Towards IoT-aware and Proactive BPM Systems

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Proactiveness is a raring feature of today’s BPM systems for coping with uncertainties. IoT enables BPM to perceive and react to real-time events in our physical world, and gives stimuli to promote process-level proactiveness. In designing IoT-aware and proactive BPM systems, however, people are often confronted with such issues as mismatch of the two established paradigms, and excessive complexity and inefficiency in dealing with temporal-spacial streams and decentralized computing. This talk elaborates some challenging issues in designing such proactive systems, and reports some intermediate progresses of an on-going project. Besides technical and methodological support, suitable architectural design is of importance to deal with the paradigm mismatch and decentralized computing. We thus also discuss our key architectural considerations and trade-offs in the second part of the talk.

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