Is Enterprise Architecture still relevant in the Digital Age?

Carsten Brockmann ¹, Eldar Sultanow² and Christian Czarnecki³

For this year's workshop on Enterpirse Architecture (EA) in Research and Practice we have received nine submissions of which five have passed the rigorous peer-review. The acceptance quote of 56% assures that only advancements in the field are included in our workshop.

Contributions cover multiple areas of expertise. The first paper describes the usage of machine learning capabilities to visualize data center architectures. The second paper discusses a case study about architecture content management in a large enterprise. The third paper proposes a technique for an architectural-wide optimization of departmental budgets. The fourth paper discusses implications of software robots on EA. The fifth paper describes how a Digital Workplace can be rolled out.

New approachs, such as software robots, propose further automation without changes of existing systems and architectures. In this context, a conceptual design of the major elements of an enteprise (e.g., strategy, processes, applications) might be seen as a burocratic obstacle. This impression might be underlined by some EA approachs that propose heavyweight methods following the waterfall model. Is EA still relevant in the digital age?

Throughout the contributions we observe the impact of new technologies on methods, structures, and architectures. Technologies, such as machine learning, require a continuous adjustment of an enterprise to changed conditions. The complexity of its structures and architectures increase, and change cycles shorten. The alignment between strategic and operational as well as business and technical aspects becomes a vital challenge for today's enterprises. The so-called Digital Transformation requires methods and structures that allow an agile development and a continuous adjustment of EA. Heavyweight methods are replaced by agile approachs. Furthermore, we observe an increased automation of the EA management itself. For example, machine learning capabilities support the management of complex and fast-changing architectures, and linear programming is used to automate budget decisions.

Overall, the workshop presents practical cases and research papers indicating the relevance of EA for today's enterprises. In this context, EA should be rather understood as an agile method supporting an enterprise-wide alignment between strategy, structure, and technoglogy, which is a vital challenge in the digital age.

¹ Deloitte Consulting GmbH, Kurfürstendamm 23, 10719 Berlin, cbrockmann@deloitte.de

² Institut für Wirtschaftsinformatik und Digitale Gesellschaft, August-Bebel-Straße 89, 14482 Potsdam, esultanow@lswi.de

³ Hochschule Hamm-Lippstadt, Marker Allee 76–78, 59063 Hamm, christian.czarnecki@hshl.de