Agile cooperative process-aware information systems (ProGility 2009) workshop report

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Agile Cooperative Process-Aware Information Systems (ProGility 2009) Workshop Report

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Abstract

The goal of the ProGility workshop is to bring together practitioners and researchers from different communities such as BPM, software engineering, service-oriented computing, artificial intelligence, and CSCW/Groupware who share an interest in flexibility of cooperative process-aware information systems and team support in both an intra- and inter-organizational setting. This report of the fourth edition of the workshop gives an overview of the presented papers, which address various flexibility issues of process-aware information systems.

1. Introduction

The economic success of an enterprise more and more depends on its ability to react to changes in its environment in a quick and flexible way. Business trends such as increasing product and service variability, fast time-to-market, and increasing division of labor along a global supply chain of goods and services force enterprises to collaborate with each other in networks that are dynamic, flexible, ad-hoc, and adaptive. Thus enterprises are developing a growing interest in new concepts, systems, and solutions which help them to flexibly align their organizational structures, business processes, and supporting information systems to these new requirements and to optimize inter-

actions with customers and business partners. While there has been major progress in disciplines that are interested in structured and unstructured intra-organizational business processes, the agile enterprise is still a vision. Agility in this context refers to the ability of an enterprise to rapidly set up new business processes and projects in order to quickly adapt to changes in the environment. To support these changes, traditional enterprises have to align their existing information systems while virtual enterprises need to customize and integrate the individual partner processes. In order to meet its business objectives, the agile enterprise continuously re-aligns its business processes as well as the interactions with its partners and customers to meet the current requirements.

Building upon the success of the workshops in 2007 and 2008, the goal of the fourth ProGility workshop is to bring together practitioners and researchers from different communities such as BPM, software engineering, service-oriented computing, artificial intelligence, and CSCW/Groupware who share an interest in flexibility of cooperative process-aware information systems and team support in both an intra- and inter-organizational setting. The workshop aims at discussing the current state of ongoing research and sharing practical experiences. Submitted papers will be evaluated on the basis of significance, originality and technical quality. Papers should clearly establish the research contribution and the relation to previous research. The workshop will also provide

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opportunity for demonstration sessions, where participant can present advanced prototypes based on their research. Workshop topics include among others adaptive processes, agile management of business processes, case handling, knowledge-intensive processes, process evolution, process mining, and process consistency.

2. Overview of the Papers

The full paper by *Schuster et al.* focus on open collaboration processes that are situational, weakly structured and highly interactive human-centered collaborations within or across organizational boundaries. Such processes are not well supported by current information technology. The paper proposes to blend services computing with enterprise documents to amend this situation. Technically, this is realized by the novel concept of document service mashups. These provide an appropriate instrument to realize situational document collaboration. To realize a document service mashup infrastructure, a document service bus which allows document service interaction and composition is used. The approach is illustrated with a usage scenario from the field of ITIL.

The work-in-progress paper by *Verginadis et al.* suggests the usage of collaboration patterns to foster the reuse of reoccurring segments of work in cross-organizational processes in the context of virtual organizations. The proposed approach combines collaborations patterns with event driven technology to detect events and to react upon them using collaboration patterns. This way, collaboration patterns enable adaptivity of collaborations, helping virtual organizations to respond quickly to changing circumstances.

Finally, the demo paper by *Pinggera et al.* presents the Alaska Simulator which is an interactive software tool developed at the University of Innsbruck to foster the comparison of different approaches for process flexibility. The Alaska Simulator not only allows people to test and analyze their own planning behavior, but can also be used to empirically investigate research questions in the context of flexible business process support.

3. Conclusion

All papers presented at this year's ProGility workshop go beyond highly structured processes as supported by traditional process management technology and focus on processes which a low degree of repetition and a high need for adaptivity.

One of the research challenges addressed at the workshop is the question how to support collaborative environments with dynamically changing partners. While *Schuster*

et al. suggest to support ad-hoc collaborations through document collaboration, *Verginadis et al.* advocate the use of collaboration patterns in combination with event-based technologies.

Another important issue raised by the workshop papers is the need for more empirical research on the suitability of different technologies for building agile collaborative process-aware information systems. The Alaska Simulator presented in the paper of *Pinggera et al.* picks up this demand and provides an environment for comparing different approaches for process flexibility.

We also see some ongoing trends from editions of ProGility. The paper by *Schuster et al.* continues a line of research which favors data-centric over process-centric modeling. The main contribution to this line of research by the paper is the focus on service-oriented technologies that help realize data-centric modeling approaches. The paper reaffirms the conclusion of last year that the actual decision which approach is best is situational. The paper by *Verginadis et al.* focuses on adaptivity, which has already been an important topic at ProGility for several years now. The key distinction with previous approaches presented at ProGility is the application domain of cross-organizational collaboration processes.

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