Business Artifacts: A Data-centric Approach to Modeling Business Operations and Processes

Submitted by Ravi Prakash Giri (rgiri8)

The paper introduces a concept of Business Artifacts. The authors describe the Business Artifacts as combination of data and process. The authors described two types of artifacts model - `information model` and `lifecycle model`. The paper further describes the artifact-centric approach to modeling business operations and contrasts it with Entity-Relationship modeling in databases. It also highlights how artifact-centric approach facilitates stakeholder communication. Finally, the paper describes the three existing model (state-based) artifact meta model and the research challenges associated with the combination of data and process.

The paper is successful in presenting and motivating the concept of Business artifact. They have provided surveys research and its applications and also discussed how principles and techniques from database management research can further develop the artifact-centric paradigm. They have listed a no. of open research areas in the field of Business Artifacts and have provided guidelines to proceed. On contraty, the paper does not discusses in detail the concepts but have given only the high-level view to the users. For ex. It only discussed the high-level representation of the information and lifecycle models of the Deal artifact. Besides exploring the open research area, this paper doesn't have anything new or innovative as it surveys the existing papers.

Business Artifact has been an interesting area for the researchers since a decade. This research was started at IBM in 1990s. There are still plenty of open areas tentalizing the researchers such as **views**, **the constellation of design principles and integrity constraints** etc. Research into foundations underlying the artifact model is still at an early stage.