

# A Recommender System for the Tourism Industry, in the Context of Social Commerce: Based on the Similarity, Social Communities, Trust, and Reputation

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## ABSTRACT

The internet and its services have significantly affected various businesses, including the tourism industry, and provided a wide range of diversity in the products and services. Due to a dramatic increase in the number of available options in travels, hotels, tourist attractions, etc., the process of decision-making has become more difficult for the consumer. As a result, Tourism Recommender Systems (TRS) have attracted the attention of researchers and businesses. Tourist attractions are often the reason why people love to travel. This research represents a social-hybrid recommender system in the context of a social commerce, which can create a personalized list of tourist attractions for each tourist, based on the similarities of the users' desires and interests, trust, reputation, communications, and social communities. The advantage of the proposed method in comparison with the traditional methods like collaborative filtering, content based filtering and hybrid, is the comprehensive usage of various factors and consideration of the trust factor in recommendation resources- as in the identification of the outliers. The results of the tests show the superiority of the presented method compared to other common methods; In addition, the proposed model can be used to recommend other products and services in the tourism industry and also in other social businesses.

**Keywords:** Social Commerce, Recommender System, Trust, Similarity, Communities, Reputation, Tourism Industry, Social Communications.