



In artificial intelligence and database theory, an **ontology** is a conceptual and computable specification of the categories within a particular domain. Ontologies also show how their categories extend and inter-relate to one another, and they are often best pictured as knowledge graphs that enable computerized interoperability and automated reasoning within and among enterprise software systems.

In this new American Accounting Association research monograph, William McCarthy, Guido Geerts, and Graham Gal apply ontological analysis to the field of business transaction processing, especially in light of the conceptual foundation first posed for accounting systems as the REA (resource-event-agent) model in a 1982 *Accounting Review* paper. Their fundamental analysis here extends REA in terms

of both the granularity plane (workflows, value chains, value networks) and the temporal plane (commitments, contracts, controls), and it questions the pervasive presence of ledger account structures in enterprise business practice. The authors finish by proposing a more general view of economic exchanges in independent collaboration spaces like blockchains. They also outline areas where future design science extensions to REA might increase the ontological adequacy of accounting systems.

To order a copies of this monograph, contact info@aaahq.org.