Despite the imperative to substantiate innovative research results expressed in reference models, little methodical guidance exists for evaluating reference models yet. We propose that IS design theories [WaWE92] can provide theoretical guidance for reference model evaluation since reference models can be formulated as a set of design principles that consist of testable propositions, kernel theories, and intended applications. We show how to facilitate the reconstruction process by applying the idea of pattern languages. Such decomposed reference models allow evaluating each design principle separately and thus formulating a more concise and elementary evaluation objective. We demonstrate the benefits of reconstructing reference models as design theories on the Service Data Management reference model that has been developed by the authors.

Intellectual Contribution: Discipline-based Research