THE LEARNING STRATEGIES AND CAPACITIES OF SMEs:  
AN EXPLORATORY STUDY IN CHINA

By

Rowland Kwok Ying LI
LLB (Hons), MBA, MSc (Hons)

A dissertation submitted in fulfilment of the requirements for the degree
Of
DOCTOR OF BUSINESS ADMINISTRATION

Newcastle Business School
Faculty of Business and Law
THE UNIVERSITY OF NEWCASTLE

December 2011
STATEMENT OF ORIGINALITY

I hereby declare that this dissertation contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my dissertation, when deposited in the University library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

Signed: ______________________

Name of the student:  Rowland Kwok Ying Li
Acknowledgments

I wish to wholeheartedly express a sincere ‘thank you’ to my supervisor Dr. Karen Yuan Wang, who gave of her precious time to coach me in preparing this thesis. Her advice, comments, and challenges helped me improve my research project significantly. Her academic expertise and strong China experiences assisted me greatly in conceptualizing the model, designing investigating instruments and developing theoretical arguments.

I would like to thank all the lecturers in the DBA program at the University of Newcastle: Professor John Burgess, Dr. Johanna Macneil, Dr. Tony Drew, Dr. Guilherme Pires, Dr. David Meachem, Dr. Marcus Rodrigs, Dr. Suzanne Ryan, Dr. Allen George, Dr. Gian Casimir, and Dr. Anton Kriz.

My sincere thanks go to Dr. Tsui-Auch, who inspired me to develop this research topic. I would also like to express my gratitude to Dr. Eric Fok and Ms. Margaret Ng for their kind assistance with my data collection. I especially want to thank Dr. Gerry Li, who gave me valuable comments that enriched my thesis.

I also want to thank the owners of the four interviewed SME firms for their precious time and friendly cooperation. Their strong support made the case study a success.

Finally, special thanks go to my family for all their patience they showed throughout the composition of this dissertation. Their understanding, support, and consideration helped me make it through this journey and furthered my own self-understanding.
# Table of Contents

Statement of Originality ................................................................. ii  
Acknowledgements ........................................................................ iii  
Table of Contents ........................................................................... iv  
List of Table .................................................................................. ix  
List of Figures ................................................................................ x  
List of Acronyms ........................................................................... xi  
Abstract ....................................................................................... xii  

Chapter 1  Introduction  
1.1  Introduction ................................................................. 1  
1.2  Aim of the Research ................................................... 2  
1.3  Research Focus and Purpose ....................................... 4  
  1.3.1.  Definition of Key Research Terms  ............. 6  
  1.3.2.  Research Questions ....................................... 7  
  1.3.3.  Conceptual Framework .................................... 9  
1.4  Implementation of the Research .................................... 10  
1.5  Significance of this Research ....................................... 11  
1.6  Outlines of the Dissertation ....................................... 13  
1.7  Conclusion ................................................................. 15  

Chapter 2  Literature Review  
2.1  Introduction ................................................................. 16  
2.2  Firm Learning ............................................................. 17  
2.3  SME Learning ............................................................. 21
2.3.1. Summary of Different Perspectives on SME Learning……23
2.4 SMEs Development in China …………..………………………….25
2.5 Chinese SME Learning………………………………………………30
2.6 Research Framework (issues and questions)…………………33
2.6.1. Research Questions………………………………………………37
2.7 Human Capital and SME Learning........................................38
2.7.1. Formal and Informal Learning in SMEs……….........................41
2.8 Social Capital and Tacit Knowledge Acquisition…………………46
2.9 Learning Capacities and SMEs’ Knowledge Acquisition……….51
2.9.1. IT System Learning Support of SMEs…………………………..51
2.9.2. SME Owner’s Attribute and Role of Learning………………..54
2.9.3. Financial Capability and SME Learning………………………58
2.10 Conclusion…………………………………………………………..61

Chapter 3  Research Methodology
3.1 Introduction………………………………………………………….63
3.2 Research Issues…………………………………………………….63
3.3 Types of Research…………………………………………………64
3.4 Paradigm Assumption…………………………………………….64
3.4.1. Ontology, Epistemology and Methodology………………….67
3.5 Methodology………………………………………………………..69
3.5.1. The Choice of Qualitative Research for this Study…………….71
3.5.2. Data Collection…………………………………………………74
3.5.3. Qualitative Interviewing Process……………………………..78
3.5.4. Data Analysis………………………………………………….80
3.6 Case Selection ................................................................. 81

3.6.1. Sampling Strategy ....................................................... 83
3.6.2. Research Sample Definition ........................................ 84

3.7 The Interview Process ...................................................... 85

3.7.1. In-depth Interviewing Technique .................................... 85
3.7.2. Demographic Data of the Interviews .............................. 87

3.8 Pilot Test ................................................................. 89

3.9 Reliability ............................................................... 89

3.10 Validity ................................................................. 91

3.11 The Quality of the Research .......................................... 93

3.12 Ethical Issues .......................................................... 96

3.13 Limitation of Data Collection ........................................ 96

3.14 Conclusion ............................................................... 97

Chapter 4 Findings and Analysis

4.1 Introduction ............................................................... 98

4.2 Case Introduction ......................................................... 98

4.3 Case Analysis ............................................................. 101

4.3.1. Firm A ............................................................... 101
4.3.2. Firm B ............................................................... 104
4.3.3. Firm C ............................................................... 105
4.3.4. Firm D ............................................................... 108

4.4 The Summary of Main Findings ..................................... 111
4.5 Findings Analysis

4.5.1 Human Capital Strategies and Knowledge Acquisition

4.5.1.1 Formal and Informal Learning

4.5.2 Social Capital Strategies and Firm Learning

4.5.3 IT System Support and Firm Learning

4.5.4 Owner’s Attribute and Role

4.5.5 Financial Capability

4.5.6 Additional Findings

4.6 Proposed Conceptual Model from the Study

4.7 Conclusion

Chapter 5 Discussion and Implication

5.1 Introduction

5.2 Discussion

5.3 Theoretical Implication

5.3.1 The Theoretical Framework of SME Learning in China

5.3.2 Human Capital Learning Strategies and Firm Learning

5.3.3 Social Capital Learning Strategies and Tacit Knowledge Learning

5.3.4 IT Learning Capacities and Explicit Knowledge Learning

5.3.5 Owners’ Learning Capacity and Role in Firm Learning

5.4 Managerial Implication

5.5 Limitation of the Research

5.6 Recommendation for Future Research

5.7 Conclusion
List of tables

Table 2.4.1 The Top Five SME Provinces
Table 2.4.2 Definitions of SMEs in China
Table 2.4.3 Definition of SMEs in European Union
Table 3.4.1 Summary of Paradigms
Table 3.4.2 Ontology, Epistemology, and Methodology Question
Table 3.5.1 Characteristics between Quantitative and Qualitative
Table 3.5.2 Qualitative Research Dissertation Content
Table 3.5.3 Differences among Various Qualitative Methods
Table 3.6.1 Ranking by SME Sectors
Table 3.6.2 Key Information on Sample Firms
Table 3.6.3 Number of Interviews Participants
Table 3.7.1 Profiles of the Interviewed Participants
Table 4.2.1 Demographic Description of Interviewed Firms
Table 4.2.2 Four Owner-managers Demographics
Table 4.4.1 Summary of Findings
Table 4.4.2 The Sales Revenue of Four Chinese SMEs
Table 4.5.1 Qualification and Experience of Employees
Table 4.5.2 Incentive Cases for Staff Learning
Table 4.5.3 Formal Learning of SMEs
Table 4.5.4 List of Industries-related Membership
Table 4.5.5 Numbers of IT and Computer Equipments
Table 4.5.6 Education and Working Experience of Owners
Table 4.5.7 Learning Activities of the Owners for 12 months
List of figures

Figure 1.3.1 Conceptual Framework ........................................9
Figure 1.6.1 Dissertation Outlines........................................14
Figure 2.6.1 Research Framework.................................36
Figure 4.3.1 Organisation Structure of Firm A..................102
Figure 4.3.2 Organisation Structure of Firm B.................105
Figure 4.3.3 Organisation Structure of Firm C...............106
Figure 4.3.4 Organisation Structure of Firm D...............109
Figure 4.6.1 Proposed Conceptual Frameworks Based Empirical Data...138
## List of Acronyms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau Statistics</td>
</tr>
<tr>
<td>CoP</td>
<td>Community of Practice</td>
</tr>
<tr>
<td>CASME</td>
<td>Chinese Association of Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>EACSME</td>
<td>European Association of Craft Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>ERP</td>
<td>Enterprises Resource Planning</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FL</td>
<td>Firm Learning</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GNP</td>
<td>Gross National Product</td>
</tr>
<tr>
<td>IA</td>
<td>Internal Audit</td>
</tr>
<tr>
<td>IACSME</td>
<td>International Association of Chinese Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>ICT</td>
<td>Information Communication Technology</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>KM</td>
<td>Knowledge Management</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>SOEs</td>
<td>State-owned Enterprises</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
</tbody>
</table>
Abstract

Small and medium-sized enterprises (SMEs) played a critical role in China’s transformation into a market economy, as thousands of state-owned enterprises closed down. Firm knowledge acquisition in Chinese SMEs has increasingly attracted scholarly attention, as it is a critical element of their business performance. However, none of the previous studies have examined how learning strategies and capacities influence Chinese SMEs’ tacit and explicit knowledge acquisition to improve their business performance. This study is designed to fill that gap by exploring SMEs’ knowledge acquisition from both human and social capital perspectives and investigating the impact of learning capacities on the learning process. Therefore, the study proposes a conceptual framework that includes human capital learning strategies (informal and formal learning), social capital learning strategies (business, social, and personal network ties), and learning capacities (IT system support, owners’ attributes and role, and financial capability). These factors have a significant impact on knowledge acquisition.

To examine the framework, qualitative in-depth and interview-driven research was conducted on four sample Chinese SMEs from the non-manufacturing sector. Sixteen interviews, including those with owner-managers and senior management, are the study’s data sources; they are supported by site observations and firms’ secondary data.

The conceptual framework of the present study contributes to the SME literature in emerging economies. The study confirms that knowledge acquisition, especially that of tacit knowledge, occurs mainly through informal learning (experience) and government,
business, and social network ties. Meanwhile, learning capacities have a moderating effect on the learning process in SMEs. The analysis of learning capacities offers valuable insight into why SMEs find it difficult to acquire tacit knowledge and to articulate and store the firm’s explicit knowledge. The proposed framework also makes practical contributions. It assists SME owners in managing their internal resources (human and financial) and external resources (social networks) to develop their competitive advantages and grow their businesses by acquiring knowledge.