Preface for Workshop on Virtues and Values in Conceptual Modeling and Requirements Engineering

Alexander Rachmann[1], Jens Gulden[2]

Abstract: Ethics and human values in developing software systems have long been a topic of discussion. A satisfactory solution like a collection of methods or model gallery for ethical argumentation has not yet been developed. The workshop provides a discussion forum in which various methods for incorporating human values into system development are discussed, as well as models, methods, and other specification techniques for incorporating values into conceptual modeling. Four submitted contributions are part the workshop. In a second practical part, the workshop gives a theoretical and practical introduction to the Square of Values (SoV) modeling approach.

Keywords: Conceptual Modeling; Human Values; Ethics; Software Development; Requirements Engineering; Society; Environment

Preface

The ViVa Models! 24 – Workshop on Virtues and Values in Conceptual Modeling and Requirements Engineering provides a discussion forum covering various methods for incorporating ethics and reflections on how to incorporate human values into conceptual modeling. The workshop consists of two parts, the first of which gives room for presentations and discussions of peer-reviewed scientific paper contributions. In the second part, there will be theoretical and practical introduction to the Square of Values (SoV) modeling approach. The participants will model a set of values concerning a topic of choice.

The first paper is *Learnings from an Ethical Experience Design Method based on Psychological Needs and Values* by Veronica Hoth, Anne Elisabeth Krüger, and Stefan Brandenburg, who developed a workshop concept where designers and technical experts learn to make abstract values tangible and integrating ethical reflection into the design process. This shows that using appropriate methods enhances the solvability of ethical challenges, and ethical considerations can be seen rather as catalysts for innovation than barriers to it.

Prozessbewertungen bezüglich Gewinn, Zeit und Kosten – fehlt da nicht noch Wesentliches?[3] by Ralf Laue points to the fact that goals like financial gain and time or cost reduction used

[1] CBS International Business School, Fachbereich Technology, Hammer Landstraße 89, 41460 Neuss, Germany, a.rachmann@cbs.de
[2] Utrecht University, Heidelberglaan 8, 3584 CS Utrecht, The Netherlands, j.gulden@uu.nl
[3] *English:* Process evaluations regarding profit, time and costs – isn't there still something essential missing?
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to dominate the scientific discourse on process improvement in the past, but examples such as employee-friendly work design, effects on nature and the environment, as well as the accessibility of processes for broad groups of people are rarely taken up in the literature on process modeling. The article presents initial ideas on how these aspects can be included in process design workshops.

The paper *Virtues and Values in Conceptual Modeling with Subject-Orientation* written by Matthes Elstermann takes in a subject-oriented modeling perspective and discusses implications of the subject-orientation paradigm on expressing values and including human elements in modeling. Furthermore, the exchange of values during the modeling process itself is explored, arguing that subject-orientation facilitates the exchange of values among stakeholders.

Preliminary experiences teaching ethical reasoning methods for ICT are discussed in the paper by Xinyu Mao and Sergio España. Ethical reasoning methods for ICT allow to apply moral principles and frameworks to evaluate and guide the development and use of technology in a morally responsible and socially beneficial manner. The authors intend to facilitate the inclusion of ethical reasoning methods for ICT in information and computing science curricula, aiming to increase the industrial adoption of such methods in the long run.

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Alexander Rachmann and Jens Gulden