

Towards Incorporating Context Awareness into Business Process Management

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Abstract : Context-aware technologies provide system applications with the awareness of environmental conditions, customer behaviour, object movements, etc. Further, with such capability system applications can be smart to adapt intelligently their responses to the changing conditions. Concerning business operations, this promises businesses that their business processes can run more intelligently, adaptively and flexibly, and thereby either improve customer experience, enhance reliability of service delivery, or lower operational cost, to make the business more competitive and sustainable. Aiming at realizing such context-aware business process management, this paper firstly explores its potential benefit and then identifies some gaps between the current business process management support and the expected. In addition, some preliminary solutions are also discussed with context definition, rule-based process execution, run-time process evolution, etc. A framework is also presented to give a conceptual architecture of context-aware business process management system to guide system implementation.

Keywords : business process adaptation, business process evolution, business process modelling, and context awareness

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