Editorial

Special Section on Best Papers from XP2010

Welcome to the Special Section of IST on the best papers from the 11th International Conference on Agile Software Development, XP2010, which was held in Trondheim, Norway, 1–4 June 2010. The conference brought together software and information systems professionals, both researchers and practitioners, to discuss the latest trends, applications, and theory, share experiences, and reveal new research results in agile software development.

Agile software development represents a major departure from traditional, plan-driven approaches to software engineering, and it has had a major influence on how software is development. It has become an umbrella term for a number of changes in how software developers plan and coordinate their work, how they communicate with customers and external stakeholders, and how software development is organized in small, medium-sized, and large companies from the telecom and health-care sectors to games and interactive media.

This Special Section presents extended versions of the four best research papers that were presented at the XP2010 conference. The first article by Juhani Iivari and Netta Iivari, entitled The Relationship between Organizational Culture and the Deployment of Agile Methods, contrasts agile methods with traditional ones and suggests a number of hypotheses to describe the relationship. Using the competing values model as the theoretical background, the authors identify several interesting paths for future research into the relationship between organizational culture and agile methods deployment. This model distinguishes four culture types: the group culture, which is primarily concerned with human relations and flexibility; the developmental culture, which is future-oriented, considering what might be; the rational culture, which, is achievement-oriented, focusing on productivity, efficiency and goal achievement, and the hierarchical culture, which emphasizes control, stability and efficiency through the following of regulations. Among the hypothesis posed is that agile methods are incompatible with a hierarchical organizational culture, although agile development is more disciplined than ad hoc development.

The second article, authored by Rashina Hoda, James Noble, and Stuart Marshall, entitled The Impact of Inadequate Customer Collaboration on Self-Organizing Agile Teams, addresses the importance of adequate customer involvement on agile projects, and the impact of different levels of customer involvement on real-life agile projects. Based on a longitudinal Grounded Theory study involving 30 practitioners from 16 software development organizations in New Zealand and India over a period of 3 years, the authors reveal that customers are not always as involved in agile projects as agile methods demand. Such inadequate customer involvement leads to adverse consequences such as pressure to over-commit, problems in gathering, clarifying, and prioritizing requirements, securing feedback, and loss of productivity and business. An interesting finding of this article is that despite insufficient or ineffective customer involvement, there exist some agile undercover strategies that can be largely useful and effective in assisting agile teams that face lack of customer involvement.

The third article, by Kieran Conboy and Lorraine Morgan, entitled Beyond the Customer: Opening the Agile Systems Development Process, argues that the idea of a single customer representative must be abandoned because it leads to a too narrow focus, and to a lack of involvement of important stakeholders. Drawing on cases from industry as illustrative examples, they argue that current thinking regarding innovation in agile development needs to be extended to include collaboration and knowledge-sharing with multiple stakeholders outside both the boundaries of a business unit and firm. The authors raise a number of important questions, and argue that a clear understanding of the inter- and intra-organizational applicability and implications of open innovation in agile systems development is required to address key challenges for research and practice.

The evolution of methods is the topic of the fourth and final article in this Special Section, which is authored by Richard Baskerville, Jan Pries-Heje, and Sabine Madsen and entitled Post-Agility: What follows a Decade of Agility? Based on four empirical studies conducted over a 10-year time period, the authors show how the meaning and practice of agile information systems development has evolved over time. An interesting aspect of these studies is the historically repeating two-stage pattern where the story line first centers on a changing context and then on the software process, and where somewhat chaotic, context-driven process adaptations seem to be followed by a more stable period of software process usage. This suggests that reoccurring periods of radically changing context will interrupt software process evolution and that progression in software processes may therefore occur in punctuated historical cycles. The authors show how these cycles help distinguish pre-agility from agility, and on this basis, to speculate about post-agility: a possible next cycle of software process evolution concerned with proactively pursuing the dual goal of agility and alignment through a diversity of means.

Together, these four articles represent an important contribution to a more fundamental understanding of agile software development.
development theory and practice and the role and evolution of agility in the 21st century.

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