



## PREDICTIVE ANALYTICS BY MINING SPORTS DATA

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**KEYWORDS :****INTRODUCTION**

There are many researches in the prediction of sports. Many sports prediction systems are in great demand. Predictions of sports are now widely used in sports such as football, cricket, tennis, basketball, athletics etc. Prediction of sports is comparatively difficult as there may be multiple factors that can influence the outcome of the game, like the sport, equipment, venue, weather conditions etc for an outdoor game. In recent years, many data mining algorithms and tools makes it possible to extract required information from the data files.

Machine learning is used in Prediction system. Machine learning is broadly classified into two types of machine learning namely supervised machine learning and unsupervised machine learning. In supervised machine learning, we must train the machine by providing huge data sets and the outcomes. Predictive and sports analytics incorporate various data mining algorithms, machine learning algorithms, SQL technologies, statistics etc. By using the queries, data can be extracted and trained, so that predictions can be made. It helps discover useful knowledge and interesting relationships in the sports data to facilitate predictions of the outcome of the game. Nowadays, a growing interest in sports encourages research in predicting sports outcomes more analytically. The advancement of technology and development in computing capabilities has expedited research in predictive analytics in the field of sports. In recent time, professional sports have become competitive. Sports people in many countries are treated as celebrities and have a huge follower, who demands information and good performance from their sports idols. Hence, the need of predictions of sports analytics, which can be used by the coaches and the players to excel their performance based on the predictions.

Data sets now days are huge coming from various sources, consisting of player's information, summary of player's performance statistics, videos, environment conditions etc.

There are various real time devices that extract the player's performance, which can be used as an input to the prediction systems. There is a tremendous growth of data, which includes players' statistics, weather conditions, information from experts, etc. The trainers and coaches now maintain datasets, which can also be used for prediction systems.

Data mining algorithms, analytical models, information systems are all combined together for the decision-making process. Such information is primarily sought for improving the team performance.

**CONCLUSION:**

Using predictive analytics, the sports person and coaches, can keep a track, evaluate and predict the outcomes of the game. It is instrumental in providing training plans, performance enhancement and strategy formulation. The sports person for self-assessment to improve their performance can also use the information. It also helps in maintaining the huge fan base of the sports players. The investors also depend on the predictions to invest. There is also a lot of scope in career in sports analytics and management.