Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
The Use of Third Party Logistics Services in China

A research report
presented in partial fulfillment of the requirements of the
degree of Master of Logistics and Supply China Management
at Massey University, Auckland, New Zealand

Jie Chen
2012
The aim of this study is to understand the current status of Chinese third party logistics (3PL) industry, and investigate the situation of 3PL services usage in China. An empirical research study is carried out to determine: the extent use of the third party logistics services in China, reasons for Chinese firms outsourcing logistics activities, reasons for Chinese firms not outsourcing logistics activities, the level of satisfaction of the company that outsource 3PL for their 3PL providers, selection criteria for choosing 3PL providers, organization impact of logistics outsourcing and future trend of Chinese logistics services.

The results of this study are gathered through an online survey questionnaire. The respondents are working in the Chinese firms with the management level position or above. The data is analyzed by SPSS, ANOVA and Chi-square test.

The present study has found that outsourcing 3PL services become very popular in China, more than half of Chinese firms outsource 3PL services. The use of 3PL services will be increasing in the future. Most user firms are satisfied with their providers’ performance. However, there is still high expectation for providers to improve. In general, Chinese outsourcing firms believe that outsourcing 3PL services would gain a number of benefits and impose positive impacts on their firms.
ACKNOWLEDGMENTS

I would like to thank many people who helped to accomplish this research report. Achievement of this study cannot be realized without your help and support.

Firstly, I would like to thank my supervisor, Professor Norman Marr for his academic supervision through the entire study. Thanks for his invaluable advices and professional guidance through the entire process. I am very appreciated that the efforts and time he had put in this study.

I would like to thank Alan Win, the lecturer of postgraduate of logistics and SCM study. Thank him for being patience to me and his encouragement.

I also would like to thank Bill Wang, the lecturer of logistics & SCM. Thanks for his professional guidance and advice on my survey questionnaire translation.

I am grateful to all participants in this study. Their contributions ensured the overall achievement of this research.

Finally, my sincere thanks go to my parents and my friends. Thanks for their patience and enormous support.
# TABLE OF CONTENT

ABSTRACT ................................................................................................................... ii
ACKNOWLEDGMENTS .............................................................................................. iii
TABLE OF CONTENT ................................................................................................ iv
LIST OF TABLES ....................................................................................................... vii
LIST OF FIGURES ................................................................................................... viii
CHAPTER ONE: INTRODUCTION ............................................................................ 1
  1.1 Introduction ....................................................................................................... 1
  1.2 Background ....................................................................................................... 1
  1.3 Logistics in China ............................................................................................. 3
  1.4 Research Problems ............................................................................................ 8
  1.5 Main Aim and Objectives ................................................................................. 9
  1.6 Thesis Outline ................................................................................................. 10
CHAPTER TWO: LITERATURE REVIEW .............................................................. 12
  2.1 Introduction ..................................................................................................... 12
  2.2 Definition of Supply Chain Management ....................................................... 12
  2.3 History and Definitions of Logistics ............................................................... 17
  2.4 Third Party Logistics ....................................................................................... 20
    2.4.1 Definitions of Third Party Logistics ............................................................. 20
    2.4.2 Third Party Logistics Partnership .................................................................. 23
  2.5 Extent of Use of the Third Party Logistics Services ....................................... 25
    2.5.1 Level of Commitment to the Usage of Third Party Logistics ................. 26
    2.5.2 Total Logistics Budget -3PL ........................................................................... 28
    2.5.3 Geographical Coverage Provided by Third Party Firms .......................... 30
    2.5.4 Third Party Services Utilized ......................................................................... 30
    2.5.5 The Length of Third Party Services. ............................................................. 33
  2.6 Reasons for Outsourcing Logistics Activities ................................................. 34
  2.7 Reasons for Not Outsourcing Logistics .......................................................... 39
  2.8 Selection Criteria of Choosing 3PL Providers ................................................. 41
    2.8.1 Logistics Performance Measurement ........................................................... 45
  2.9 Organizational Impacts of Using Logistics Outsourcing Services ................. 47
  2.10 Future trend of logistics services ................................................................. 49
  2.11 Summary ....................................................................................................... 50
CHAPTER THREE: METHODOLOGY .................................................................... 53
  3.1 Introduction ..................................................................................................... 53
  3.2 Research Objectives ........................................................................................ 53
  3.3 Research Philosophies: Positivism & Phenomenology .................................. 54
  3.4 Quantitative & Qualitative Research Method ................................................. 55
  3.5 Survey Type .................................................................................................... 57
    3.5.1 Questionnaire ..................................................................................................... 57
    3.5.2 Survey Questionnaire Design ......................................................................... 58
  3.6 Data Collection ............................................................................................... 62
LIST OF TABLES

Table 1.1 Regulatory Frameworks for Foreign Participation in Logistics Sectors .................. 5
Table 1.2 Pre- and Post- WTO Rules and Regulations ......................................................... 7
Table 2.1 Definitions of Supply Chain Management .............................................................. 13
Table 2.2. Definitions of the Discipline of Logistics ............................................................... 19
Table 2.3 Data of Previous Studies in Different Countries ..................................................... 27
Table 2.4 Geographical Coverage & Total Logistics Budget ................................................. 28
Table 2.5 Shippers Outsource a Wide Variety of Logistics Services in 2009 ......................... 32
Table 2.6 Length of Contracts & Length of Using 3PL Services ........................................... 33
Table 2.7 Top Five Reasons for Outsourcing Logistics Activities ....................................... 35
Table 2.8 Reasons for Outsourcing ....................................................................................... 38
Table 2.9 Reasons for Not Outsourcing ............................................................................... 39
Table 2.10 Criteria for Evaluating Performance .................................................................... 46
Table 2.11 Future Trend of Logistics Services ...................................................................... 50
Table 3.1 Features of Two Main Philosophies ...................................................................... 54
Table 4.1 Total Current Employees ..................................................................................... 68
Table 4.2 Main Business Category ...................................................................................... 69
Table 4.3 Annual Sales Revenues (¥ millions) in 2009 ......................................................... 71
Table 4.4 Total Companies Outsourcing/ Not Outsourcing .................................................... 72
Table 4.5 Chi-square Test: Reasons for Outsourcing & Total Number of Employees .......... 75
Table 4.6 More Logistics Expertise/Equipment & Total Employee Numbers ....................... 76
Table 4.7 Reducing Inventory & Total Employee Numbers .................................................... 76
Table 4.8 Chi-square Test: Reasons for Not Outsourcing & Total Employees ....................... 78
Table 4.9 Loss Logistics Control & Total Employee Numbers .............................................. 78
Table 4.10 Percentage of Total Logistics Budget Allocated to 3PL Providers ....................... 79
Table 4.11 Geographical Coverage ...................................................................................... 80
Table 4.12 Percentages of Third Party Logistics Services Used ............................................ 81
Table 4.13 The Satisfaction Level of Outsourced Third Party Logistics Services .................. 82
Table 4.14 Percentage of Total Number of 3PL Providers ..................................................... 83
Table 4.15 Number of 3PL Providers Used & Total Employees Number ............................. 84
Table 4.16 Number of 3PL Provider Used & Length of Using 3PL Services ......................... 85
Table 4.17 ANOVA: 3PL Services & Length of Service Used .............................................. 87
Table 4.18 Total Number of Employees & Length of Using 3PL Services ............................. 88
Table 4.19 Degree of Importance of Selection Criteria ........................................................ 90
Table 4.20 Degree of Organization Impacts .......................................................................... 93
Table 4.21 Percentage of Satisfaction Rate with Current Providers ..................................... 96
Table 4.22 Percentage of Future Usage of 3PL Services ..................................................... 97
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>A Model of Supply Chain Management</td>
<td>16</td>
</tr>
<tr>
<td>2.2</td>
<td>Relationships between Shipper and 3PL Provider</td>
<td>24</td>
</tr>
<tr>
<td>2.3</td>
<td>The Relationship between Three Parts</td>
<td>25</td>
</tr>
<tr>
<td>2.4</td>
<td>Total Logistics Expenditures -3PL</td>
<td>29</td>
</tr>
<tr>
<td>3.1</td>
<td>Research Process</td>
<td>66</td>
</tr>
<tr>
<td>4.1</td>
<td>Company Location</td>
<td>71</td>
</tr>
<tr>
<td>4.2</td>
<td>Main Reasons for Using 3PL Services</td>
<td>74</td>
</tr>
<tr>
<td>4.3</td>
<td>Main Reasons for Not Using 3PL Services</td>
<td>77</td>
</tr>
<tr>
<td>4.4</td>
<td>Length of Using 3PL Services</td>
<td>86</td>
</tr>
<tr>
<td>4.5</td>
<td>Duration of Contract</td>
<td>88</td>
</tr>
<tr>
<td>4.6</td>
<td>Degree of Importance Criteria when Evaluating Provider’s Performance</td>
<td>91</td>
</tr>
<tr>
<td>4.7</td>
<td>Main Reasons for Retraining</td>
<td>95</td>
</tr>
</tbody>
</table>