

Social Influences in Recommendation Systems

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Abstract—Social networking sites such as Flickr and Facebook allow users to share content with family, friends, and interest groups. Also, tags can often assign to resources. In the previous research [4] using few association rules FAR, we have seen that high-quality and efficient association-based tag recommendation is possible, but the set-up that we considered was very generic and did not take social information into account. The proposed method in the paper [4], FAR, in particular, exhibited a favorable trade-off between recommendation quality and runtime. Unfortunately, recommendation quality is unlikely to be optimal because the algorithms are not aware of any social information that may be available. Two proposed approaches take a more social view on tag recommendation regarding the issue: *social contact variants* and *social groups of interest*. The user data is varied and used as a source of associations. The adoption of social contact variants has two approaches. The first social variant is User-centered Knowledge, to contrast Collective Knowledge. It improves tag recommendation by grouping historic tag data according to friend relationships and interests. The second variant is dubbed ‘social batched personomy’ and attempts to address both quality and scalability issues by processing queries in batches instead of individually, such as done in a conventional personomy approach. For the social group of interest, ‘community batched personomy’ is proposed to provide better accuracy groups of recommendation systems in contrast also to Collective Knowledge. By taking social

information into account can enhance the performance of recommendation systems.

Keywords—*User-centered Knowledge, Collective Knowledge, social batched personomy, community batched personomy*

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