

HPI Colloquium

16 February 2023, 5pm (CET)

Lecture L-E.03 and via tele-TASK
Campus Griebnitzsee, 14482 Potsdam

“Digital nudging for technical debt management”

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ABSTRACT

Technical debt is a technical compromise in software development wherein the ability to maintain information technology (IT) applications over the long term is sacrificed for short-term business goals. Technical debt occurs when software development teams undergo constant pressure to release applications swiftly, on a tight schedule. Technical debt substantially affects the functionality, the security, and the business sustainability of an IT system and thus represents a key challenge in technology-driven organizations. In this talk, I will focus on a recent study in which we present a complementary but distinct approach to managing TD in the form of a digital nudge. We designed a digital nudge specifically for managing technical debt at Credit Suisse, a global financial services company. The goal of the digital nudge was to help to increase the awareness and understanding of the issue in software development teams and to motivate them to reduce technical debt in their IT applications. The digital nudge used various elements triggering developers' heuristic decision routes. In a field test over a one-year period, the nudge effectively raised awareness and understanding of technical debt in software development teams, with IT management, and business stakeholders, and helped the teams reduce overall technical debt in their IT applications. The case demonstrates that digital nudges are viable means for guiding collective decisions in complex decision environments like that of technical debt management.

SHORT BIO

Annamina Rieder is Postdoctoral Researcher at the Institute of Information Management of the University of St.Gallen. She received her Ph.D. in Management from the University of St.Gallen. Her research interest lies in user behavior and how behaviors can be shaped by technology, for example, using nudges. She is particularly passionate about research that has a societal and humanistic impact, for example, in the domains of digital health, social media, and green transformation. Her work has appeared, amongst others, in the European Journal of Information Systems, Electronic Markets, and the International Journal of Human-Computer Interaction. To balance the brainwork, she likes to climb frozen waterfalls and fourthousanders in the Alps.

Host: Prof. Dr. Falk Uebernickel