

ABSTRACT

Position bias is the tendency of users to click on items in higher positions in the recommendation list, which can negatively impact less popular items due to limited exposure and difficulty in obtaining sufficient interactions. Although position bias cannot be avoided, previous research has proposed improving recommendation quality through item repositioning. However, this improvement is often evaluated solely based on accuracy, which may not be entirely suitable. Such evaluations only compare predicted values to actual values, but in many cases, the actual values of previous candidate recommendations cannot be accessed. Additionally, studies proposing item repositioning often employ random methods, which can give equal chances to all items to occupy higher positions. This study aims to enhance recommendation quality beyond accuracy evaluation by placing candidate items that similar with the user interaction history at higher ranks. Evaluation is based on factors such as relevance, innovation, and surprise, which are crucial in delivering meaningful recommendations to users by the Recommendation System.

Keywords: Position Bias, Reposition Item, Recommendation System, Coverage, Novelty, Serendipity