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Impacts of Firm Performance on Business Intelligence and Analytics Engagement Strategies

Completed Research Paper

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Abstract

IT innovation is key to firms' competitive advantage, even survival. We investigated the diffusion of Business Intelligence and Analytics (BI&A) from a performance feedback perspective, a novel perspective on IT innovation diffusion. Drawing on the behavioral theory of the firm (BTOF) and institutionalization literature, we examined how relative performance shortfalls (performance shortfalls relative to their aspirations in terms of shortfalls from their historical performance and shortfalls with respect to comparison firms) affect firms' BI&A engagement strategies over time. We also examined potential decoupling of firms' informational (talk about) and material (actual use) engagement with BI&A across early and late diffusion stages. Using a longitudinal sample of 3,311 firm-year observations between 2010 and 2015, we found social aspiration gaps do not exert significantly higher positive impacts on firms' BI&A engagement than do historical aspirations. Contrary to our prediction that informational engagement with BI&A responds more to social aspiration gaps than material engagement, we found that material engagement with BI&A was influenced more by these gaps than was informational engagement. Last, we observed these relationships to be stronger at early BI&A than at later BI&A diffusion stages.

Keywords: IT innovation diffusion, Business Intelligence and Analytics, BTOF.