

With N. Roberts, P. S. Galluch, & M. Dinger. (2012)"Absorptive Capacity and Information Systems Research: Review, Synthesis, and Directions for Future Research," *MIS Quarterly*, Vol. 36(2), 625-648.

This study examines the effect of the resolution of uncertainty on real options exercise decisions with respect to three e-commerce investment options: scale-up, stage and joint investment, and the relationship between exercise of these options and firm performance. The results of a study of 172 public e-commerce investment announcements show that resolution of external (exogenous) and internal (endogenous) uncertainty has a significant effect on option exercise decisions. However, the results also imply that simply waiting without investment in active learning does not create significant value from real options. The key differentiator is how a firm resolves endogenous uncertainty as this endows it with the ability to successfully undertake the information technology investment and exploit the economic opportunity implied by the resolution of exogenous uncertainty. Furthermore, our results imply that different options should be used to manage situations involving certainty of loss on one hand and severity of loss on the other hand. Thus, it is important for firms to make the right choices when using options-based investing to manage risk. We suggest that, perhaps, managers need to maintain a portfolio of options to manage the two dimensions of risk simultaneously.