

A STUDY TO SELECT THE BEST METHOD FOR RANKINGS OF COUNTRIES

Original scientific paper

Abstract

The purpose of this study was to predict the success of participating countries in the Asian Games in 2010 through macro-economic variables, political, cultural and social. The statistical sample in this research was the participating countries in Asian Games from 1974 to 2010. Ranks of countries were predicted based on KNN model and using three methods number of gold medals, total of medals and weight of medals. The research results showed that among the three methods used, ranking method by using total of medals earned the highest correlation coefficient (0.9135) between original and predicted ranks compared with methods of based on the weight of medals (0.8941) and based on the numbers of gold medals (0.8501). In all three methods, predicted ranks of China and Iran were consistent with their original ranks. Also, the ranks of Japan, South Korea and Malaysia have been predicted only with 1 rank different from their original ranks.

Keywords: *Prediction, Asian Games, Macro variables, rankings of countries, KNN Model*