

How well does FIFA Player Ratings contribute towards predicting Player's Actual Market Value

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Background

Soccer is the most popular sport in the world with an estimated 3.5 billion fans and an annual global revenue of about 28 billion USD. Money in the sport is generated by clubs that perform well in domestic and continental competitions, with star players not only contributing with their on-field performance but also revenue in terms of merchandise sales and marketability. All these factors contribute to the extremely high transfer fees for players where prospective clubs have to fork out these sums to their parent clubs. With an eye on the profits to be made our company (Fenway Sports Group) has been investing a significant amount of money into player transfer fees for Liverpool Football Club to stay competitive as well as generate revenue from player sales.

Introduction

The FIFA video game franchise is one of the best-selling and is well known for having extremely well researched and documented in depth player ratings for players' physical attributes and technical soccer skills.

Through our project we wish to study how the amalgamation of these player ratings aid in predicting the player's actual market value. We will study past editions of the game rating to build our model and will make predictions based on the latest edition of the game FIFA 22. With the model that we have built, our company will be able to make informed decisions on future transfers and have a sense of how their investment in new players might pan out financially, particularly if there will be a significant profit or loss to be made from the transfer.

Dataset

The primary dataset we are evaluating is the FIFA Player Database in the video game's 'Career Mode'. Each record corresponds to a detailed account of each player's biographical information, club information, and score of competency in six core skills: pace, shooting, passing, dribbling, defending, and physical fitness. Each of these major areas have several secondary skills that are also scored similarly on a 100 scale. All these scores have been created each game by a team of sports analysts based on their observation of each player's performance for that season of FIFA. The dataset also contains non-numerical columns for each player's dominant foot, position, traits that may minorly impact performance in the logic of the video game (i.e. accident prone, speed dribbler, diver, etc.), and a categorical column for their estimated productivity (High, Medium, Low).

We will also be using a dataset of each player's actual market value as catalogued on transfermarkt.com. The website has information not only of all player's current market values, but their historical market values from previous seasons. We hope to train our model on previous seasons to predict upcoming seasons.