Radio Frequency Identification (RFID) Adoption in Supply Chain Activities: Facilitators and Inhibitors

Xiaoran Wu
University of North Carolina at Charlotte, xwu5@uncc.edu

Chandrasekar Subramaniam
University of North Carolina at Charlotte, csubrama@uncc.edu

Follow this and additional works at: http://aisel.aisnet.org/amcis2011_submissions

Recommended Citation
Radio Frequency Identification (RFID) Adoption in Supply Chain Activities: Facilitators and Inhibitors

Xiaoran Wu
University of North Carolina at Charlotte
xwu5@uncc.edu

Chandrasekar Subramaniam
University of North Carolina at Charlotte
csubrama@uncc.edu

ABSTRACT
RFID is an increasingly important technology whose adoption is not well understood from a supply chain perspective. Drawing from the Technology-Organization-Environment framework, we have developed a theoretical model for RFID adoption, incorporating critical factors perceived to influence RFID adoption. Survey data was collected from industry professionals worldwide for the empirical study. The findings suggest that (1) organizations facing greater competitive pressure and trading partner readiness are more likely to adopt RFID and (2) perceived complexity of RFID is a significant inhibitor for the adoption of this technology. The implications of our results are discussed.

Keywords:
RFID, adoption, TOE, supply chain