

University of Macau

Abstract

## **Simulation-based Evaluation of Workflow Escalation Strategies**

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**Abstract**

Workflows in the service industry sometimes need to deal with multi-fold increases in customer demand within a short period of time. Such spikes in service demand may be caused by a variety of events including promotional deals, launching of new products, major news or natural disasters. Escalation strategies can be incorporated into the design of a workflow so that it can cope with sudden spikes in the number of service requests while providing acceptable execution times. In our work, we propose a method for evaluating escalation strategies using simulation technology and analyze strategies from the aspects of cost and time. The effectiveness of the proposed method is demonstrated on workflows from an insurance company.