

Toward An Ontology of Value

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Value, the process of its creation, as well as its perception and determination by a beneficiary, are the central elements and the core purpose of human economic exchange. Though central to the service science lexicon, our understanding of value, its exchange, measurement, and underlying definition remains surprisingly ambiguous. The emergence of service-dominant (SD) logic advanced the perception of value in service research by introducing concepts like value-in-use or value-in-exchange. However, despite these advances, we cannot assume that the value lexicon of SD logic represent the managerial understanding of value that may be applicable beyond academic realms.

In this work, we explore the concept of value from a linguistic/ontological perspective. Specifically, we utilize an automated computational approach to extract concepts that are semantically related to value from the web, in order to provide the, to the best of our knowledge, very first empirically derived cross-domain ontology of value. Ontologies are formal representation of knowledge that consist of a set of concepts within a domain of interest (e.g. value), thereby describes the domain of interest itself, and improves reasoning about the entities within that domain.

The ontology engineering approach that we apply here helped us to identify concepts that are semantically related to “value”, and thereby to delineate the wider understanding of value from a practitioner perspective. Our resulting ontology is a multifaceted network structure with individually related concepts clustered around “value”. More importantly, the enriched network provides weighted directional relationships that facilitate further in-depth analysis. Specifically, we investigated the similarity and differences of the understanding of “value” from domain expert (academic researchers in this space) and non-experts (practitioners in industry).

Identifying the similarities as well as discrepancies between the ontological structure surrounding the value concept and the current academic discourse in service research enables us to provide a number of significant contributions: we are the first to apply a computational ontology engineering approach to service research. Second, this approach enables us to describe how the ontological roots, and therefore managerial perceptions of value, differ from our current academic understanding of the concept. Highlighting these discrepancies is important because it enables us to, third, delineate future research opportunities. Finally, both academic and practitioner perspectives can be bridged in the same ontology, and this provides clear “routes” for academic-industry knowledge exchange in the area.