

Information Technology and Complements in Value Creation: A Meta-analytic Replication

Pankaj Nagpal*

*Department of Information Systems and Business Analytics
Neil Griffin College of Business, Arkansas State University
Arkansas, USA*

Kalle Lyytinen

*Department of Design
Weatherhead School of Management
Case Western Reserve University, Ohio, USA*

Susan Helper

*Department of Economics
Weatherhead School of Management
Case Western Reserve University, Ohio, USA*

Abstract: We execute four theoretically motivated replications of seminal papers on business value of information technology (IT). We classify firm level IT value research and select alternative studies to understand the core logics of current research and its sensitivity to used measures. Simultaneous replication of several models enables generalization across a variety of constructs, and abstracts their findings as is commonly done through meta-analyses. An access to a common dataset and availability of well-matched analogues allow execution of these replications. Our results show robustness of some constructs across studies in predicting aspects of IT value. The models also offer theoretical insights of plausible interactions between the technology artifact, organizational characteristics and productivity outcomes. Extensions to current theories are suggested which would enable better explanation and prediction. The replications have clear implications for rigor versus relevance debate, in that these results address rigor as well as relevance.

Keywords: Information Technology, Productivity, Replication, Complements, Meta Analyses, Firm Value, Relevance, Rigor

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* Corresponding author. Email: pnagpal@astate.edu

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