

Alignment of the REA and the EDMC Financial Ontologies

Michael Bennett, Enterprise Data Management Council
William McCarthy, Michigan State University

The REA accounting model as first published in 1982 has gradually evolved into a more complete business process ontology in 2012 as seen in its expansion both horizontally into policy and planning layers and vertically in its expansion to value chains and workflow levels.

The scope of enterprise modeling components covered by REA has been augmented significantly since its inception, but one area that remains underdeveloped is its modeling of financing cycle components, that is, the debt and equity instruments used in modern financial markets for both initial and continued corporate financing. Significantly, there is at present an ongoing initiative by the Enterprise Data Management Council to construct semantic models of these very same instruments.

This presentation will overview the preliminary results of our first integration efforts. As seen in the accompanying figure where the EDMC components are presented in color and the REA components are presented in black and white, the key alignment points established initially revolve around the semantic components of agents (parties and persons), resources, and contracts. These alignment points will be developed and expanded further, but a key focal point of our integration will be an entirely new data cluster centered on the REA notion of economic claims as imbalances in duality relationships. Claims were explicated theoretically in the original REA accounting paper, but their detailed pattern components are still open to differences in different modeling approaches. Our presentation will discuss the significant ramifications of modeling debt and equity enterprise components with both the REA and the EDMC frameworks in mind.

