ABSTRACT

Object oriented database systems are popular and influential in advanced database applications and so, it is important to investigate the mechanisms for knowledge discovery in object oriented data. The concept of domain knowledge is very important in data mining. Most current systems rely heavily on user’s interaction for inputs. The user must specify which data-mining algorithm to use and all the parameters associated with the algorithm. The user requires a great level of expertise in setting these parameters. The user needs to have enough prior domain knowledge in order to define the objective and specify the correct mining algorithm and its parameters. Then only the user gets the correct knowledge from the data mining system. It will take more time for the end-users to choose the correct mining algorithm which involves more time and domain knowledge. Sometimes, the user might even need to define the goal, or what the user is looking for in the data. After the application of a data-mining algorithm on the data of interest and returns the results, the user must do more work to decide which results are useful or interesting. For most of the organizations the required human resource is too expensive. Even if the required human resource is available, the person might still not be able to efficiently tackle the task on hand, due to the number of unknown data’s to be mined. Therefore, the need arises to empower non-expert users to achieve reasonable results with minimum effort. A data mining framework is required to perform discovery on data automatically, without asking the user too many questions.
This research work provides an interface to the non-experts and also hides the mining concepts away from the users thus helping to bridge the conceptual gap usually associated with data mining. The new proposed framework deals with developing an automated data mining system for an Object Oriented data using software agents.

Therefore, the need arises to develop highly automated, scalable, integrated, and reliable data-mining systems and tools.

**Major Strengths of the Approach**

- Design and development of an automated data mining system for object oriented databases.
- Integration of software agents with data mining system empowers non-experts to achieve reasonable results with minimum effort or with less human intervention.