

MSQ11

A Linear Programming Approach To Building an NBA Champion

Ken Ko

Pepperdine University, Los Angeles, CA, USA

Abstract

In the quest to win an NBA championship, the “name of the game” is to be better than your opponents. In this paper, we use this fact to analyze the performance of the last five NBA championships and runners-up relative to all the other teams and also relative to one another. Through our analysis, we determine what are the most important factors in winning a championship. In addition, we use linear programming to determine the relative weighting of these factors in order to optimize winning. Knowing this information can help NBA general managers make personnel decisions to increase the probabilities of their teams winning an NBA championship.

Conference Track

Management Science and Quantitative Methods