USING DATA MINING TECHNIQUES TO DISCOVER THE CORRELATION BETWEEN HIGH SCHOOLS FINISHED AND HIGHER EDUCATION PROGRAMMES CHOSEN BY STUDENTS

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Abstract: Although used as a basis for various analyses and research, large databases as such are insufficient. Accumulated data should be further analysed using appropriate techniques. Databases kept by student service departments are good examples of this. This paper explains the correlation between the high schools finished by students of the Business and Technical College of Applied Sciences (BTC) and the study programmes they have enrolled on. Real data have been used in this research, without revealing students' names and personal information in order to ensure the privacy of each individual. The aim is to discover whether students enrolled at higher education institutions (BTC in this case) choose the same fields of science as in high schools or study programmes in entirely different fields. Furthermore, a subsection provides information on students' high school academic achievement, as well as a comparative overview of study programmes regarding this issue. Another section provides a graphical overview of the results obtained using the decision tree technique. The results may be used for planning the promotion of specific study programmes to potential students. Any higher education institution can benefit from such analyses.

Key words: data mining, decision tree, students, high school, academic achievement.