# SUPPLY CHAIN MANAGEMENT PRACTICES, SUPPLY CHAIN INTEGRATION AND SUPPLY CHAIN PERFORMANCE: A STUDY OF ELECTRONICS FIRMS IN MALAYSIA

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#### ABSTRACT

Organisation has begun to understand and recognise that it is vital to improve the effectiveness and efficiency of both, the organization and their supply chain simultaneously. However, only few manufacturing firms have gained significant benefits by effectively utilizing supply chain management practices to tightly integrate operations with their members of supply chain. Therefore, it is still vague on how supply chain management practices can be used to enhance and promote supply chain integration and to better the performance of the supply chain. Consequently, this study aims to investigate the relationship among three factors: supply chain management practices (SCMP), supply chain integration (SCI) and supply chain performance (SCP) of manufacturing firms in the electronics industry in Malaysia. It presents a theoretical model in which SCMP implementation can affect SCP either directly or indirectly, via SCI. This study is perhaps one of the few to address the effect of SCMP towards the overall performance of the SCP in consideration of the mediation effect of SCI. Data was collected from 113 electronics firms through the questionnaire survey method. Respondents were owners, senior managers and managers of firm in the electronic industry in Malaysia. This study develops regression analysis to test the relationship between SCMP, SCI and SCP. As a result, this empirical study indicates that all the three variables [supply chain management practices, supply chain integration and supply chain performance] seem to have a significant positive relationship. Finally, the study found supply chain integration to mediate the relationship between supply chain management practices and supply chain performance. These findings highlight the importance for companies to promote SCI and implement SCMP as an enabler. Policy and managerial implication is further discussed in this study.

#### **ABSTRAK**

Organisasi mulai menyedari bahawa tidaklah cukup untuk meningkatkan kecekapan dalam sebuah organisasi, tapi seluruh rantaian bekalan mereka. Ramai penyelidik telah menunjukkan bahawa pemahaman dan amalan pengurusan rantaian bekalan (SCM) telah menjadi prasyarat penting untuk tinggal di tempat kerja yang kompetitif global dan untuk meningkatkan keuntungan. Tujuan kajian ini adalah untuk mengeksplorasi amalan pengurusan rantaian bekalan dilakukan oleh organisasi perkilangan terutama dalam industri elektronik di Malaysia. Dalam kajian ini, suatu rangka kerja yang dibentuk berdasarkan hujah teori yang sedia ada, di mana hubungan antara tiga faktor penting; amalan pengurusan rantaian bekalan, integrasi rantai bekalan dan prestasi rantaian bekalan, dikaji. Selain itu, kesan pengantaraan integrasi rantaian bekalan, diperiksa. Pengajian ini adalah salah satu daripada antara yang terhad yang menganalisa pengaruh amalan rantaian bekalan terhadap prestasinya dengan mengambil kira kesan pengantaraan integrasi rantaian bekalan. Oleh itu, kajian ini dapat mengisi jurang kajian melalui kajian kuantitatif ke dalam industri penbuatan elektronik di Malaysia. Tambahan pula, keputusan empirik menunjukkan bahawa ketiga-tiga pembolehubah mempunyai pengaruh dan hubungan positif yang signifikan. Akhirnya, kajian ini mendapati integrasi rantaian bekalan untuk memediasi hubungan antara amalan pengurusan rantai bekalan dan prestasi rantaian bekalan. Dasar dan implikasi manajerial dijelaskan lebih lanjut tentang kajian ini.

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iv

# TABLE OF CONTENT

| Abs  | tract      |  | i   |
|------|------------|--|-----|
| Abs  | trak       |  | ii  |
| Ack  | nowledge   | ment   | iii |
| Tab  | le of Cont | ent  | v   |
| List | of Figure  |  | XV  |
| List | of Table   |  | XV  |
| List | of Chart   |  | xix |
| List | of Acron   | yms and Symbols  | XX  |
| Ded  | ication    |  | xxi |
|      |            |  |     |
| СН   | APTER 1    |  | 1   |
| 1.0  | INTR       | ODUCTION   | 1   |
| 1.1  | Intr       | oduction   | 1   |
| 1.2  | Bac        | kground of Study   | 1   |
| 1.3  | Stat       | ement of Problem   | 5   |
| 1.4  | Res        | earch Questions  | 11  |
| 1.5  | Res        | earch Objectives   | 12  |
| 1.6  | Just       | ification for Current Research                                       | 14  |
|      | 1.6.1      | Justification for the selection of Malaysia, as the country of study | 14  |
|      | 1.6.2      | Justification for the selection of the manufacturing sector          | 15  |
|      | 1.6.3      | Justification for the selection of electronics sector                | 17  |
|      | 1.6.4      | Justification for the selection of supply chain as the research area | 18  |
| 1.7  | Con        | tribution of Research  | 19  |
|      | 1.7.1      | Theoretical Contribution   | 20  |

|      | 1.7.2 | Managerial Contribution  | 21 |
|------|-------|--|----|
| 1.8  |       | Research Boundaries  | 22 |
|      | 1.8.1 | Scope of Research or Study   | 22 |
|      | 1.8.2 | Unit of Analysis   | 22 |
|      | 1.8.3 | Time Frame   | 23 |
| 1.9  |       | Organisation of Thesis   | 23 |
|      |       |  |    |
| CHA  | APTE  | R 2  | 27 |
| 2.0  | L     | TERATURE REVIEW  | 27 |
| 2.1  |       | Introduction   | 27 |
| 2.2  |       | Underpinning Theory of Study                                       | 28 |
| 2.3  |       | The History of Supply Chain  | 29 |
| 2.4  |       | Definition of Supply Chain   | 32 |
|      | 2.4.1 | Partial List – Definition of Supply Chain                          | 32 |
|      | 2.4.2 | Taxonomy of Supply Chain Definition                                | 33 |
|      | 2.4.3 | Review of Supply Chain Definitions                                 | 35 |
| 2.5  |       | Definition of Supply Chain Management                              | 36 |
|      | 2.5.1 | Partial List- Definition of Supply Chain Management                | 36 |
|      | 2.5.2 | Taxonomy of Supply Chain Management Definitions                    | 38 |
|      | 2.5.3 | Review of Supply Chain Management Definitions                      | 39 |
| 2.6  |       | Operational Definition of Supply Chain and Supply Chain Management | 41 |
| 2.7  |       | The Importance of Supply Chain                                     | 43 |
| 2.8  |       | The Supply Chain Configuration in manufacturing context            | 44 |
| 2.9  |       | Supply Chain Management Concept                                    | 47 |
| 2.10 | )     | Supply Chain Management Practices                                  | 49 |

|      | 2.10.1  | Definition of Supply Chain Management Practices              | 50 |
|------|---------|--|----|
|      | 2.10.2  | Construct and Framework of Supply Chain Management Practices | 51 |
|      | 2.10.2  | Strategic Supplier Partnership                               | 54 |
|      | 2.10.2  | 2.2 Customer Relationship                                    | 54 |
|      | 2.10.2  | 3 Information Sharing  | 55 |
|      | 2.10.2  | .4 Information Quality                                       | 55 |
|      | 2.10.2  | 2.5 Postponement   | 56 |
|      | 2.10.2  | .6 Internal Lean Practices                                   | 56 |
|      | 2.10.2  | .7 Risk and Reward Sharing                                   | 58 |
|      | 2.10.2  | .8 Agreed Vision and Goals                                   | 58 |
| 2.11 | Sup     | pply Chain Integration                                       | 59 |
|      | 2.11.1  | Definition of Supply Chain Integration                       | 59 |
|      | 2.11.2  | Construct and Framework of Supply Chain Integration          | 61 |
| 2.12 | 2 Sup   | pply Chain Performance                                       | 63 |
|      | 2.12.1  | Definition of Supply Chain Performance                       | 64 |
|      | 2.12.2  | Supply Chain Performance Evolution                           | 65 |
|      | 2.12.3  | Construct and Framework of Supply Chain Performance          | 67 |
| 2.13 | Sun     | nmary  | 73 |
|      |         |  |    |
| CH   | APTER 3 |  | 75 |
| 3.0  | THE I   | ELECTRONICS INDUSTRY IN MALAYSIA                             | 75 |
| 3.1  | Intr    | oduction   | 75 |
| 3.2  | The     | e History of Malaysia's Electronics Industry                 | 75 |
| 3.3  | Mal     | laysia's Manufacturing Sector Development                    | 78 |
| 3.4  | Mal     | laysia's Electronics Industry                                | 81 |

| 3.5              | Con      | tributions of National Electronics Sector                   | 84           |
|------------------|----------|---|--------------|
|                  | 3.5.1    | Export Growth Contribution                                  | 85           |
|                  | 3.5.2    | Investment Growth Contribution                              | 87           |
|                  | 3.5.3    | Employment Growth Contribution                              | 87           |
| 3.6              | Pote     | ntial source of electronics industrial growth               | 88           |
| 3.7              | The      | Policy and Support Framework                                | 90           |
|                  | 3.7.1    | First Industrial Master Plan.                               | 90           |
|                  | 3.7.2    | Second Industrial Master Plan                               | 95           |
|                  | 3.7.3    | Third Industrial Master Plan                                | 97           |
| 3.8              | Supp     | oly Chain Management in Electronics Industry in Malaysia    | 98           |
|                  | 3.8.1    | An overview of SCM at Electronics Industry in Malaysia      | 98           |
|                  | 3.8.2    | Supply Chain Management Practices in Electronics Industry i | n Malaysia99 |
|                  | 3.8.2.1  | Strategic Supplier Partnering                               | 99           |
|                  | 3.8.2.2  | Customer Relationship                                       | 100          |
|                  | 3.8.2.3  | Information Management                                      | 101          |
|                  | 3.8.2.4  | Internal Lean Practices                                     | 102          |
|                  | 3.8.2.5  | Postponement  | 103          |
|                  | 3.8.2.6  | Logistics and Transportation Sector                         | 104          |
| 3.9              | Sum      | mary  | 105          |
|                  |          |   |              |
| CH               | APTER 4. |   | 106          |
| 4.0              | RESEA    | ARCH DESIGN AND METHODOLOGY                                 | 106          |
| 4.1 Introduction |          | 106   |              |
| 4.2              | Phile    | osophy Background   | 107          |
|                  | 4.2.1    | Philosophy of Research Orientation                          | 107          |

|      | 4.2.2              | Approach adopted in this study                                     | 108 |  |
|------|--------------------|--|-----|--|
| 4.3  | Res                | earch Design   | 109 |  |
| 4.4  | Research Framework |  |     |  |
| 4.5  | Нур                | oothesized Research Model  | 113 |  |
| 4.6  | Нур                | potheses Development   | 118 |  |
|      | 4.6.1              | Supply Chain Management Practices [SCMP] and Supply Chain          |     |  |
|      | Performa           | ance [SCP].  | 120 |  |
|      | 4.6.2              | The Relationship between Supply Chain Management Practices and Sup | ply |  |
|      | Chain In           | tegration  | 122 |  |
|      | 4.6.3              | The Relationship between Supply Chain Integration and Supply Chain |     |  |
|      | Performa           | ance   | 123 |  |
|      | 4.6.4              | The Relationship between Supply Chain Management Practices, Supply |     |  |
|      | Chain In           | tegration and Supply Chain Performance                             | 124 |  |
| 4.7  | San                | nple and Sampling Procedures                                       | 126 |  |
| 4.8  | Que                | estionnaire Development  | 128 |  |
|      | 4.8.1              | Survey Questionnaire Design  | 128 |  |
|      | 4.8.2              | Survey Questionnaire Validation                                    | 129 |  |
| 4.9  | Dat                | a Collection Procedure   | 130 |  |
| 4.10 | Me                 | asurement Instrument   | 130 |  |
|      | 4.10.1             | Supply Chain Management Practices                                  | 131 |  |
|      | 4.10.1             | .1 Strategic Supplier Partnership [SSP]                            | 132 |  |
|      | 4.10.1             | .2 Customer Relationship Management [CRM]                          | 133 |  |
|      | 4.10.1             | .3 Information Sharing [IS]  | 134 |  |
|      | 4.10.1             | .4 Information Quality [IQ]  | 135 |  |
|      | 4.10.1             | .5 Postponement [PST]  | 136 |  |

|      | 4.10.1  | 1.6     | Internal Lean Practices [ILP]        | 137 |
|------|---------|---------|--------------------------------------|-----|
|      | 4.10.1  | 1.7     | Agreed Vision and Goals              | 138 |
|      | 4.10.1  | 1.8     | Risk and Reward Sharing              | 138 |
|      | 4.10.2  | Sup     | oply Chain Integration               | 139 |
|      | 4.10.3  | Sup     | oply Chain Performance               | 140 |
|      | 4.10.3  | 3.1     | Supply Chain Flexibility Performance | 140 |
|      | 4.10.3  | 3.2     | Supply Chain Resource Performance    | 141 |
|      | 4.10.3  | 3.3     | Supply Chain Output Performance      | 142 |
| 4.11 | Me      | ethod ( | of Survey                            | 143 |
| 4.12 | 2 Pil   | ot Tes  | st                                   | 145 |
| 4.13 | 3 Co    | mmor    | n Method Bias                        | 146 |
| 4.14 | 4 Su    | mmar    | у                                    | 147 |
|      |         |         |                                      |     |
| CH   | APTER 5 | 5:      |                                      | 148 |
| 5.0  | DAT     | A AN    | ALYSIS AND RESULT                    | 148 |
| 5.1  | Int     | roduc   | tion                                 | 148 |
| 5.2  | Re      | spons   | e Rate                               | 148 |
| 5.3  | No      | n-Res   | sponse Bias                          | 149 |
| 5.4  | Da      | ta Scr  | eening                               | 151 |
|      | 5.4.1   | Det     | ection of Missing Data               | 151 |
|      | 5.4.2   | Det     | ection of Outliers                   | 151 |
| 5.5  | Pro     | ofile o | f Respondents                        | 152 |
| 5.6  | No      | rmalit  | ty Test                              | 153 |
| 5.7  | Co      | rrelati | ion Matrix                           | 155 |
|      | 5.7.1   | Mu      | lticollinearity Test                 | 155 |

|      | 5.7.2   | Correlation Matrix between Variables                            | 156 |
|------|---------|---|-----|
| 5.8  | Con     | struct Validity   | 161 |
|      | 5.8.1   | Principal Component Analysis                                    | 161 |
|      | 5.8.2   | Exploratory Factor Analysis                                     | 163 |
|      | 5.8.3   | Independent Variable Exploratory Factor Analysis – Supply Chain |     |
|      | Manager | nent Practices  | 164 |
|      | 5.8.3.1 | EFA for Strategic Supplier Partnering                           | 164 |
|      | 5.8.3.2 | EFA for Customer Relationship                                   | 165 |
|      | 5.8.3.3 | EFA for Information Sharing                                     | 166 |
|      | 5.8.3.4 | EFA for Information Quality                                     | 167 |
|      | 5.8.3.5 | EFA for Postponement  | 168 |
|      | 5.8.3.6 | EFA for Internal Lean Practices                                 | 168 |
|      | 5.8.3.7 | EFA for Agreed Vision and Goals                                 | 169 |
|      | 5.8.3.8 | EFA for Risk and Reward Sharing                                 | 170 |
|      | 5.8.4   | Intervening Variable Exploratory Factor Analysis                | 170 |
|      | 5.8.4.1 | EFA for Supply Chain Integration                                | 170 |
|      | 5.8.5   | Dependent Variable Exploratory Factor Analysis                  | 171 |
|      | 5.8.5.1 | EFA for Flexibility Performance                                 | 171 |
|      | 5.8.5.2 | EFA for Resources Performance                                   | 172 |
|      | 5.8.5.3 | EFA for Output Performance                                      | 173 |
|      | 5.8.6   | Summary of Exploratory Factor Analysis                          | 173 |
| 5.9  | Mea     | sures of Reliability  | 174 |
| 5.10 | ) Mul   | tiple Regression Analysis                                       | 179 |
|      | 5.10.1  | Basic Assumption for Multiple Regression Analysis               | 179 |
|      | 5.10.2  | Condition or Assumption for Hierarchical Regression Analysis    | 181 |

| 5.11 Result of Multiple Regression Analysis                                       | 35 |
|---|----|
| 5.11.1 Testing the relationship between independent and mediating variables       |    |
| [STEP- 1]18   | 39 |
| 5.11.2 Testing for relationship between independent and dependent variables       |    |
| [STEP- 2]19   | 91 |
| 5.11.2.1 Testing for relationship between supply chain management practices       |    |
| and resource performance  | 92 |
| 5.11.2.2 Testing for relationship between supply chain management practices       |    |
| and output performance19  | 94 |
| 5.11.2.3 Testing for relationship between supply chain management practices       |    |
| and flexibility performance19   | 96 |
| 5.11.3 Testing for relationship between mediating variable and dependent variable | es |
| [STEP- 3]19   | 98 |
| 5.11.4 Testing for mediation [STEP 4]   | 99 |
| 5.11.4.1 Testing mediation between independent variables and dependent            |    |
| variable (resource performance)   | )1 |
| 5.11.4.2 Testing mediation between independent variables and dependent            |    |
| variable (output performance)20   | )3 |
| 5.11.4.3 Testing mediation between independent variables and dependent            |    |
| variable (flexibility performance)20  | )5 |
| 5.12 Summary  | )7 |
|   |    |
| CHAPTER 6:20  | )9 |
| 6.0 FINDINGS AND DISCUSSION   | )9 |
| 6.1 Introduction 20   | )9 |

| 6.2 | Sun          | nmary of Result of the Hypotheses                                    | 209  |
|-----|--------------|--|------|
|     | 6.2.1        | Summary of Result of Hypothesis One                                  | 211  |
|     | 6.2.2        | Summary of Result of Hypothesis Two                                  | 212  |
|     | 6.2.3        | Summary of Result of Hypothesis Three                                | 214  |
|     | 6.2.4        | Summary of Result of Hypothesis Four                                 | 215  |
|     | 6.2.5        | Summary of Result of Hypothesis Five                                 | 216  |
|     | 6.2.6        | Summary of Result of Hypothesis Six                                  | 217  |
|     | 6.2.7        | Summary of Result of Hypothesis Seven                                | 218  |
|     | 6.2.8        | Summary of Result of Hypothesis Eight                                | 219  |
| 6.3 | Rea          | addressing the Research Question and Recapitulation of Main Findings | 221  |
|     | 6.3.1        | The Relationship between Supply Chain Management Practices and Su    | pply |
|     | Chain Pe     | erformance   | 223  |
|     | 6.3.2        | The Relationship between Supply Chain Management Practices and Su    | pply |
|     | Chain In     | tegration  | 229  |
|     | 6.3.3        | The Relationship between Supply Chain Integration and Supply Chain   |      |
|     | performa     | ance   | 231  |
|     | 6.3.4        | The Relationship between Supply Chain Management Practices, Supply   | y    |
|     | Chain In     | tegration and Supply Chain Performance                               | 232  |
| 6.4 | Sun          | nmary  | 235  |
|     |              |  |      |
| CH. | APTER 7:     |  | 240  |
| 7.0 | CONC         | CLUSION AND RECOMMENDATION   | 240  |
| 7.1 | Introduction |  |      |
| 7.2 | Prac         | ctical and Policy Implications and Recommendations                   | 240  |
|     | 7.2.1        | Embracing the awareness of supply chain management practices         | 242  |

|     | 7.2.2     | Promoting infrastructure development                          | 242 |
|-----|-----------|---|-----|
|     | 7.2.3     | Promoting Information, Communication and Technology (ICT)     | 242 |
|     | 7.2.4     | Incentives to promote supply chain activities                 | 243 |
|     | 7.2.5     | Establishment of NGO in the field of Supply Chain             | 244 |
|     | 7.2.6     | Supply Chain Practitioners Creative Initiatives               | 244 |
|     | 7.2.7     | Support and Commitment from Top Level                         | 245 |
|     | 7.2.8     | Provide Training on Supply Chain Skills                       | 246 |
|     | 7.2.9     | Developing Organization Cooperation with Trust                | 246 |
|     | 7.2.10    | One-Stop Centre for Promoting Supply Chain Innovation         | 247 |
| 7.3 | Lin       | nitations of Current Study                                    | 247 |
|     | 7.3.1     | Survey  | 248 |
|     | 7.3.2     | Distance of the Respondents                                   | 248 |
|     | 7.3.3     | Time  | 248 |
|     | 7.3.4     | Confidentiality of Information                                | 249 |
| 7.4 | Rec       | commendations for Future Research                             | 249 |
|     | 7.4.1     | Include other manufacturing industries                        | 250 |
|     | 7.4.2     | Include other dimensions of supply chain management practices | 251 |
|     | 7.4.3     | Study design to consider the causality effect                 | 251 |
| 7.5 | Sur       | nmary   | 252 |
| App | endix 1 - | Cover Letter & Questionnaire                                  |     |

# LIST OF FIGURES

| Figure | Title  | Page |
|--------|--|------|
| 1.1    | New Combination of Supply Chain Management Practices Model | 10   |
| 1.2    | Outline of the Thesis Organization                         | 24   |
| 2.1    | A Basic Supply Chain Configuration                         | 46   |
| 2.2    | System Levels of the Supply Chain Concept                  | 47   |
| 2.3    | A Supply Chain Management Model                            | 49   |
| 2.4    | The Interrelationship of Measure Types in a Supply Chain   | 72   |
|        | Measurement System   |      |
| 4.1    | Research Process Flow Chart                                | 109  |
| 4.2    | Theoretical Framework                                      | 111  |
| 4.3    | The Hypothesized Research Model                            | 113  |
| 5.1    | Schematic Diagram of Variables                             | 183  |

# LIST OF TABLES

| Table | Title   | Page |
|-------|---|------|
| 2.1   | A Partial List of the Different Definitions of Supply Chain       | 33   |
| 2.2   | The Taxonomy of Supply Chain Definitions                          | 34   |
| 2.3   | A Partial List of the Different Definition of Supply Chain        | 37   |
|       | Management  |      |
| 2.4   | The Taxonomy of Supply Chain Management Definitions               | 38   |
| 2.5   | The Dimensions of Supply Chain Management Practices               | 53   |
| 2.6   | List of Sub-Constructs for Supply chain integration               | 62   |
| 2.7   | Performance Measurement System Evolution                          | 67   |
| 2.8   | The influence of Different Management Level Measures              | 69   |
| 2.9   | The Goals of Supply Chain Performance Measure Types               | 71   |
| 2.10  | Measures of supply chain performance identified in the literature | 73   |
| 3.1   | Value Added of Resource-Based Manufacturing                       | 79   |
| 3.2   | Value Added of Non-Resource-Based Manufacturing                   | 80   |
| 3.3   | Export of Resource-Based Manufactured Goods [2000-2010]           | 84   |
| 3.4   | Export of Non-Resource-Based and Other Manufactured Goods         | 85   |
|       | [2000-2010]   |      |
| 3.5   | Employment in the Resources-Based Manufacturing Sector [2000-     | 88   |
|       | 2010]   |      |
| 3.6   | Employment in the Non-Resources-Based Manufacturing Sector        | 89   |
|       | [2000-2010]   |      |
| 4.1   | Direct Relationship – Hypothesis 1                                | 114  |
| 4.2   | Direct Relationship – Hypothesis 2                                | 115  |
| 4.3   | Direct Relationship – Hypothesis 3                                | 115  |
| 4.4   | Direct Relationship – Hypothesis 4                                | 116  |
| 4.5   | Direct Relationship – Hypothesis 5                                | 116  |
| 4.6   | Indirect Relationship – Hypothesis 6                              | 117  |
| 4.7   | Indirect Relationship – Hypothesis 7                              | 117  |
| 4.8   | Indirect Relationship – Hypothesis 8                              | 118  |

| Table | Title  | Page |
|-------|--|------|
| 4.9   | Measurement Items for Strategic Supplier Partnership of Supply   | 133  |
|       | Chain Management Practices                                       |      |
| 4.10  | Measurement Items for Customer Relationship Management of        | 134  |
|       | Supply Chain Management Practices                                |      |
| 4.11  | Measurement Items for Information Sharing of Supply Chain        | 135  |
|       | Management Practices   |      |
| 4.12  | Measurement Items for Information Quality of Supply Chain        | 136  |
|       | Management Practices   |      |
| 4.13  | Measurement Items for Postponement of Supply Chain Management    | 137  |
|       | Practices  |      |
| 4.14  | Measurement Items for Internal Lean Practices of Supply Chain    | 137  |
|       | Management Practices   |      |
| 4.15  | Measurement Items for Agreed Vision and Goals of Supply Chain    | 138  |
|       | Management Practices   |      |
| 4.16  | Measurement Items for Risk and Reward Sharing of Supply Chain    | 139  |
|       | Management Practices   |      |
| 4.17  | Measurement Items for Supply Chain Integration                   | 140  |
| 4.18  | Measurement Items for Supply Chain Flexibility Performance       | 141  |
| 4.19  | Measurement Items for Supply Chain Resource Performance          | 142  |
| 4.20  | Measurement Items for Supply Chain Output Performance            | 142  |
| 5.1   | Description of the Respondents Firms                             | 152  |
| 5.2   | Skewness and Kurtosis Analysis                                   | 154  |
| 5.3   | Correlations among the Subscales of the Constructs               | 160  |
| 5.4   | Kaiser-Meyer-Olkin (KMO) and Bartlett's test for Sphericity      | 162  |
|       | Measures   |      |
| 5.5   | Exploratory Factor Analysis for Independent Variables: Strategic | 165  |
|       | Supplier Partnership   |      |
| 5.6   | Exploratory Factor Analysis for Independent Variables: Customer  | 166  |
|       | Relationship   |      |

| Table | Title  | Page |
|-------|--|------|
| 5.7   | Exploratory Factor Analysis for Independent Variables: Information | 167  |
|       | Sharing  |      |
| 5.8   | Exploratory Factor Analysis for Independent Variables: Information | 167  |
|       | Quality  |      |
| 5.9   | Exploratory Factor Analysis for Independent Variables:             | 168  |
|       | Postponement   |      |
| 5.10  | Exploratory Factor Analysis for Independent Variables: Internal    | 169  |
|       | Lean Practices   |      |
| 5.11  | Exploratory Factor Analysis for Independent Variables: Agreed      | 169  |
|       | Vision & Goals   |      |
| 5.12  | Exploratory Factor Analysis for Independent Variables: Risk &      | 170  |
|       | Reward   |      |
| 5.13  | Exploratory Factor Analysis for Intervening Variables: Supply      | 171  |
|       | Chain Integration  |      |
| 5.14  | Exploratory Factor Analysis for Dependent Variables:               | 172  |
|       | Flexibility Performance  |      |
| 5.15  | Exploratory Factor Analysis for Dependent Variables:               | 172  |
|       | Resource Performance   |      |
| 5.16  | Exploratory Factor Analysis for Dependent Variables:               | 173  |
|       | Output Performance   |      |
| 5.17  | Internal Consistency of the Constructs                             | 176  |
| 5.18  | Test Model for Hierarchical Regression Analysis                    | 184  |
| 5.19  | Conformance to Mediating Effect                                    | 184  |
| 5.20  | Regression Result of Resources Performance-Dependent Variable      | 186  |
| 5.21  | Regression Result of Flexibility Performance-Dependent Variable    | 187  |
| 5.22  | Regression Result of Output Performance-Dependent Variable         | 188  |
| 6.1   | Summary Results of Hypothesis One                                  | 212  |
| 6.2   | Summary Results of Hypothesis Two                                  | 213  |
| 6.3   | Summary Results of Hypothesis Three                                | 214  |
| 6.4   | Summary Results of Hypothesis Four                                 | 215  |

| Table | Title                               | Page |
|-------|-------------------------------------|------|
| 6.5   | Summary Results of Hypothesis Five  | 216  |
| 6.6   | Summary Results of Hypothesis Six   | 217  |
| 6.7   | Summary Results of Hypothesis Seven | 219  |
| 6.8   | Summary Results of Hypothesis Eight | 220  |
| 6.9   | Summary of Discussion               | 237  |

# LIST OF CHARTS

| Chart | Title  | Page |
|-------|--|------|
| 3.1   | Exports of Manufactured Goods for Resource-Based, Non- | 86   |
|       | Resource-Based and Others Industry for 2005            |      |

#### LIST OF ACRONYMS AND SYMBOLS

CRM Customer Relationship Management

CRP Continuous Replenishment Programme

EDI Electronic Data Interchange

EPP Entry Point Project

ETP Economic Transformation Plan

FMM Federation of Malaysian Manufacturers

ILP Internal Lean PracticeIQ Information QualityIS Information Sharing

KPI Key Performance Indicator

KRA Key Result Area

MIDA Malaysian Investment Development Authority

MITI Ministry of International Trade and Industry

MNC Multi National Corporation

PSTN Postponement

RR Risk & Reward Sharing

SC Supply Chain

SCI Supply Chain Integration
SCM Supply Chain Management

SCMP Supply Chain Management Practices

SCP Supply Chain Performance

SSP Strategic Supplier Partnering

VISN Agreed Vision & Goals

r Correlation Coefficient

R R-Squared

β Beta, Regression Coefficient

# **DEDICATION**

To my parents, my family, my friends,

To my past, present and future

To all whom I may know

To the mighty GOD, in whom I am deeply loved, greatly blessed, and highly favoured