Impact on the Results of Sub-Group Analysis on Performance of Recommender Systems

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Abstract : The purpose of this study is to investigate whether friendship in social media can be an important factor in recommender system through social scientific analysis of friendship in popular social media such as Facebook and Twitter. For this purpose, this study analyzes data on friendship in real social media using component analysis and clique analysis among sub-group analysis in social network analysis. In this study, we propose an algorithm to reflect the results of sub-group analysis on the recommender system. The key to this algorithm is to ensure that recommendations from users in friendships are more likely to be reflected in recommendations from users. As a result of this study, outcomes of various subgroup analyzes were derived, and it was confirmed that the results were different from the results of the existing recommender system. Therefore, it is considered that the results of the subgroup analysis affect the recommendation performance of the system. Future research will attempt to generalize the results of the research through further analysis of various social data.