

Group Formation with Neighbor Similarity Trust in P2P E-Commerce

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Abstract

The simplicity with which products and prices are compared in e-commerce brings an attractive option for many online merchants. The completion of online business transactions with the condition that one must provide personal information has always been an act that beckons hesitation. Most online traders are conscious of various threats and attacks such as credit card fraud, identity theft, spoofing, hacking, phishing, and other abuses, leading to low trust in transactions. P2P systems take place at the edge of the Internet. Peer communities are established dynamically with peers unknown to each other. In our proposed mechanism, peers form groups to ensure trust and security. Each group is established based on interest among peers. In this paper, we show how peers form groups, and select group leaders. A peer can belong to more than one up to n groups. The neighbor similarity behavior is shown by peers having common neighbors.

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