THE APPLICATION OF DATA MINING TECHNIQUES TO ANALYZE CUSTOMERS BEHAVIOR

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Abstract

The development of information and communication technology creates possibilities for companies to maintain large amount of actual and historical data. Within these data there is information that will helps companies to get new and keep existing customers. Traditional methods of data analysis could not help in extracting the information that was unknown before from these data. Recently for analyzing the data with the aim to detect previously unknown information is being used data mining which is a combination of artificial intelligence, machine learning, statistics, and information processing systems. Data mining it is known as a process that finds patterns and meaning of data in large datasets with the aim to discover crucial information for further use and to transform this information in an intelligible form.The use of datamining techniques helps companies to determine the relationships between various factors such as price, the position of the product or staff skills. As a result, companies can create different offers and products for specific customers based on historical data of sales performed. In our paper, we will study theoretically and practically datamining techniques that can be applied in the data gathered by companies with the aim to increase existing customers' satisfaction and to attract new customers. Data Mining techniques will be applied practically to a point of sale system which has been implemented in one of the branches of a big retail company that operates in Albania.We expect that application of data mining techniques to have a positive impact in the increase of customers' satisfaction and attracting new clients for this company.