

(Revised 07/09)

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NSFC/RGC Joint Research Scheme
Joint Completion Report

*(Please attach a copy of the completion report submitted to the NSFC
by the Mainland researcher)*

Part A: The Project and Investigator(s)

1. Project Title

The effects of social capital on organizational performance in the context of
e-business: A longitudinal research

2. Investigator(s) and Academic Department/Units Involved

	Hong Kong Team	Mainland Team
Name of Principal Investigator <i>(with title)</i>	Dr Wei Kwok Kee	Dr Lu Yao Bin
Post	Professor (Chair)	Professor
Unit / Department / Institution	Dept of Information Systems, City Uni of Hong Kong	School of Management HuaZhong Uni of Tech. & Sci.
Co-investigator(s) <i>(with title)</i>	Prof. Hefu LIU, USTC, China Prof. Weiling KE, Clarkson University, USA	Prof. Ling ZHAO, HUST, China

3. Project Duration

	Original	Revised	Date of RGC/ Institution Approval <i>(must be quoted)</i>
Project Start date	1 Mar 2011		
Project Completion date	28 Feb 2014		
Duration <i>(in month)</i>	36		

Part B: The Completion Report

5. Project Objectives

5.1 Objectives as per original application

- (1) to explore which salient factors rooted in structural, relational and cognitive capital are critical for organizational performance in the context of e-business
- (2) to examine how are structural, relational and cognitive capital related to performance, and how differently do they affect substantive and symbolic performance in the context of e-business
- (3) to understand how structural, relational and cognitive capital interactively impact organizational performance

5.2 Revised Objectives

Date of approval from the RGC: Nil

Reasons for the change: Not Applicable

6. Research Outcome

1. We have investigated the impact of two different dimensions of e-business in the form of supply chain integration on two aspects of firm performance in the emerging economy of China. In addition, we also studied the moderating effects of market orientation on the relationship between supply chain integration and firm. (A journal paper was published by *International Journal of Operations and Production Management* that reporting our research findings).
2. Based on the theory of market orientation and the institution-based perspective, we investigate the effect of market orientation on supply chain integration (SCI) in e-business and examine the moderating role of ownership type in the relationships between market orientation and SCI in China. The results of a survey of 229 firms suggest that the dimensions of market orientation have different effects on the supply and the demand process integration in e-business. In addition, ownership type moderates the relationships between market orientation and SCI. (A journal paper based on our research findings was published by *Journal of Global Information Management*).
3. Electronic supply chain management, a form of E-business, has become a popular Web-based seamless supply chain process. We examine the impact of three power sources –non-mediated, coercive-mediated, and reward-mediated power-on the three dimensions of trust–competence, goodwill, and contractual-and their influence in turn on a firm’s electronic supply chain management adoption intention in China. Our results show that non-mediated power is positively associated with competence and goodwill trust but negatively related to contractual trust. Coercive-mediated power only negatively affects competence and goodwill trust. Reward-mediated power does not affect any type of trust significantly. The research contributes knowledge about the power–trust relationship in China from a E-business perspective and presents a multidimensional explanation of the relationships between power, trust, and intention to adopt SCM. (A journal paper based on our research findings was published by *International Journal Production Research*).
4. We find performance impacts of different IT capability are mediated by different SCI. Specifically, internal integration mediates the impact of internally-focused IT capability and external integration mediates the impact of externally-focused IT capability, while both internal and external integration mediate the impact of IT business spanning capability. We also find IT business spanning capability positively moderates the impact of internally-focused IT capability on internal integration. Theoretical contributions and implications of this research are also discussed. . (A number of conference papers were (to be) presented at PACIS2013, ICIS 2013 and 2014).
5. Social capital is increasingly regarded as a crucial predictor of performance improvement. However, the Internet is challenging the previous understanding of social capital. We conduct a research to empirically test the social capital theory in the context of e-business. Specifically, we investigate the influence of social capital on firm substantial and symbolic performance, and compare the influence of social capital on substantial performance to on symbolic performance in the context of e-business. The results suggest that structural and relational capital could influence substantial and symbolic performance significantly. However, we find that cognitive capital could not impact substantive performance significantly, but can influence symbolic performance significantly. (A conference paper was presented at PACIS conference 2014. We are currently working on a paper to be submitted at a later point in time for journal publication consideration).
6. Building on multiple theoretical perspectives, we examined how e-business capability moderates the association of different dimensions of market orientation (i.e., customer, competitor, and inter-functional coordination orientation) and firm performance (i.e., financial, operational, and customer service performance). Our findings reveal that both customer orientation and inter-functional coordination can positively impact firm performance, while competitor orientation cannot affect firm performance significantly. Further, we found the complicated and interesting moderating effects of e-business capability on the multiple relationships between market orientation and firm performance. Specifically, e-business capability can strengthen the impact of customer orientation on financial and operational performance, but it weakens the relationship between competitor orientation and financial performance and the relationship between inter-functional coordination and customer service. Theoretical contributions and managerial implications of the study are discussed. (A conference paper was presented at PACIS conference 2012).

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Potential for further development of the research and the proposed course of action)

We focus our study in the context of emerging economy of China, which has unique cultural, economic, and institutional features. As such, researchers and practitioners should be cautious when generalizing the findings of the current study to other contexts. Further research could be conducted in developed economy which has a different type of culture, economic and institutional features.

7. The Layman's Summary

Our research make the following contributions:

- (1) Improving our conceptual and operational understanding of social capital and other related concepts in the context of e-business
- (2) Providing theory-based managerial guidelines for developing social capital and other related concepts (such as Operational coordination, Information sharing, market orientation, power, trust and etc.) in the context of e-business to maximize organizational benefits. Given numerous global firms are operating in China.
- (3) We caution managers to note the different roles of competence, goodwill, and contractual trust in promoting e-business (specifically, electronic supply chain management) adoption.
- (4) We suggest that managers should notice that the different social capital would play various role in improving substantial and symbolic performance. Meanwhile, they should pay attention to the interrelationship between organizational structural, cognitive and relational capital.

Part C: Research Output

8. Peer-reviewed journal publication(s) arising directly from this research project
(Please attach a copy of each publication and/or the letter of acceptance if not yet submitted in the previous progress report(s). All listed publications must acknowledge RGC's funding support by quoting the specific grant reference.)

The Latest Status of Publications				Author(s) <i>(bold the authors belonging to the project teams and denote the corresponding author with an asterisk*)</i>	Title and Journal/Book <i>(with the volume, pages and other necessary publishing details specified)</i>	Submitted to RGC <i>(indicate the year ending of the relevant progress report)</i>	Attached to this report <i>(Yes or No)</i>	Acknowledged the support of this Joint Research Scheme <i>(Yes or No)</i>
Year of publication	Year of Acceptance <i>(For paper accepted but not yet published)</i>	Under Review	Under Preparation <i>(optional)</i>					
2013	2012	NA	NA	Hefu Liu Weiling Ke, KK Wei, Zhongsheng Hua	Effects of Supply Chain Integration and Market Orientation on Firm Performance: Evidence from China, <i>International Journal of Operations and Production Management</i> , 33(3), 322-346	Yes, 2012	Yes	Yes

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2013	2012	NA	NA	Hefu Liu, Weiling Ke, KK Wei, & Zhongsheng Hua	The impact of IT capabilities on firm performance: The mediating roles of absorptive capacity and supply chain agility, <i>Decision Support Systems</i> , 54(3), 1452-1462.	Attached	Yes	Yes
2015	2014	NA	NA	Hefu Liu Weiling Ke, KK Wei, Zhongsheng Hua	Market Orientation, Electronic Supply Chain Integration, and Firm Performance in China: The Moderating Role of Ownership Types, <i>Journal of Global Information Management</i> (forthcoming)	Attached	Yes	Yes
2015	2014	NA	NA	Hefu Liu Weiling Ke, KK Wei, Zhongsheng Hua	Influence of power and trust on the intention to adopt Internet-enabled supply chain management systems in China, <i>International Journal Production Research</i>	Attached	Yes	Yes
NA	NA	No	Yes (we are still in the process of upgrading our 2014 PACIS paper for Journal publication consideration)	Hefu Liu, Weiling Ke, Kwok Kee Wei and Yaobin Lu	The Effects of Social Capital on Firm Substantial and Symbolic Performance in E-Business	Not ready	NA	NA

9. Recognized International conference(s) in which paper(s) related to this research project was/were delivered (Please attach a copy of each delivered paper)

Month/Year/Place	Title	Conference Name	Submitted to RGC	Attached to this report	Acknowledged the support of this Joint Research Scheme
07/2012	The Moderating Effect of e-business Capability in the Relationship between Market Orientation and Firm Performance	Pan Pacific Conference of Information Systems	2012	Yes	Yes
07/2013	The interaction effects between supply chain integration and IT capabilities on firm performance	Pan Pacific Conference of Information Systems	Nil	Yes	Yes
12/2013	Supply chain exploitation, exploration, and firm performance: Effects of top management and information technology capabilities	International Conference of Information Systems	Nil	Yes	Yes
06/2014	The Effects of Social Capital on Firm Substantial and Symbolic Performance in the Context of E-Business	Pan Pacific Conference of Information Systems	Nil	Yes	Yes
12/2014	Mediating Effects of Supply Chain Integration: From IT Capability to Firm Performance	International Conference of Information Systems	Nil	Yes	Yes

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10. Student(s) trained *(Please attach a copy of the title page of the thesis.)*

Name	Degree registered for	Date of registration	Date of thesis submission/ graduation
Wei Shaobo	PhD	01/09/2013	30/06/2016

11. Other impact *(e.g. award of patents or prizes, collaboration with other research institutions, technology transfer, etc.)*

Nil