

Creating Strategic Business Value from Big Data Analytics: A Research Framework

ABSTRACT: Despite the publicity regarding big data and analytics (BDA), the success rate of these projects and strategic value created from them are unclear. Most literature on BDA focuses on how it can be used to enhance tactical organizational capabilities, but very few studies examine its impact on organizational value. Further, we see limited framing of how BDA can create strategic value for the organization. After all, the ultimate success of any BDA project lies in realizing strategic business value, which gives firms a competitive advantage. In this study, we describe the value proposition of BDA by delineating its components. We offer a framing of BDA value by extending existing frameworks of information technology value, then illustrate the framework through BDA applications in practice. The framework is then discussed in terms of its ability to study constructs and relationships that focus on BDA value creation and realization. We also present a problem oriented view of the framework—where problems in BDA components can give rise to targeted research questions and areas for future study. The framing in this study could help develop a significant research agenda for BDA that can better target research and practice based on effective use of data resources.