that Data mining technology is using to make the security, scalability, and efficiency better when dealing with a huge amount of data set. It also revealed that there are several limitations of the A-priori algorithm such as; the scanning and checking out time of the data will be too long, and the efficiency will be very low when the database stores a huge amount of data.

KEYWORDS: Data Mining, Query Flocks Algorithm, Efficiency & Optimization

Received: Feb 27, 2018; Accepted: Mar 20, 2018; Published: May 18, 2018; Paper Id.: IJCSEITRJUN20188