Business and Enterprise Architecture: Processes, Approaches and Challenges

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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: A Framework for Exploring Digital Business Ecosystems, which presents a framework for exploring digital business ecosystems developed from Zachman’s enterprise architecture.

The second paper Enterprise Architecture Cybernetics and the Edge of Chaos: Sustaining Enterprises as Complex Systems in Complex Business Environments, proposes and details a model of system evolution, and shows its derivation from the fields of Enterprise Architecture, cybernetics and systems theory.

The third paper, Alignment of Business and IT Architectures in the German Federal Government: A Systematic Method to Identify Services from Business Processes, focuses on the alignment of the business and information systems architecture. Specifically, the paper presents a new method to identify services from business process models.

Session 2

The first paper in the second session, Enterprise Architecture Quality Attributes: A Case Study, identifies ten quality attributes for EA products and services, utilizing data collected from 14 EA practitioner interviews.

The next paper, Enterprise Architecture Documentation: Empirical Analysis of Information Sources for Automation presents findings of a survey conducted on key problems in EA documentation as well as the appropriateness of specific EA information sources for automation, with respect to provided data types and data quality.

The third paper, Team Knowledge in Enterprise Architecting, investigates the role of team knowledge in helping coordinate the architecting effort and achieve this alignment. The paper reports on four case studies with various degrees of EA success.

Session 3

The third session starts out with the paper: Reach and Range of Business Process Management – Findings in the Telecommunication and Chemical Industry. The paper proposes a framework for exploring development paths in BPM implementations. This framework is then exemplarily applied in two case studies in the telephone and chemical industries.

The second paper Transformative Influence of Business Processes on the Business Model: Classifying the State of the Practice in the Software Industry, clarifies the influence of business processes on the business model. The paper derives a classification framework for receiving new insights into the maturity of current KPI-systems and their strategic importance concerning business model changes.

The third paper, Approaches to E-business in the Light of Essential Business in Ports, examines approaches to e-business in the maritime sector in Egypt. The organizational strategic view, the evolution of e-business in terms of an analysis of business functions, and the consideration of some stage models of the evolution are explored.