

A Collaborative Reputation-aware Autonomous Agent Negotiation Framework for Electronic Marketplace Environments

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We propose an agent-based negotiation framework for e-marketplaces, with a dynamic multi-issue multi-party negotiation model and negotiation strategies that employ a flexible ranking mechanism, instead of the complicated counter offer scheme. A collaborative Seller reputation mechanism enables Buyers to exchange information on Sellers' reliability and considers the Sellers' past performance in meeting the Buyers' requirements. The reputation management system distinguishes between truthful and deceiving responses and enforces a penalty policy for malicious parties endangering its integrity.