Technical Debt *How Software Organizations Can Stay Solvent*

Paris Avgeriou University of Groningen, The Netherlands paris@cs.rug.nl

Abstract: The term *Technical Debt* has become rather popular over the past years, expressing technical compromises that can yield short-term benefits but may hurt the long-term health of a software system. There are good news: Technical Debt as a metaphor resonates well with technical and non-technical stakeholders, and can potentially act as a bridge between them and facilitate communication and negotiation. There are also bad news: Technical Debt is undeniably accumulating in most large systems, pervading the entire lifecycle from requirements to deployment; it threatens to "bankrupt" those systems if it is not actively managed. The future of software engineering research and practice will revolve around how to identify, measure, prioritize and repay Technical Debt, as well as how to make sound investments to balance short- and long- term goals. In this talk, we revisit the state-of-the art and practice to examine how much progress is achieved so far, and we discuss some promising future directions in the field, concluding with a "call to arms".

BRIEF BIOGRAPHY

Dr. Paris Avgeriou is Professor of Software Engineering in the University of Groningen, the Netherlands where he has led the Software Engineering research group since September 2006. Before joining Groningen, he was a post-doctoral Fellow of the European Research Consortium for Informatics and Mathematics (ERCIM). He sits on the editorial board of IEEE Software and Springer Transactions on Pattern Languages of Programming. His research interests lie in the area of software architecture, with strong emphasis on architecture modeling, knowledge, evolution, patterns and link to requirements. He champions the evidence-based paradigm in Software Engineering research. Sixth International Symposium on Business Modeling and Software Design

