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## QUALITY IMPACT PREDICTION FOR EVOLVING SERVICE-ORIENTED SOFTWARE (Q-IMPRESS)

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**ABSTRACT.** The difficulty in evolving service-oriented architectures with extra-functional requirements seriously hinders the spread of this paradigm in critical application domains. The Q-ImPrESS method offsets this disadvantage by introducing a quality impact prediction, which allows software engineers to predict the consequences of alternative design decisions on the quality of software service and select the optimal architecture without having to resort to costly prototyping. The method takes a wider perspective on software quality, by explicitly considering multiple quality attributes (performance, reliability and maintainability), and the typical trade-offs between these attributes. The benefit of using this approach is that it enables the creation of service-oriented systems with predictable end-to-end quality. The proposed talk is intended to present the Q-ImPrESS method and demonstrate the associated tools at work.