

## DOCTORAL THESIS

### **E-business assimilation and organizational dynamic capability: antecedents and consequences**

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**E-Business Assimilation and Organizational Dynamic Capability:  
Antecedents and Consequences**

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## ABSTRACT

With the popularity of the Internet and related technologies, dynamics in customer demand and market competition become even fierce. In such situation, the role of e-business has evolved from conventional cost reduction and efficiency improvement to enhancement of organizational flexibility and adaptation to changing environment. However, a comprehensive literature review reveals that there is a lack of study of the impacts of e-business on firm dynamic capability and performance. Viewing e-business as a complex organizational innovation, this study aims to understand e-business assimilation and the mechanism underlying how enterprises leverage e-business to create value in a changing environment. In particular, three related research questions are examined: How to conceptualize and operationalize e-business assimilation? What factors impact e-business assimilation? And how e-business assimilation contributes to organizational dynamic capability and firm performance?

Drawing upon previous studies and theoretical foundations, an integrated research model is developed to address antecedents and consequences of e-business assimilation. Based on Technology-Organizational-Environmental framework, top management support, IT readiness, and competition intensity are proposed to influence both the breadth and depth of e-business assimilation. Dynamic capability is proposed to mediate the effect of e-business assimilation on firm operational effectiveness and competitive advantage. Hypotheses are proposed to describe relationships among antecedents, e-business assimilation, dynamic capability and firm performance constructs.

A measurement scale is developed by adopting from prior empirical studies and revised based on feedback from pilot study. By using survey data collected from Chinese companies, the proposed hypotheses and research model are evaluated.

The properties of measurement scale are evaluated by conducting factor analysis and hypotheses are estimated by using structural equation modeling (SEM) method. Partial least square (PLS) software package is used for data analysis. The mediating effect of dynamic capability between e-business assimilation and firm performance constructs is examined by using a model comparison approach.

Most proposed hypotheses are found significant except the effects of competition intensity on e-business assimilation. The results show that top management support and IT readiness significantly impact e-business breadth and depth, which are found significantly influence dynamic capability and indirectly influence operational effectiveness and competitive advantage.

In an innovation assimilation perspective, this study contributes to the e-business literature by focusing on e-business assimilation which is neglected by prior studies. This study also originally applies dynamic capability approach to e-business value creation and examines the impacts of e-business on firms in a changing environment, offering a theoretical extension of the mechanism underlying e-business value creation. Generally, this empirical research provides valuable groundwork for further studies on e-business operations.

Keywords: E-Business Assimilation, Dynamic Capability, E-Business Value Creation, Firm Performance

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