

Chair of Systems Design

SG_Seminar

Providing Incentives for Honest Feedback in Electronic Environments

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Cooperative outcomes in online environments, such as peer-to-peer and customer-to-customer e-commerce (e.g. eBay), often fail to arise due to hidden information on quality and honesty of participants. Reputation systems are often employed to alleviate this problem. However, we show that their performance heavily depends on their exploitation policies and the accuracy of the ratings. In peer-to-peer systems, we experimentally prove that the calculation of accurate reputation has to be complemented by appropriate reputation-based policies that determine the pairs of peers eligible to interact in order incentives for high performance to be provided. Also, regarding the accuracy of reputation, we propose a mechanism for providing the incentives for reporting truthful ratings' feedback in a peer-to-peer system for exchanging services. Under our approach, both transacting peers submit ratings on performance of their mutual transaction. If these are in disagreement, then both transacting peers are punished, because such an occasion is a sign that one of them is lying. Our analytical and experimental results show that our mechanism detects and isolates liar peers effectively, while rendering lying costly. We also propose an incentive mechanism for truthful reporting in a competitive e-marketplace in which providers and clients exchange roles.

When? Wednesday, 6 August 2008, 14.00-15.30

Where? ETH Zürich, Kreuzplatz 5, KPL F 39