

Introduction to the Minitrack on Enterprise Architecture and Business Processes Analysis

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Enterprise Architecting (EA) is the process of developing enterprise Information Technology architecture. An EA focuses on a holistic and integrated view of the why, where, and who uses IT systems and how and what they are used for within an organization. An enterprise architect develops the strategy and enables the decisions for designing, developing, and deploying IT systems to support the business as well as to assess, select, and integrate the technology into the organization's infrastructure.

Session 1

The first session starts out with the paper: *Business Capability Maps: Current Practices and Use Cases for Enterprise Architecture Management*, this paper provides a state-of-the-art report on the usage of business capability maps in enterprise architecture management. The paper conducted expert interviews with to reveal the benefits and challenges of capability-based enterprise architecture management and evaluated 14 use cases on the feasibility and benefit of using business capability maps in practice. The results reveal increasing interest and acceptance of the approach in practice and among support organizations

The second paper is *How to decompress the Pressure - The moderating Effect of IT Flexibility on the negative Impact of Governmental Pressure on Business Agility*. Since governments frequently introduce new regulatory terms especially in the finance sector, regulation is a changing phenomenon itself, which forces the banks to keep adjusting and changing their systems constantly. To manage these challenges, successful businesses need to have a flexible IT architecture in place. Based on the analysis of 119 survey results, we found that business agility is indeed lower for higher regulatory pressure and that this effect is mitigated by a flexible IT.

The third paper, *A Primer on NoSQL Databases for Enterprise Architects: The CAP*

Theorem and Transparent Data Access with MongoDB and Cassandra. This paper presents the two leading systems, along with the underlying principle of the CAP Theorem, in the context of creating transparent data access tiers capable of supporting flexible enterprise architectures.

Session 2

The first paper in the second session, *A Modelling Technique for Enterprise Agility* extends existing enterprise modelling approaches with new modelling constructs for representing features of change. These modelling constructs are integrated into a modelling language or metamodel using model driven approaches. To demonstrate utility, the paper applies this meta-model to represent a real world case study and discuss some lessons learned in this process.

The next paper, *Connected Enterprise Meets Connected Customer - A Design Approach*, analyzes the characteristics of the connected customer, and presents guidelines for enterprises to address customer needs adequately and manage their operations in the Internet of Everything. Building upon established enterprise architecture frameworks, The paper applies a Design Science Research procedure to derive four practical recommendations.

The third paper is: *A reference model-driven Architecture linking Business Processes and Services*. This paper presents a reference model driven architecture linking BPs to services, automating the generation of Service-Oriented Architectures (SOA) from BPs architectures. The approach applies both to collaborative and orchestration BPs.