ABSTRACT OF THE THESIS

IT industries in current scenario have to struggle effectively in terms of cost, quality, service or innovation for their subsistence in the global market. Due to the swift transformation of technology, software industries owe to manage a large set of data having precious information hidden. Data mining technique enables one to effectively cope with this hidden information where it can be applied to code optimization, fault prediction and other domains which modulates the success nature of software projects. Additionally, the efficiency of the product developed further depends upon the quality of the project personnel. The position of the study therefore is to explore potentials of project personnel in terms of their competency and skill set and its influence on quality of project. The above mentioned objective is accomplished using a classifier in order to capture the pattern of human performance. The hidden and valuable knowledge discovered in the related databases will be base for decision support system for formulating rules related to employee. The analysis of employee performance and its impact on quality and therefore profit is the key point of study. This predictive study enables the project managers to reduce the failure ratio to a significant level and improve the performance of the project using the right choice of project personnel through data mining techniques. Researchers have used data mining techniques in last few decades to analyze large or small data sets in most fields of engineering, marketing and science to extract hidden knowledge.

Data mining aims to discover hidden patterns and extract knowledge from large databases that are dormant but potential for giving insight for improving decision making. Data mining techniques help to improve the decision making by using facts and not merely intuition. Machine learning, statistical and data mining methods are gaining popularity in recent years. The insights obtained give a better understanding of the data and can enhance business scenario.

Keywords: Human Aspect of Software engineering, data mining, Classification