Causal Inference in Strategic Performance Measurement Systems and Its Effect on Performance Evaluations: A Laboratory Experiment

Emergent Research Forum

Min Hui Liang
Monash Business School
Monash University, Australia
mhlia1@student.monash.edu

Kristian Rotaru*
Monash Business School
Monash University, Australia
kristian.rotaru@monash.edu

Dennis Fehrenbacher
Monash Business School
Monash University, Australia
dennis.fehrenbacher@monash.edu

Axel Schulz
Monash Business School
Monash University, Australia
axel.schulz@monash.edu

Abstract

This study aims to test the effect of explicit representation of causal relationships in strategy map component of balanced scorecards BSC on performance evaluations outcomes. To address this aim, a 2 × 2 factorial design laboratory experiment was conducted, where: (1) the inclusion of graphical information supporting causal relationships between objectives in strategy maps, and (2) performance outcome patterns (positive vs. negative) across performance measurement perspectives of BCSs were manipulated. The findings show that the observed performance evaluation scores are driven more significantly by the performance outcomes in the outer perspectives of BSCs (financial and learning & growth) than by inner perspectives (internal business processes and customer). It was also confirmed that the difference in performance evaluation scores between two identically structured BSCs with positive versus negative performance outcomes in the outer perspectives is relatively larger in the presence of the strategy map versus when the ordered strategic objective list is presented.

Keywords: balanced scorecard, strategy map, causal inference, performance evaluation

* Corresponding author