ABSTRACT

E-procurement systems extend benefits such as cost cutting, real time bidding and response, transparency of the process, cycle time reduction, and increased geographical outreach. The services such as spend analysis, sourcing, contract management, supplier management offered under e-procurement can be implemented in-house or outsourced to third party service providers. Expertise and diversified skillset available with third party service providers for automating the procurement activities and smooth transition during technology upgradation is compelling organizations to outsource their procurement processes to these parties fully or partially. Various adoption and post-adoption issues associated with third party e-procurement services are the major motivation for this research work. The thesis focuses on five such issues. We contribute to the body of the literature firstly, by providing methodologies for service provider selection, risk assessment of outsourcing, and quantifying the impact on sustainable procurement practices. While the first two tools address two important issues during adoption phase, the last one is for post-adoption phase. Multi-criteria decision making approaches with interrelated criteria in these models use Analytic Network Process and its variants to build the basic model with supporting tools such as SWOT analysis and Liberator Score. All the models are applied to live industrial cases. Secondly, we extend and apply Technology Acceptance Model (TAM) to examine the organizational buyers' acceptance and continued usage intentions of third party e-procurement services. Modification to TAM has been made keeping in mind the mandatory usage environment of e-procurement system. Partial least square based structural equation modeling has been used for both the studies. We test our hypotheses with survey data collected from 132 organizational buyers selected from "Directory of Top 1000 Corporate Companies of India 2013-2014" published by Delhi information bureau utilizing e-procurement services. While the acceptance study reveals the importance of managerial interventions and organizational buyers' cognitive belief on behavioral intention, the continued intention study reveals the importance of information flow quality, logistics fulfillment quality, and cognitive belief of organizational buyers' continuance of e-procurement system.

Keywords: E-procurement, third party services, mandatory acceptance environment, service provider selection, risk assessment, acceptance intention, continuance intention, sustainable procurement