

Comparing Business Value Modeling Methods: A Family of Experiments

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Resumen (Abstract). A value model is used to describe how an organization creates, delivers, and captures its business value. Value-driven development methods use the notion of “economic value exchange” to define more efficient business strategies and align Information Systems (IS) with organizational goals. Current value-driven methods are complex and there is insufficient empirical evidence regarding which of the existing methods are more effective. *Objective:* This paper compares two different value-driven methods to provide empirical evidence regarding both their efficacy when modeling business value and their likelihood of acceptance in practice. *Method:* This goal was addressed by performing a family of three controlled experiments with a group of novice software engineers and business analysts to compare the Dynamic Value Description (DVD) method with the e3value method, with respect to their effectiveness, efficiency, perceived ease of use, perceived usefulness and intention to use. The experiment was initially performed in Spain and then replicated in Portugal and Brazil with other participants with different backgrounds. A meta-analysis was performed to aggregate the empirical findings obtained in each experiment. *Results:* The results indicate that the DVD method is superior with respect to all the variables analyzed. *Conclusion:* The DVD method is a promising and alternative method to specify business value when compared to the well-known e3value method for the analyzed variables.