

## QoS-CBMG: A Model for e-Commerce Customer Behavior

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**Abstract :** An approach to model the customer interaction with e-commerce websites is presented. Considering the service quality level as a predictive feature, we offer an improved method based on the Customer Behavior Model Graph (CBMG), a state-transition graph model. To derive the Quality of Service sensitive-CBMG (QoS-CBMG) model, process-mining techniques is applied to pre-processed website server logs which are categorized as 'buy' or 'visit'. Experimental results on an e-commerce website data confirmed that the proposed method outperforms CBMG based method.

**Keywords :** customer behavior model, electronic commerce, quality of service, customer behavior model graph, process mining

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