

**FACTORS INFLUENCING OUTSOURCING SUCCESS IN  
MALAYSIAN AUTOMOTIVE INDUSTRY: THE ROLES OF DEGREE  
OF OUTSOURCING AND PARTNER'S COMPATIBILITY**

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**FACULTY OF BUSINESS AND ACCOUNTANCY  
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KUALA LUMPUR**

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AUTOMOTIVE INDUSTRY: THE ROLES OF DEGREE OF OUTSOURCING  
AND PARTNER'S COMPATIBILITY**

**ABSTRACT**

In the new age of innovation for developing and maintaining competitive advantage, organizations should focus on what is achievable in the market and utilize the innovations developed by other organizations. Fierce global competition, higher customer expectations, and continuously expanding supply chains have driven companies to outsource. Increasing globalization, technological advancements and increased customer expectations have created complex market structures and tightened competition in the marketplace. These factors have made the sustaining of organizations more challenging than ever. To ensure the success of outsourcing, the integration of tasks between focal and vendor organization must be well and efficiently managed. The purpose of this study is to identify the factors that need to be managed in the process of the integration of outsourcing tasks. In this thesis, exchange of resources is viewed from the perspective of the Social Exchange Theory. Vendor management capability, partnership quality, trust, human capital, knowledge sharing, degree of outsourcing and partners' compatibility are identified as factors that have an impact on outsourcing success in manufacturing. This study also tests the effects of the magnitude of degree of outsourcing and partners' compatibility in the collaborative business on outsourcing success. Cross-sectional data was collected through a survey of managers in the automotive industry of Malaysia using structured questionnaires. A total of 337 usable responses were collected. Structural Equation Modeling (SEM) was used to analyze the survey responses through smartPLS 3. The empirical analysis verified the nature of the influence of identified factors on outsourcing success. Degree of outsourcing explains the relationship between vendor management, partnership quality, trust and outsourcing

success when outsourcing activities are moderate or extensive. This research contributes to the area of business strategy knowledge and expands the horizon of supply chain management from a strategic perspective. Specifically, the study highlights the importance of developing a balanced robust structured outsourcing system by using a balanced approach to degree of outsourcing where sustainable outsourcing success can be attained by value creation. Insights into this process are lacking in current literature. The factors recognized by this study provide guidelines for plan inputs and also for managing the process of manufacturing outsourcing. Managers in the automotive industry can use the model to evaluate the potential success of outsourcing. Additionally, they can evaluate the most suitable level of outsourcing and the expected compatibility of partners. This affords several strategic implications for practice. The analysis suggests that the degree of outsourcing mediates outsourcing success which gives clear indication as how much they have to outsource. It also suggests that partner compatibility has a direct impact on outsourcing success, and thus ultimately that managers should pay more attention to methods that augment the alignment of the vendor(s) and themselves. As a whole, this study highlights prominent factors which allow manufacturing industry stakeholders to plan, execute and assess outsourcing as a collaborative business practice that ensures mutual benefits as well as mutual success and survival.

**Key Words:** Outsourcing success, Social exchange theory, Degree of outsourcing, Moderate to greater extent, Partners' compatibility

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**ABSTRAK**

Dalam era baharu iaitu era inovasi untuk pembangunan dan mengekalkan kelebihan persaingan, organisasi seharusnya memfokuskan kepada apa yang mampu dicapai dan menggunakan sepenuhnya inovasi yang dibangunkan oleh organisasi lain. Kebimbangan dengan persaingan global, jangkaan pelanggan yang tinggi dan kelangsungan untuk mengembangkan rantai bekalan mendorong syarikat untuk menggunakan penyumberan luar. Peningkatan globalisasi, kemajuan teknologi, dan peningkatan jangkaan pelanggan telah membentuk struktur pasaran yang kompleks dan mengetatkan persaingan di pasaran. Faktor-faktor ini menyebabkan syarikat berhadapan dengan cabaran yang tinggi. Untuk memastikan kejayaan pengurusan penyumberan luar, penyepaduan tugas, fokus organisasi dan vendor mesti diurus dengan baik dan cekap. Tujuan kajian ini adalah untuk mengenal pasti faktor-faktor yang perlu diuruskan dalam proses penyepaduan pengurusan penyumberan luar. Dalam tesis ini, pertukaran sumber dilihat dari perspektif Teori Perubahan Sosial (*Social Exchange Theory*). Keupayaan pengurusan Vendor, kualiti perkongsian, kepercayaan, modal insan, perkongsian pengetahuan, tahap penyumberan luar dan keserasian rakan kongsi dikenalpasti sebagai faktor yang memberi impak kepada kejayaan penyumberan luar dalam industri pembuatan. Kajian ini juga menguji tahap impak penyumberan luar dan keserasian rakan kongsi dalam perniagaan kolaboratif ke atas kejayaan penyumberan luar. Data keratan rentas dikumpul melalui tinjauan ke atas pengurus dalam industri automotif Malaysia menggunakan soal selidik berstruktur. Sejumlah 337 maklum balas dikumpul dan digunakan. Pemodelan Persamaan Struktur (SEM) digunakan untuk menganalisis tindak balas tinjauan melalui *SmartPLS 3*. Bukti empirikal mengesahkan

faktor-faktor berjaya mempengaruhi penyumberan luar. Tahap penyumberan luar menjelaskan hubungan antara pengurusan vendor, kualiti perkongsian, kepercayaan dan kejayaan penyumberan luar apabila tahap aktiviti penyumberan luar berada di tahap sederhana atau lebih tinggi. Penyelidikan ini telah menyumbang kepada bidang strategi perniagaan dan mengembangkan skop rantaian pengurusan bekalan dari perspektif strategik khususnya kepentingan membangunkan sistem penyumberan luar berstruktur yang seimbang dengan menggunakan pendekatan ke atas penyumberan luar yang mana kejayaan penyumberan luar dapat dicapai dengan membentuk nilai. Aspek ini kurang ditekankan dalam literatur terdahulu. Faktor-faktor yang diiktiraf oleh kajian ini menyediakan garis panduan untuk pelan input dan cara untuk mengurus penyumberan luar. Pengurus dalam industri automotif boleh menggunakan model ini untuk menilai kejayaan penyumberan luar. Di samping itu, mereka boleh menilai tahap penyumberan luar dan keserasian rakan kongsi vendor. Ini membawa beberapa implikasi strategik untuk diamalkan. Analisis menunjukkan tahap penyumberan luar mempunyai hubungan dengan kejayaan penyumberan luar melalui petunjuk yang jelas tentang berapa banyak penyumberan luar yang mereka perlukan. Dapatan ini juga mencadangkan keserasian rakan kongsi mempunyai kesan langsung ke atas kejayaan penyumberan luar. Oleh itu pengurus harus memberi lebih perhatian kepada kaedah yang sesuai dengan kehendak vendor dan mereka sendiri. Keseluruhannya, kajian ini menonjolkan faktor-faktor penting yang membolehkan pihak berkepentingan industri pembuatan untuk merancang, melaksanakan dan menilai penyumberan luar sebagai amalan perniagaan kolaboratif untuk memastikan kepelbagaian manfaat dan kejayaan bersama serta untuk meneruskan kelangsungan organisasi.

**Kata Kunci:** Kejayaan penyumberan luar, Teori Perubahan Sosial, Tahap penyumberan luar, Sederhana ke tahap yang lebih tinggi, Keserasian rakan kongsi

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## TABLE OF CONTENTS

<b>ABSTRACT .....</b>	<b>iii</b>
<b>ABSTRAK.....</b>	<b>v</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>vii</b>
<b>LIST OF FIGURES .....</b>	<b>xiii</b>
<b>LIST OF TABLES .....</b>	<b>xiv</b>
<b>LIST OF SYMBOLS AND ABBREVIATIONS .....</b>	<b>xvi</b>
<b>LIST OF APPENDICES.....</b>	<b>xvii</b>
<b>CHAPTER 1: INTRODUCTION.....</b>	<b>18</b>
1.1 Background of The Study.....	18
1.2 Outsourcing Definitions .....	24
1.3 Outsourcing Success.....	27
1.4 Research Gap.....	31
1.5 Problem Statement.....	34
1.6 Research Questions .....	38
1.7 Research Objectives .....	38
1.8 Significance and Expected Contributions of Study.....	39
1.8.1 Theoretical Contribution.....	39
1.8.2 Managerial Contribution.....	41
1.9 Scope of The Study .....	42
1.10 Organization of Thesis .....	45
<b>CHAPTER 2: LITERATURE REVIEW.....</b>	<b>47</b>
2.1 Introduction .....	47
2.2 Research Theoretical Underpinning.....	48
2.3 Theories of Outsourcing .....	48
2.3.1 Transaction Cost Economics.....	49
2.3.2 Core Competencies Theory.....	51
2.3.3 Resource Based View .....	51
2.3.4 Knowledge Based View.....	53
2.3.5 Resource Dependency Theory .....	53
2.3.6 Social Exchange Theory .....	56

2.3.7 Selection of Social Exchange Theory as Research Theoretical Underpinning .....	58
2.4 Governance in Outsourcing Exchange .....	60
2.4.1 Contractual Governance.....	61
2.4.2 Relational Governance.....	62
2.5 Literature Conceptual Framework.....	75
2.6 Outsourcing: An Overview.....	76
2.7 Outsourcing Structure.....	76
2.8 Manufacturing Vs Services Outsourcing.....	77
2.9 Outcomes of Outsourcing.....	79
2.10 Advantages of Outsourcing .....	80
2.10.1 Financial and Operational Flexibility .....	82
2.10.2 Cost Efficiencies .....	83
2.10.3 Access to New Capabilities or Knowledge.....	84
2.10.4 Create Distance from Undesirable Activities .....	85
2.11 Disadvantages of Outsourcing.....	85
2.11.1 Difficulty of Communication and Coordination.....	86
2.11.2 Loss of Ability to Perform the Outsourced Task.....	86
2.11.3 Dependence on Vendor and Own Self Interest of Vendor .....	87
2.11.4 Discomfort for In-House Staff.....	88
2.11.5 Leakage of Scale Advantage to Smaller Competitors .....	89
2.12 Factors Affecting Outsourcing Success.....	89
2.12.1 Manageable Factors .....	90
2.13 Vendor Management Capability.....	93
2.14 Partnership Quality .....	95
2.15 Trust.....	99
2.16 Degree of Outsourcing.....	102
2.17 Human Capital.....	105
2.18 Knowledge Sharing .....	109
2.19 Partners' Compatibility.....	110
2.20 Hypotheses .....	114
2.21 Base Model.....	115
2.22 Theoretical Framework & Binding.....	116
2.23 Research Model .....	117
Summary.....	118

<b>CHAPTER 3: METHODOLOGY .....</b>	<b>119</b>
3.1 Introduction .....	119
3.2 Measurement of Constructs .....	119
3.2.1 Criterion Variable: Outsourcing Success .....	120
3.2.2 Predictor 1: Vendor Management Capability .....	122
3.2.3 Predictor 2: Partnership Quality .....	124
3.2.4 Predictor 3: Trust .....	125
3.2.5 Predictor 4: Human Capital .....	127
3.2.6 Predictor 5: Knowledge Sharing .....	129
3.2.7 Predictor 6 and Moderator: Partners' Compatibility .....	130
3.2.8 Mediator: Degree of Outsourcing .....	132
3.3 Research Design .....	134
3.4 Research Method – Survey .....	138
3.5 Population of Study .....	138
3.6 Unit of Analysis .....	139
3.7 Sample Size .....	139
3.8 Sampling Technique and Data Collection .....	140
3.9 Validity .....	142
3.10 Reliability .....	142
3.11 Pilot Study .....	143
3.12 Data Analysis Procedure .....	148
3.13 Structural Equation Modeling (SEM) .....	149
3.13.1 Confirmatory Factor Analysis (CFA) .....	153
3.13.2 Level of Significance .....	153
Summary .....	154
<b>CHAPTER 4: DATA ANALYSIS .....</b>	<b>155</b>
4.1 Introduction .....	155
4.2 Data Preparation for Analysis .....	155
4.3 Response Rate .....	155
4.4 Demographic Analysis of Respondents .....	156
4.5 Variables Descriptive Statistics .....	157
4.5.1 Outsourcing Success .....	157
4.5.2 Vendor Management Capability .....	158
4.5.3 Partnership Quality .....	159

4.5.4 Trust .....	160
4.5.5 Human Capital .....	161
4.5.6 Knowledge Sharing.....	162
4.5.7 Degree of Outsourcing.....	163
4.5.8 Partners' Compatibility.....	164
4.6 Common Method Variance .....	165
4.7 Assessment of Multivariate Assumptions .....	165
4.7.1 Normality .....	166
4.7.2 Assessment of Multicollinearity .....	169
4.8 Structural Equation Modeling (SEM) Via smartPLS .....	170
4.9 Confirmatory Measurement Assessment.....	172
4.10 Evaluation of The Measurement and Structural Model .....	172
4.11 Reflective Measures Validity .....	180
4.12 Convergent Validity .....	180
4.12.1 Outsourcing Success AVE.....	181
4.12.2 Vendor Management Capability AVE.....	181
4.12.3 Partnership Quality AVE .....	181
4.12.4 Trust AVE.....	181
4.12.5 Human Capital AVE.....	181
4.12.6 Knowledge Sharing AVE .....	181
4.12.7 Partners' Compatibility AVE.....	182
4.13 Reflective Measures Reliability.....	182
4.14 Discriminant Validity .....	183
4.15 Formative Measures Validity .....	186
4.15.1 Formative Measures Collinearity.....	186
4.15.2 Significance and Relevance of the Formative Indicators .....	187
4.16 Significance and Relevance of The Structural Model Relationships .....	187
4.17 Assessment of R <sup>2</sup> Level.....	191
4.18 Mediation Analysis.....	192
4.19 Moderation Analysis .....	194
Summary.....	195
<b>CHAPTER 5: DISCUSSION OF RESULTS AND CONCLUSION .....</b>	<b>197</b>
5.1 Introduction .....	197
5.2 Discussion.....	197

5.2.1 Objective 1 .....	198
5.2.2 Objective 2 .....	199
5.2.3 Objective 3 .....	201
5.2.4 Objective 4 .....	202
5.2.5 Objective 5 .....	204
5.2.6 Objective 6 .....	205
5.2.7 Objective 7 .....	209
5.3 Implications of The Study .....	211
5.3.1 Research Questions .....	211
5.4 Study Contributions .....	220
5.4.1 Theoretical Contributions .....	220
5.4.2 Managerial Contributions .....	223
5.5 Limitation and Direction for Future Research.....	225
5.6 Conclusion .....	226
<b>REFERENCES .....</b>	<b>228</b>
<b>APPENDICES .....</b>	<b>264</b>

## LIST OF FIGURES

Figure 2.1:	Conceptual Framework of Literature	75
Figure 2.2:	Manufacturing Vs Services Outsourcing	79
Figure 2.3:	Adapted Model	115
Figure 2.4:	Theoretical Framework & Binding	116
Figure 2.5:	Value Creation Model	117
Figure 3.1:	Research Approaches Based on Ontology and Epistemology	135
Figure 4.1:	Measurement Model of Variables	174
Figure 4.2:	Structural Model of Variables	179
Figure 4.3:	Heterotrait-Monotrait Ratio (HTMT)	186
Figure 4.4:	Example of a simple PLS-SEM path model	193

## LIST OF TABLES

Table 1.1:	Business Eras from Perspectives of Business Process Management	23
Table 1.2:	Top Ten Outsourcing Locations of World	43
Table 1.3:	Market Sales Review	44
Table 2.1:	Critical Summary of Literature Review	64
Table 3.1:	Outsourcing Success	122
Table 3.2:	Vendor Management Capability	124
Table 3.3:	Partnership Quality	125
Table 3.4:	Trust	127
Table 3.5:	Human Capital	128
Table 3.6:	Knowledge Sharing	130
Table 3.7:	Partners' Compatibility	132
Table 3.8:	Degree of Outsourcing	134
Table 3.9:	Different School of Thought Studies	137
Table 3.10:	Sample with Respect to Malaysian States	142
Table 3.11:	Results of Pilot Study: Outsourcing Success (n = 50)	144
Table 3.12:	Results of Pilot Study: Vendor Management Capability (n = 50)	144
Table 3.13:	Results of Pilot Study: Partnership Quality (n = 50)	145
Table 3.14:	Results of Pilot Study: Trust (n = 50)	146
Table 3.15:	Results of Pilot Study: Human Capital (n = 50)	146
Table 3.16:	Results of Pilot Study: Knowledge Sharing (n = 50)	147
Table 3.17:	Results of Pilot Study: Partners' Compatibility (n = 50)	147
Table 3.18:	Results of Pilot Study: Degree of Outsourcing (n = 50)	148
Table 3.19:	Rule of Thumb for CB-SEM or PLS-SEM Selection	152

Table 4.1:	Questionnaires Response	156
Table 4.2:	Demographic Summary of Survey Respondents	157
Table 4.3:	Descriptive Statistics for Outsourcing Success	158
Table 4.4:	Descriptive Statistics for Vendor Management Capability	159
Table 4.5:	Descriptive Statistics for Partnership Quality	160
Table 4.6:	Descriptive Statistics for Trust	161
Table 4.7:	Descriptive Statistics for Human Capital	162
Table 4.8:	Descriptive Statistics for Knowledge Sharing	163
Table 4.9:	Descriptive Statistics for Degree of Outsourcing	164
Table 4.10:	Descriptive Statistics for Partners' Compatibility	165
Table 4.11:	Skewness and Kurtosis Statistics	167
Table 4.12:	Multicollinearity Assessment	170
Table 4.13:	Factor / Outer Loadings, Composite Reliability and AVE of Reflective Variables	176
Table 4.14:	Cronbach's Alpha and Composite Reliability of Reflective Variables	183
Table 4.15:	Formative Variable Outer Weights	183
Table 4.16:	Heterotrait-Monotrait Ratio (HTMT)	185
Table 4.17:	Path Coefficients Results	188
Table 4.18:	Summary of Direct Hypotheses Testing Results	190
Table 4.19:	Comparison of Acceptable R <sup>2</sup> Values	191
Table 4.20:	R <sup>2</sup> and R <sup>2</sup> <sub>adj</sub> Values of Variables	192
Table 4.21:	Mediation Effect	194
Table 4.22:	Summary of Mediation Hypotheses Testing Results	194
Table 4.23:	Moderating Effect	195
Table 4.24:	Summary of Moderating Hypotheses Testing Results	195
Table 5.1:	Summary of Objectives with Results of Hypotheses	218



## LIST OF SYMBOLS AND ABBREVIATIONS

B2B	Business To Business
SSO	Shared Services and Outsourcing
GDP	Gross Domestic Product
TCE	Transaction Cost Economics
RV	Relational View
RBV	Resource Based View
KBV	Knowledge Based View
RDT	Resource Dependency Theory
SET	Social Exchange Theory
Vs	Versus
M	Mean
IT	Information Technology
RFQ	Request for Quote
HP	Hewlett Packard
CSFs	Critical Success Factors
OS	Outsourcing Success
VMC	Vendor Management Capability
PQ	Partnership Quality
TR	Trust
HC	Human Capital
KS	Knowledge Sharing
PC	Partners' Compatibility
DOO	Degree of Outsourcing
PLS	Partial Least Square
SEM	Structural Equation Modeling
SPSS	Statistical Software for the Social Sciences
N	Number
A	Cronbach's Alpha
AMOS	Analysis of a Moment Structures
LISREL	Linear Structural Relations
CB-SEM	Covariance Based Structural Equation Modeling
PLS-SEM	Partial Least Square Structural Equation Modeling
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
P-Value	Probability Value
SD	Standard Deviation
N	Number
M	Mean
CMV	Common Method Variance
VIF	Variance Inflation Factor
R <sup>2</sup>	R-Squared
AVE	Average Variance Extracted
HTMT	Heterotrait-Monotrait Ratio
T-Value	Test Statistics
H	Hypothesis
R <sup>2</sup> <sub>adj</sub>	R-Squared Adjusted
%	Percentage
B2C	Business To Consumer

## LIST OF APPENDICES

Appendix A	Questionnaire for Pilot Study	264
Appendix B	Questionnaire for Final Data Collection	276
Appendix C	Descriptive Statistics Frequencies of Variables	286

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## CHAPTER 1: INTRODUCTION

### 1.1 Background of The Study

Organizations operating under the constrictions of global competition, dynamic changes and the regular pressure to optimize and rationalize the cost of operation can no longer afford to have a surplus of labor or equipment. At the same time, they are bound to secure easier access to such resources if the need arises (for instance, if new commissions require increased processing capacity). In the new age of innovation for developing and maintaining competitive advantage, companies should focus on what is achievable in the market and utilize the innovations developed by other companies, both international leaders and small start-up enterprises. The driving forces for companies to outsource are continuously expanding supply chains, higher customer expectations and fierce global competition (Zhu, Ng, Wang, & Zhao, 2017). Today, labor, capital and technology requirements clearly go beyond the natural and legal boundaries of individual companies. Present resources are global. Therefore, the main focus should be on access and influence (Sobinska & Willcocks, 2016).

To remain competitive and create competitive advantage, organizations have to be continuously innovative and improvise their ongoing operations with reinforcement (Ok, 2011). For value creation, organizations have to find new sustainable ways of doing business.

For expansion into other markets, organizations have to adopt and adapt where necessary through the philosophy of outsourcing for making inroads, and this phenomenon is welcomed by the world (Wahrenburg, Hackethal, Friedrich, & Gellrich, 2006). Many activities are now being outsourced because of the mounting trend towards outsourcing activities which used to be performed in-house (Lievens & Corte, 2008). When a vendor has been approached to perform activities by focal organization (any organization which outsource) then outsourcing takes place (Greer, Youngblood, &

Gray, 1999). Now different needs of organizations can be satisfied through multiple vendors rather than a single source because the market is growing rapidly for the providers of outsourced services (Lilly, Gray, & Virick, 2005).

The level contributed by the manufacturing industry to the world's economy is growing. Tightened competition in the marketplace has created a multifaceted market structure because of increased customer expectations, technological advancements and mounting globalization. Sustaining organizations has become more challenging than ever before because of these factors.

Existing resource bases of organizations, if utilized properly and in accordance with best practices, will allow organizations to achieve better performance. All the resources required by organizations could be obtained by themselves, but this is often inappropriate. Acquiring those resources from peripheral resources is one of the prominent ways to solve this problem (Hessels & Terjesen, 2010).

Outsourcing, partnerships, mergers and strategic alliances are the main ways in which organizations expand their resource foundation to augment their competitive advantage (Al-Natour & Cavusoglu, 2009). In this stratum the crucial facet is to shape alliances according to the strength of the members' relationship to conformist purchasing. In today's contemporary setting, outsourcing is a business strategy for creating value which is able to attain strategic and operational endeavors for development (Faisal & Raza, 2016; D. M. Jain & Khurana, 2016; Mukherjee, Gaur, & Datta, 2013).

In the current globalized era, outsourcing has been broadly accepted as one of the business strategies for organizations to attain efficiency and cost reduction (Willcocks, 2010). For delivering excellent products / services to customers outsourcing has emerged as a critical mechanism from this perspective (Ravi, Jain, & Sharma, 2011). To improve performance and to strengthen their core competencies many organizations considering outsourcing strategy for breakthroughs (Gewald, 2010; Quinn, 2000). To

attain sustainable leadership positions, outsourcing has been considered a management technique and innovative strategy that uses the most modern technologies. When the in-house processes and the inside business tasks of doing business are transmitted to an outside party that is called outsourcing (Donada & Nogatchewsky, 2009; Kotabe & Mol, 2009; Kroes & Ghosh, 2010; Lee, 2001; Li & Choi, 2009).

Outsourcing can be thought of as a strategic tool that augments organizational performance (Cusmano, Mancusi, & Morrison, 2009; Domberger, Jensen, & Stonecash, 2002; Espino-Rodríguez & Padrón-Robaina, 2005; Espino-Rodríguez & Padrón-Robaina, 2004; Fixler & Siegel, 1999; Kakabadse & Kakabadse, 2003; Lee, 2001; Li & Choi, 2009; Zhang, Song, & Huang, 2009). Having said that, it is an enigma challenging process which requires careful management due to reservations such as confidentiality leaks (Li & Choi, 2009), hidden costs (Belcourt, 2006; S. Kumar & Eickhoff, 2005), quality issues (Carr, Kaynak, Hartley, & Ross, 2008; Li & Choi, 2009; Young, 2008), loss of reciprocated trust (Cui, Loch, Grossmann, & He, 2009; H.-S. Han, Lee, & Seo, 2008; Lee, 2001; McIvor, 2003; Young, 2008), and before the completion of period the extinction of contract (Lam & Han, 2005; Matthyssens et al., 2008; Young, 2008).

These matters are common to the manufacturing industry. They can be avoided as long as ways can be figured out to manage outsourcing function / activities in spite of the subsistence of these issues. From this perspective, outsourcing success assessment and evaluation for factors which have an impact on it is the focal point of academic research lately. For example, analysis on critical success factors (A. Banerjee & Williams, 2009; Cusmano et al., 2009; O. Ee, H. A. Halim, & T. Ramayah, 2013; Jillapalli & Jillapalli, 2014; Jyoti & Arora, 2013; Moon, Choe, Chung, Jung, & Swar, 2016; Ogden, 2006; Qi & Chau, 2013, 2015; Rajabzadeh, Asghar Anvary Rostamy, & Hosseini, 2008; Swar, Moon, Oh, & Rhee, 2012; Whipple & Frankel, 2000; Wongsaroj, Krairit, & Khang, 2014), outsourcing dexterity (Kroes & Ghosh, 2010; Liou & Chuang, 2010; Young,

2008), and outsourcing structural scope have been carried out widely (Espino-Rodríguez & Padrón-Robaina, 2004; Gilley & Rasheed, 2000; Marshall, McIvor, & Lamming, 2007; Thouin, Hoffman, & Ford, 2009).

In outsourcing, worrying factors which have been detected amongst the functional, behavioral and relational necessities as depicted in the above studies. In addition, other factors to do with general management are recognized in this thesis and will be further discussed below. 'Commitment of senior management' and 'improved communication' is elementary goals of business. Manufacturing outsourcing has been recognized and depicted as a structural change in task performance. The prior literature has still not successfully brought together and dealt with manufacturing outsourcing structural variation or recognized distinctive factors which are required to manage it (E. Ee, H. A. Halim, & T. Ramayah, 2013).

Third party participation requires outsourcing in all cases despite the fact that there are several different definitions of outsourcing (Klaas Jagersma & van Gorp, 2007). Involvement of an external products or services delivery provider outside the boundaries of an organization implies outsourcing (Stephan & Silvia, 2008). To make products/services inside the organization or to outsource it from outside is a strategic choice (Edvardsson, Oskarsson, & Vesteinsdottir, 2011).

For more than three-quarters of the respondents, operational effectiveness (cost reduction, greater scalability of operations, and process standardization) was the main impetus for outsourcing. Headcount reduction, efficiency improvement and cost reduction are the three key reasons why organizations in Europe are outsourcing, which has been the trend over the past years. Leading drivers of outsourcing are strong financial base and cost savings identified in previous researches (Ghodeswar & Vaidyanathan, 2008; Hsiao, Kemp, Van der Vorst, & Omta, 2010; Jiang, Frazier, & Prater, 2006; Kroes & Ghosh, 2010; Quélin & Duhamel, 2003). Within a contemporary

business context, outsourcing is acknowledged as a strategy which is creating value that augments organizational business performance and competitive edge (Faisal & Raza, 2016; D. M. Jain & Khurana, 2016). In coherence with value creation, it had been depicted that a considerable paradigm of modern marketing has been taking place from a consumer-centric to a value driven era (Kotler, Kartajaya, & Setiawan, 2010). The table below depicts business over the years with its situation and respective processes.

University of Malaya

**Table 1.1:** Business Eras from Perspectives of Business Process Management (Seethamraju, 2012)

<b>Period</b>	<b>Perspective</b>	<b>Focus</b>	<b>Now</b>
1900s	Scientific management	Reorganization of work processes and their content to simplify the work	JIT, Kanban, TQM
1940s	Operations Research Systems thinking	Optimization of resources and facilities Holistic view of interactions of functions and processes and their environment, including feedback and control	Optimization tools in software solutions Systems dynamics and learning organization
1960s	Process Simulation, Data Processing, Digitization of routine transactions, Information systems, Systems Modeling	Simulating processes and activities, ERP systems, Computerized support of non-routine activities and processes, Models and tools to represent information systems and processes	Simulation, Knowledge management, Various (UML, BPM, SODA, etc.) methods and Languages
1980s	Quality Management processes, reengineering, E-commerce	Process control and improvements through tools, systems, standards and excellence frameworks, Process performance improvement through aggressive redesign and new design of processes, Digitization of activities and transactions across the supply chain, End-to-end seamless customer interactions across channels	Six Sigma/lean, BPR and redesign, Process mapping and Modeling
2000s	Enterprise Systems, Supply chain Management, Business process outsourcing, Service oriented computing	Enterprise modeling and integrated transactional Processes, Inter-enterprise processes customer and supplier side, Execution of business processes by external Providers, Web services, SOA and IT-enabled services as Processes, Orchestration, configuration and business activity Monitoring, Process intelligence through event monitoring	Enterprise systems, business process management, service process management, process intelligence, Process agility, Business activity monitoring



## 1.2 Outsourcing Definitions

To develop their activities organizations need to consider various strategic options such as outsourcing in an environment where competition is ever fiercer. Duties that have normally been done internally, in outsourcing organizations use outside companies to perform these duties (Espino-Rodríguez, Chun-Lai, & Gil-Padilla, 2017).

Managing operations and realizing their strategic goals outsourcing has become a transformational and prevalent business practice (Handley & Benton, 2009; Mani, Barua, & Whinston, 2012; Narayanan, Jayaraman, Luo, & Swaminathan, 2011). To manage and to deliver one or more business functions or processes by an external organization though contract with another organization refers to outsourcing (Liu, Wang, & Huang, 2017).

To accomplish a particular organizational objective the sourcing decision must establish whether to use internal or external resources (Holcomb & Hitt, 2007). Involvement of external party is the common attribute in all definitions of outsourcing (Aubert, Rivard, & Patry, 2004; Kakabadse & Kakabadse, 2003; King & Malhotra, 2000; Mary C Lacity & Hirschheim, 1993). The value which organization not creating by their own resources given to external resources which indicates performing the tasks to create value (Arnold, 2000).

Main ownership is not with the organization of resources in this context. So buy and share of resources can be executed by an organization. It can be establish that perception on resources diverse in these definitions. Anything that is used as a production input is commonly known as resource. Intangible or tangible as resource can be in both shape (J. B. Barney, 1999). Resources can be more or less strategic as all resources are not evenly important (Cheon, Grover, & Teng, 1995). Non substitutable, inimitable, rare, valuable are the distinctive characteristics of strategic resources (Jay Barney, 1991). Discernment on value of resources is different explained by different

theories. Outsourcing as a method of cost cutting has commonly been perceived by transaction cost economic theory (Donada & Nogatchewsky, 2009).

Outsourcing by defining could accomplish tasks relatively more cheaply as it has been taken as a value added strategy in the domain of some studies. In outsourcing, cost and value benefits can be materialized through vertical integration (leading to lower transaction costs) as well as economic gains that accumulate from market transactions by hybrid structures that let organizations to reap benefits (De Vita, Tekaya, & Wang, 2010).

By covering strategic significance of external resources, the resource based view (RBV) defines outsourcing as a strategic method. For networked business this value creation strategy has been recognized the value of outsourcing beyond cost reduction (Leiblein, 2003). Explicit categories of resources that the organization does not itself possess and which are provided more efficiently by others has been specifically defined as outsourcing by obtaining desired resources in result (Espino-Rodriguez & Robaina, 2005). Resource utilization for sustainable competitive advantage and the competitive relative importance of resources has been elaborated in definition. Lack of capital or expertise which caused the rejection of internalization is not however merely claimed as outsourcing (Gilley & Rasheed, 2000). Substitution can be seen as due to absence of capital to acquire physical and non-physical resources or the absence of certain resources which is making however aforementioned arguments not clear. In resource based supply chains, outsourcing is seen as an approach of providing potentialities for business process (Miles & Snow, 2007).

As compare to resource based view outsourcing has been defined in a much broader context in knowledge based view (KBV). From learning and innovation mechanism perspective KBV has been explained for outsourcing (Cusmano et al., 2009; Miles & Snow, 2007). While gathering company learning experiences, outsourcing allows

companies to garner gains in specialization (Cusmano et al., 2009). Knowledge and its exchange are intangible. This has been the focus of information systems outsourcing studies utilized by KBV.

Learning is associated with outsourcing, and the importance of this knowledge has been recognized by organizations. Contribution of knowledge and learning is difficult to quantify had been depicted that organizations are reluctant to consider this fact (Bounfour, 1999). Shared knowledge however has been perceived by the members in the network as an expandable rather than diminishing resource (Miles & Snow, 2007). Decisions to discontinue or continue upholding a competitive knowledge position has become the outsourcing activity to claim from this perspective.

Outsourcing provides a way to bring expert knowledge to the organization from the perspective of organizational learning and innovation (Arnold, 2000; Capron & Mitchell, 2004; Cusmano et al., 2009). While responding flexibly to the stresses and strains of competition, it had been perceived that outsourcing implies extensive leverage of technology and knowledge from external sources (Cusmano et al., 2009).

Along with the purpose of outsourcing however the research focus has been evolved. Great benefits of other tangible resources can be attained through relational resources in modern businesses. The value of relational and behavioral aspects in outsourcing has been recognized through the vehicle of transaction cost economics (TCE) to the relational specific theory (SET) approach, in other words (TCE to RBV to KBV to SET). Business collaboration with external parties for mutual benefit has been defined as outsourcing from the perspective of studies based on relational or behavioral approaches.

The way to get the best supplies is the focal and vendor organization relationship (Donada & Nogatchewsky, 2009). The increased level of social expectation of stakeholders and due to increasing globalization the need has been identified from stakeholder perspective in the supply chain management (Park-Poaps & Rees, 2010). In a business-to-business context, hence collaborative business success has become a driver of successful relationships.

Definitions of outsourcing, contract type and factors such as drivers in short have various approaches.

Applied by the particular study, these methods are pursued by the domain of research. With regards to outsourcing however managers have mixed and multiple interests in practice. In setting the outsourcing structures, accordingly there are different approaches. However as per depicted in research theoretical underpinning after analysis of all outsourcing theories that social exchange theory is the most applicable for addressing modern business issues which can make a balanced robust structured system which is the contribution of this study.

### **1.3 Outsourcing Success**

Since the origin of IT outsourcing in the early 1960s and the growth of business-centric outsourcing in the mid-1980s, outsourcing has become an omnipresent phenomenon and the subject of significant research (Schwarz, 2014; Weick, 2007). Changing certain organizational functions relates to an outside-organization practice depicting growing trend of outsourcing market (Grover, Cheon, & Teng, 1996). Diversity of option like offshore, domestic, rural and local might be involved in it.

Benefits which majority of focal organizations are expecting from outsourcing process not been achieved by them. When this occurs, we usually expect that organizations will consider the practice a failure, discontinue it, and search for alternative arrangements. However, in the case of outsourcing, most corporations mentioned that they will continue with this practice. While this decision may come out paradoxical, it actually indicates a value proposition. Although focal organizations have experienced the cost of not achieving the preferred benefits, when the cost is compared to the benefits they hope to receive in the future, they see value in the outsourcing proposition (Schwarz, 2014).

Without possessing the knowledge regarding how to develop a successful outsourcing arrangement, corporations engaged in outsourcing will experience negative consequences that appear when a successful outsourcing arrangement cannot be achieved. Outsourcing success as seen by reaching economic, strategic and

technological benefits, as well as satisfaction, needs to be countered by flexibility, variations in transaction costs, and non-matching outsourcer objectives has been defined in an often cited paper (Grover et al., 1996). A basic framework to judge success had been suggested by them. Factors as the relationship with the in-sourcer may play an imperative role also been acknowledged by them.

Impact on performance of business and satisfaction of customers in terms of outsourcing can be measured as outsourcing success (Lee & Kim, 1999). Through assessing level of achievement of the economic, strategic and technological benefits of outsourcing, business performance can be measured. Degree of fit between customer requirements and outsourcing outcomes can be viewed as customer satisfaction. Beneficial outcomes of outsourcing resulting from deployment of outsourcing strategy have been identified as outsourcing success in contrast. Risk reduction in technological obsolescence, management of information systems expenses, greater access to key informational technologies, economies of scale in technological and human resources, access to skilled personnel and enhancement of IT competence are among the factors indicated for measuring outsourcing success (Grover et al., 1996).

Implementation management, efficient third party outsourcing, slick physical facilities, process improvement, technology enablement, people development, service excellence are the seven generic competencies have been identified to transform back offices (Mary C Lacity, Khan, & Willcocks, 2009). Increase in the effectiveness of the processes of the system form successful outsourcing. Organization's motivation, advantages and risks are the factors measured to be the key drivers of outsourcing success in this case. Strategic goals, human resource considerations, strategic considerations, cost savings and technological considerations are the motives which turn organizations for outsourcing.

Goals of focal and vendor organization should match for the success of outsourcing engagements. Dynamic processes through specific sequential interaction whereby entities engage in mutual activities is the relationship between focal and vendor organization (Lee & Kim, 1999). Both parties however cannot get always desired results because of good relationship.

Factors which determine success of outsourcing projects are therefore vital to understand. Close links with their vendor lead to outsourcing success which has been believed by many organizations (Ee, Abdul Halim, & Ramayah, 2013). Greater cooperation and energetic striving of outsourcing members plays an important part in enhancing and developing strategic alliances over time (Willcocks & Choi, 1995). There is in fact positive correlation between cooperative partnerships and outsourcing which succeeds (Lee, 2001; Lee & Kim, 1999).

Focal organization's lack of ability to describe in detail what they need from vendors is the most frequently reported problem in outsourcing relationships. In the outsourced activity this situation will lead to inefficiency and conflict. With the surrounding environment an organization's activities may not uphold in the absence of relationships (Raman, Chadee, Roxas, & Michailova, 2013).

Fundamentals for organizations to deploy resources, gain knowledge and pursue continuous competitive advantage are analyzing, recognizing and promoting inter-organizational relationships according to inter-organizational research. From a business and user perspective it had been suggested that is possible to recognize outsourcing success (Lee & Kim, 1999). Through technological and strategic improvement and quantitative improvement as seen in economic returns business performance can be measured. Perceived benefits and satisfaction namely has been depicted as twin indicators for success in outsourcing. Inter-organizational relationship effectiveness entails evaluation of satisfaction from all aspects. While appreciation of benefits gained

from a particular outsourcing relationship are the perceived benefits of focal organization (S. Kim & Chung, 2003).

Beneficial contributions of outsourcing commotion to the organizational performance can be defined as outsourcing success. To build a competitive advantage and to achieve organizational objectives successful partnership is needed which every organization may not garner by itself (Lee & Kim, 1999). Overall, operational and financial stipulations have been measured for outsourcing success (Zhang et al., 2009). Strategic, economic and technological indicators been employed to measure the success of outsourcing (Grover et al., 1996; H.-S. Han et al., 2008; Lee, 2001).

Intangible and tangible nevertheless are both ways of outcome. In order to measure the success of outsourcing therefore behavioral dimensions included (Benamati & Rajkumar, 2008; De Vita et al., 2010; Espino-Rodríguez & Padrón-Robaina, 2005; H.-S. Han et al., 2008; Lee, 2001). From the perspective of the product receivers this research measures the success of outsourcing. Because the decision makers who make a decision on the reason to outsource are the product receivers. Whether outsource motivation has been met and if this strategy has been successful, they are the best persons to evaluate it. To see how outsourcing relationships should be run, it is believed they have the most holistic view on functions and activities of outsourcing (E. Ee et al., 2013).

Thus this study deployed the working definition of outsourcing success depicted as the satisfaction with the benefits attained by an organization as a result of deploying outsourcing and successful outsourcing is a powerful tool for organization to generate value (E. Ee et al., 2013).

#### **1.4 Research Gap**

From the perspective of manufacturing outsourcing this study focuses on discovering the factors which have an impact and effect on outsourcing success. Numerous gaps were identified in relation to the rationale of study in the existing epistemology, depicted in this section. To look into it first, the nature of manufacturing as well as relations among the focal organizations (any organization which outsources) and vendors, which are vital to make and deliver a product / service, are considered. The lack of connection between focal organization and vendor is denoted as ‘structural hole’ and current ‘system shortcoming’ (Sobinska & Willcocks, 2016).

Therefore, there is a need to deploy an appropriate outsourcing system for ensuing and constant interaction. To explore the outsourcing relationship from the perspective of the research gap in the literature, the researcher attempted to determine how capabilities can be exploited and decided to investigate the effect of focal organizations’ capabilities on outsourcing relationships (H.-S. Han et al., 2008). By employing human capital, further ensuing and constant interaction can be enriched (Koo, Lee, Heng, & Park, 2017).

Next, compatibility of partners, which has been referred to as the match between partners, is a considerable factor of success in business-to-business (B2B) environments, as has generally been acknowledged in studies (Whipple & Frankel, 2000). Partner compatibility as a variable has been used in many studies for joint value creation of partners (Hassini, Jungbae Roh, Hong, & Park, 2008; Matthyssens et al., 2008; Shamdasani & Sheth, 1995; Whipple & Frankel, 2000). Mainly, it has been considered from the cultural perspective of organizations (Harrigan, 1985; Hassini et al., 2008; Lam & Han, 2005; Whipple & Frankel, 2000). Further, to add essential competencies, compatibility may also be recognized as another vital requirement for the success of business collaboration (Espino-Rodríguez & Padrón-Robaina, 2005; Jarvenpaa & Mao, 2008; Kroes & Ghosh, 2010; Skinner, 1966; Wu & Park, 2009). As



an example, the effect of information technology (IT) compatibility has been recognized as a critical ingredient for success in information systems outsourcing (Bettis, Bradley, & Hamel, 1992; Faisal & Raza, 2016; Lee, 2001; Sobinska & Willcocks, 2016; Tallon, 2008). Through the phase of provider selection by having the chance to conduct realistic assessment, IT resource capability of vendors can be observed.

The question which here arises is the extent to which non-tangible factors like culture and competencies can be evaluated prior to working together despite of the objective evaluation. Despite of objective assessment, it is questionable, as to what degree factors which are not tangible in the shape of culture and competencies specifically can be evaluated prior to working together. Certainly these assessments are restricted.

In this stratum, experience in the shape of explicit behavior can only be had after implementation of contract. Only when focal organizations start working with vendors can real time management philosophy be observed from this perspective. One of the fundamentals that guide human action / behavior is culture. Because of the above stated fact, culture can be characterized as a human resource of organizations.

Vendor compatibility matters throughout the whole outsourcing process, not only at the initial stage of selection. For the success of an alliance, partners' compatibility is one of the predominant factors which has been proven to be of importance by past studies (Liou & Chuang, 2010; Lok, Baldry, & Pitt, 2016; Shamdasani & Sheth, 1995; Zoghbi-Manrique-de-Lara & Ting-Ding, 2016). It has been generally accepted that more value will be created when organization have compatible business partner as measured against less amenable partners (Shamdasani & Sheth, 1995; Whipple & Frankel, 2000). The above stated link has been primarily missing in the available literature. Therefore, this study will evaluate the direct impact of partners' compatibility together and will assess the moderating role in manufacturing outsourcing.

Another missing link, as has been depicted, is that the quality of organizational performance in the manufacturing sector is positively related to the degree of outsourcing (Fixler & Siegel, 1999; Gilley & Rasheed, 2000; Thouin et al., 2009). With regards to this, an alignment of findings positive linear relationship has been observed (Espino-Rodríguez & Padrón-Robaina, 2004). For value creation of valued resources, partners are reliant on each other, and reciprocity of resources moves towards an equilibrium point. Though organizations optimize differently throughout the outsourcing process, it is not known what mechanism is most significant to achieve outsourcing success by having optimal degree of outsourcing.

The above depicted perplexing discussion urges further investigation to figure out the direct and indirect impact of the degree of outsourcing. Degree of outsourcing has been depicted and identified as the level of external resource and propensity involvement of an organization in the perspective of outsourcing (Gorla & Somers, 2014; McIvor, 2009). Therefore, the outsourcing level needed to optimize the system for the success of outsourcing is critical to figure out and evaluate. This brings an answer to the question as to what level of outsourcing will achieve optimal success.

Because of the above discussed complexities, realizing predictable benefits is still subtle, elusive and indefinable, specifically from the perspective of developing economies, so a system is needed for understanding of factors enabling outsourcing success as not much work has been done to address this issue and to make a system for outsourcing success. There is gap to develop a balanced robust structured system and factors which enable outsourcing success, as the majority of the research on the phenomenon of outsourcing has mainly focused on the developed countries of Europe, Japan, and USA, leaving out developing economies (Ikediashi & Okwuashi, 2015). Outsourcing successes which have been ignored in previous studies within the context of developing countries from the perspective of outsourcing phenomenon will give

several new and interesting insights (Ikediashi & Okwuashi, 2015; R. K. Jain & Natarajan, 2011), because outsourcing markets of developed economies like the UK are structured differently or have different legal and cultural constraints as compare to developing economy (Ikediashi & Okwuashi, 2015).

### **1.5 Problem Statement**

The manufacturing sector is prospering globally and therefore competition among manufacturing organizations also mounting. To perform better than the competition, organizations need to have a competitive advantage in the current competitive business world by attaining efficiency and cost reduction as now organizations have more pressure to perform from this perspective than ever before (Plugge et al., 2016).

It had been recognized that outsourcing is a strategy for harnessing expertise knowledge which extends competitive advantage. The existing literature is not fully able to depict a robust outsourcing system despite the fact that dependence on outsourcing is common (Gerbl, McIvor, Loane, & Humphreys, 2015). Having stated above there is need to form a balanced approach as what organization need to outsource while at the same time not to lose their human capital specifically from the perspective of developing economies like Malaysia.

The global outsourcing market is expected to reach a compounded annual growth rate of 5.7 % and more than 200 billion dollars in turnover in 2017, which equates to 176 billion dollars in 2011. A number of organizations have had negative experiences with outsourcing projects in the past, as they failed to attain the benefit and value expected, but still rapid growth of outsourcing is recognized by researchers and practitioners.

It has been estimated that 50 % of outsourcing projects failed to give extra value beyond standard operations, produce knowledge of particular processes or reduce costs as prescribed in the contract, as per a survey of 189 outsourcing organizations across various industries (e.g., finance and accounting, retailing, health administration). Based

on a worldwide survey of 300 executives from organizations grossing more than 30 million dollars annually across varied industries (e.g., manufacturing, retail, services and education), approximately 75% of the vendors indicated that focal organizations lacked sufficient preparation for outsourcing, systematic strategies and understanding of working processes. These results show that outsourcing projects produced unsatisfactory performance (Liu et al., 2017). Therefore, a balanced robust structured outsourcing system is needed to address these problems.

Outsourcing for many organizations in today's environment is a necessity, but one with significant potential shortcomings. Contemporary research shows that outsourcing of components, even mission-critical ones, has become a key strategic initiative for numerous organizations (Schoenherr, 2010). From this perspective, the achievement of cost savings and other benefits has been difficult to obtain as outsourcing governance structure is still immature or lacking altogether (Schoenherr, Narayanan, & Narasimhan, 2015). From practice point of view, lack of connection by having repeated interactions between organizations in developing economies like Malaysia's automotive industry is one of the reasons that organizations having outsourcing engagements fail to attain optimal outsourcing success through cost savings and efficiency.

Automotive industries are an accepted way to bridge a nation's development through their high rate of employment. As such they are the target of many direct investments by the global automakers. Therefore this study seeks to evaluate certain factors in order to identify a robust system for outsourcing success in the manufacturing industry (Shatouri, Omar, Igusa, & de São Pedro Filho, 2013).

From practical perspective potential is there to reap benefits from outsourcing as depicted from above facts but problem is to attain optimal outsourcing success through which automotive industry of developing economies like Malaysia can reap benefits as

they are facing the problem to attain optimal outsourcing success by creating efficiency, cost reduction in making this industry lucrative and viable.

Factors affecting outsourcing success can be seen from two perspectives, as some are beyond organizational control while others can be controlled. Uncertainty of market (A. Banerjee & Williams, 2009; Espino-Rodríguez & Padrón-Robaina, 2004; Gilley & Rasheed, 2000; Kotabe & Mol, 2009; Matthyssens et al., 2008), market thickness (De Vita et al., 2010) and expected contention (Lahiri, Kedia, Raghunath, & Agrawal, 2009), are factors which fall outside the real control of the organization. These factors have been excluded from this study. Factors which can be controlled and have an impact on outsourcing success are vendor management capability (Chua, Lim, Soh, & Sia, 2012), partnership quality (E. Ee et al., 2013), trust (Mazzola & Perrone, 2013; Palvia, King, Xia, & Palvia, 2010; Sambasivan, Siew-Phaik, Mohamed, & Leong, 2013), human capital (Marin Kawamura, Eisler, & Banerjee, 2013), knowledge sharing (D. M. Jain & Khurana, 2016; Qi & Chau, 2013, 2015), and degree of outsourcing (Gorla & Somers, 2014; McIvor, 2009), partners' compatibility (Lok et al., 2016).

Outsourcing success and the quality of partnership relationships has been taken for granted in the existing literature (E. Ee et al., 2013; Lee, 2001). When there is high quality partnership, it should be validated whether outsourcing is successful or not. High quality is not a sufficient condition for outsourcing success, although it may be an essential one (Graham & Wei Khong, 2005).

Processes for managing the outsourcing relationship and selecting the right vendors not been studied intensively, especially from the perspective of Malaysia, so managers may still have lack of knowledge about it. In the modern business context, it is becoming increasingly complex for many organizations to manage the relationship between organization and vendor. When developing and maintaining outsourcing relationships, this is because both parties have different needs and agendas (Lievens & Corte, 2008).

There is long term commitment needed between the organizations and vendor/s to constantly monitor outsourcing activities and there is hidden cost to pursuing this monitoring. Outsourcing success relationship can be impeded if a poor choice of outsourcing partners has been made (Tapiero, 2006).

Degree of outsourcing has been recognized as critical factor for outsourcing success in the present study. But this needs further investigation by evaluating as to what degree outsourcing needs to be planned and executed in partnership among organizations to form an efficient and robust outsourcing system. Capability to plan and work together refer to partners' compatibility (Whipple & Frankel, 2000). The partnership begins at the stage once partners' compatibility has been actuated.

Strategic value can be added in the shape of outsourcing success through partners' compatibility by influencing activities and orientation (Shamdasani & Sheth, 1995). Many organizations fail to select the right partners and thus fail to build a solid relationship with vendor/s.

It is desirable for there to be a cultural fit and agreed priorities between the vendor and focal organization in the shape of partners' compatibility and operational expertise. These elements are the basis to select partners for ensuring successful relationship. To avoid problems, they should establish strategic alliances and agree on their willingness to adopt the philosophy that they are organizational partners (E. Ee et al., 2013; Tapiero, 2006). From this perspective the success of outsourcing will be analyzed in terms of the direct and indirect impact of partners' compatibility. In this stratum vendor management capability, partnership quality, trust, degree of outsourcing, human capital, knowledge sharing and partners compatibility delineates the most salient predominant factors in manufacturing sector outsourcing.

To create competitive global strategies for making efficient and superior products is the challenge for the Malaysian automotive industry. To compete in efficiency and

attractiveness of price as compared to other carmakers has been the problem of Malaysian automotive industry. To achieve outsourcing success the Malaysian automotive industry has to align its outsourcing strategy which involves producing and assembling cars by concentrating on the outsourcing activities (Rahman, Melewar, & Sharif, 2014).

### **1.6 Research Questions**

This study seeks to answer the following questions.

1. What impact vendor management capability, partnership quality, trust, human capital, knowledge sharing, degree of outsourcing and partners' compatibility have on outsourcing success?
2. What mediating role degree of outsourcing asserting between the relationship of vendor management capability, partnership quality, trust and outsourcing success in Malaysian automotive industry?
3. What moderating role partners' compatibility asserting between the relationship of human capital, knowledge sharing and outsourcing success in Malaysian automotive industry?

### **1.7 Research Objectives**

Based on the research questions, the aims of this study are:

1. To analyze the impact of vendor management capability on outsourcing success in Malaysian automotive industry.
2. To examine the influence of partnership quality on outsourcing success in Malaysian automotive industry.
3. To analyze the impact of trust on outsourcing success in Malaysian automotive industry.
4. To evaluate the relationship between human capital and outsourcing success in Malaysian Automotive industry.

5. To examine the impact of knowledge sharing on outsourcing success in Malaysian automotive industry.
6. To evaluate the mediating effect of degree of outsourcing between the relationship of 1) vendor management capability and outsourcing success, 2) partnership quality and outsourcing success, 3) trust and outsourcing success, while examining the impact of degree of outsourcing on outsourcing success.
7. To analyze the moderating effect of partners' compatibility between the relationship of 1) human capital and outsourcing success, 2) knowledge sharing and outsourcing success, while evaluating the impact of partners' compatibility on outsourcing success.

## **1.8 Significance and Expected Contributions of Study**

Following is the significance and expected contributions of this study.

### **1.8.1 Theoretical Contribution**

Following are the theoretical contributions of this study.

A researcher can contribute to the theory from three facets (Alan Bryman & Emma Bell, 2007). To address the neglected aspects in previous studies is the first facet of the researcher's contribution. The research offers two theoretical contributions in this facet.

The first contribution of this study which is lacking in current literature is to attain sustainable outsourcing success by value creation through developing a balanced robust structured outsourcing system, having recognizing its importance is depicted in the background and gap discussion of the study above. A balanced robust system is lacking not only in developing economies but also in developed economies as well. In result by filling this gap, this study will offer a balanced robust system to attain value creation which is outsourcing success as depicted in the operational definition of outsourcing success of this study by using a balanced approach of degree of outsourcing.

To have a balanced robust system, the same organizational philosophy and management style between focal and a vendor organization is also important as it influences value



creation and hence tends to attain outsourcing success. To attain, this study proposes that there should be the same organizational philosophy and management style between focal and vendor organization. In the current literature, the use of a balanced approach to degree of outsourcing together with the analysis of the influence of partner compatibility in an ongoing outsourcing contract is less empirically addressed.

It lure to empirical evaluation of the effect of partner compatibility on the success of outsourcing. The second contribution of this study will come in this way. In the area of manufacturing outsourcing, it is predicted that the empirical investigation of these two ignored elements will contribute new concepts to the storehouse of knowledge. To evaluate variables which have previously been empirically untested is the second aspect through which a researcher can contribute. By explicating this aspect, theoretical contributions three and four of the study will be shown.

By evaluating mediating role of degree of outsourcing, contribution number three of the study will appear. The examination of underpinning theories showed that some facets have not been tapped by them. A specific set of outcomes has been addressed by most of them. However, in outsourcing there are critics of transaction cost economics and resource based view.

Therefore, social exchange theory (SET) will be deployed for this study to oversee the outsourcing context after analyzing all theories of outsourcing in research theoretical underpinning heading. Due to the limitations of the explanatory power of the theories used in the literature of outsourcing, many negative elements have resulted.

The knowledge based view (KBV), resource based view (RBV) and transaction cost economics (TCE) have been used in the bulk of the previous studies. TCE fails to identify corporate capabilities, which is one reason for detractions and criticisms of it (Holcomb & Hitt, 2007). By deploying social exchange theory in the manufacturing industry, the present study will give a contribution by showing that the greater the

partners' compatibility, the more outsourcing success there will be, which provides more value to the collaborations.

Drawing on social exchange theory, previous studies have insufficiently empirically addressed the direct impact of trust on the success of outsourcing. In this stratum, this study is examining the impact of trust on outsourcing by lessening opportunism, decreasing cost and yielding favorable returns on investment, which is another theoretical contribution of this study. This study integrates human factors, i.e. human capital and knowledge sharing, for the success of outsourcing under the realm of social exchange between organizations to create value, which is less empirically addressed in previous literature.

### **1.8.2 Managerial Contribution**

Following are the managerial contributions of this study.

In the manufacturing industry for managing the outsourcing function, the present study will give a guideline. This study tends to analyze automotive industry in Malaysia. From a strategic management perspective, the present study will offer a guideline for managing outsourcing as a business strategy. Rather than an activity, outsourcing has been professed as a system. The explicit nature of manufacturing is the concern of this study.

To manage the process of outsourcing of manufacturing, the factors recognized will suggest guidelines for inputs into plans. The first managerial contribution of this study will come in that way.

To evaluate the success of outsourcing, managers in the automotive industry can use this model. If the degree of outsourcing mediates outsourcing success, then it will give managers clear indication as how much they have to outsource i.e. moderately outsource, outsource to a greater extent, totally outsource or not outsource at all with reference to a particular function / activity. Managers can attend more to strategies

which augment the alignment of themselves with vendors in a way as if partners' compatibility has direct impact on outsourcing success by evaluating its moderating role. By working with vendors as a team to adapt the vendors to the focal organization's culture, communication of organizational culture may involve assigning a definite time for this activity (Daityari, Saini, & Gupta, 2008).

The model of the study will help to take counteractions to make more appropriate and informed decisions for appraising the success of outsourcing. This is another managerial contribution of this study.

### **1.9 Scope of The Study**

A trend has been prevailing since the 1980s in manufacturing industry outsourcing to focus on non-core functions to advance strategic and transformational outsourcing. Many organizations have achieved large savings through traditional outsourcing alone. In this perspective many multinational organizations are now looking for locations like East Asian countries that offer equal if not better advantages and one can also find examples like India for that. An excellent telecommunication, IT infrastructure and stable political climate are the common considerations for potential outsourcing locations. Other considerations for outsourcing locations are positive support from the government involving start-up investments with relevant tax incentives, a relatively low cost of labor and the availability of talented human resources with prevalent use of English and major Asian dialects. Malaysia is the third most attractive offshore location for shared services and outsourcing, so does not Malaysia combine almost all these criteria? If so, how does Malaysia fare in this? From this perspective, the contribution of outsourcing to the local economy has been realized by the Malaysian Government. Investment of more than RM1 billion had been applied to the outsourcing industry in Malaysia in 2011 (O. Ee, H. A. Halim, et al., 2013).

In the list of outsourcing destinations Malaysia had been ranked third in the world. Top ten destinations of the world have been depicted in below table.

**Table 1.2:** Top Ten Outsourcing Locations of World (Kearney, 2011)

<b>Country</b>	<b>Rank</b>	<b>Country</b>	<b>Rank</b>
India	1	Mexico	6
China	2	Thailand	7
Malaysia	3	Vietnam	8
Egypt	4	Philippines	9
Indonesia	5	Chile	10

As a result of the level of good business environment, qualified labor, talent pools and low cost advantages showed by these countries, above rankings have been made. Perusahaan Otomobil Nasional Berhad (also known as Proton), on May 07, 1983 was the first car manufacturer when Malaysian automotive Industry was established. This was established by the fourth prime minister of Malaysia Tun Mahathir Muhammad. In July 09, 1985, proton's first model, Proton Saga was launched.

In August 01, 1994, Perusahaan Otomobil Kedua Sdn. Bhd. (also known as Perodua), which launched its manufacturing plant was established as a second car manufacturer. At only about 50,000 units per year, even though during that time the national automotive market was initially low but now below table depicting the market sales review of industry.

**Table 1.3:** Market Sales Review (Yusop, Wahab, & Saibani, 2016)

<b>Ranking</b>	<b>Manufacturer</b>	<b>Total (Unit)</b>	<b>Share %</b>
1	Perodua	196,071	29.90%
2	Proton	138,753	21.16%
3	Toyota	91,185	13.90%
4	Nissan	53,156	8.11%
5	Honda	51,544	7.86%
6	Mitsubishi	12,348	1.88%
7	Hyundai-Inokom	12,217	1.86%
8	Isuzu	12,061	1.84%
9	Ford	10,660	1.63%
10	Volkswagen	9538	1.45%
11	Others	68,260	10.41%
<b>Total</b>		<b>655,793</b>	<b>100.00%</b>

One can figure out from above last table that only Perodua and Proton had already covered app. 51% of the Total Industry Volume (TIV) depicting the contribution and strategic importance of this industry.

In East Asian countries, particularly Malaysia has been selected to set up affiliate outsourcing centers by many organizations, and this is the latest development in this regard. To handle local and overseas operations for achieving the benefits of outsourcing, these organizations are adopting outsourcing operations concept by setting up centralized processing centers in Malaysia.

To reduce cost, improve efficiency, focus on core competencies, improve processes, develop new capabilities through current liberation in regulation as well as advances in information and communication technology, all of these incentives have provided an opportunity to use outsourcing as a strategic point for value creation (R. K. Jain & Natarajan, 2011).

In the current competitive business world, organizations are adopting outsourcing strategy to create value through cost reduction and efficiency, specifically in developing countries like Malaysia where there is need to develop a structured system and to figure

out factors to enable outsourcing success for the value creation of organizations. To encourage the growth of shared services and outsourcing (SSO) industry, the Malaysian government has shown some support (E. Ee et al., 2013).

Developing countries like Malaysia are focusing more on their automotive industry as the Government and its spokesmen are taking much interest in it, highlighting the value and strategic importance of this industry for economic growth. The gross domestic product (GDP) contribution of the Malaysian automotive industry is 3.2 %, a substantial export of RM 5.3 billion to the nation, which is depicting a continual major GDP contribution to the national economy and making it one of the major industries in Malaysia (Yusop, Wahab, & Saibani, 2015). From this perspective it is one of the most important and a strategic industry in the Malaysian manufacturing sector and one which makes a major contribution to Malaysia's manufacturing development. The automotive industry has to increase productivity and sell more through innovative business strategies. The industry must focus on operations and cost efficiency to reduce costs which have been added by Malaysia's deputy prime minister. In the manufacturing sector, the automotive industry has been recognized as a strategic and significant industry (Rahman et al., 2014). There are 690 automotive organizations currently in the automotive industry (Natsuda, Segawa, & Thoburn, 2013).

Because of the significance of the Malaysian automotive industry as depicted above, to create value through cost reduction and efficiency is a highly worthwhile goal. Outsourcing success as an outcome needs to be analyzed because it will afford novel and interesting findings and implications from the perspective of developing countries like Malaysia as depicted above (Ikediashi & Okwuashi, 2015).

### **1.10 Organization of Thesis**

Chapter one investigates the fundamental and overarching subject of this study, by attending to gaps in the current literature, while ascertaining a stable backdrop for the

proposed research. This chapter offers the statement of problem, analysis of outsourcing theories, rationale for selecting social exchange theory as the theoretical underpinning, theoretical studies and managerial contributions.

Chapter Two offers a review of the ontological and epistemological setting of the phenomena of outsourcing. It covers linked output of multiple research areas, such as outsourcing, management of manufacturing, management of performance and supply chain management.

Finally, an inclusive literature analysis pertaining to various variables which are also part of the research framework have been explained. The second part of the chapter observes the key issues which arise from the discussion up to that point. Considering the observed issues, subsequent hypotheses are set forth for verification in an empirical manner.

The third chapter gives details of the constructs and methodology followed, especially research design, rationale and sampling method. Also, the chapter incorporates the pilot study results and the relevant adjustments made. Further, the establishment of the statistical background for data analysis is discussed after being provided.

In the fourth chapter, the interpretation of data analysis results, both inferentially and descriptively, is presented. The descriptive statistics contain demographic profile analysis and mean ( $\mu$ ) analysis of variables. The inferential statistics section contains the depiction of model of measurement and structural model. The study findings subsequent to each established hypothesis re considered.

The fifth chapter abridges the findings of the hypothesis tests, as well as considering the findings of the research. It offers linkages to the research questions and research objectives of the study, as well as noting the contribution of the study to theory and practice. The last section of this chapter focuses on the limitations of the study and prospective areas for future research.

## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

An organizational performance directly influences the supply chain which is why it is gaining growing recognition (Ketchen & Giunipero, 2004; Lejeune & Yakova, 2005; Miles & Snow, 2007). So as to deliver competitive products(s) or service(s) by assimilating organization's value chain with stakeholders' is the focus of supply chain management. Collaboration is generally known as the value chain integration with external stakeholders. Instituting links between focal and vendor organization is outsourcing in the form of business collaboration. Business partnerships developed and evolve from outsourcing.

Improving overall performances partnership augments the strength of the business. Expansion of outsourcing even with offshore vendors has significantly been accelerated by globalization and information technology (IT). To become competitive and to overcome deficiencies in the required resources outsourcing came into place regardless of geographical dispersion (domestic / international). Having stated above, positive outcomes all time not been reported from outsourcing. Due to aforementioned reason coping strategies as well as the latent causes of negative outcomes has been attempted to examine in numerous recent years researches.

Such as the vendor's adverse reactions risk associated with the outsourcing task are the negative outcomes reported in some studies (Lam & Han, 2005; Le Bon & Hughes, 2009), along with high cost of switching (Donada & Nogatchewsky, 2009), market insecurity (Gilley & Rasheed, 2000; Kotabe & Mol, 2009; Lahiri et al., 2009), and advantage-taking behavior of vendor (Lam & Han, 2005; Le Bon & Hughes, 2009). Because of negative experiences received by either / both parties, outsourcing can accrue negative consequences (Donada & Nogatchewsky, 2009). Outsourcing cut activity / function and workforce transversely which is one of the negative aspects of



outsourcing. A hybrid multi-criteria model for selecting outsourcing partners which assumes that performance differences are vendor-related had been developed (Liou & Chuang, 2010). While manage strategies studies are few in contrast.

Due to above stated reasons this study developing a balanced robust structured system to avoid transversely cut of activity / function and workforce which is the main aim of this study is to recognize factors that have to be managed while dealing with aforementioned negative consequences. This is necessary not to lose human capital having knowledge sharing which are ultimately asset of organization. Therefore human capital factor and knowledge sharing has been included in this study to have balance approach of degree of outsourcing.

## **2.2 Research Theoretical Underpinning**

Following is the research theoretical underpinning.

## **2.3 Theories of Outsourcing**

Involving many managerial dilemmas, the process of outsourcing is a multifaceted concept comprised of sub-activities and activities. To help practitioners successfully manage the process and to help academics to understand the nature of those activities, many theories have been proposed. There are several theoretical approaches that are advanced to explain each phenomenon by numerous frameworks. Different theories have been put forward to explain outsourcing from its inception. Therefore, the outsourcing phenomenon creates confusion among researchers.

The outsourcing phenomenon could be explained by a considerable number of theories as acknowledged by many authors (Gottschalk & Solli-Sæther, 2005; McIvor, 2005). Cost stage analysis is grounded in transaction cost economics (TCE) and agency theory which focuses on analysis of the commencement of an outsourcing arrangement. Resource based views and core competencies are vital explanatory theories which propose that after many years of outsourcing the central point of the outsourcer shifts

into the resource stage. Social exchange theory and relational views bring important explanations at the end where the partnership stage carries on.

### **2.3.1 Transaction Cost Economics**

The most popular theory of outsourcing is transaction cost economics (TCE). Applied to forthcoming outsourcing arrangements, TCE is supposed to be a decision-making tool to help organizations make outsourcing decisions. This theory is also appropriate in the reconsideration phase when the concept of switching costs is to the fore, while the dominant feature of the theory is inclined to be applied in studying the managing relationship phase. Relationships among organizations have been explained by TCE. It refers to two methods of analyzing hierarchies and markets.

Due to partners' self-interest and opportunism uncertainties, as explained by TCE, the decision to use either vertical integration / hierarchies or market mechanisms depends on the relative monitoring costs that crop up from rationality (Kaufman, Wood, & Theyel, 2000). TCE also offers an explication of contractual complexity, which is another functional concern for outsourcing.

An important determinant of an organization's scope of vertical integration which has been conceived by transaction cost economics as "transaction costs" are costs of exploration, contracting, negotiating, monitoring and dealing with changes / disagreements (Williamson, 2008).

The main implication of this literature is that firms outsource (thereby relying on outside "markets") when those transactions costs are acceptable and in-source (using internal "hierarchies") as a way to evade outsized transactions costs. By overlooking modern day industrial collaborative arrangements, TCE has been criticized for depending on a single transaction as the unit of analysis. In a nutshell, the vitality of the current business environment is not appropriate to TCE as it is stagnant. Within inter-organizational relationships, the way in which how organizations attain and uphold their

competitive advantage has been explained and developed by the relational view. How organizations choose their future outsourcing partners and favored type of relationship is the key premise and is pursued via the concept of relational rents. The reconsideration phase, relationship management phase and transition phase have also been considered via this lens. Critical resources may extend organizational boundaries by arguing that the relational view (RV) complements the resource based view (Dyer & Singh, 1998). Not only relational rent will be accrued by organizations but internal rents (i.e., Ricardian rents from scarcity of resources and quasi-rents from added value) will also be made. Through joint support of the collaborative partners, relational rent can be created as it is a supernormal profit reciprocally generated in an exchange relationship that cannot be created by either organization in separation (Dyer & Singh, 1998; Lavie, 2006).

Joint value creation (i.e., inter-organization rent generation) intricate mechanisms are based on the relational view by means of collaborative benefits. At the collaboration level for common benefits, relational rent has been argued to accrue. The role of both private and common benefits in the relational view is dissimilar to other studies (Hamel, 1991; Khanna, Gulati, & Nohria, 1998). The possibility of spinning the outsourcing process from a simple partnership into a strategic alliance is uncovered by laying the groundwork through appropriate planning (Willcocks & Choi, 1995).

Based on technology relationship maintenance for the development of competitive advantage, a model had been suggested to examine the effects of an organization's capability to develop a relationship with the vendor at the phase of vendor selection.

The phases of relationship maintenance, preparation, and vendor selection have been illustrated through a model by the relational view, which studied the care given by contracting parties to the maturity of the relationship. The research reached the

conclusion that the benefits of the outsourcing process are dependent on the quality of the relationship and its enterprise.

### **2.3.2 Core Competencies Theory**

The concept of core competency was developed on the basis of resource based theory. The focus here is on how to synchronize varied production skills and integrate multiple streams technologies. Core competencies has been conceived as mutual learning in organizations (Hamel & Prahalad, 1990). It has been a much admired concept among researchers. That core activities should remain in house is the main inference of this concept, which is used to develop and test diverse outsourcing decision.

The concept is also appropriate for analyzing the relationship management and reconsideration phases. To persuade success of an outsourcing arrangement, the vendor's competencies are one of the vital factors (Levina & Ross, 2003). According to core competencies theory, the key factor that establishes the success of an agreement is the analysis of the vendor's competencies. The phases of relationship management and reconsideration have also been explained by core competencies theory. In academic research related to outsourcing, core competencies theory is an acknowledged approach. Core competencies theory is the second theoretical pillar of research, as illustrated in TCE. This is worth mentioning (Arnold, 2000). Core competencies theory is one of the two approaches that better explicate the outsourcing process as it examines the phases of preparation, relationship maintenance and reconsideration (Gottschalk & Solli-Sæther, 2005).

### **2.3.3 Resource Based View**

It has been shown that resources and capabilities can vary considerably across organizations, and these differences can be stable. This is the core principle of the resource based view (J Barney, Hesterly, Clegg, Hardy, & Nord, 1996). Organizations can achieve a competitive advantage if their resources and abilities are harnessed and

employed in an appropriate way. To overcome its weaknesses, organizations should look for an external provider which can compensate for lack of valuable, rare, unique, organized resources and capabilities which are the intent of the resource based view from an outsourcing perspective.

The resource based view has usually been applied in the vendor selection phase for selecting an appropriate vendor, and therefore the most well-known use of the theory is in the preparation phase of the outsourcing process for defining the decision-making framework. A seminal piece of initial work originating the resource based view was that done by (Wernerfelt, 1984). Strategic resources can explicate organizational performance variance such as core competence (Jay Barney, 1991). Strategic resources can explicate organizational performance variance suggested by resource based view (RBV) such as core competence (Hamel & Prahalad, 1990), vibrant capability (Teece, Pisano, & Shuen, 1997), and absorptive capacity (W. M. Cohen & Levinthal, 1990).

Advantages over competing organizations can be gained by mingling resources in a distinctive way which others are unable to do (Dyer & Singh, 1998). Organizations can reach a persistent market advantage even when possessing limited resources and assets by excelling in core competencies and capabilities (Foss & Knudsen, 2003). Because of rare, valuable, non-substitutable, difficult to imitate natural advantages being asserted by RBV, organizations may benefit through investing in relations specific assets facilitate partnering organizations to raise performance (Jay Barney, 1991).

One of the key conceptual frameworks in the study of strategic management, RBV builds upon many of the same works that influenced TCE. In RBV, the firm is an aggregation of resources that can craft competitive advantage if employed appropriately. The RBV posits that resources that create contribution to competitive advantage should be internalized within the organization rather than being put at risk by outsourcing. Matching capabilities can be taken from external providers. This theory

also been utilized to explicate important issues relating to the managing relationship and reconsideration phases.

#### **2.3.4 Knowledge Based View**

How individuals cooperate to produce goods and services has been explicated in the knowledge based view (KBV) for understanding. Knowledge application and knowledge creation are the two ways in which knowledge is shared among partners as explained by the knowledge based view. Knowledge is the main resource which has an impact on an organization's competitive advantage as explicated in KBV of the organization (Grant, 1996; Kogut & Zander, 1992). In KBV the major driver of insourcing is the subsistence of vital implicit knowledge that must be shared between activities (one residing within the firm and another being considered for outsourcing).

Knowledge sharing in the managing relationship stage is positively related to the success of an outsourcing arrangement as the knowledge based view ascertains it by utilizing and deploying in outsourcing research. How individuals collaborate to produce goods and services is the understanding which the Knowledge based view gives. The model underpinning the KBV is proposed by (Lee, 2001). Management of the two contracting parties in the outsourcing process from a relationship perspective is the attempt explicated in it. Knowledge sharing is one of the key success factors of an outsourcing process by reaching at the conclusion that model also been employed in core competencies theory.

#### **2.3.5 Resource Dependency Theory**

Resource dependency theory is about how peripheral resources affect the manner of acting of organizations (Pfeffer & Salancik, 1978, 2003). Still, the root of this theory is in social exchange theory (Al-Natour & Cavusoglu, 2009). Latent causes of external stakeholder relationships have been explained by this theory as well (Hessels & Terjesen, 2010). This theory is concerned with the notion of effectiveness. Resource

dependency theory (RDT) creates a balance between dependencies on external resource for better organizational leverage (Pfeffer & Salancik, 2003). The major cause for seeking external resources is scarcity of resources from the perspective of RDT (Al-Natour & Cavusoglu, 2009).

Numerous organizational phenomena such as mergers, alliances, franchise and outsourcing are explained by RDT as the outcomes of external resource involvement by generating economic collaboration (Hessels & Terjesen, 2010). The current competitive business world is about making interdependence networks by utilizing external resource acquaintances which is to go beyond 'making deals' and in its place is about designing and making models which work together (Linder, 2004). In contemporary business, gains and survival depends on how efficiently an entity can create and make operational networked business (Petersen, Handfield, & Ragatz, 2005).

Performance can be improved by using RDT, which suggest that organizations should regulate their extent of operations to surmount environmental uncertainties (Kedia & Lahiri, 2007). Expansion of power can be attained by utilizing several strategies recommended by RDT. From this perspective strategic alliances can be made with sole vendors by taking the control of resources needed by others. Where the organization may minimize the vendor dependency level though optimal outsourcing, this can also be helpful for them (Ulrich & Barney, 1984).

Kedia and Lahiri (2007) proposed that failing businesses can be turned around by utilizing external resources to manage environmental vitality. Overseeing reliance is situational and it depends on task environmental components, to extent that individual organizations are concerned. Fruitful results in the system can be attained for members who can balance their reliance. It had been depicted that three essential strategies to oversee reliance are 1) modifying hierarchical association through joint efforts, 2) establishment of aggregate structures to shape an 'arranged domain', and 3) utilizing

lawful, political or social activity to frame a 'made situation' (Pfeffer & Salancik, 1978). These strategies have been examined above. Clarification of the essential intention of outsourcing has been explained by the first strategy. At the point when an organization outsources an activity, it shares peripheral assets with another organization. Due to this, the appropriate propensity level of peripheral resource involvement has to be decided.

At this juncture, focal organization can augment or lessen propensity involvement of peripheral resources to increase competitiveness (Hessels & Terjesen, 2010). Similarly strategic choices of resources are proposed by resource dependency theory (Kedia & Lahiri, 2007; Pfeffer & Salancik, 1978).

The second strategy involves relationship administration, and accordingly proposes that reliance, socialization process, vendor coordination and social capital have an unpredictable arrangement of interrelationships. Dependency of the focal organization on the vendor augments the contribution of the vendor in the partnership (Petersen et al., 2005). Trust with external partners additionally prompts the intensification of the relationship (Pfeffer & Salancik, 1978). Through formal governance mechanisms, management of dependency can be done appropriately, which is the third strategy (Al-Natour & Cavusoglu, 2009). The risk associated with the exchange of resources can be anticipated for stakeholders which can be safeguarded by legitimized dependency (Hessels & Terjesen, 2010). To legitimize the level of control from the perspective of the organization's capacity to get to peripheral resources is deployment of RDT.

To make equivalent outcomes of performance from all dependent relationships is not necessary (Al-Natour & Cavusoglu, 2009). Also the propensity level of organizations depends upon the purpose of sharing peripheral resources from the perspective of resource dependency theory (Hessels & Terjesen, 2010). In order to optimize benefits from outsourcing, selection of the best resource deployment is critical as resources alternative choices have budgetary constraints. Because of the aforementioned reason,



the organization has to make decision about whether they have to produce internally or have to engage vendor to buy external resource. A balanced combination of outsourcing at appropriate levels and in-sourcing at other levels will establish the performance of organization (Kotabe & Mol, 2009; Thouin et al., 2009; Watjatrakul, 2005). Accordingly, to plan deployment of organizational resources has been suggested by RDT.

### **2.3.6 Social Exchange Theory**

For social engagement and exchange, social exchange theory elucidates interpersonal relationships by positing economical cost benefit analysis. Fundamental forms of human interaction (material or social) from the perspective of exchange of resources have been explained by social exchange theory. Actions are reliant on rewarding reactions coming from the realm of social exchange theory by depicting that social exchange is an ongoing mutual process (Gottschalk & Solli-Sæther, 2005). Use of efficiency and the comparison of alternatives, as well as subjective cost benefit analysis, are the drivers for which all human relationships are formed, and this has been explicated in social exchange theory. For social participation and social exchange, social exchange theory (SET) construes interpersonal transactional relationships by using the economic cost benefit analysis and efficiency as a requisite.

Reactions of organizations or individuals depend on the rewarding reactions they receive from others, which shows that social exchange is a continuing reciprocal process (Gottschalk & Solli-Sæther, 2005). The phase of reconsideration during the outsourcing process has been depicted by the research as indicating that the social exchange theory suggests a model which is interpreting it (Whitten & Wakefield, 2006). Highly theoretical work examining the social exchange process has been undertaken by (Gottschalk & Solli-Sæther, 2005, 2006).

The social and anthropology research realm has been explained well by social exchange theory (Zafirovski, 2005). To explicate relational models and social system organization, social exchange theory is the most applicable theory in this regard. Mutual benefits in exchange and survival of mutual responsibilities have been well explained by social exchange theory from the perspective of its pattern (Lawler, 2001).

The exchange forms are the result of the performing actors' endeavors on the attempt to fulfill their necessities, which is rooted by utilitarianism of social exchange theory (K. Cook, 2000). Along these lines, human activities are controlled by the results; thus connections are made for complementary results. Demand and supply of resources is reliant on connections which can be perceived as the principal social unit / system (Ruben, 1998). Social exchange facets have the flavor to facilitate a variety of studies which is coming from the realm of social exchange theory. As explained above, social exchange theory is concerned with some fundamentals of transaction cost economies. Opportunistic behavior is an issue in the contemporary business setting. Social exchange theory analyzes and takes into account the vibrant nature of relations and impending opportunistic behavior (Blau, 1964; Montgomery, 1996). SET considers the nature of the whole knowledge sharing process which proposes that the sharing of knowledge is a major element of the exchange process as expedited by information technology (S. Chen & Choi, 2005).

SET has been criticized for its inability to assess economic exchange because it does not take into account of the theory of diminishing marginal utility (Zafirovski, 2005). Contrary to the above described viewpoint, SET explain both social exchange perspective and economic exchange (K. S. Cook, Cheshire, Rice, & Nakagawa, 2013; Ruben, 1998). From business transactions perspective both types are vital. For fruitful and successful exchange, there is a need to operate relational facets, not only formal

contracts for full satisfaction of partners. From this perspective, exchange of relationship can be integrated through resource exchange.

Game theory forms the basis of SET from the perspective of social and economic exchange connections. As a function of social relations that instigate later development, power has been explained by connecting social networks to the power of micro theories (K. S. Cook et al., 2013). In that way, social network power can be maximized through aspects of social relationships. On this level resource exchange theory has been taken as branch of SET while the forthcoming section will describe managing power in outsourcing contexts (Al-Natour & Cavusoglu, 2009). As per the above discussion, microeconomic activity is a deduction of outsourcing. Resource based views focus mainly on power, which is explained as the strength of the competencies for competitive advantage. One can observe and infer that SET is an important facet which covers many valuable elements of resource exchange.

### **2.3.7 Selection of Social Exchange Theory as Research Theoretical Underpinning**

These theories are extremely helpful in framing the discussion of outsourcing. At the same time, a small number of caveats merit mention. These theories are conceptual and explanatory vehicles that do not by themselves propose any new methodology for quantification. The theories are diverse but not alternatives, as they have many ideas in common and share many influences. They can frustrate when taken as a set, because they can lead to different conclusions (McIvor, 2009; Tiwana & Bush, 2007; Zack & Singh, 2010). This is not essentially because any of them directly contradict the logic of the others, but because they diverge in the relative weight assigned to the salient factors. Within the context of outsourcing phases, the application of most theories in the field of outsourcing focus on exploring explicit phases of the process and / or specific issues taking place. The above analytical discourse explained the dominance of social exchange theory over other theories. By attracting the interest of researchers in the field

of outsourcing, value creation can be attained through cost reduction and efficiency by adopting outsourcing as a business strategy.

By exchange between two or more organizations having repeated interactions, formations and continuation of shared responsibilities for outsourcing success can be attained. This theory has the ability to address modern issues in outsourcing to create value which can come from the realm of a partnership between two organizations which is lacking in other theories. By deciding whether organization should go for outsourcing of any activity / function, most of the models explained in the aforementioned analysis evaluate the preparation phase of outsourcing.

Social exchange proposes that the fundamental relations between parties involved focus on the benefits and costs they offer to each another. Parties involved could be divisions within an organization, organizations, communal entities, individuals and any meaningful social units (Blau, 1964; K. S. Cook et al., 2013). In this stratum, to study social networks SET gives a rational and practical platform. Further, there is an increasing trend to utilize SET to see contemporary inter and intra-organizational phenomena both from theoretical and managerial perspectives (S. Chen & Choi, 2005; Ruben, 1998).

From an epistemological stance it covers the broader spectrum of human / behavioral facets. Most favorable outcomes among parties can be constructed by having strong positive emotions through the self-efficacy depicted in social exchange theory (Lawler, 2001). Essentially, outsourcing is a B2B process of exchange which has the objective to create value and anticipate to receive valuable outcomes (Lee, 2001). Consequently, expected outcomes are determined by self efficacy. Felicity in outsourcing is dependent on every party to the exchange, as in exchange process collaborators are relying on one another (Sierra & McQuitty, 2005).

Reason to switch vendors is where self-efficacy is absent, which leads to emotions in the negative realm (Donada & Nogatchewsky, 2009). In the result, expected benefits can be attained through the shared satisfaction of the individuals and parties implicated in the transaction (Zafirovski, 2005). Because of the multidisciplinary approach of SET as it integrates basic fundamentals of human behavior and economic exchange and explains gain and losses in exchange, the impetus behind exchange analysis, which oversees the exchange process, makes SET is the most suitable theory for deployment (Ruben, 1998).

Reciprocal and negotiated exchanges are the two kinds of manageable exchange focused on by SET. With respect to reciprocal exchange, it explains the social facets of resource exchange while the economic facets has been covered by negotiated exchange (Ferguson, Paulin, & Bergeron, 2005). Therefore, relational governance is one type of governance which deals with reciprocal exchange while contractual governance is a second type of governance which manages negotiated exchange. The preceding literature will be explained in detail in terms of both contractual and relational governance from the perspective of their mechanisms.

#### **2.4 Governance in Outsourcing Exchange**

Failure of reinforcement is cause to end any mutual exchange of reinforcement and relationship depicted by social exchange process. The mutual expectations of all parties must be fulfilled in a successful social exchange process. Relational and contractual governance for favorable outcomes is important to uphold properly in resource exchange of outsourcing (Ferguson et al., 2005; Mary C Lacity et al., 2009). The transactional-relational continuum had been demonstrated from this perspective (Day, 2000). This exchange has been explained from two governance structure (Ferguson et al., 2005).

Diverse types of benefits can be attained as B2B transactions contain exchange of substance as well as interactions, and the importance of controlling these elements is not trivial. To uphold a sufficient relationship with vendors, it is necessary to overcome the problem of pure contractual governance (Young, 2008). The essential requirement for a successful business however is the deployment of relational resource. Contractual and relational governance in outsourcing is explicated in next section.

#### **2.4.1 Contractual Governance**

Formal governance of system of interests has been recognized as a contract. The rationale of a formal contract is to mitigate risk factors linked with the exchange of resources (Williamson, 1996).

Clauses such as that specify warranties, benchmarking, penalties for non-performance and specific prices have been explained in detail in the section on the outsourcing contract (Mary C Lacity, Solomon, Yan, & Willcocks, 2011; Poppo & Zenger, 1998).

An explicit set of transaction responsibilities from the transaction cost economics (TCE) realm has been perceived as contractual governance (Ferguson et al., 2005; Williamson, 1996). In contractual relationships, the focal organization's role and responsibilities have also been shown as the responsibilities for transactions are not solely pertinent to the vendor. In performing specific tasks in this way, contracts chiefly represent and the responsibilities and roles of partners.

For manufacturing outsourcing, having a well-defined contract is critical. To achieve an agreed objective requires the coordinating of activities and resources by two or more organizations, which shows that agreements are characterized by the commitment (Al-Natour & Cavusoglu, 2009).

In assuring outsourcing success, both supplier and focal organization have obligations in respect of the mutual relationship. The responsibility of the focal organization is to manage vendor activities, as noted in the problem statement. At the negotiated measure

of quality then the vendor is responsible for delivering the products and services. Through vendor management capability, outsourcing success will be assured. Because of the prospective and innate variability of manufacturing, that may have mistakes which may be seen by the customer, the vendor's role is critical in manufacturing.

The decisive objectives of economic transactions are recognized as accomplishing performance outcomes. Where both parties can attain their performance objectives, this will further highlight a win-win situation (Whipple & Frankel, 2000). Outsourcing entails governance towards achieving business goals, as it is a type of joint business venture which ultimately benefit the vendors as well.

One of the main facets of contractual governance in outsourcing is the focal organization's ability to perform supplier management functions and the vendors' ability to come up with the agreed products and services at the level of quality agreed.

#### **2.4.2 Relational Governance**

The stronger the emotional attachment both parties show to a given element of social exchange, the more responsibility each party has in the process of exchange. Successful resource exchange can be created through strong positive emotions and bonding from a pleasant working environment. The level of relationship required depends upon the perceived benefits and the perceived risks having been established from outsourcing.

The success of relationship management depends on an efficient supply chain which has been established empirically (Croom, Romano, & Giannakis, 2000; Zhang et al., 2009).

In international outsourcing, three types of partnerships have been discussed. All three types have been thoroughly debated in terms of transaction cost economics, resource-based views and resource dependency theories, which is the shortcoming of current literature as these three types are tactical, strategic and transformational partnerships.

In the exchange process, a relationship which is sustainable may increase over time when each partner receives a reciprocal stimulus, as has been explicated in SET

(Ferguson et al., 2005; Zafirovski, 2005). Mutual understanding and trust is based in a networked inter- and intra- organization business environment function explained from the context of modern business operations. This suggests that trust has a very important direct effect and impact on the success of the outsourcing engagement. So as tangible resources, relational resources are very important. Human capital has been perceived as a relational resource in business (Marin Kawamura et al., 2013; Subramaniam & Youndt, 2005). Social capital has also been perceived as relational resource in business (Bernardes, 2010). For example, the degree of trust involves commitment (Mazzola & Perrone, 2013), information sharing, knowledge sharing (Yu, 2014), eminence of communication (Park-Poaps & Rees, 2010), information balance (Donada & Nogatchewsky, 2009), relational investments (Cui et al., 2009; Lee, 2001).

Nissan Inc.'s relational governance mechanism has been depicted by explaining that the business helped a vendor (a seat supplier) to construct a plant near its factory. This has been implemented to reduce delivery time, increase manufacturing flexibility and minimize transportation costs while at the same time increasing the production capacity of vendor.

An extended level of relational governance has been explicated in the practical example above (Dyer, 1997). So as to become competitive market players, inter-organizational relationships create social learning experiences (Lee & Kim, 1999). To bring an acceptable service or product to the final customer is the main objective of business collaborations for the development of a sustainable and profitable relationship (Young, 2008). For building long term sustainable relationships with vendors, organizations have to invest in human capital (Subramaniam & Youndt, 2005). Hence the prominent impact of outsourcing success can be derived from relational governance. From this perspective below table depicting the critical analysis of outsourcing literature.



**Table 2.1:** Critical Summary of Literature Review

<b>Title</b>	<b>Journal, Author &amp; Year</b>	<b>Variables Used</b>	<b>Analysis</b>
<p>Investigating the roles of interpersonal and interorganizational trust in IT outsourcing</p>	<p><u>Information technology &amp; people, (Qi &amp; Chau, 2013).</u></p>	<p>Interpersonal trust, Interorganizational trust, Knowledge sharing, IT outsourcing success</p>	<p>From the managerial perspective, findings from this study emphasize the importance of relationship management (trust and knowledge sharing) on overall IT outsourcing success. However study lack the broader horizon to achieve IT outsourcing success as most of the discussion and results are on trust though it is an essential factor to achieve success of any outsourcing engagement. While the study only constricted to trust and leaving the balanced approach to develop a model.</p>
<p>Quality of relationship on information technology outsourcing for organizational success in hospitality industry</p>	<p><u>Journal of hospitality and tourism technology, (Sukru Centinkaya, Ergul, &amp; Uysal, 2014)</u></p>	<p>Service quality, relationship quality, outsourcing success, organizational performance</p>	<p>Service quality and relationship quality, which are two dimensions of outsourcing relationships, were found to be positively related to outsourcing success. Although the research findings provide meaningful implications but the results are only one side of the story, from the service receiver's perspective. Certain facets of the outsourcing success construct are not adequately represented by the chosen indicators as research results may reveal an idea about the research subject in general, but may not be generalized to the whole industry.</p>

**Table 2.1:** Critical Summary of Literature Review Continued

Title	Journal, Author & Year	Variables Used	Analysis
<p>Configurations of outsourcing firms and organizational performance: A study of outsourcing industry in India</p>	<p><u>Strategic outsourcing: an international journal</u>, (Sharda &amp; Chatterjee, 2011)</p>	<p>Work design variables (Task variability, Task analyzability, Task interdependence, Emotional labour, Directionality of information flow, Information accessibility, Channel multiplicity, Information adequacy, Feedback, Satisfaction, Recruitment, Performance management, Training, Career development, Work-life balance policies - Strategic orientation variables (Product distinctiveness, Service market sensitivity, Cost efficiency, Price, Technology, Scope, Site appeal, Human capital, asset specificity, information exchange coordination, commitment, conflict, conflict resolution, cooperation, interdependence, contract dimensions, ownership and outsourcing success</p>	<p>In this study five dominant configurations of outsourcing firms emerge, namely, clear-eyed strategists, adapting professionals, focalizing artisans, conservative controllers, and overambitious associates. Specific configurations of outsourcing firms are associated with better performance across a variety of organizational performance parameters (average attrition, growth in employment, growth in clients, growth in offered processes and overall satisfaction with organizational performance).</p>

**Table 2.1:** Critical Summary of Literature Review Continued

<b>Title</b>	<b>Journal, Author &amp; Year</b>	<b>Variables Used</b>	<b>Analysis</b>
<p>Relationship or contract? Exploring the key factor leading to IT outsourcing success in China</p>	<p><u>Information technology and people, (Qi &amp; Chau, 2015)</u></p>	<p>Relationship dimension (Trust, Commitment, Knowledge sharing, communication quality), Contract dimension (contractual complexity, contract management) and IT outsourcing success</p>	<p>This study develops a conceptual model and empirically tests it through a cross-sectional survey conducted in five big cities of Mainland China. The analysis identified the dimensionalities of relationship, contract and IT outsourcing success and determine the causal relationships between these three constructs. While the new evaluation criteria of IT outsourcing success is somehow different from the literature, however, it may be consistent with the new trends of the global sourcing</p>
<p>IT outsourcing success in the public sector: Lessons from e-government practices in Korea</p>	<p><u>Information development, (Moon et al., 2016)</u></p>	<p>Organizational environment (organization size, IT department size, the role of IT in organization, Attitude of top management toward the role of IT), Contract/project characteristics (project size, contract duration, complexity of project), project management (Frequency of project status meetings, Prototyping, Human resource management), Management (Partnership quality, Knowledge transfer) and IT outsourcing success</p>	<p>Knowledge transfer and partnership quality were strongly related to outsourcing success. Result emphasizes the importance of partnerships for IT outsourcing success. Thus, IT managers in the public sector should concentrate on building better partnerships with vendors. However the study lack theoretical support. This study attempted to demonstrate each direct relationship between two variables, but did not assume possible simultaneous causal relationships between the variables.</p>

**Table 2.1:** Critical Summary of Literature Review Continued

Title	Journal, Author & Year	Variables Used	Analysis
<p>Human resource outsourcing success: Leveraging on partnership and service quality</p>	<p><u>Sage open, (Abdul-Halim, Ee, Ramayah, &amp; Ahmad, 2014)</u></p>	<p>Partnership quality (Business understanding, trust, commitment, communication, top management), Service quality (Tangibles, reliability, assurance, responsiveness, empathy), HR outsourcing successService quality</p>	<p>This article aims at examining the role of service quality in strengthening the relationship between partnership quality and human resource (HR) outsourcing success. The samples were obtained from 96 manufacturing organizations in Penang, Malaysia. The results showed that partnership quality have significant positive impact on HR outsourcing success, whereas in general, service quality was found to partially moderate these relationships. Therefore, comprehending the HR outsourcing relationship in the context of service quality may assist the organizations to accomplish HR outsourcing success by identifying areas of expected benefits and improvements.</p>

**Table 2.1:** Critical Summary of Literature Review Continued

Title	Journal, Author & Year	Variables Used	Analysis
IT outsourcing and impacts in Thailand's financial institutions	<u>Information development.</u> (Wongsaroj et al., 2014)	Levels of ITO - IT activities - IT components (Transaction costs, specific asset, internal uncertainty, internal IT skills) and ITO success	A three-pronged approach is used in this study. It began with a comprehensive literature review. This was followed by in-depth expert interviews with representatives from financial institutions, academia, and outsource vendors. Contrary to previous researches, this study found that internal uncertainty and internal IT skills were two factors that do not affect the levels of ITO. In addition, it was found that levels of ITO have impacts on ITO success. ITO is an organizational strategy that can be applied to many business environments but it is difficult for top management to find a balance between outsourcing and insourcing. Determining the levels of ITO can be a challenge because it is difficult to predict the return. Hence there is need to establish a study to figure out which activity and how much activity an organization needs to outsource to achieve optimal outsourcing success.

**Table 2.1:** Critical Summary of Literature Review Continued

<b>Title</b>	<b>Journal, Author &amp; Year</b>	<b>Variables Used</b>	<b>Analysis</b>
Impact of client-vendor relationship on firm's financial performance: A study of outsourcing firms	<u>Global business review, (Jyoti &amp; Arora, 2013)</u>	Cost, vendor client relationship, quality and Outsourcing success (Financial performance)	The study is primarily based on first-hand information gathered from managers of medium-scale firms. Data analysis revealed that there is significant impact of client-vendor relationship on firm's financial performance as well as on cost and quality of the product. Further, direct and indirect effect of client-vendor relation, cost and quality on financial performance has been discovered. The study empirically contributes to the triangular impact of client-vendor relationship on cost and quality of the product as well as on financial performance. Client-vendor relations affect financial performance directly as well as indirectly through cost and quality.

**Table 2.1:** Critical Summary of Literature Review Continued

Title	Journal, Author & Year	Variables Used	Analysis
<p>Factors influencing hotel outsourcing decisions in thailand: modifications to the transaction cost economics approach</p>	<p><u>Journal of Hospitality &amp; Tourism Research</u>, (Promsivapallop, Jones, &amp; Roper, 2015)</p>	<p>Asset specificity, environmental uncertainty, behavioral uncertainty, frequency, supplier availability, guest contact, capital requirement, hotel experience, level of profit, size of hotel, level of service and level of outsourcing</p>	<p>Results of this study indicate that the experience of the organization may affect its production costs more than transaction costs. Researchers found that hotels do not outsource activities where they have greater capability than external suppliers. Hotels would have lower operational capability in the activities they choose to outsource. However complete activity index in missing which make study worthy in contemporary outsourcing engagement. Inclusion of complete activity index will make study more interesting and will present compact picture of any organization or industry.</p>
<p>A prescription for medical outsourcing success in the affordable care act milieu</p>	<p><u>Journal of Global Marketing</u>, (Jillapalli &amp; Jillapalli, 2014)</p>	<p>Medical outsourcing Competence (Senior management, Perceived industry dynamism, market driven learning), trust, information exchange, communication quality and medical outsourcing</p>	<p>This theoretical research emphasizes the importance of relationship marketing. Unlike traditional transaction based exchanges, this research strives to underscore the importance of trust, timely information exchange, and rich communication quality as the basis for relationship building rather than power-oriented governance and sanctions in contractual medical outsourcing relationships.</p>

**Table 2.1:** Critical Summary of Literature Review Continued

<b>Title</b>	<b>Journal, Author &amp; Year</b>	<b>Variables Used</b>	<b>Analysis</b>
<p>Modeling the impact of outsourcing decisions on facilities management service-level performance: a case of Nigeria's public hospitals</p>	<p><u>Construction Management and Economics</u>, (Ikediashi &amp; Mbamali, 2014)</p>	<p>Cost-related drivers, Strategy-related drivers, Quality-related drivers, Time-related drivers, Social-related drivers and service level performance</p>	<p>Using data from Nigeria's public hospitals, a developed conceptual model is tested in an attempt to understand the underlying attributes of outsourcing decisions and their links to FM services performance. Findings reveal that quality consideration is one of the most significant drivers impacting on service performance of FM services in hospitals. However, is the rejection of the proposition that strategy-related factors impact on service-level performance while social factors do not have a significant impact on service-level performance.</p>
<p>An empirical study of collaborative partnering among enterprises and government organizations for information system outsourcing</p>	<p><u>Applied Economics</u>, (Yu, 2014)</p>	<p>Trust, Mutual dependence, Information sharing, Equipment investment and long term partnership</p>	<p>Results of study support the widely held belief that specific asset investments and information sharing are the major predictors for IS successful outsourcing public-private partnerships. IS equipment investments bind government and business sector firms together in terms of information infrastructure variables in the proposed model explained 58.1 % of the variance in long-term partnership. Since 41.9 % of the variance is unexplained, there is a need for additional research incorporating potential variables that were not considered in the current study.</p>



**Table 2.1:** Critical Summary of Literature Review Continued

Title	Journal, Author & Year	Variables Used	Analysis
Determinants of relationship quality for IS / IT outsourcing in public sector	<u>Information system front.</u> (Swar et al., 2012)	Relationship quality determining capabilities (Communication capability, Cultural compatibility capability, Confidentiality Maintaining Capability, Flexibility Capability, Information Sharing Capability, Conflict Handling Capability, Partnership quality (cooperation, trust, mutual understanding) and performance IS / IT outsourcing success	In this study literature review reveals that relationship quality is one of the important factors to prevent the possibility of project failures. Some researchers have examined the insights of IS / IT outsourcing relationships but they are limited to private sector. However the study is restricted to the Korean public sector organizations therefore caution is needed while generalizing the findings.
The effects of partnership quality on business process outsourcing success in Malaysia: key user perspective	<u>Services Business, (O. Ee, H. A. Halim, et al., 2013)</u>	Partnership Quality (Business understanding, commitment, communication, age of relationship, top management support) and outsourcing success	This paper proposes a theoretical framework to investigate the impact of partnership quality and other variables-business understanding, commitment, communication, relationship age and top management support on outsourcing success.

**Table 2.1:** Critical Summary of Literature Review Continued

<b>Title</b>	<b>Journal, Author &amp; Year</b>	<b>Variables Used</b>	<b>Analysis</b>
Critical success factors in relationship management for services outsourcing	<u>Services business, (Rhodes, Lok, Loh, &amp; Cheng, 2016)</u>	Outsourcing motive - dimension (Cost reduction, Increased company focus, Improved quality, Increased responsiveness to variability in Demand, Innovation capability), Relationship interaction - dimension (Communication, Cooperation, Coordination, Conflict resolution, Integration), Relationship quality - dimension (Trust, Commitment, Flexibility, Consensus, Interdependence, Culture compatibility) and Core benefits - dimension (Quality, Performance), sourcing benefits - dimension (Support services, Personal interaction), Operations benefits - dimension (Know - how, Time-to-market), Cost sacrifices - dimension (Purchase cost, Ordering processing cost, Hidden cost, Downtime cost, Coordination cost)	The main contribution of this study is the development of a conceptual framework in outsourcing motives, supplier-customer relations and customer perceived value in services outsourcing. Results revealed that customer perceive value (CPV) in services outsourcing is a balance between benefits and sacrifices and management should focus on measuring core, sourcing and operations benefits in services outsourcing.

**Table 2.1:** Critical Summary of Literature Review Continued

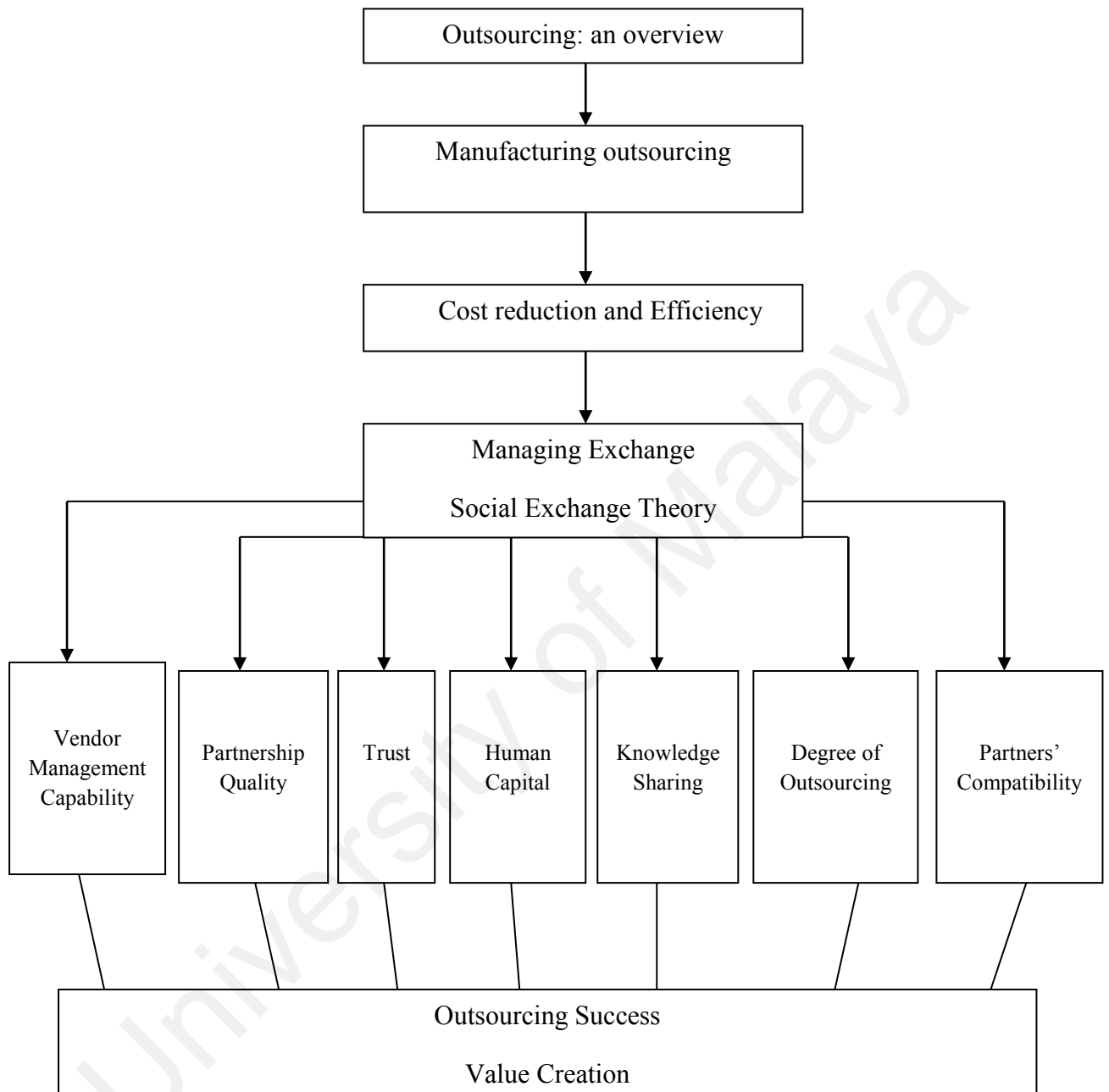
Title	Journal, Author & Year	Variables Used	Analysis
Human resource outsourcing success: leveraging on partnership and service quality	<u>Sage open.</u> (Abdul-Halim et al., 2014)	Partnership quality (Business understanding, trust, commitment, communication, top management), Service quality (tangibles, reliability, assurance, responsiveness, empathy) and HR outsourcing success	This article aims at examining the role of service quality in strengthening the relationship between partnership quality and human resource (HR) outsourcing success.

Consequently, the main factors that have to be managed identifies in this study are vendor management capability, partnership quality, trust, human capital, knowledge sharing, degree of outsourcing, partners' compatibility. To oversee these factors social exchange theory provides the guideline.

The influence of variables noted above with regards to outsourcing in general and manufacturing outsourcing in particular will be discussed in this chapter by offering an inclusive review of outsourcing literature. In this stratum by mapping the flow of literature, conceptual framework has been depicted in below Figure 2.1.

## 2.5 Literature Conceptual Framework

Following is the conceptual framework of literature.



**Figure 2.1:** Conceptual Framework of Literature

## **2.6 Outsourcing: An Overview**

The transformation of business environment has evolved the concept of outsourcing. Outsourcing was professed as a 'make or buy' decision which depicted in most of the studies conducted before 2000 (Fixler & Siegel, 1999; Mary Cecelia Lacity & Hirschheim, 1995; Rothery & Robertson, 1995). While some other studies after 2000 recognize outsourcing as value creation strategy (E. Ee et al., 2013; Faisal & Raza, 2016; D. M. Jain & Khurana, 2016; Mukherjee et al., 2013).

Outsourcing is established as a choice between making and buying when the contract is seen as purchasing. When a contract is more like a collaborative partnership for shared benefits, then in contrast it is viewed as a value creation strategy.

## **2.7 Outsourcing Structure**

Observation can be made for existence of different outsourcing structures in practice. Competencies of organization and the making of alternate structures is reliant on resource capability (J. B. Barney, 1999; Kotabe & Mol, 2009). The focal organization takes on an intermediate role in this transaction process in general as outsourcing is a vertical supply chain. Outsourcing has been depicted from the perspective of four types of structural elements (Dibbern, Goles, Hirschheim, & Jayatilaka, 2004). The time frame, the ownership, the mode and the degree are these four types of structural elements. Ownership utter whether the activity or function outsourced is externally owned, somewhat owned or fully owned by the company, the method defines the number of parties in the exchange process and the degree refers to the level of vendor's involvement. Outsourcing contract could have a short or long-term time frame.

The degree of outsourcing and the ownership concept however is a known fact which cannot be separated. Critical decision in outsourcing has been identified as time duration.

To ensure the successful execution of outsourcing it is often recommended to have an enduring view of establishment for a cumulative relationship (Chan & Chin, 2007; Park-Poaps & Rees, 2010; Qu, Oh, & Pinsonneault, 2010). The leverage which each organization wishes to maintain is the degree of outsourcing. For developing balanced robust structured system hence the amount of outsourcing is the most essential structural decision with balanced approach in modern business context. Below section will discuss about manufacturing and services outsourcing.

## **2.8 Manufacturing Vs Services Outsourcing**

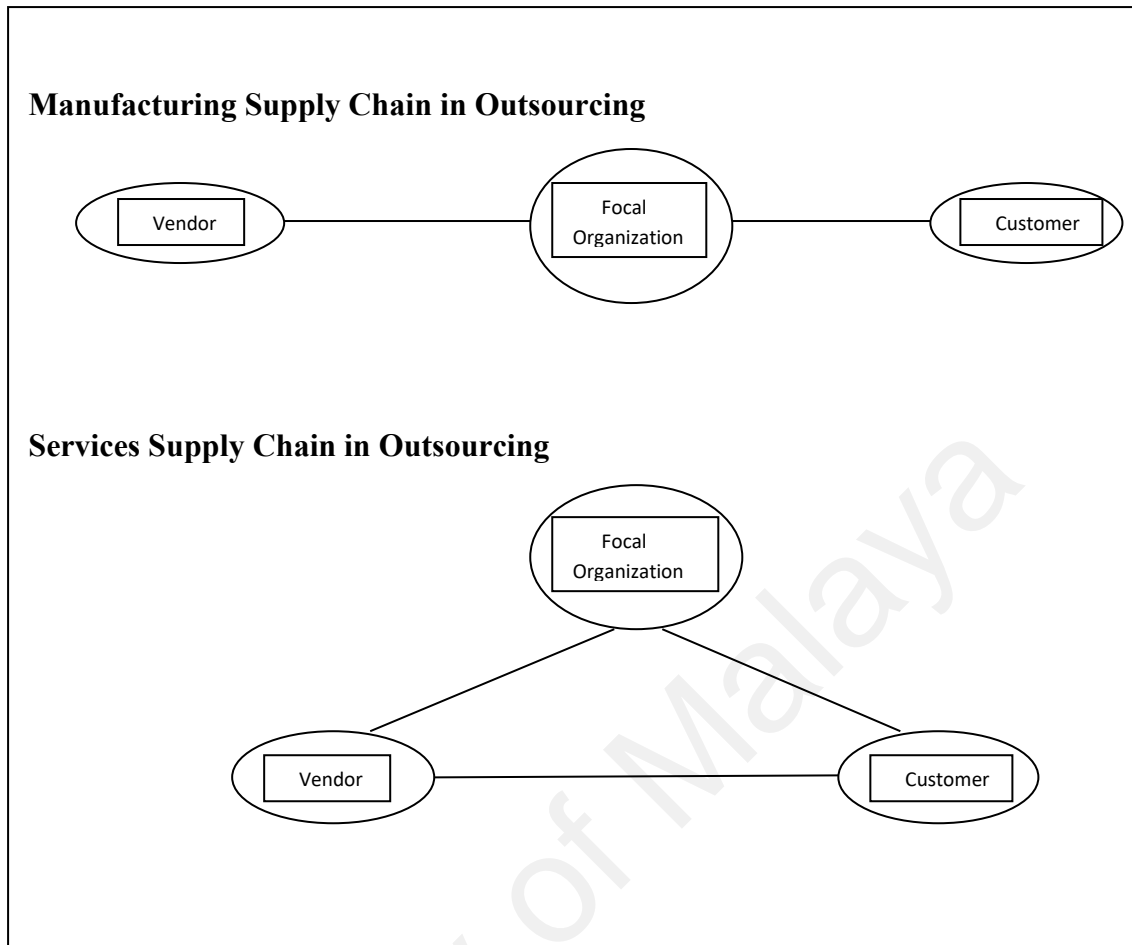
Service is an experience to the receiving customer and is concept method or idea developed by service providers. To transform ideas into experiences the organization assigns an outside party whenever a task is outsourced. Specify in the contract service outsourcing making it quite difficult to utter as delivery customer requirements are heterogeneous (Li & Choi, 2009; Young, 2008). Therefore, it makes service contract careful articulation of necessities. In the delivery of a single service encounter there are only two parties involved (that is, service provider and customer) which is depicting that the service delivery is bidirectional (Sampson, 2000). The focal organization or the vendor in this case can be the provider. By making it not possible to be kept for future trade services are perishable unlike manufacturing. Resource idle times consequently which make outsourcing more challenging have to bear by service organizations. Task-based outsourcing therefore is better than time-based outsourcing in services. If there is not a satisfactory recovery system then services sector is at risk of losing customers.

During the tender assessment process companies need to assess vendors' plans for service recovery. Strategies such as outsourcing, alliances and franchising alternatively with the standardization of service processes enables service organizations to be more malleable in applying. For better facilitation of coordination, communication, and monitoring the standardization of service process has a positive impact on outsourcing

success. Outsourcing in manufacturing is less complex than it is for services because of the assessment of outsourcing in services.

Services have greater uncertainties in outputs than manufacturers (Sengupta, Heiser, & Cook, 2006). Vendor's performance uncertainty is quite strong in this perspective (H.-S. Han et al., 2008; Lee, 2001). Based on three decades of data in the manufacturing / services sector in the US a comparative analysis has been conducted (Fixler & Siegel, 1999). It had been revealed that the productivity is clearer with respect to impact of outsourcing in manufacturing than it may be for the services sector. Outsourcing outcomes are hard to quantify in services which is the fact prescribed for it (Kannan & Choon Tan, 2004). Further to add, demand of services outsourcing has higher uncertainties (Zhang et al., 2009).

Between manufacturing and services supply chain the difference is quite prominent as shown in Figure 2.2 other than above mentioned factors (Li & Choi, 2009). Since focal organizations act as intermediaries between vendor and customer due to which manufacturing supply chain is linear. Between vendor and customer in manufacturing sectors outsourcing there is not direct contact as depicted clearly in Figure 2.2.



**Figure 2.2:** Manufacturing Vs Services Outsourcing

Source: Comparison of supply chain triadic relationship structures in manufacturing Vs services (Li & Choi, 2009)

## 2.9 Outcomes of Outsourcing

To examine methods of ensuring the success of outsourcing is the main focus of outsourcing studies. However satisfaction definition is subjective. Anticipation of the involved parties for it to be considered a success is incumbent on their meeting. To segregate performance from overall organizational performance is difficult from the impact of outsourcing (Fixler & Siegel, 1999; Kotabe & Mol, 2009; Kroes & Ghosh, 2010). The outsourcing level is correlated positively to organizational performance which has been discovered in current literature (Fixler & Siegel, 1999). Using secondary data for the past five years a microeconomic analysis on outsourcing in



manufacturing organizations was conducted (Raa & Wolff, 2001). Fixler and Siegel (1999) findings were consistent with it.

So as to ensure outcomes of efforts in outsourcing in diverse sectors, many cross-sectional studies have been carried out. The manufacturing sector however is subject to empirical investigations of greater rigor than services sector which have been accepted generally. Advantages of outsourcing despite of sector have been discussed in next section.

### **2.10 Advantages of Outsourcing**

Financial and non financial improvements have been pointed out in terms of advantages of outsourcing (Gilley & Rasheed, 2000). Financial and operational indicators were measured from the perspective of supply chain performance (I. J. Chen & Paulraj, 2004). Therefore performance is often measured in terms of operational, financial and strategic outcomes however non-financial indicators contain both strategic and operational gains (Zhang et al., 2009).

Reduction of operational costs in detail included in financial benefits (Kroes & Ghosh, 2010; Lee, 2001), legal and regulatory costs reduction (Kroes & Ghosh, 2010), returns on addition of value (Kotabe & Mol, 2009), and profits (Espino-Rodríguez & Padrón-Robaina, 2005). To measure the performance of outsourcing however very few studies depicted the importance of quality improvements as a measurement dimension (Espino-Rodríguez & Padrón-Robaina, 2005; Espino-Rodríguez & Padrón-Robaina, 2004; Liou & Chuang, 2010; Young, 2008).

Further, quantity of operational success is acknowledged as productivity (Espino-Rodríguez & Padrón-Robaina, 2004; Fixler & Siegel, 1999; Kotabe & Mol, 2009). Able to gain sustainable value for organizations the strategic outcomes have long-term impacts on performances (Jay Barney, 1991; K. K. Kim, Umanath, & Kim, 2005). Focus on core business more explicitly (Kroes & Ghosh, 2010), information and

knowledge sharing expertise (A. Banerjee & Williams, 2009; H.-S. Han et al., 2008; A. Malhotra, Gosain, & Sawy, 2005), improvements (Cui et al., 2009; Cusmano et al., 2009), reduction of business risk (Cusmano et al., 2009; Kedia & Lahiri, 2007; Lee, 2001), and competitive advantage (Bettis et al., 1992; Matthyssens et al., 2008), represent several outsourcing strategic outcomes. Important activities that have been retained in-house outsourcing may facilitate the outsourcing party to better focus on them.

Capabilities that are not available internally vendors may provide them or savings. High liability or otherwise undesirable activities, outsourcing may permit an organization to distance itself from them because as compare to internal employees, vendor may be more motivated. Take care of your core competencies and outsource other things is an idea often heard about outsourcing. As outsourcing can eliminate distractions while causal premise is that focus is valuable.

By identifying core competencies and arranging activities around them, it had been depicted that a company can maximize its competitive advantage (Pralhad & Hamel, 1990). RBV have the high suggestion of this theme (McIvor, 2009). Handling of noncore activities not been asserted but it had been reckon that the outsourcing of core competencies would be a significant strategic error (Pralhad & Hamel, 1990). Everything that is not core had directly been advocated as the goal of outsourcing (Quinn & Hilmer, 1994). Core competencies have been defined as:

- i. Functions (because core competencies do not fall into traditional function categories such as finance, production, sales, engineering,) or knowledge sets and skill rather than products (since these may be reverse-engineered);
- ii. Proficient adaptation or evolution of flexible, long term platforms;
- iii. More than one but fewer than five, depicted as limited in numbers to perhaps two or three;

- iv. Leverage in the value chain of unique sources;
- v. Leading areas of company;
- vi. In the long run rudiments which are important to customer; and
- vii. Not dependent on key persons, embedded in the organization's system.

Things those are strategically important in its place according to these authors are core competencies but not things done excellently or frequently. These are usually not restrained to single departments or functional areas.

To functional areas these core competencies rarely restrained or to individual product department. Influential strategy at organizations like Cisco had been articulated the notion of core versus context. Rest everything else is context the organization do except activities which differentiate an organization in markets and thus drive stock valuation is known as core. Outsource as much of the context as possible while putting the best people in the core can be devised from this. It is needed to identify core competencies by thinking of a way to surmise what really is valuable to the organization.

Offloading tasks not done often enough to achieve specialist performance, the pursuit of focus means that outsourcing can result in great improvements in the quality of people who still work for you (Drucker, 2002).

### **2.10.1 Financial and Operational Flexibility**

By changing fixed costs to variable costs, outsourcing may augment operational and financial flexibility. Setting capacity used as payment basis, this means circumvent ownership of, say, a cargo ship or factory by using someone else's as required. In human resources as well, flexibility can be attained. The employers employ and lay off workers based on demand (or add or reduce shifts, or even make payment on a piecework basis) but they may be unable or hesitant to do this, by depicting that labor costs generated in-house are flexible to this degree.

Western parts of Europe or in India do not much discuss scaling down or terminating contracts with vendor organizations as outsourcing this is rather beneficial in these geographic locations where labor laws mean firing internal employees is not easy. To better fit the outsourcing party's needs dividing asset ownership from convention releases creativity in payment scheme structuring. Financial flexibility has this kind of shape as well. In defense and aerospace industries from the perspective of an example, it is known as "performance based logistics" and also called "power by hour" (a Rolls Royce term) relationship structure.

Instead of the more convoluted conformist approach of selling hardware and then billing separately for after sales services, in this type of contract vendor charges per hour of usage including repair and maintenance. By making an organization look more productive to outside parties maintaining an operation that is low in capital assets and full-time workers can truly augment organization value.

### **2.10.2 Cost Efficiencies**

As contrasting to simply moving cost around, moving tasks between people might create greater value for the system. Due to the pooling of risk (balancing highs in some customers' needs with lows in others'), specialization and scale economies vendor seemingly enjoys superior cost structure. It would be inefficient for clients to perform all tasks themselves, so from this perspective vendor may gather tasks from across numerous clients. The benefits which can be evident in areas such as relationships (creating single access points to many partners or customers), receivables (achieving scale in the collections process and pooling of default risk), information (consolidation into a sole repository, thus reducing search costs), procurement, warehousing, transportation, inventory levels and capacity which is called aggregation.

Whether and in what way service providers share these savings is the impetus on which benefit of outsourcing party depends upon. It is possible that something

disadvantageous to an individual part of system, which creates value for the system. As efficiencies arises since service providers hold capacity or inventory that is in spirit used also by customers, which is one of the example of many forms of the aforementioned aggregation. The unfavored customer however may have been better off keeping dedicated resources in-house if the vendor differentiates when distributing capacity or inventory in times of shortage (for example, larger contracts get priority).

### **2.10.3 Access to New Capabilities or Knowledge**

Replacing an existing function is need not to be about outsourcing. The competencies which are simply not available any other way, an outside party may proffer those competencies. Because in definite skills or equipment as specialist can cost-justify large investments. Knowledge brokering occurs when a vendor organization which works with various focal organizations is better positioned to perform it. The idea across different settings as depicted above refers to cross-pollination of ideas. Transformation outsourcing consists of four types of candidates as all are in quest of special type of basic change (1) “startups”, which require partners to bring new ideas to market and rapidly balance the business, (2) “crouching tigers”, which outsource to repair processes impeding growth, (3) “fallen angels”, which outsource to indicate wide alteration and focus on value addition and (4) “born again organizations”, which markedly improve core operating capabilities in order to survive (Linder, 2004).

It is less worrying that outsourced services may be costlier than what may be achieved in-house as type one and two organizations seek rapid access to abilities that are outside current capital restraints. It might lead to in-sourcing because of the change in financial situation. Outsourcing should be made permanent as types three and four seek to change strategically and reduce cost by accomplishing these goals.

#### **2.10.4 Create Distance from Undesirable Activities**

Organizations sometimes fail to accurately represent their affairs in media or public discourse and this is one way in which outsourcing can create distance. Plausible deniability or a buffer from liability may be projected to create from outsourcing. Focal organization can pretend outrage before publicly firing the vendor. To build suitable compensation into the original fee structure, the vendor supposedly understood the prospect of being a scapegoat as an unspoken part of the deal. This might construe outsourcing party paid as an insurance premium.

#### **2.11 Disadvantages of Outsourcing**

Only positive gains and results could not be achieved as there are no perfect business practices. This is true as there are possible negative effects and implications for outsourcing as well. Loss of confidentiality of valuable information, hidden costs are the examples of it (Li & Choi, 2009), with service quality problems (Young, 2008). Organizations need to try to overcome these problems so as to maximize positive gains from outsourcing.

In this stratum leakage of organization's scale advantage to its smaller competitors, unhappiness of organization staff who manage vendor organization, dependence on vendor which may have a problem with performance and will act in their own self-interest, loss of ability to perform the outsourced task, difficulty of communication and coordination are the disadvantages of outsourcing (Barthelemy, 2003). A number of these factors, since they might not represent straight expenses, decision-makers may easily underweight or overlook. Consequently, emphasis has been given on understanding of all costs and risks, both the nebulous and the explicit, and both the long-term and the short-term for the best contemporary practices of managing outsourcing.

### **2.11.1 Difficulty of Communication and Coordination**

Outsourcing increases the difficulty of communication and coordination which is perhaps the immediate disadvantages of it. It is a key consideration in the KBV while this would be classed as a transaction cost by TCE (Williamson, 2008). Communication can be made difficult by an array of size when attempting to cross corporate boundaries, with persistent challenge even among internal stakeholders. Systems do not communicate well with each other often with respect to different organizations. Reports, memos, emails are the mediums which organizations have to use rather than data liable to informal exchange among employees.

Since vagueness between organizations may lead to litigation or have monetary consequences so these documents have to be written in a more professional way. Changes should pass a vetting process on each side of any desired contract over time typically needed. Due to literal or metaphorical language differences, culture (corporate or national), or mindset, the problem is compounded further by off-shoring. Investing in human and information technology or redesigning processes can counter broken information flow, and for obscure fragmented decision making information technology can be used to reduce remote transaction and communication costs, which could be taken to propose improvements.

### **2.11.2 Loss of Ability to Perform the Outsourced Task**

When the demeanor of the activity based on tacit knowledge critical capacity outsourcing may be put at risk. Through experience, metaphor and analogy, indirect communication this kind of knowledge can be learned rather than explicit knowledge which can usually be confined in procedures and manuals. When the activity resides in-house the chance of keeping tacit knowledge as institutional knowledge (which is sometimes called tribal knowledge) is higher. Even challenges are great such that outsourcing must be linked to great efforts to codify tacit knowledge which is at risk.

Exploited by competitors and an organization's ability to codify knowledge for safeguarding can allow that knowledge to be gained is a double edge sword of success in this endeavor (Grant, 1997). Ability to create new processes and products and processes, which would jeopardize by depicting specifically how organizations which have manufacturing outsourced may not be seen as a core competence (Pisano & Shih, 2009, 2012).

### **2.11.3 Dependence on Vendor and Own Self Interest of Vendor**

Outsourcing enhances dependence on vendor which comprises to the extent for critical capabilities of present and future. Having stated above because of outsourcing vendor going into competition with their clients, use their clients' knowledge of process or product to assist the organizations' competitors, keeping critical assets like custom tooling or rare parts hostage, as this creates susceptibility to vendors' performance problems (Arrunada & Vázquez, 2006; Pisano & Shih, 2009).

Any doubts about the vendor financial stability must address from due diligence in outsourcing. As part of the request-for-quote (RFQ) and trying to verify them independently have been included in asking for financial records. These findings into the vendor selection methodology followed by organizations like Hewlett-Packard (HP) by incorporating it formally. Given that the data is at least somewhat self-reported however the risk cannot be completely eradicated.

Independent parties essentially think of themselves no matter how strong the business relationships due to which conflict arises. Given transparency of behavior on both sides, by lessen opportunism this tension can be addressed through using social exchange theory. Vendor management capability is very important factor for the success of outsourcing and to avoid the issue of limitations in capacity of outsourcer to monitor and dictate essential details of vendors' actions allows a vendor to act against the best interests of focal organization.



Numerous organizations do not realize that investments in business controls must truly be augmented to account for new risks by associating outsourcing with reductions in resource and staff requirements. Organization might be better to not outsource at all as correct oversight of vendors may require very close involvement.

#### **2.11.4 Discomfort for In-House Staff**

Outsourcing organizations may experience resistance from in-house staff besides worrying about vendor risk. The word layoffs often come not long after the word outsourcing is expressed. It has the power to disrupt any outsourcing initiatives as this may destabilize and demoralize in-house workers. Relocation of employees may merely transfer problems to the vendors' payroll as at times, outsourcing just shifts activities without eliminating issues.

Outsourcing may reduce the number of jobs available but if vendor can do the work more efficiently. It is substantial disruption to one's professional life to change employers. Day to day duties of remaining employees morphed in uncomfortable ways. Process and technical knowledge, part of which is deployed inwardly chosen for workers staffed typically for in-house tasks. Managing the same services internally requires an entirely different set of skills as compare to manage external resources (Peisch, 1994).

Competencies such as contract management, program and project management, negotiation, relationship building is relatively outward-facing precedence shifts by outsourcing (G. G. Parker & Anderson, 2002). The ability to elucidate ambiguous specifications and the power to persuade are critical to getting the work done (Amaral, Anderson, & Parker, 2011). Spending time with service providers is essential especially when quality assurance and due diligence is involved as many of these activities cannot be done effectively from a distance. Incentive misalignment when working with outside parties outsourcing increases this need due to intrinsic potential.

### **2.11.5 Leakage of Scale Advantage to Smaller Competitors**

The outsourcing aggregation effect may actually backfire by enabling competitors to make use of the organizations' own economies of scale for organizations that represent the lion's share of its vendors' business. In-sourcing is a better strategy for boosting the costs of organizational competitors under the right circumstances.

### **2.12 Factors Affecting Outsourcing Success**

Aptly named critical success factors several studies emphasize elements which guarantee the sustainability and success of the supply chain (Chan & Chin, 2007; Rajabzadeh et al., 2008; Whipple & Frankel, 2000). Critical success factors in strategic alliances have been highlighted by Whipple and Frankel (2000) which are clear goals and partners' compatibility, the ability to meet performance goals, senior management support and trust.

Managing relationship with vendors in terms of level (Donada & Nogatchewsky, 2009), and a suitable communication system (Chan & Chin, 2007; Ogden, 2006; Rajabzadeh et al., 2008) are also key success factors in outsourcing. In business to business context value of long term relationship also been explained by (Qu et al., 2010). Facilitation for understanding of long-term and short-term goals is due to long term close relationship with vendor. Clear continuous process evaluation and vendor selection criteria, having a strategic view, having a full structured contract, the ascertaining of core activities of the organization depends on a collaborative business success (Rajabzadeh et al., 2008). Outsourcing success also depends on bi-directionality (Cui et al., 2009).

Clear problem definition and inducement alignment, strong in-house competence, strong partner competence, trust and communication have been defined as bi-directionality in this context. Broader meaning however carries by critical success factors (CSFs). Factors that should be given great attention to achieve high performance, as few things that are essential to ensure managerial and organizational

success and as such represent managerial or enterprise area has been defined as critical success factors (Boynton & Zmud, 1984). Issues of operating activities which are imperative to an organization's future success included in factors critical to success.

By taking the stance that impact is contextual and enterprise factors are unique, this study concerns with critical managerial factors from organizational perspective. Currently it is not helping manufacturing sector managers to implement and plan outsourcing tasks because of the scattered nature of these factors. In general management some of these factors are considered prerequisites. Better communication and clear problem definition and top management support are some examples of the functional rations in management.

Other factors are importantly affecting outsourcing success and it is also possible to consider them. Those factors are outlined and discussed under preceding heads of literature review chapter two in detail as this work covers factors which are manageable and which precisely impact outsourcing success. The factors have been discussed briefly in the following section.

### **2.12.1 Manageable Factors**

In influencing a relationship with a vendor first "resource capability of organization" means the relevant organization's abilities should be accounted for as they affect outsourcing (H.-S. Han et al., 2008). Due to the diversity of tasks consensus on required capabilities could not be shaped. Exploitation, assimilation, acquisition and the ability to scan had been depicted as among the organizations capabilities in IS outsourcing (Lee, 2001). Organization's abilities as far as relationship, technical and vendor management issues have been measured (H.-S. Han et al., 2008).

Structural dimensions of outsourcing contract have been outlined by these capabilities. Evaluation process, top management commitment and degree of outsourcing includes in information technology (IT) outsourcing decision. Evaluation is a vendor management

activity while the commitment of upper management is considered as elemental in general management. In this category degree of outsourcing is imperative only. Contract size, contract duration, contract type has been depicted as factors require precise articulation (Mary C Lacity et al., 2009).

Influenced by both internal and external environment factors, these are characteristics of contract that are vibrant and situational. As the length of agreement is allied to other elements such as seasonal demand variation or the organization's future strategic movements, the period of contract tends to be less reliable. The contract is recognized as a formal document that specifies each party's responsibilities and degree of outsourcing based on above facts. Consequently, level of trust a focal organization have on its vendor, partnership quality level, level of vendor management activities which causes outsourcing success are the structural decisions involved in the outsourcing decisions.

This needs to be evaluated as how much degree to outsourcing needed for these critical success factors (CSFs). The degree of outsourcing explains the level of external resource or propensity involvement deployed by a focal organization on its vendor in outsourcing context (Gorla & Somers, 2014). Result of favorable outcomes does not always come with higher level of outsourcing (Mary C Lacity & Willcocks, 1998). Especially in the case of focal organizations human capital and knowledge sharing because this do not need degree of outsourcing as focal organization already have the personnel which are creating appropriate value for organization. If they also have been outsourced then this will decrease to create value for organization which ultimately hurt the efficiency and outsourcing success.

This relation needs partners' compatibility as if focal and vendor organization has same operating philosophies, management style by having proficient human capital and knowledge sharing which are the core competencies of organizations as stated by Quinn and Hilmar (1994), then this can lead to positive outsourcing success but if they don't

have same operating philosophies and management style then this can lead to negative performance of outsourcing success (D. M. Jain & Khurana, 2016; Kroes & Ghosh, 2010; Marin Kawamura et al., 2013; Subramaniam & Youndt, 2005). By influencing outsourcing success vendor management capability has been viewed in the context of social exchange process (H.-S. Han et al., 2008). Direct impact of vendor management capability on outsourcing success however pointed out by numerous studies (Chan & Chin, 2007; H.-S. Han et al., 2008; Mary C Lacity & Willcocks, 1998; Lee, 2001).

Threats in outsourcing like vendors' opportunistic behavior can be curbed by focal organization through proper management system (Lam & Han, 2005; Matthyssens et al., 2008). Outsourcing drives of the organization can also be aligns with vendor selection criteria (Kroes & Ghosh, 2010; Wadhwa & Ravindran, 2007). Asset specificity has been identified as a factor which influences outsourcing success explained by transaction cost economics (De Vita et al., 2010; E. T. Wang, 2002; Zhang et al., 2009). Transferability of assets as seen in specific transactions refers to asset specificity. Most outsourcing has been proposed with high asset specificity rather than in-sourcing (Watjatrakul, 2005). Transaction frequency and uncertainty are the root causes of transaction difficulties with respect to depiction about asset specificity (Williamson, 1979).

Deleterious impact on the relationship satisfaction in outsourcing has been discovered due to vendors' low level asset specificity (De Vita et al., 2010). Asset specificity has indirectly affects success as it had been depicted that assets specificity establishes the level of outsourcing (González-Díaz, Arruñada, & Fernández, 2000; Leiblein, 2003; Saussier, 2000).

Bonds intricately form two organizations cultures in business through outsourcing. Working blueprint of an organization, beliefs, and values represents organizational culture.

In ensuring success, partner compatibility plays a large role in outsourcing (Whipple & Frankel, 2000). As conflicts of culture often contribute to lack of success and cessation of business contracts as this assumption has led to mark the significance of homogenous organizational cultures in outsourcing (Jarvenpaa & Mao, 2008; Lam & Han, 2005; Matthyssens et al., 2008). Vendor which satisfies and supplements the organization's long-term needs and corporate culture is the appropriate and correct vendor to achieve desired objectives (Wadhwa & Ravindran, 2007). Based on above facts following is the detail literature for each of the variable.

### **2.13 Vendor Management Capability**

Growing and commonly accepted practice is outsourcing (Aubert et al., 2004; Barthélemy & Geyer, 2005). Many organizations reported that desired objective and success not been achieved in spite of the increasing outsourcing trend. For attaining impact, risks and efficiency of outsourcing focal and vendor businesses are under pressure to demonstrate the value of their outsourcing and to what degree they have to outsource. The vendor's team needs to be managed well by focal organization. Right technical skills as well as management needs to be provide in return by vendors' (D. M. Jain & Khurana, 2016).

It had been suggested that the most advantageous manner of meeting this challenge is focal organization's ability to manage their vendor (H.-S. Han et al., 2008). Focal and vendor organization interactions are also influenced by intangible factors which are difficult to incorporate in a contract as they often go beyond rules, agreements and expectations. In current literature there are some unaddressed weaknesses, like to consider the effect of focal organization ability to manage its vendor which is vendor management capability.

To evaluate resources, utilize them, assimilate them and employ them in final goods for each organization has a primarily different predisposition. Organization's capability has been termed for that (Jay Barney, 1991). Their operation can be rather different

depending on their abilities although each organization could have the same external and internal resources. The recognition of necessary assets as well as their unmediated impact on business performance explored by many previous studies in particular those which took a resource based view (Wade & Hulland, 2004). Inadequate literature however rather exists for this. Ability should improve business functions to derive performance gains as depicted in study that most RBV studies asserted (Rivard, Raymond, & Verreault, 2006). By improving support for core competencies, it had been posited that interrelatedness of organization abilities and suggested abilities has an impact on organization's performance. As reducing good way to reduce costs and complement the organization's capability most organizations adopt outsourcing for effectiveness. Exploring long-term relations with vendor could create win-win situations from the perspective of looking beyond and existing contractual arrangement.

Vendor's participation in outsourcing should be facilitated by it. Vendor's cooperation results in improved outcomes as the management's direction of the vendor's work have been persuaded in right way (Shi, Kunnathur, & Ragu-Nathan, 2005). Ensuring the success of outsourcing focal organization is held responsible for it (H.-S. Han et al., 2008; Mary C Lacity & Willcocks, 1995; Lee, 2001; Rajabzadeh et al., 2008). For selecting, monitoring, evaluating and developing vendors basically focal organization is responsible for it (Chan & Chin, 2007; H.-S. Han et al., 2008). An important aspect of managing vendors is the focal organization's tendency to reward vendors at agreed levels.

Vendor management capability is the main factor which contributes to outsourcing success as highlighted by several scholars; that is, a strong vendor management system is an important part of strategic outsourcing (Chan & Chin, 2007; H.-S. Han et al., 2008; Mary C Lacity et al., 2009; Lam & Han, 2005; Lee, 2001; Petersen et al., 2005; Rajabzadeh et al., 2008).

Therefore deploying working definition for this study, the focal organization's capacity to monitor, select, develop, evaluate and compensate vendors suitably refers to vendor management capability (Chua et al., 2012; H.-S. Han et al., 2008). Based on above literature and first research objective below hypothesis has been developed.

**H1:** Vendor management capability has a positive relationship to outsourcing success

#### **2.14 Partnership Quality**

To improve in a quickly changing business environment the decision to outsource is now often made since businesses need high quality, diverse information services (Wei Khong & Richardson, 2003). It is becoming a problem however for organizations to build successful partnerships in outsourcing. There are also apprehensions about how they should manage the outsourcing relationships as they lack ability to choose outsourcing vendors (D. W. Parker & Russell, 2004).

To achieve stated goals of participants as an inter-organization refers to partnership (Lee & Kim, 1999). Transactional and partnership-style relationships refer to the twin approaches that have appeared from previous research. Partnership is created through a relationship exchange which engrosses benefit and risk sharing whereas a transactional relationship is created through a formal contract. To form and managing successful outsourcing relationships many organizations had trouble in the 1990s.

In the outsourcing industry this issue originated a move from contractual relationships to partnership relationships (Lee, 2001). To attain important organizational objectives and create competitive advantage in their industries a partnership permits two organizations (Grover et al., 1996). Focal organizations should equip themselves with essential relationship management capabilities and knowledge to build satisfied relationship with vendor/s. Values held in common among parties involved refers to partnership in general (Ren, Ngai, & Cho, 2010).



For determining outsourcing success partnership quality is vital. To improve the suitability of their partnership it had been depicted that the enthusiastic participation of the partnership members plays a main part (Chakrabarty, Whitten, & Green, 2008; J. C. Henderson, 1990). Particularly in the context of Malaysian automotive industry, the quality of partnerships helps foster cooperative relationships which are important to the success of outsourcing. Common values that subsist among those involved in general refers to partnership (Ren et al., 2010).

In partnership quality length of relationship also plays an imperative part. The business must be ready to sustain this relationship over time when it commits to an outsourcing relationship and selects a vendor. Based on trust this involves a long-term relationship. In order to make choices which will result in positive outcomes for the businesses both parties have to believe one another (Lee & Kim, 1999). In evaluating outsourcing success, partnership quality is very crucial. To establish a partnership by an outsourcing agreement has been suggested to be the most effective method to achieve competitive outcomes while some organizations in developing market are hesitant to establish it.

Degree of understanding and at agreement a deep level comprises of business understanding as this is one of the most important things in partnership quality. Effect on outsourcing success is demonstrated by partnership quality (Lee, Huynh, & Hirschheim, 2008). It is becoming dilemma to build a successful partnership in outsourcing as part of the knowledge. With the surrounding environment a business's operations would not uphold in absence of relationships (Raman et al., 2013). Prerequisites and main elements for organizations to expand knowledge, deploy resources and seek competitive advantage according to inter-organizational research are identifying, analyzing and promoting the inter-organizational relationships. Persistent social connections in business, continuous interaction and a sharing process between

businesses and other businesses are seen to be entrenched by definition as inter-organizational relationships (Raman et al., 2013; Ren et al., 2010).

Partnership quality is distinguished from outsourcing success by substantiating the notion that each has its own proper characteristics. For outsourcing success good partnership quality may be an essential element in this stratum (O. Ee, H. Abdul Halim, et al., 2013). How to implement successful relationships, there have been diverse views on it. Transactional style relationship and partnership style relationship are the ways of thinking that have come out from prior research. Partnership is shaped through commingling which involves benefit and risk sharing while the relationship is formally defined by contract (Srinivasan, Mukherjee, & Gaur, 2011). So, whether partnership quality have an effect on outsourcing success, it would be interesting to study. When relationship successfully meets goals of both parties and serves its projected function then partnership quality exists.

Organizations should prepare to persist in relationship over time when they embark on outsourcing relationships and select particular vendors. Long term perspectives are needed to sustain such business relationships. Results in good outcomes for the organizations will occur when both parties require believing one another to perform actions (Swar et al., 2012). Promise of continuing the relationship or pledges and a certain degree of sincerity must be require holding these relationships. Businesses cannot easily establish competitive advantage alone, and successful partnerships are required which enable the organization to achieve organizational objectives (Lee & Kim, 1999).

The effectiveness of the overall process is improved as this might lead to outsourcing success. Between outsourcing success and partnership quality studies have establishes a significant relationship (Grover et al., 1996; Ren et al., 2010). A positive partnership

with vendor is important in outsourcing strategy, as indeed such a partnership will allow parties to reach key organizational objectives and build competitive advantage.

Namely product providers and product receivers are the two or more parties involved in partnership. The products provided by the outsourcer directly and indirectly used by entities refer to product receivers. To whom the process is outsourced are the entities called product providers (Lee & Kim, 1999). Reciprocal interactive, inter-organizational relationship to achieve shared goals has been defined as partnership quality (Byramjee, Bhagat, & Klein, 2010). Relational norms in an exchange process and reciprocal behavior have been explained by partnership quality. Power based hierarchical relationship in modern business has stirred away to communal development based partnership (I. J. Chen & Paulraj, 2004). From this perspective a key determiner of outsourcing success has been recognized as partnership quality (Chi, 1994; De Vita et al., 2010; Kedia & Lahiri, 2007).

In influencing the success or failure of outsourcing initiatives, quality of relationship element have been indicated between a focal and vendor organization (Chakrabarty et al., 2008). When developing and maintaining outsourcing relationships, for many organizations managing the relationships between organizations become more complex as both parties might have different agendas and desires (Ates, 2013; Lievens & Corte, 2008). Organizations should attempt to expand their quality of partnership to reflect the degree of closeness in the shape of degree of outsourcing between their partners in order to benefits from partnership (O. Ee, H. Abdul Halim, et al., 2013).

The quality and success of outsourcing relationship can also be impede by inadequate choice of outsourcing partners (Elmuti & Kathawala, 2000). Up to what extent focal organization outsource denoted as degree of outsourcing which explains the connection between partnership quality and outsourcing success. To figure out the direct and

indirect effects of partnership quality on outsourcing success, it is interesting to see as how much focal organization outsources to achieve success.

By deploying working definition partnership quality in organization are seen as a series of long-term social connections in business to create value by having continued exchange and interaction processes between organization and other organizations (E. Ee et al., 2013). Based on above literature and second research objective following hypothesis has been developed.

**H2:** Partnership quality has a positive relationship with outsourcing success

### **2.15 Trust**

Suitable management is important for the success of outsourcing which has been asserted in strategic relationships literature (Dyer & Singh, 1998; Mazzola & Perrone, 2013; Sambasivan et al., 2013). Trust has been deemed a significant factor and result of social exchange in strategic management research (Blau, 1964; Cropanzano & Mitchell, 2005). Flows downward through each organization always start from the upper levels since trust is treated as any social exchange activity (Ring & Van de Ven, 1994). Developing a scenario for the benefit of both and for value addition closer social ties (rapport and trust) between managers are critical for realizing benefits (Kotlarsky & Oshri, 2005).

For efficiency, business continuity and long term relationships, trust is the underpinning for it (N. Kumar, Scheer, & Steenkamp, 1995). It can be analytic of the degree of integration between two organizations and further component of an organization's relational capital (Sambasivan & Nget Yen, 2010; Sambasivan, Siew-Phaik, Abidin Mohamed, & Choy Leong, 2011). Trust is more and more viewed as a key of competitive advantage and an organization's ability to develop relationships. By translating into cooperative relationships with external partners, organizations that

possess an inner atmosphere of trust have unprecedented advantages in their dealings (Dyer & Singh, 1998; Zaheer, McEvily, & Perrone, 1998).

Organizational life pivotal concept is trust (Rousseau, Sitkin, Burt, & Camerer, 1998). As integrated into a majority of relationship models trust regarded as a basic building block. When a partner in a relationship wants to perform an action that is thought to be in the interest of their respective partners, almost all definition indicates this notion of trust. In both inter and intra-organizational affairs trust is a crucial factor. When an organization orients their trust towards a partner organization, it is regarded as the level of trust one have on other organization. Corporate associations in various contexts, among others, between focal and vendor organization can be improved through trust (Moorman, Deshpande, & Zaltman, 1993).

Coordinating economic activities, fostering information exchange and inter-organizational learning (Hamel, 1991), alleviating conflict and the costs of negotiation between partners (Zaheer et al., 1998), collective strategies formulation would be promoted by trust (Astley & Fombrun, 1983), and augments system stability, facilitate organizational changes. Atmosphere of trust is regarded through organization's climate. More success can be experienced by organization that enjoy trust to a greater extent, be adaptive and innovative compared to those organizations suffering from pervasive distrust which possess lower levels of trust.

It has been argued that trust is closely allied to relationship and is in fact important to sustaining relationships when it comes to trust with respect to most prior organizational behavior studies. In successful relationship management from outsourcing context, prior studies have considered the importance of trust. The degree and nature of sharing for creating success not only influenced by trust but more importantly influence the character of professional relationships (relationships at work) as well (Panteli & Sockalingam, 2005). In this stratum mediating effect of degree of outsourcing will be

considered between the relation between trust and outsourcing success in this study. An element or part of an outsourcing relationship had been depicted as trust (Lee & Kim, 1999). Trust has a positive and direct influence on outsourcing success as it had been proposed that trust is key attribute of relationship intensity (H.-S. Han et al., 2008). Non including a few studies with a specific interest in trust, it is generally listed in the framework of outsourcing relationship (Lee et al., 2008). Trust exists in many forms and at different degrees of outsourcing as not a lot of empirical research has been done to study trust independently and to look into the contribution of trust at different degree of outsourcing to outsourcing success (Qi & Chau, 2013).

From many disciplines by owing this, trust has begun to receive more attention. For instance, in virtual communications (Panteli & Sockalingam, 2005), trust in the e-commerce environment, particularly shopping online from the perspective of information systems literature, research has been done on trust in different contexts (McKnight, Choudhury, & Kacmar, 2002). To an organization's relationship marketing strategy, trust has been perceived to be critical in marketing literature (Doney & Cannon, 1997).

To study uncertainty reduction mechanism and transaction cost (Mayer, Davis, & Schoorman, 1995), trust is thought important as it is a reliable predictor of satisfaction in management (Driscoll, 1978). It is an important factor in delimiting the effectiveness of many relationships (Paul & McDaniel Jr, 2004), engagement success (Gefen, 2002), and also has an important role as a basis for effective collaboration (Rousseau et al., 1998).

At the organizational level researchers mainly focus on trust in outsourcing context. It had been claimed that trust can help mitigate the level of uncertainty that exists in inter-organizational relationships by diminishing opportunistic behavior depicting importance of trust in client / vendor relationships.

Trust can yield favorable returns on investment and decrease transaction costs by lessening opportunism (Luo, 2002). For the successful management of outsourcing, trust has been asserted as one key factor (Gottfredson, Puryear, & Phillips, 2005). Trust has a major effect on outsourcing success by arguing that it is an element of an inter-organizational relationship (Grover et al., 1996).

Zaheer et al. (1998) claim that trust has been incorporated into the organizational level of analysis by depicting that it is fundamentally an individual-level phenomenon. There is theoretical confusion about who trusts whom as not clearly demonstrating how trust carries across from the individual to the organizational level, since it is individual members of organizations, not organizations themselves, who trust. As trust operates at different degrees with respect to outsourcing analysis context, there is some uncertainty in the literature about the exact role of trust (Qi & Chau, 2013). In this study an indirect relationship also builds to clarify above the depicted ambiguity and also to examine the effect of degree of outsourcing of trust on overall outsourcing success as depicted by social exchange theory (SET). Exchange relationship facet of process integration and contract flexibility has been considered because of trust formation in supplier-buyer relationships particularly drawing on social exchange theory (Schoenherr et al., 2015).

Trust can be viewed as a social dimension of success that can add benefits of outsourcing relationships by deploying working definition within framework of this study, since traits such as cooperative norms and communication play a significant role (Mazzola & Perrone, 2013; Palvia et al., 2010; Sambasivan et al., 2013). Based on above literature and third research objective, following hypothesis has been developed.

**H3:** Trust has a positive effect on outsourcing success

### **2.16 Degree of Outsourcing**

Proportion of activities / functions has been characterized as degree of outsourcing (Gonzalez, Gasco, & Llopis, 2015). Fundamentally by its costs and benefits degree of

outsourcing has been determined (A. Banerjee & Williams, 2009). The degree of salience of the resource to organizational performance, resource scarcity and contest between businesses for control of resources are three factors proposed to persuade the level of dependency (Pfeffer & Salancik, 1978). Different optimal levels of outsourcing persisted by diverse organizations. Managers can take help to define core and non-core activities for their organizations, as taken together these factors influence the comparative salience of a particular task to the organization.

Non-core activity / functions should be outsourced only by organizations. It must be carefully examined for any attempt to outsource the core activity / function (Alexander & Young, 1996; Cusmano et al., 2009; Espino-Rodríguez & Padrón-Robaina, 2005; Jiang, Belohlav, & Young, 2007; Kotabe & Murray, 2004; Marshall et al., 2007; McCarthy & Anagnostou, 2004; Quinn & Hilmer, 1994; Wu & Park, 2009). Core and none-core logic are neutral in respect of debates on it. It had been argued that different organizations have different explanations about core and non-core by challenging the value of using core versus non-core logic (Marshall et al., 2007).

Due to its ever-changing nature it had been argued that there is a lack of clear boundaries separating core and non-core. Rather than core and none core logic dynamic outsourcing models have been introduced as a solution (Wu & Park, 2009). Rather than organizational perspective core competencies had been defined in terms of customer perspective (Leavy, 2004). Defining what is core and non-core is best left to each organization as nevertheless organizations are unique systems.

Superior performance could be achieved by organizations because of their usage of complementary resources from the outsourcing vendors for outsourcing success (McIvor, 2009). Complete infrastructure being responsible for delivering products / services if organization owns total in-sourcing. External providers harmonize internal capabilities in the case of selective outsourcing. Organization may outsource several



activities to external providers for explicit areas even though the organization has practically total control over products / services (Gulla & Gupta, 2011).

Rather than total in-sourcing or total outsourcing in outsourcing decisions, selective outsourcing has been proposed as a better option as in other words it is linked strongly with outsourcing success (Mary C Lacity, Willcocks, & Feeny, 1996; Lee, Miranda, & Kim, 2004; Shi, 2010; Väyrynen & Kinnula, 2012). With the success level accomplished, degree of outsourcing has been correlates positively with it (Grover et al., 1996). Both focal organization's satisfaction and greater benefits perceived with it determinedly influenced by higher degree of outsourcing.

It cannot be refuted that a high degree of outsourcing is desirable and even beneficial for the focal organization without actually proposing total outsourcing. Previously this practice was regarded as risky but possibly the maturity of contracts taken with the experience accrued by focal organization with vendors made it increasingly favored and led to an increase in its support base (Gonzalez, Gasco, & Llopis, 2010). The alleged benefits of degree of outsourcing assert a mediating role in the satisfaction derived between vendor management capability, quality of partnership, trust and outsourcing success (Gonzalez et al., 2015).

Deploying working definition for this study, external resource level and propensity involvement of an organization is considered as "degree of outsourcing" as regards the context of outsourcing (Gorla & Somers, 2014; McIvor, 2009). Based on sixth research objective and above depicted literature, following hypotheses have been developed.

**H1a:** Vendor management capability has a positive relationship with the degree of outsourcing

**H1b:** The relationship between vendor management capability and the outsourcing success is mediated by the degree of outsourcing

**H1c:** Degree of outsourcing has a positive effect on outsourcing success

**H2a:** Partnership quality has a positive relationship with the degree of outsourcing

**H2b:** The relationship between partnership quality and outsourcing success is mediated by degree of outsourcing

**H3a:** Trust has a positive effect on the degree of outsourcing

**H3b:** The relationship between trust and outsourcing success is mediated by degree of outsourcing

### **2.17 Human Capital**

In order to augment outsourcing success at the organization level, the theory considers that businesses should make investments in improving the human capital of their workforce. As a key factor for sustainable competitive advantage organization's human capital could be seen as a useful resource (Huselid, 1995; Prahalad & Hamel, 2001; Wright, Dunford, & Snell, 2001; Wright, McMahan, & McWilliams, 1994). An organization's ability with regards to its workforce refers to human capital. Businesses cannot create value without it, and thus human capital constitutes the other intangible values lynchpin (Gamerschlag, 2013). It is the highest rated source of maintainable competitive advantage as it is equivalent to the most important component of intellectual capital (Nonaka & Takeuchi, 1995).

To mine the best solutions from individual manpower and individual knowledge stocks that are entrenched in an organization's collaborative capability refers to intellectual capital (Bontis, 1999, 2001). The sum of workers' experiences, skills, tacit knowledge and capacities has been characterized as human capital. From an individual aspect integration of four factors which includes attitudes about life and businesses, experience, education, genetic inheritance can be defined as human capital. Strategic renewals and well of innovation considered as human capital (Bontis, 1998). Human capital should be combined with relational and structural factors of an organization in order to add more value. From this perspective organizational performance and

commitment have proportional link. Retention of skilled manpower which eventually creates outsourcing success in an organization is somewhat able to guide the development and creation of knowledge. Motivation, commitment, and employee satisfaction are viewed as a function of general individual sentiment.

Towards productivity and innovation via integrating intellectual capital by cooperation, businesses should make every effort to employ and retain capable, skilled personnel, direct those with intellect and develop their knowledge (Chauhan & Bontis, 2004). To attain positive outcomes of teamwork in organizations it had been depicted that here is need for increased innovation, productivity and speed-to-market (R. Henderson & Cockburn, 1994).

Willingness to perform, motivation and employees' accumulated qualifications and competencies all are included in human capital. Human factor's overall importance have long been recognized in human capital theories (Schultz, 1961). Remuneration through investments in education, efficiency, organizations, economies and individuals can improve their performance which had been proposed in these theories (Blaug, 1976). Continual competitiveness and economic growth depend solely on creating innovations which had been argued in human capital and economic theory. Thus, in the end they depend on human capital (Barro, 2001; Bontis, 1998; Mankiw, Romer, & Weil, 1992; Zingales, 2000). Behind organizations' competitiveness human capital should be seen as central factor and a most valuable resource (Chadwick & Dabu, 2009; Huselid, 1995; Prahalad & Hamel, 2001; Snell, Youndt, & Wright, 1996; Wright et al., 2001; Wright et al., 1994).

Superior organization performance equates to heterogeneity in the custody of indicative productive factors which are somewhat difficult to obtain and one of the cornerstones to competitive advantage. Such resource heterogeneity can empower competitive advantage, and human capital is a cogent element of this. The value individuals create is

heterogeneous in various environments and as such there could exist heterogeneous expectations of human capital value within a business since workers create varying amounts of value in different environments (Sharda & Chatterjee, 2011). Human assets have found to be a significant factor in these contexts and have been indeed important to the strategic accomplishments of organizations (Leiponen, 2005; Mohnen & Röller, 2005). To escort to greater organization performance research focus on discovering individuals with higher human capital (Colombo & Grilli, 2005, 2010).

Need to manage human capital is the focus of management research. Theory suggests in order to increase outsourcing success businesses should invest in developing the human capital of their personnel (P. M. Banerjee, 2013). Due to variations in contributing elements and the nature of embedded routines that affect actual or perceived value of human capital in the business, individual ability to create value may vary across businesses (Groysberg, Lee, & Nanda, 2008; Huckman & Pisano, 2006), the existing knowledge stocks of organization's interdependencies (Tzabbar, Aharonson, Amburgey, & Al-Laham, 2008), technologies production (Argote & Darr, 2000), resources access (J. B. Barney & Wright, 1998), and assets complementary (Teece, 1986).

Through internal development human capital management strategies organizations should go forward to enrich their assets (Lepak & Snell, 1999). Business social climates of, shared codes, cooperation and language had been related positively for human resource practices which relate to commitment or internal development. It needs to investigate further that how much human capital management techniques create greater human capital for outsourcing success to avoid loss of organizational human capital. It materialize through relationship building with people as it is not only via innovation investment nor in employing greater human capital (P. M. Banerjee, 2013).

Concepts which triggers entrepreneurial ventures and expansion of outsourcing and operational processes authors claim that human capital can explicate these discoveries

however only when seen in the relevant social structure, these attributes help to garner successful results (Augusto Felício, Couto, & Caiado, 2014). Human capital is thought an important element for success of organization in numerous studies (Colombo & Grilli, 2005; Gimeno, Folta, Cooper, & Woo, 1997).

Knowledge, experience and education are relevant characteristics of human capital (Wright, Smart, & McMahan, 1995), with opportunities to allow affordances to more resources (Davidsson & Honig, 2003; Gimeno et al., 1997). Influencing efficiency potential and productivity to develop activities human capital theory implies that knowledge affords greater intellectual skills to individuals. All through the business process or in terms of conception of activities, it had been argued that formal education appears inconclusively linked with success.

Entrepreneurial abilities related to knowledge and skills gained through education and previous work experiences as the coordination of knowing scattered amongst varied individuals is a distinctive capability (Davidsson & Honig, 2003). Implicit knowledge gained via experiences in certain fields as well as explicit knowledge garnered through education institutions are seen as opportunities and risks influenced by abilities in the gaining of new knowledge (W. M. Cohen & Levinthal, 1990). Significant factor of outsourcing success is human capital which is important to the strategic activities of organizations to create value (Sharda & Chatterjee, 2011). Skills gained in the past become less usable as knowledge of human capital becomes obsolete and workers forget past learning, that is, knowledge depreciation to have negative impact on value creation (Almeida & Carneiro, 2009).

This study employed the working definition of human capital, seeing it as a construct which confines an individual's stock of skills, knowledge, abilities and other attributes which are involved in generating value (Marin Kawamura et al., 2013). Based on fourth

research objective and above depicted literature, following hypothesis has been developed.

**H4:** Human capital has a positive influence on outsourcing success

### **2.18 Knowledge Sharing**

Outsourcing knowledge sharing deserves to be studied thoroughly as it is an important factor in explaining how knowledge sharing influences the success of outsourcing. Knowledge transfer and information exchange between partners which bring together good ideas and appropriate technologies to create new opportunities positively contributes to the success of outsourcing. It illustrates the success of outsourcing can be significantly achieved by sharing knowledge (Quinn, 1999).

Resources or abilities acquired outside of inter-organizational exchange are not only knowledge-sharing, but also an internal activity that provides a competitive advantage (Lee, 2001). The effective transfer of knowledge from focal organizations and vendors is the most important thing in the success of outsourcing. It shows that the success of outsourcing has evolved greatly by outsourcing success (Moon et al., 2016; Yu, 2014). Support can be found in a variety of studies which used SET. Expertise and continuous knowledge sharing between supplier and supplier organizations is a hallmark of successful outsourcing contracts and this mechanism contributes to the success of outsourcing (Klepper & Jones, 1998). The lack of knowledge transfer is detrimental to the relationship and it has been argued that the pursuit of a successful relationship requires an investment that is knowledge (T Kern & Willcocks, 2001).

One of the key factors of successful relationships and partnerships is the sharing / exchange of information. Projects may suffer from coordination problems which could lead to fruitless collaborations without effective information sharing (Thomas Kern & Willcocks, 2002). To explain how sharing knowledge influences the structure, management and effectiveness of the relationship, it has been suggested that the factor

(knowledge sharing) is one of the most important in outsourcing and should be studied thoroughly. Knowledge transfer and information exchange create successful outsourcing between partners and conjoins good ideas and appropriate technologies for opportunity creation.

Knowledge sharing indicates a positive impact on successful outsourcing (Quinn, 1999). One of the important determinants of successful outsourcing is knowledge sharing (Mayer et al., 1995). Knowledge sharing is an essential asset for organizations because the specific reason for its launch is that it is an essential asset for organizations (Qi & Chau, 2013). Knowledge sharing is an important predictor of successful outsourcing, as the importance of knowledge sharing between orientation and sales organization in outsourcing projects is therefore noticeable (Blumenberg, Wagner, & Beimborn, 2009). The theory of social exchange as a theoretical basis in their studies can be found from a variety of studies that have used it.

Increasing costs and the high risk of ownership of knowledge sharing between the focal and vendor organization can therefore lead to negative results for the success of outsourcing (Brusoni & Prencipe, 2011; Kamuriwo & Baden-Fuller, 2016).

By deploying a working definition for this study, knowledge sharing is defined as activities which lead to the transfer or dissemination of knowledge among the focal organization and the provider (D. M. Jain & Khurana, 2016; Qi & Chau, 2013, 2015).

On the basis of a fifth research objective and the literature described above, the following hypothesis has been developed.

**H5:** Knowledge sharing has a positive relationship to outsourcing success

### **2.19 Partners' Compatibility**

The concept of compatibility of the partners comes from the theoretical aspects of the theory of social exchanges (SET). Compatible partners depend on one another in a complementary rather than competitive way. Partners share compatible goals, strive for

mutual benefits and recognize a high degree of mutual interdependence, as partnership is an intentional strategic relationship (Mohr & Spekman, 1994). It has been argued that preference has been given to forming a compatible organizational culture (Cheng, Yeh, & Tu, 2008; Jarvenpaa & Mao, 2008; Lam & Han, 2005; Whipple & Frankel, 2000). Subcontracting as a compatible (unitary) interest was perceived by the internal staff of the focal organization as a joint sharing with external employees of the supplier's organization. Compared to others, some organizational cultures might adapt to outsourcing processes with more or less difficulty and thus influence the vision of outsourcing of internal employees (Zoghbi-Manrique-de-Lara & Ting-Ding, 2016).

To integrate innovations into existing operations and take advantage of new technologies, adaptation is necessary to meet changing needs. The home and provider organization must manage adaptation as a singularly linked unit in an outsourcing context. Due to changing needs, often due to environmental changes in the market or technology, the organization and the provider may need to adapt their activities together, ensuring that partners share the same operating philosophy. Previous research shows that the level of adaptability of a provider influences the ability of the focal organization to gain a competitive advantage in a changing environment. Suppliers may have to adapt to the changing circumstances of the focal organization during an outsourcing contract and, in this case, may need to adapt their capabilities (Plugge et al., 2016).

It forms the compatibility of the partners between the focal organization and the organization of the suppliers, which is the main determinant of the success of the outsourcing.

The ability to plan and work together in a solution-oriented, productive way refers to the compatibility of the partners. Two issues specifically related to partner compatibility are (1) the ability to cooperate and problem-solving, (2) the evaluation of business



philosophy and style. There should be a similarity in the operating philosophy between the focal organization and the provider, while recognizing that management styles are the same among partner organizations. The two organizations work together as a team with understanding despite some differences to improve the partnership by showing mutual respect and commitment.

The day-to-day performance of the alliance would strengthen the compatibility of the partners because of the strong conviction of the focal organizations that their partners are open to new proposals. It was perceived that the partners are willing to discuss operational and very cooperative issues. Responding to special requests and being flexible enough to deal with unforeseen circumstances, partners are ready to take corrective action to solve a problem (Whipple & Frankel, 2000). In considering the functional management of the organization's manufacturing and supply chain, the role of the company or the competitive strategy has been the target of much previous research (Devaraj, Hollingworth, & Schroeder, 2004; Kathuria, 2000; Miller & Roth, 1994; Skinner, 1966, 1974; Vickery, Dröge, & Markland, 1997). Cost drivers, differentiators or targeted suppliers are the competitive strategies which normally drive an organization to compete.

Competitive business strategy is re-conceptualized as competitive priorities and carried out or implemented through operational action plans in manufacturing organizations (Hayes & Schmenner, 1978). The objectives and strategic objectives of manufacturing organizations are competitive priorities (Koufteros, Vonderembse, & Doll, 2002). There are five usually accepted competitive priorities: time, cost, innovation capacity, flexibility and quality in the manufacturing environment (Leong, Snyder, & Ward, 1990; Ward, McCreery, Ritzman, & Sharma, 1998), to successfully outsource between the supplier's organization to form the compatibility of the partners. To facilitate the success of outsourcing, they also work with partners with similar compatibilities

(Espino-Rodríguez & Padrón-Robaina, 2005; Espino-Rodríguez & Robaina, 2005; Kroes & Ghosh, 2010; Skinner, 1966; Tallon, 2008; Wu & Park, 2009).

The degree to which focal and vendor organizations share similar organizational, competitive and cultural priorities identified as the compatibility of the partners in this fact-based study in order to achieve a joint business activity (Kroes & Ghosh, 2010; Whipple & Frankel, 2000).

In order to improve their dexterity with the climate and culture of the organization for positive results, some organizations train their provider (Carr et al., 2008). In an ongoing outsourcing contract, the regulation of cultural compatibility and competing priorities will improve the effectiveness of efforts to ensure the success of outsourcing (Daityari et al., 2008; Kannan & Choon Tan, 2004; Matthyssens et al., 2008; Tallon, 2008). The extent to which an organization outsources also depends on their compatibility since the focal organization and the provider have the same operating philosophies and the same management style. This leads to a positive relationship between the compatibility of partners and the success of outsourcing.

From this perspective, the compatibility of partners has a direct impact on the success of outsourcing and plays a moderating role for the orientation of total value of business between the relationship of human capital, the sharing of knowledge and the success of outsourcing. On the basis of the seventh research objective and the literature described above, the following hypotheses have been developed.

**H4a:** The relationship between human capital and outsourcing success is moderated by partners' compatibility

**H5a:** The relationship between knowledge sharing and outsourcing success is moderated by partners' compatibility

**H6:** Partners' compatibility has a positive influence on outsourcing Success

## **2.20 Hypotheses**

Here are the hypotheses developed for this study.

**H1:** Vendor management capability has a positive relationship to outsourcing success

**H1a:** Vendor management capability has a positive relationship with the degree of outsourcing

**H1b:** The relationship between vendor management capability and the outsourcing success is mediated by the degree of outsourcing

**H1c:** Degree of outsourcing has a positive effect on outsourcing success

**H2:** Partnership quality has a positive relationship with outsourcing success

**H2a:** Partnership quality has a positive relationship with the degree of outsourcing

**H2b:** The relationship between partnership quality and outsourcing success is mediated by degree of outsourcing

**H3:** Trust has a positive effect on outsourcing success

**H3a:** Trust has a positive effect on the degree of outsourcing

**H3b:** The relationship between trust and outsourcing success is mediated by degree of outsourcing

**H4:** Human capital has a positive influence on outsourcing success

**H4a:** The relationship between human capital and outsourcing success is moderated by partners' compatibility

**H5:** Knowledge sharing has a positive relationship to outsourcing success

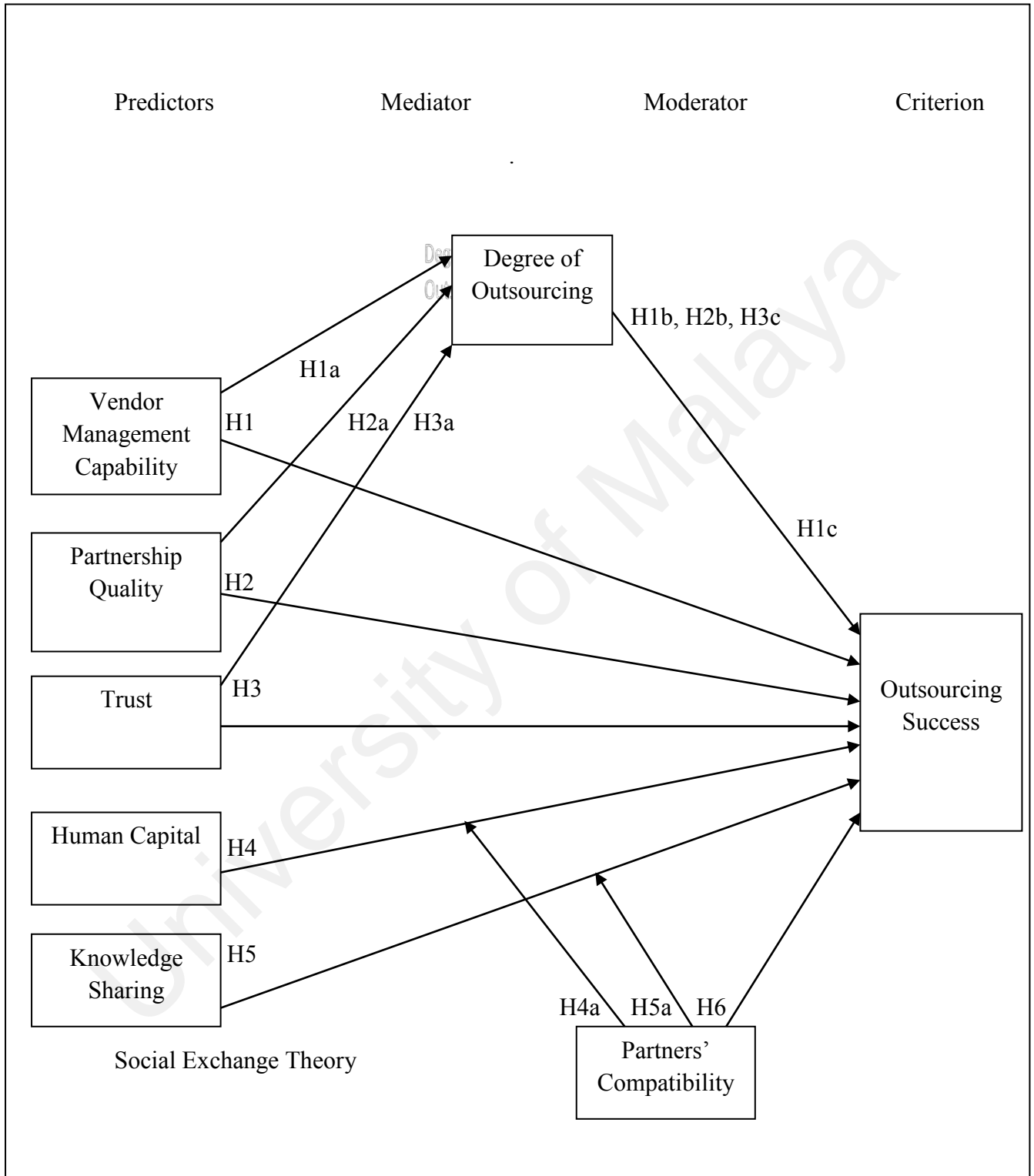
**H5a:** The relationship between knowledge sharing and outsourcing success is moderated by partners' compatibility

**H6:** Partners' compatibility has a positive influence on outsourcing success



## 2.22 Theoretical Framework & Binding

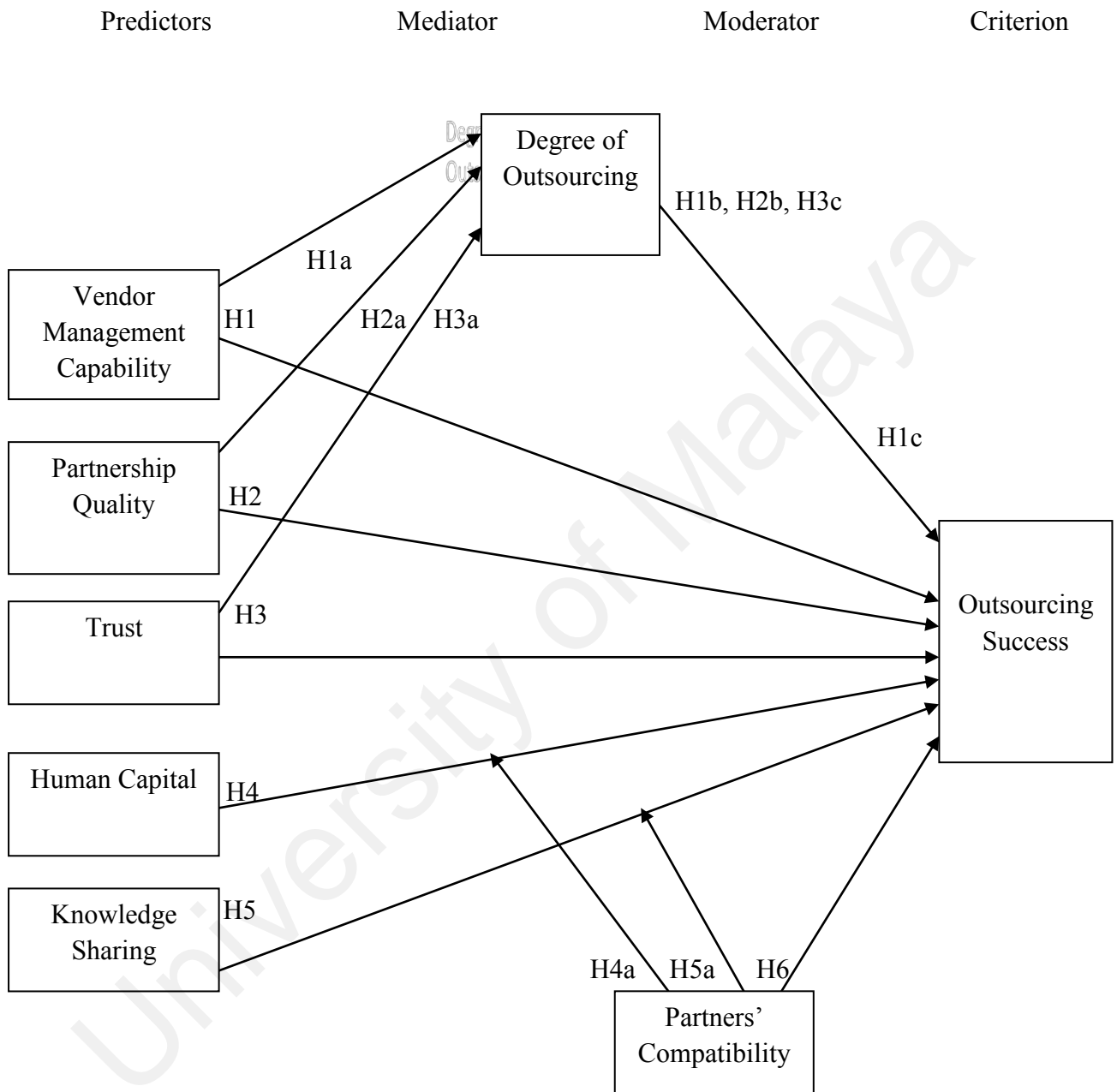
Below is the theoretical framework and theoretical binding of framework.



**Figure 2.4:** Framework's Theoretical Binding

### 2.23 Research Model

From the discussion, the research model of this study is developed. It is shown in below Figure 2.5 which is value creation model.



**Figure 2.5:** Value Creation Model

## **Summary**

First of all, everything concerning the literature has been mapped in Figure 2.1 which shows the complete picture of the literature of this study. Then, a review of the literature of all constructs was discussed in this chapter. Earlier work by eminent researchers from the point of view of outsourcing was discussed of each construct. Different definitions of each construct were discussed with their relation to the success of outsourcing dependent variable. What definition of work to make operational with respect to the measure adopted / adapted for this study of each construct has been described in the review section of the literature.

On the basis of a review of the literature of each construct with alignment of the research objective, each hypothesis was developed and represented under each construct. This chapter also describes the model that has been adapted for this study. Based on the theory of social exchange and the adapted model, a theoretical framework has been defined for the research model which is the value creation model of this study. The moderating role of the partners' compatibility and mediating role of degree of outsourcing has been discussed in this chapter with the formation of their respective assumptions.

At the end, this chapter describes the measurement, operationalization and instrumentation of each variable. A code was given to each question for each item and the source was given for each item, whether adopted or adapted for that study. The following chapter will deal with the methodology of this study.

## CHAPTER 3: METHODOLOGY

### 3.1 Introduction

Thorough methodology will be presented in chapter 3 together with measurement of constructs. This chapter consists of sampling and pilot testing by adopting methodological procedure to test the proposed research model.

### 3.2 Measurement of Constructs

Eight constructs described for the model developed in the previous section. The meanings are however conceptualized for a given context because constructs are not directly observable. The purpose of the research made it possible to define each construct more precisely. Then, the transformation of constructs into variables takes place. They are used to test hypotheses because the variables are the properties studied. Earlier part of this thesis established it.

This study consists of four types of variables, which are the mediator, the moderator, the criterion (dependent) and the predictor (independent). A variable that has an impact of a causal nature on another dependent variable has been defined as an independent variable or predictor, while a variable that is causally influenced by another variable (the independent variable) is identified as a dependent / criterion variable (Alan Bryman & Emma Bell, 2007).

The relationship between two variables, the independent variable and the dependent variable explained by another variable, refers to the mediator, while the variables that are responsible for varying levels of strength in the relationship between the variables have been defined as moderator or as a variable that changes the relationship between two variables also known as moderator (Baron & Kenny, 1986).

Vendor management capability, partnership quality, trust, human capital and knowledge sharing of focal organizations are the factors on which the success of outsourcing depends. Vendor management capability, partnership quality and the relationship of



trust with the success of outsourcing is mediated by the degree of outsourcing, as the relationship between these independent variables and the dependent variable is consistent. Although the relationship between human capital, knowledge sharing and the success of outsourcing is moderated by partners' compatibility, the relationship between these independent variables and the dependent variable is inconsistent.

### **3.2.1 Criterion Variable: Outsourcing Success**

A broader perspective of the success of outsourcing this study wants to identify. To determine the success of outsourcing previous studies have used different measurement indicators. Some have their own theoretical limitations, but some studies have covered many aspects. To measure the success of outsourcing, some studies concentrated on one industry in particular, while others added custom metrics. The increase in computer skills and increased access to key information technologies has been added as an indicator to examine the success of IT outsourcing (Lee, 2001).

Based on the theory of the underlying applied, a marked deviation can be seen in the performance indicators. The operational and financial performance indicators have been used in previous studies. Financial performance measures have been highlighted by numerous studies such as cost reduction (Kedia & Lahiri, 2007; Lam & Han, 2005; Zhang et al., 2009), profitability (Espino-Rodríguez & Padrón-Robaina, 2005; Kroes & Ghosh, 2010; Thouin et al., 2009; Zhang et al., 2009).

Overall quality has been seen as a performance indicator with various terminologies, which is one of the key operational aspects of outsourcing. To measure operational performance, "quality improvements" were used (Espino-Rodríguez & Padrón-Robaina, 2005; Zhang et al., 2009). For the interpretation of tactical partnerships, however, TCE explains it as a leading platform. The technological, economic and strategic measures of this study have been adopted (Grover et al., 1996), as in order to understand the success this measure is of a broader nature.

Knowledge-Based View (KBV) and Resource-Based View (RBV) used in studies on adding strategic value to outsourcing, such as reducing business risk (Kedia & Lahiri, 2007; Lee, 2001), the sharing of expertise (A. Banerjee & Williams, 2009; H.-S. Han et al., 2008; Lee, 2001), focus on core activities (H.-S. Han et al., 2008; Kroes & Ghosh, 2010). Reducing business risks, sharing expertise and focusing on the core business are therefore the key strategic outcomes of outsourcing. The satisfaction and intention to outsource in terms of behavioral perspectives to measure the success of outsourcing have been used in a few studies. To measure the success of information system outsourcing, "overall supplier satisfaction" has been used (Lee, 2001). The "overall performance of outsourcing relationships" was used to measure supplier satisfaction (Espino-Rodríguez & Padrón-Robaina, 2005; Lee, 2001). Organizations tend to switch providers because of negative emotions since they are not satisfied with existing providers (Donada & Nogatchewsky, 2009). To engage in the future, therefore, the buyer does not intend to engage with one or more particular sellers (Dyer, 1997; Lee, 2001).

The willingness to pursue the contract with the vendor(s) is a successful outsourcing indicator because the outsourcing contract will be continued only if the focal organization is happy with its suppliers (Shamdasani & Sheth, 1995). The future intention to outsource depends on the current experience of the outsourcing demonstration. As a behavioral result of a successful outsourcing experiment, the acceptance mode of outsourcing has identified the future intention to use outsourcing (Benamati & Rajkumar, 2008).

One of the determinants of the success of outsourcing is the propensity to outsource. The desire to extend existing outsourcing arrangements and the future intention to outsource currently in-sourced functions, is identified as one of the factors reflecting the satisfaction of outsourcing (Espino-Rodríguez & Padrón-Robaina, 2004). Outsourcing

success has been operationalized as follows based on these arguments. The elements that have been adopted to measure the success of outsourcing have been described in Table 3.1. Below part evaluates variable outsourcing success of organization on below 7 point likert scale with respect to Table 3.1. 1 = Strongly disagree; 2 = Disagree; 3 = Somewhat disagree; 4 = Neutral; 5 = Somewhat agree; 6 = Agree; 7 = Strongly agree.

**Table 3.1:** Outsourcing Success

<b>Code</b>	<b>Items</b>	<b>Source</b>
OS1	We have been able to refocus on core business.	Adopted: (Grover et al., 1996)
OS2	We have enhanced our competence.	
OS3	We have increased access to skilled personnel.	
OS4	We have enhanced economies of scale.	
OS5	We have increased control of expenses.	
OS6	We have reduced the risk of technological obsolescence.	
OS7	We have increased access to key information technologies.	
OS8	We are satisfied with our overall benefits from outsourcing.	

### 3.2.2 Predictor 1: Vendor Management Capability

To cope with the unwanted consequences of outsourcing, a formal vendor management system is crucial (H.-S. Han et al., 2008; Lee, 2001). But this must be determining what degree of outsourcing is needed to achieve maximum outsourcing success. One of the most critical decisions with which it begins is the selection of the most suitable providers (Carr et al., 2008; Rajabzadeh et al., 2008). Long-term success can be assured (Quinn, 1999). Based on the motivation to evaluate possible providers for selection,

organizations must have pre-determined criteria (Chan & Chin, 2007). Even after the start of the contract, the evaluation process should be continued. After identification, deficient vendors should be removed by the focal organization to improve the success of outsourcing. From this point of view, a monitoring system must be implemented by a focal organization that constantly monitors and evaluates supplier performance.

Management of outsourcing and supplier control contracts, management of outsourcing processes, vendor selection and vendor performance evaluation were applied as a measure of vendor management capability (H.-S. Han et al., 2008). Transfer of best practices, training and education, vendor certification, feedback for improvement, formal evaluation, vendor evaluation and vendor selection according to several criteria were used as extended measures (Chan & Chin, 2007).

As stipulated in the contract, the ability of the focal organization to compensate vendor reflects the organizations' financial obligation to manage providers (Carr et al., 2008).

In summary, the ability of the focal organization to monitor, select and evaluate the performance and development of vendors attempted to measure in this study which is broader and adopted to this study. Since the items are aligned with the working definition of this variable, this study uses the measure of (H.-S. Han et al., 2008).

The vendor management capability is operationalized as follows based on the arguments explained above. Below is Table 3.2 showing the elements that have been adopted to measure vendor management capability.

This part evaluates variable vendor management capability of organization on below five point likert scale with respect to Table 3.2. 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

**Table 3.2:** Vendor Management Capability

Code	Items	Source
VMC1	We have formalized processes to select vendors.	Adopted: (H.-S. Han et al., 2008)
VMC2	We have ability to evaluate the performance of outsourcing.	
VMC3	We have management processes for outsourcing projects.	
VMC4	We have systematic processes to manage outsourcing contracts with vendors.	
VMC5	We have systematic processes to control outsourcing vendors.	

### 3.2.3 Predictor 2: Partnership Quality

Engagement among trading partners is largely conceived as a quality of partnership (Cheng et al., 2008; H.-S. Han et al., 2008; Lai, Lee, & Hsu, 2009; Lee, 2001). Quality, relational strength, proximity has been termed relational intensity. The benefits and risk share, coordination, commitment and dependence are the measures of the variables used to measure the degree of relationship intensity (R. M. Morgan & Hunt, 1994).

The quality of communication, information sharing and collaborative participation as relational creation behaviors leading to engagement results have been recognized by (H.-S. Han et al., 2008). The behavioral elements are scattered around the cooperation of the partners that was noticed in this study. The aspect of knowledge and collaborative participation reflects the level of cooperation of partners as well as sharing / communication information (H.-S. Han et al., 2008; Mary C Lacity et al., 2009; Lee, 2001). As an integrated construct of reciprocal behaviors and its results, the quality of the partnership was identified by this study. The partnership quality is operationalized as follows according to the arguments described above. The elements adopted and adapted to measure partnership quality have been illustrated in Table 3.3. This part

evaluates variable partnership quality of organization on below five point likert scale with respect to Table 3.3.

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

**Table 3.3: Partnership Quality**

Code	Items	Source
PQ1	We and our vendor make decisions for business objective and direction together.	Adopted: (H.-S. Han et al., 2008)
PQ2	We and our vendor solve most problems together.	
PQ3	We and our vendor are willing to comply with each other's request.	
PQ4	We and our vendor are interested in each other's problems.	
PQ5	We and our vendor are generally cooperative in conducting business.	
PQ6	We and our vendor make beneficial decisions under any circumstances.	Adapted: (Lee, 2001)
PQ7	We and our vendor understand each other's business objective and process.	
PQ8	We and our vendor share the benefits and risks that can be occurred in the process of business.	
PQ9	We and our vendor perform pre-specified agreements and promises very well.	

### 3.2.4 Predictor 3: Trust

Certain characteristics have often been considered important in establishing quality relationships based on the predictions of social exchange theory. To take part in a successful and mutually beneficial exchange relationship, trust and dependence between the service provider and the client have been suggested as central factors in motivating each party (Hewett & Bearden, 2001). When quantified at the business level, trust does not influence only the success of the partnership (Mohr & Spekman, 1994), it is also used to evaluate satisfaction with the relationship and the cogency of the outsourcing project. The theory of social exchange (SET) may be used as a theoretical basis since SET comes from the level of individual exchange but has been applied to the

organizational level (K. S. Cook, 1977; R. M. Morgan & Hunt, 1994). For example, by studying strategic alliances and joint ventures, confidence measures have been used to ensure a healthy and cooperative relationship, and for the sustenance of cooperative relationships (Inkpen & Currall, 1997).

Similarly, Lee (2001) used trust as a critical measure in developing an extended relationship and facilitating an exchange relationship. Trust increases the confidence that the parties have for each other in the performance of tasks and the achievement of common objectives that represent elements of measure of trust. One of the first methods of measuring interpersonal and inter-organizational trust simultaneously and confidence-measuring items are applicable to most types of inter-organizational exchanges (Zaheer et al., 1998). Two five-question sets were used to measure trust at twin levels and the scales reflected three kinds of trust: behavioral, cognitive and emotional trust. For the inter-organizational trust construct, two elements captured the equity component of trust. One element directly assessed inter-organizational trust and the other two used reliability of trust. On the other hand, the interpersonal trust measure included a predictability element, three elements of equity, and an element directly assessing the interpersonal trust.

The first four items in this study to measure trust were derived from (H.-S. Han et al., 2008), as it is inline what was intended to measure against the working definition of the study by depicting repeated interaction and relationship to create value. The last four items have been adapted from (Park & Lee, 2014). Vendors help make critical decisions about focal organization, the willingness to provide assistance to create value for the entire organization. Based on the above, trust is operationalized as follows. The elements adopted and adapted to measure trust have been illustrated in Table 3.4. This part evaluates variable trust of organization on below five point likert scale with respect

to Table 3.4. 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

**Table 3.4:** Trust

Code	Items	Source
TR1	Our vendor makes beneficial decisions to us under any circumstances.	Adopted: (H.-S. Han et al., 2008)
TR2	Our vendor is willing to provide assistance to us without exception.	
TR3	Our vendor is sincere at all times.	
TR4	We and our vendor have friendly relations.	
TR5	My vendor is open and honest when problems occurred.	Adapted: (Park & Lee, 2014)
TR6	My vendor helped me make critical decisions.	
TR7	My vendor is always willing to provide required information.	
TR8	My vendor always cares for us.	
TR9	My vendor could be trusted completely.	
TR10	My vendor is someone that i have great confidence in them.	

### 3.2.5 Predictor 4: Human Capital

Research has concentrated on the requirement to manage human capital. Human resources have been particularly important to the strategic efforts of organizations and have proven to be a significant element in leading to better organizational performance (P. M. Banerjee, 2013). Human capital has been measured in previous studies such as the five items assessing human capital have been founded on prior discussions around human capital (Schultz, 1961), as well as on current strategic human resource management studies (Snell & Dean, 1992). They demonstrated the expertise, general skills and knowledge levels of organizational workers. Similarly, organizational capital has been measured using a four-item scale that assessed an organization's ability to garner and store knowledge in physical repositories such as, manuals, databases, patents (Davenport & Prusak, 1998), and as well in structures, processes, cultures, and ways of doing business (Walsh & Ungson, 1991).



The five items assessing social capital drew on the basic ideas of social structure literature (Burt, 2009). They also referred to the more pertinent literature on knowledge management (Gupta & Govindarajan, 2000). These elements assessed a business's capacity to leverage and share knowledge among and between the alliance's networks of customers, workers, partners and suppliers. This study adopted the measures of (Subramaniam & Youndt, 2005), to build human capital, as it fulfills what this study intends to measure in the perspective of the working definition of this construct. As employees of the organization focus skills, creativity, expertise in their jobs and particular functions that is of a broader nature to create value by forming the success of outsourcing. Based on the description above, human capital is operationalized as follows. The elements adopted to measure human capital have been shown in Table 3.5. This part evaluates variable human capital of organization on below seven point likert scale with respect to Table 3.5.

1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree

**Table 3.5:** Human Capital

Code	Items	Source
HC1	Our employees are highly skilled.	Adopted: (Subramaniam & Youndt, 2005)
HC2	Our employees are widely considered the best in our industry.	
HC3	Our employees are creative and bright.	
HC4	Our employees are experts in their particular jobs and functions.	
HC5	Our employees develop new ideas and knowledge.	

### **3.2.6 Predictor 5: Knowledge Sharing**

Knowledge sharing makes reference to the transfer of technology, skill and processes between the outsourcing organization and the provider through individuals (Lee & Kim, 1999).

In this perspective, the measures used by (Qi & Chau, 2013), were more specific at the strategic level because the unit of analysis was "relationship" rather than "project". Measurements in other studies involve the sharing of key organizational information such as the business planning strategy, the core business process and data relating to the political, economic and legal environments (Lee & Kim, 1999).

Park and Lee (2014) used the measures to determine the sharing of project plans, the project status, and knowledge from education or training, the experience from work of the project in an efficient way.

While Lee (2001) used more global and broader measures to build knowledge sharing that is consistent with the working definition of this construct in this study described in the literature review section.

Based on the above description, knowledge sharing is operationalized as follows. The elements that are suitable for measuring knowledge sharing have been shown in Table 3.6. This part evaluates variable knowledge sharing of organization on below five point likert scale with respect to Table 3.6.

1 = Strongly Disagree; 2 = Somewhat Disagree; 3 = Neutral; 4 = Somewhat Agree; 5 = Strongly Agree

**Table 3.6:** Knowledge Sharing

Code	Items	Source
KS1	We and our vendor share business proposals and reports with each other.	Adapted: (Lee, 2001)
KS2	We and our vendor share business manuals, models, and methodologies with each other.	
KS3	We and our vendor share each other's success and failure stories.	
KS4	We and our vendor share business knowledge obtained from newspapers, magazines, journals, and television.	
KS5	We and our vendor share know-how from work experience with each other.	
KS6	We and our vendor share each other's know-where and know-whom.	
KS7	We and our vendor share expertise obtained from education and training.	

### 3.2.7 Predictor 6 and Moderator: Partners' Compatibility

Although compatibility has been studied in different joint business configurations, there is no agreement about the operationalization of the construct. This is because of the dynamic nature of compatibility requirements in various contexts. Still, according to the literature, the study captures competing priorities among partners and the compatibility of culture and, as shown in previous studies. Organizational culture may be seen as a set of guiding philosophies and styles of management targeted towards common goals (Jarvenpaa & Mao, 2008; Shamdasani & Sheth, 1995; Whipple & Frankel, 2000). Competitive priorities are generally identified in terms of quality, cost, speed of service delivery and flexibility (Espino-Rodríguez & Padrón-Robaina, 2004; Jarvenpaa & Mao, 2008; Kroes & Ghosh, 2010). Shamdasani and Sheth (1995) included meshing

objectives as a part of strategic fit. It has been said that "goals" are part of the culture adopted (Jungbae Roh, Hong, & Park, 2008; Schein, 1996).

However, in defining an organization's organizational culture, goals are seen as common goals, pulling the company in the same direction, but with respect to the context of outsourcing, it can be seen as a vertical integration of the business supply chain (I. J. Chen & Paulraj, 2004; Lejeune & Yakova, 2005). When it comes to vertical integration, partners ideally have mutually reinforcing complementary objectives (Lam & Han, 2005; Shamdasani & Sheth, 1995). Therefore, in a context of vertical integration, it is more salient to define objectives as "complementary" rather than "common". While Whipple and Frankle (2000) used cultural compatibility in measuring that the focal organization and the organization of the suppliers have the same operating philosophies, the same management style and work together to improve the strategic value for the companies. On the other hand, Kroes and Ghosh (2010) used competing priorities in measuring that the focal and vendor organization consider cost, quality, and delivery time as important elements in creating value for money businesses.

As a result, this study adopted the first four items of Whipple and Frankle (2000) while remaining four adapted from Kroes and Ghosh (2010) as it measures what one wanted to measure against the working definition of this construct. Based on the above description, the compatibility of the partners is operationalized as follows. Elements that are adopted and adapted to measure partner compatibility have been shown in Table 3.7. This part evaluates variable partners' compatibility of organization on below seven point likert scale with respect to Table 3.7.

1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree

**Table 3.7: Partners' Compatibility**

Code	Items	Source
PC1	We and our vendor have similar operating philosophies.	Adopted: (Whipple & Frankel, 2000)
PC2	We and our vendor have a similar management style.	
PC3	We and our vendor work as a team to improve the alliance.	
PC4	Our vendor is receptive to new solutions that will improve the strategic value of the alliance.	
PC5	We and our vendor consider 'cost' as an important element in doing business.	Adapted: (Kroes & Ghosh, 2010)
PC6	We and our vendor consider 'quality' as an important element in doing business.	
PC7	We and our vendor consider 'delivery time' as an important aspect in doing business.	
PC8	We and our vendor consider 'flexible reaction to demand' as an important facet in doing business.	

### 3.2.8 Mediator: Degree of Outsourcing

The degree of outsourcing refers to the level of involvement of external resources and the propensity of an organization in the context of outsourcing (Gorla & Somers, 2014).

An activity can be partially or totally outsourced, since it can consist of a set of skills or sub-activities (Poppo & Zenger, 1998). Other authors have tried to investigate the percentage of an outsourced activity, but have been faced with the difficulty of determining a percentage (Gilley & Rasheed, 2000; Poppo & Zenger, 1998).

Gilley and Rasheed (2000) used the measure from the point of view of the extent and depth of outsourcing by identifying fourteen outsourcing activities. An organizational degree of outsourcing has been derived by multiplying its magnitude with the depth of outsourcing in its study.

This approach has been used in a similar way too by (Harrigan, 1984). After in-depth conversations with three leaders of organizations, this list of value-creating tasks was

put together by (Gilley & Rasheed, 2000). This list was then improved by the addition of several points discussed by (Porter, 1985).

Other authors consider to what extent an activity could be a competitive advantage while taking into account the elements required for the assets used to be effective for competitive advantage.

After considering the literature and empirical work on strategic value, questions were listed for each of the tasks in which the subjects were questioned (Espino-Rodríguez & Padrón-Robaina, 2005).

In this stratum, this study adapted the activity index by taking all fourteen activities developed by (Gilley & Rasheed, 2000). As this activity index is a list of complete value-creating activities based on several points discussed by (Porter, 1985).

The pattern of questions has been adapted from (Espino-Rodríguez & Padrón-Robaina, 2005). As this pattern is complete and measures what is intended to measure using the five-point likert scale compared to the working definition of this construct described in the review section of the literature.

Based on the description above, the degree of outsourcing is operationalized as follows.

This part evaluates variable degree of outsourcing of organization on below five point likert scale with respect to Table 3.8.

1 = Not outsourced at all; 2 = Outsourced to a limited extent; 3 = Outsourced to a moderate extent; 4 = Outsourced to a greater extent; 5 = Totally outsource

**Table 3.8:** Degree of Outsourcing

Code	Items	Source
DOO1	What is your organization's current level of outsourcing for accounting activity?	Adapted: (Espino-Rodríguez & Padrón-Robaina, 2005; Gilley & Rasheed, 2000)
DOO2	What is your organization's current level of outsourcing for advertising activity?	
DOO3	What is your organization's current level of outsourcing for assembly activity?	
DOO4	What is your organization's current level of outsourcing for customer service activity?	
DOO5	What is your organization's current level of outsourcing for information systems activity?	
DOO6	What is your organization's current level of outsourcing for machining/manufacturing activity?	
DOO7	What is your organization's current level of outsourcing for payroll?	
DOO8	What is your organization's current level of outsourcing for product repair activity?	
DOO9	What is your organization's current level of outsourcing for purchasing activity?	
DOO10	What is your organization's current level of outsourcing for research and development activity?	
DOO11	What is your organization's current level of outsourcing for sales force activity?	
DOO12	What is your organization's current level of outsourcing for shipping activity?	
DOO13	What is your organization's current level of outsourcing for training activity?	
DOO14	What is your organization's current level of outsourcing for warehousing activity?	

### 3.3 Research Design

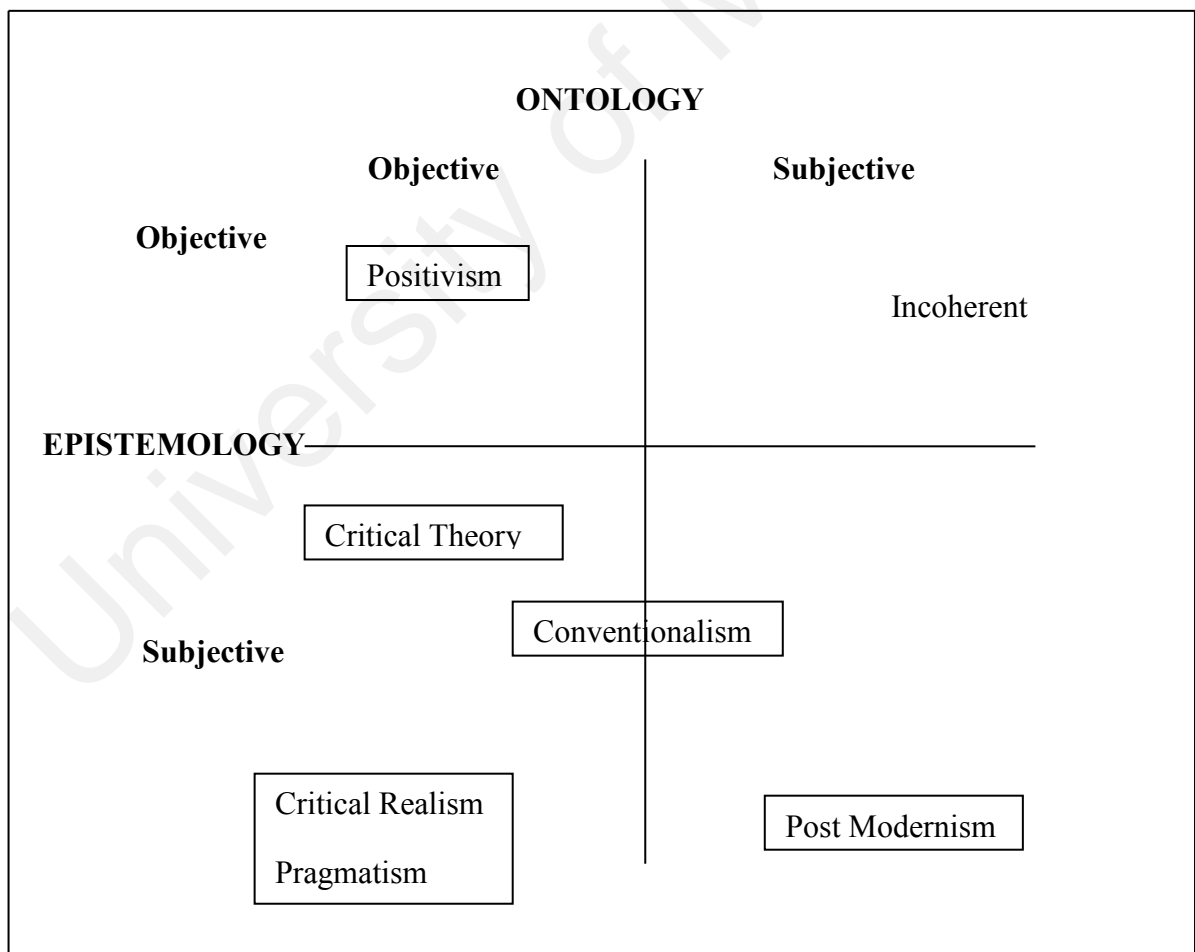
The school of thought was led by the design of the research. There are different research approaches for different schools of thought. The epistemological and ontological perspectives of some schools of thought are defined by these approaches. In philosophy, the binary model is called dualism (Johnson & Duberley, 2000).

Corresponding approaches to the social sciences were shown in the following figure from the point of view of different schools of thought. In positivism, the ideas of the

research paradigm are based on objective ontology and objective epistemology, and this study uses a positivist research approach.

This study assumes that reality is autonomous from the point of view of the theoretical-natural observation language, because there is the possibility of objectively accessing the outside world. The reality in this external world can be objectively measured, which is also the social phenomenon of this research.

Therefore, the study describes their research design based on this fundamental thinking. Social science research consists of prioritizing a number of dimensions of research processes, including sampling (generalization to a large group), the expression of causal relationships implies the temporal assessment of social phenomena, their interrelations, and the understanding of social context behavior (A Bryman & E Bell, 2007).



**Figure 3.1:** Research Approaches Based on Ontology and Epistemology (Johnson & Duberley, 2003)



A framework for data collection and analysis was provided by the research design (A Bryman & E Bell, 2007). The design of the research greatly affects the reliability of the findings as found in a meta-analysis performed (Churchill Jr & Peter, 1984). A researcher can find out how to do the research work by the formulation of the most appropriate research design. More reliable and valuable search results can be generated through this facilitation. Developing a research design is not a simple task with multiple factors (Cavana, Delahaye, & Sekaran, 2001). In a particular research paradigm, each element is interconnected with each other. Objective measures of variables were used to examine the influence of certain factors on the success of outsourcing.

Quantitative causal relationships have been studied in this study (Baumgartner, Strong, & Hensley, 2005). The transverse and longitudinal design are the two classifications of descriptive research (N. K. Malhotra, 2007).

A snapshot of a moment any cross-sectional study attempts to offer. Using the same samples and responding to the same variables, a longitudinal plan collects data from two or more periods. As it aims to examine the phenomena at a certain moment, the current study is identified as cross sectional.

This study applies the methodology of the survey to the research in order to achieve the main objective of the research. Here is the grid that represents studies from the point of view of different schools of thoughts.

**Table 3.9:** Different School of Thought Studies

<b>Authors</b>	<b>Year of Publication</b>	<b>School of Thought</b>
(Schoenherr et al., 2015); (Oshri, Kotlarsky, & Gerbasi, 2015); (Ikediashi & Okwuashi, 2015); (Wuyts, Rindfleisch, & Citrin, 2015); (Gonzalez et al., 2015); (D. M. Jain & Khurana, 2015); (Bhattacharya, Singh, & Nand, 2015).	2015	Positivism, quantitative studies
(Claude Paraponaris, Beaugency, Sakinç, & Talbot, 2015); (Hartshorne, 2015).	2015	Interpretivism, qualitative studies
(Schwarz, 2014); (S. Y. Han & Bae, 2014).	2014	Positivism, quantitative studies
(Pratap, 2014); (Rahman et al., 2014).	2014	Interpretivism, qualitative studies
(Sani, Dezdar, & Ainin, 2013); (Shatouri et al., 2013); (H.-S. Han, Lee, Chun, & Seo, 2013).	2013	Positivism, quantitative studies
(Leeman & Reynolds, 2012); (Handley & Benton, 2012).	2012	Positivism, quantitative studies
(R. K. Jain & Natarajan, 2011).	2011	Positivism, quantitative studies
(Hessels & Terjesen, 2010); (Kroes & Ghosh, 2010); (Bustinza, Arias-Aranda, & Gutierrez-Gutierrez, 2010); (De Vita et al., 2010).	2010	Positivism, quantitative studies

The total interpretative qualitative studies are 4 compared to the above grid while the total frequencies of positivism, quantitative studies are 19. The objective measures of the variables will be used with the logic to examine the influence of certain factors on success from outsourcing as this research follows the paradigm of positivist research. Quantitative causal relationships have been studied in this study (Baumgartner et al., 2005). In order to achieve the main objective of the research, this study applies the inquiry method based on the characteristics related to the research design.

The analysis was performed through smart partial least square (PLS) 3 using structural equation modeling (SEM). In order to make predictions, inferential statistics were used

to search for the relationship between attributes and create model. Descriptive statistics were used to describe data that include measures of central (mean), mean, standard deviation, and factor analysis. Respondents belong to different cultural and educational backgrounds. The age group of respondents who participated in this study is between 28 and 60 years old and there is no forced participation for this study.

### **3.4 Research Method – Survey**

In the social sciences, for the most part, quantitative research is done in the form of cross-sectional data collection (A Bryman & E Bell, 2007). Defined by its structured nature in collecting data from a large sample survey, it is the most popular data collection tool (Ruane, 2004). Achieving the target population survey is a relatively economical and effective method (N. K. Malhotra, Hall, Shaw, & Oppenheim, 2004). Descriptive information and some facts provided by survey can be intrapolated to the population. A structured self-completion questionnaire was selected for this study to collect cross-sectional data for the reasons mentioned above and the fact that it is appropriate for a research plan. In addition, it is also an established method widely used by researchers in the social sciences, management and marketing field (E. Babbie, 1990; Neuman, 2006).

### **3.5 Population of Study**

This population has been described as "the universe of units from which a sample must be selected" (A Bryman & E Bell, 2007). Evaluating and analyzing the outsourcing practices of the automotive industry in Malaysia is the focus of this study. The automotive industry has used outsourcing for many activities as a competition strategy, which is the context of the study. To add value to their business process, the automotive industry uses outsourcing (Rahman et al., 2014).

### **3.6 Unit of Analysis**

It has been indicated by recognizing managers and senior executives of departments as respondents (Lam & Han, 2005). Following senior management decisions, the carrying out of the outsourcing function / activity is a middle management responsibility (Espino-Rodríguez & Padrón-Robaina, 2005; Espino-Rodríguez & Robaina, 2005). In outsourcing, it can vary the decision-making organ from one organization to another. The middle managers of this perspective are the respondents in this study who are in charge of outsourcing (general or specific activity). Rather representative of the respective organizations, these managers are not however considered as the unit of analysis. To evaluate and examine the success of the outsourcing of Malaysia's automotive organizations are the objectives of this study. Therefore, automotive organizations that apply outsourcing consider as units of analysis for this study.

### **3.7 Sample Size**

Due to the uncertainty of receiving all forms back there was no need to calculate the sample size (Sekaran, 2006). The population comprises 690 automotive organizations in Malaysia. On the sample size, there are different arguments. If other multivariate assumptions are satisfied, the minimum sample size would be five for each free parameter to be estimated (Bentler & Chou, 1987).

To decide on sample size, previous research used this as an empirical rule. Some researchers have measured sample sizes based on the software / statistical software requirement used to analyze the data, which assumes a minimum size of 150 to 200 (JFJ Hair, Black, Babin, Anderson, & Tatham, 2010). A sample should be greater than 150, making it an adequate level of a sample, as discussed previously (Schumacker & Lomax, 2004). In this stratum, this study will follow to have a minimum sample size of 200.

### **3.8 Sampling Technique and Data Collection**

In Malaysian context near to 50 % response rate of questionnaires is quite common especially in Malaysian automotive and manufacturing industry. As in one of the study where structured questionnaire was employed on gathering data from Malaysian automotive industry organizations, a set of 450 questionnaires were distributed, out of which 320 questionnaires were returnable and analyzed (Rashid, Jabar, Yahya, & Samer, 2015). The response rate of this study is approximately 71 %.

In another automotive industry study, 100 questionnaires were sent out of which 38 were returned and analyzed which is depicting the response rate of 38 % (Yusop et al., 2016).

Another Malaysian manufacturing organizations study depicted that, of the 228 questionnaires distributed, a total of 99 questionnaires were returned at the end of the data collection process which is stating the response rate of approximately 43 % (Abdul-Halim et al., 2014).

In another study of Malaysian manufacturing organizations, a total of 99 questionnaires were received at the end of the data collection process. Based on the initial expectation of 228 respondents from organizations responded positively, the response rate is approximately 43.42 % (E. Ee et al., 2013). It had been suggested that, “a demonstrated lack of response bias is far more important than a high response rate” (E. Babbie, 1990; E. R. Babbie, 1973).

In another study, a total of 105 responses were received at the end of the data collection process. Based on the initial expectation of 200 respondents from the nine Malaysian banks involved, the response rate was approximately 53 % (O. Ee, H. A. Halim, et al., 2013).

Malaysia’s education sector is a renowned and established market. As most of scholars and students come from Muslim countries to Malaysia, which in result caused different

types of industry and organization researches. So many of the industries are aware and support to take part and to respond on questionnaires, which raised the response rates of researches specifically for questionnaires.

Above response rate of different contemporary studies depicting the awareness and participation of different sectors of Malaysia in researches. This not only increase the response rate but also establish content validity of studies. Hence by adopting and adapting elements from previous mature studies this study established the validity of content. This method was adopted from the approach of (Zailani, Govindan, Iranmanesh, Shaharudin, & Chong, 2015).

As noted earlier, the population includes 690 automotive organizations. Census sampling was used for this study, in which questionnaires were distributed to all 640 automotive industry organizations in Peninsular Malaysia after excluding 50 respondents of pilot study to get maximum responses. After identifying key managers in industry informal discussions took place with them by meeting them personally. After meeting them personally, brief them about the study. After briefing, questionnaires were filled from them. Then leads of these managers and other respondents to whom questionnaires were distributed personally have been used to get responses from respondents. This same process had been repeatedly used to get responses from all respondents and the whole process took approx. one and half year.

Below is a table describing the segregation of 690 Malaysian automotive organizations from all 13 states, based on the Malaysia Automotive Institute website ([www.mai.org.my](http://www.mai.org.my)), and their directory had be used for approaching organizations. This table shows that the majority of the sample is in western Malaysia while only ten % of the sample is in eastern Malaysia, which comprises two states: i-e Sarawak and Sabah.

**Table 3.10:** Sample with Respect to Malaysian States

<b>States</b>	<b>Percentage</b>	<b>Total Samples</b>
Selangor, Pahang, Kedah, Melaka, Penang, Perak, Johar	70%	483
Negeri and Sembilan, Perlis, Terengganu, Kelantan	20%	138
Sarawak, Sabah	10%	69
Grand Total	100%	690

This study adapts the same sampling technique as previously used for the Malaysian automotive industry where questionnaires were sent to all Malaysian automotive organizations (Zailani et al., 2015).

### **3.9 Validity**

This study used the content validity approach of (Zailani et al., 2015). For these, elements if necessary have been adopted and adapted from previous mature studies to ensure the validity of the content, which is represented in the measurement heading of constructs. In order to ensure the validity of the panel of experts, the first initial questionnaire was sent to eight people. The individuals were from academics of Pakistan. After some modifications, a questionnaire was discussed with five people from the Malaysian automotive industry who are engaged in outsourcing. After their suggestions and comments, the questionnaire was finalized.

### **3.10 Reliability**

By measuring the internal coherence of the questionnaire items, the main objective of a pilot study is to perform a reliability analysis of the research instrument and this pilot study was conducted to perform a reliability analysis. As the "respondent" scores of the indicators tend to be related to their scores on the other indicators, they have been described as characterizing internal reliability (A Bryman & E Bell, 2007).

For the internal consistency of items, it has been argued that Cronbach's alpha is a higher estimator (Nunnally, 1978). As a measure of the degree to which a set of indicators of a latent construct is internally consistent refers to reliability. The scale is generally considered reliable when Cronbach's alpha is greater than 0.70 whereas it is considered poor if the value is less than 0.60 (Cavana et al., 2001). So Cronbach's alpha of each variable was analyzed from the pilot study for the reliability of the study.

### **3.11 Pilot Study**

Since the researcher did not have the opportunity to investigate and ask questions when respondents complete the questionnaire, piloting the finding aid was very important for a self-assessment questionnaire or structured interview (A Bryman & E Bell, 2007). To ensure the validity of the content, a pilot study also provides an additional method. By measuring the internal consistency of the questionnaire items, the main objective of a pilot study is to perform a reliability analysis of the research instrument. For internal consistency of elements, Cronbach's alpha is a better estimator. In the early stages of research, it was said that the range of 0.50 to 0.60 was considered sufficient (Nunnally, 1978). The total-item correlation between elements is another factor that helps to establish internal reliability. The degree of correlation information among the indicators of the same scale refers to the item-total correlations between items (Lu, Lai, & Cheng, 2007). In conceptualizing the given factor, an element with a value less than 0.25 plays a very small role and is considered very small (Nunnally, 1978).

Therefore, anything less than 0.25 would be omitted as this study fixes the total correlation value of the item at 0.25. A pilot study was done to test the internal consistency of the measure developed for this study. For analysis of the pilot study, SPSS (statistical software for the social sciences), version 21 was used. The questionnaire that was used for the pilot study is described in Appendix A. To test the internal consistency of the measure, Cronbach's alpha analysis was examined.



The questionnaires were distributed to 50 automotive industry organizations in Selangor, Malaysia. Table 3.11 presents the results of the success of outsourcing. Cronbach's alpha was greater than 0.60 ( $\alpha = 0.81$ ), indicating that the success of outsourcing has maintained internal reliability. All eight items had total-item correlations greater than 0.25. Because of these results, all items of the questionnaire were retained for a complete data collection.

**Table 3.11:** Results of Pilot Study: Outsourcing Success (n = 50)

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Outsourcing success (OS1)	.433	.810
Outsourcing success (OS2)	.842	.768
Outsourcing success (OS3)	.659	.777
Outsourcing success (OS4)	.486	.798
Outsourcing success (OS5)	.710	.761
Outsourcing success (OS6)	.722	.772
Outsourcing success (OS7)	.456	.801
Outsourcing success (OS8)	.274	.839
<b>(OS) Outsourcing Success (<math>\alpha = 0.81</math>)</b>		

The results of the vendor management capability are presented in Table 3.12. Cronbach's alpha was greater than 0.60 ( $\alpha = 0.74$ ), indicating that the vendor management capability maintained internal reliability. The item-total correlation of all five items was greater than 0.25. Because of these results, all items of the questionnaire were retained for a complete data collection.

**Table 3.12:** Results of Pilot Study: Vendor Management Capability (n = 50)

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Vendor Management Capability (VMC1)	.690	.617
Vendor Management Capability (VMC2)	.509	.690
Vendor Management Capability (VMC3)	.267	.769
Vendor Management Capability (VMC4)	.478	.702
Vendor Management Capability (VMC5)	.576	.664
<b>(VMC) Vendor Management Capability (<math>\alpha = 0.74</math>)</b>		

The results of the quality of the partnership are presented in Table 3.13. Cronbach's alpha was greater than 0.60 ( $\alpha = 0.86$ ), indicating that the partnership quality maintained internal reliability. The item-total correlation of all nine items was greater than 0.25. Because of these results, all items of the questionnaire were retained for a complete data collection.

**Table 3.13:** Results of Pilot Study: Partnership Quality (n = 50)

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Partnership Quality (PQ1)	.749	.830
Partnership Quality (PQ2)	.693	.835
Partnership Quality (PQ3)	.412	.861
Partnership Quality (PQ4)	.450	.859
Partnership Quality (PQ5)	.498	.854
Partnership Quality (PQ6)	.723	.832
Partnership Quality (PQ7)	.735	.831
Partnership Quality (PQ8)	.625	.842
Partnership Quality (PQ9)	.409	.862
<b>(PQ) Partnership Quality (<math>\alpha = 0.86</math>)</b>		

The results of the trust are shown in Table 3.14. Cronbach's alpha was greater than 0.60 ( $\alpha = 0.85$ ), indicating that trust maintained internal reliability. Item-total correlation of all items were greater than 0.25, except for item (TR8). Because of these results, all of the items in the questionnaire were retained for the complete data collection study except for (TR8) and are omitted from the full data collection questionnaire because their value is less than 0.25. After the exclusion of the item (TR8), Table 3.14 shows that the new value of Cronbach's alpha has been increased and that the new value is ( $\alpha = 0.86$ ).

**Table 3.14:** Results of Pilot Study: Trust (n = 50)

Items	Corrected Item-Total Correlation		Cronbach's Alpha if Item Deleted	
	Old Value	New Value	Old Value	New Value
Trust (TR1)	.478	.413	.841	.859
Trust (TR2)	.594	.644	.831	.837
Trust (TR3)	.718	.722	.820	.830
Trust (TR4)	.435	.455	.845	.855
Trust (TR5)	.542	.557	.836	.846
Trust (TR6)	.507	.472	.839	.854
Trust (TR7)	.725	.750	.819	.827
Trust (TR8)	.226	excluded	.858	-
Trust (TR9)	.754	.723	.814	.828
Trust (TR10)	.493	.533	.840	.848
<b>(TR) Trust</b>			<b>(<math>\alpha = 0.85</math>)</b>	<b>(<math>\alpha = 0.86</math>)</b>

The results of human capital are shown in Table 3.15. Cronbach's alpha was greater than 0.60 ( $\alpha = 0.87$ ), indicating that human capital maintained internal reliability. The item-total correlation of all five items was greater than 0.25. Because of these results, all items in the questionnaire were retained for a comprehensive data collection study.

**Table 3.15:** Results of Pilot Study: Human Capital (n = 50)

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Human Capital (HC1)	.533	.886
Human Capital (HC2)	.819	.816
Human Capital (HC3)	.773	.829
Human Capital (HC4)	.720	.842
Human Capital (HC5)	.698	.853
<b>(HC) Human Capital (<math>\alpha = 0.87</math>)</b>		

The results of knowledge sharing are presented in Table 3.16. Cronbach's alpha was greater than 0.60 ( $\alpha = 0.87$ ), indicating that knowledge sharing maintained internal reliability. The seven items had item-total correlations greater than 0.25. Because of these results, all items in the questionnaire were retained for a comprehensive data collection study.

**Table 3.16:** Results of Pilot Study: Knowledge Sharing (n = 50)

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Knowledge Sharing (KS1)	.631	.852
Knowledge Sharing (KS2)	.534	.864
Knowledge Sharing (KS3)	.732	.838
Knowledge Sharing (KS4)	.555	.861
Knowledge Sharing (KS5)	.928	.811
Knowledge Sharing (KS6)	.446	.879
Knowledge Sharing (KS7)	.725	.839
<b>(KS) Knowledge Sharing (<math>\alpha = 0.87</math>)</b>		

Results of partners' compatibility are presented in Table 3.17. Cronbach's alpha was greater than 0.60 ( $\alpha = 0.88$ ), indicating that partners compatibility maintained internal reliability. The eight items had an item-total correlation greater than 0.25. Consequently because of these results, all items in the questionnaire were retained for a comprehensive data collection study.

**Table 3.17:** Results of Pilot Study: Partners' Compatibility (n = 50)

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Partners Compatibility (PC1)	.451	.893
Partners Compatibility (PC2)	.876	.853
Partners Compatibility (PC3)	.714	.860
Partners Compatibility (PC4)	.516	.880
Partners Compatibility (PC5)	.713	.860
Partners Compatibility (PC6)	.744	.858
Partners Compatibility (PC7)	.671	.862
Partners Compatibility (PC8)	.782	.856
<b>(PC) Partners' Compatibility (<math>\alpha = 0.88</math>)</b>		

The results of the degree of outsourcing are presented in Table 3.18. Cronbach's alpha was greater than 0.60 ( $\alpha = 0.80$ ), indicating that the degree of outsourcing maintained internal reliability. All items had item-total correlations greater than 0.25, except items (DOO2), (DOO4), and (DOO10). Consequently because of these results, all items in the questionnaire were retained for complete data collection except for DOO2, DOO4, and DOO10, and these were omitted for the full data collection questionnaire because the

value of these items was lower than 0.25. After excluding items (DOO2), (DOO4) and (DOO10) below, Table 3.18 indicates that the new value of Cranach's alpha has been increased and that the new value is ( $\alpha = 0.83$ ).

**Table 3.18:** Results of Pilot Study: Degree of Outsourcing (n = 50)

Items	Corrected Item-Total Correlation		Cronbach's Alpha if Item Deleted	
	Old Value	New Value	Old Value	New Value
Degree of Outsourcing (DOO1)	.671	.659	.772	.798
Degree of Outsourcing (DOO2)	.120	excluded	.817	-
Degree of Outsourcing (DOO3)	.537	.586	.783	.805
Degree of Outsourcing (DOO4)	.224	excluded	.813	-
Degree of Outsourcing (DOO5)	.566	.621	.781	.803
Degree of Outsourcing (DOO6)	.491	.543	.786	.809
Degree of Outsourcing (DOO7)	.454	.420	.790	.820
Degree of Outsourcing (DOO8)	.330	.300	.798	.830
Degree of Outsourcing (DOO9)	.329	.376	.799	.825
Degree of Outsourcing (DOO10)	.237	excluded	.805	-
Degree of Outsourcing (DOO11)	.649	.616	.772	.801
Degree of Outsourcing (DOO12)	.740	.736	.766	.791
Degree of Outsourcing (DOO13)	.363	.294	.797	.834
Degree of Outsourcing (DOO14)	.431	.381	.791	.823
<b>(DOO) Degree of outsourcing</b>			<b>(<math>\alpha = 0.80</math>)</b>	<b>(<math>\alpha = 0.83</math>)</b>

Some modifications for the initial measurement developed needed after specified in the validity and reliability tests by concluding the fact in the instrumentation. As a result, the final version of the survey instrument was created for the final data collection based on the analysis above (please refer to Appendix B).

### 3.12 Data Analysis Procedure

After manually checking the completeness and accuracy of the returned questionnaire, data analysis began. Using the SPSS version 21.0 spreadsheet, the entire data was entered for the basic analysis. Data were processed for missing values and cleaned before analysis. Scale purification, multivariate hypothesis testing, descriptive statistics and inference statistics for hypothesis testing were the primary focus of the data analysis.

### **3.13 Structural Equation Modeling (SEM)**

A single model in which each latent factor is regressed on the others by combining factor (measure) and path (structural) models refers to the Structural Equation Modeling (SEM). Therefore, each analysis result describes how, for each hypothesis presented, basic descriptive statistics are calculated for each variable under this study. Specifically, means, standard deviations, frequency, variable distributions and other related statistical information from the survey results are calculated and the results are discussed in Chapter 4.

A model consisting of a certain phenomenon that takes a confirmation as the hypothesis test approach to analysis using statistical methodology refers to SEM. Two important aspects SEM term convey for procedures. A causal process which is the first aspect refers to the study which is represented by a series of structural equations such as regression. Structural relationships that can be modeled in a pictorial fashion to enable a clearer conceptualization of the theory in the study are the second aspect of this stratum (Byrne, 2013).

Thus, this study found Structural Equation Modeling (SEM) as an appropriate tool for data analysis, since SEM is structural models of algorithm and measurement models simultaneously. To estimate a series of interdependent dependency relationships at the same time, SEM is considered a technique to help generate a model of relationships between variables (J. F. Hair, C. M. Ringle, & M. Sarstedt, 2011). This leads to less biased results of the full model because measurement errors can be explicitly considered.

To inform the researcher how well his model fits the empirical data, SEM is adapted to confront a priori knowledge and hypotheses with empirical data, so that measures of the overall quality of the model can be understood. SEM has allowed researchers to better

understand the interrelationships between independent variables and to develop better models.

Model interpretation can be simplified using SEM because it has an attractive graphical modeling interface (V. Kumar, Smart, Maddern, & Maull, 2008).

For inferential statistical analysis, the current study has therefore applied structural equation modeling. At the same time, a series of interrelated dependency relationships can be examined using SEM which is known as a powerful method and helps construct a model of relationships between variables.

In addition, the use of SEM helps researchers better understand the interrelationships between independent variables and build better models (Fomell, 1982). There are a number of SEM software packages available today, including analysis of a moment structures (AMOS), linear structural relations (LISREL), and partial least square (PLS). For data analysis, partial least squares (PLS) were chosen for this study. The measurement and the structural model were tested in this study using PLS. In addition, PLS simultaneously models measurement pathways and structural trajectories (Ringle, Wende, & Will, 2005). PLS is not limited by distribution requirements or sample size limits like other structural equation modeling tools, which is why many researchers prefer to use PLS.

The measurement and structural model is a two-step process that is included in PLS (Chin, Marcolin, & Newsted, 2003). The measurement model performed as a first step is very similar to factor analysis. The second stage of the PLS process is the structural model for providing path coefficients that illustrate the relationships of each construct. Using the measurement model, reliability measures and element weighting factors can be evaluated for each latent variable, while the path of coefficients for significant effects on relationships between variables is accessible through the structural model.

Conceptual validity and theoretical connections between a set of concepts or constructs represented by multiple measured variables can be examined for which SEM is considered an effective multivariate procedure.

SEM is considered a useful technique that allows researchers to simultaneously perform a measurement model and structural model analysis (Hair Jr, Hult, Ringle, & Sarstedt, 2016). In the past, the most commonly used statistical program was AMOS, known as covariance-based structural equation modeling (CB-SEM). In addition, recently, partial least square structural equation modeling (PLS-SEM) has been successfully applied in commercial research and management. The following table describes the reasons for choosing CB-SEM or PLS-SEM for any particular search.

University of Malaya



**Table 3.19:** Rule of Thumb for CB-SEM or PLS-SEM Selection (J. F. Hair et al., 2011)

<b>Research Goals</b>	<ul style="list-style-type: none"> <li>• If the research goal is predicting key target constructs or identifying key ‘driver’ constructs, selects PLS-SEM.</li> <li>• If the research goal is theory testing, theory confirmation, or comparison of alternative theories, select CB-SEM.</li> <li>• If the research is exploratory or an extension of an existing structural theory, select PLS-SEM.</li> </ul>
<b>Measurement Model Specification</b>	<ul style="list-style-type: none"> <li>• PLS-SEM is selected if formative constructs are part of the structural model.</li> <li>• CB-SEM is selected if error terms require additional specification, such as covariance.</li> </ul>
<b>Structural Model</b>	<ul style="list-style-type: none"> <li>• If the structural model is complex (many constructs and many indicators), select PLS SEM.</li> <li>• CB-SEM is selected while the model is non-recursive.</li> </ul>
<b>Data Characteristics and Algorithm</b>	<ul style="list-style-type: none"> <li>• If the data is appropriate and set with the CB-SEM assumptions exactly, such as distributional assumptions, with respect to the minimum sample size then select CB-SEM; else, PLS-SEM is a worthy approximation of CB-SEM results.</li> <li>• If the sample size is relatively low, select PLS-SEM. With large data sets, CB-SEM and PLS-SEM results are similar, provided that a large number of indicator variables are used to measure the latent constructs (consistency at large).</li> <li>• If the data are to some extent non-normal, use PLS-SEM; otherwise, under normal data conditions, CB-SEM and PLS-SEM results are highly similar, with CB-SEM providing slightly more precise model estimates.</li> <li>• If CB-SEM requirements cannot be met (e.g., model specification, identification, non-convergence, data distributional assumptions), use PLS-SEM as a good approximation of CB-SEM results.</li> </ul>
<b>Model Evaluation</b>	<ul style="list-style-type: none"> <li>• PLS-SEM is the appropriate approach, If you need to use latent variable scores in subsequent analysis</li> <li>• CB-SEM is the desired approach if your research requires a global goodness-of fit criterion.</li> <li>• CB-SEM is a good choice, if you need to test for measurement model invariance.</li> </ul>

### **3.13.1 Confirmatory Factor Analysis (CFA)**

One type of structural equation modeling that deals with measurement models refers to confirmatory factor analysis (CFA) which is the relationship between observed measures or indicators and latent variables or factors. This specifically concerns measurement models because it is considered as a type of modeling of structural equations or relationships between observed and latent variables (Brown, 2014).

The CFA is based on assumptions, where all aspects of the CFA model are a priori specified unlike the exploratory factor analysis (EFA). Before evaluating the structural model, it was suggested that the review of a measurement model first involves a two-step SEM approach to ensure that the adequacy of the research model is established (Anderson & Gerbing, 1988). To substantiate indicators/items loadings are responsible for their corresponding latent variables using the data collected (Kline, 2015), the research measurement model includes the factor analysis and the quality criteria of the research model.

Factor analysis establishes whether the popularly accepted criteria for acceptable discriminant validity, convergent validity, and reliability of latent variables were satisfied. To examine whether the observed variables appropriately represent latent constructs, the measurement model as an integral part of SEM has been tested (Brown, 2014).

### **3.13.2 Level of Significance**

In this research, the level of significance for all analyzes was established at  $p < 0.05$ . In this way, if p-value is greater than 0.05, the null hypothesis will not be rejected whereas if p-value is less than 0.05, the null hypothesis will be rejected. In addition, it should be noted that the lowest level of significance such as 0.01 or 0.001 was not chosen because of the increased risk of type II error and less statistical power. The level of significance commonly used in the social sciences is 0.05 compared to the fields of applied sciences

such as medicine or health where the level of significance commonly used is 0.01 or 0.001.

### **Summary**

The research methodology of the study was explained in Chapter 3. The realm of this research is situated under the paradigm of positivism. Cross-sectional data were collected through the survey method so this study applied the quantitative method. Recent studies of different schools of thought have been described to give the frequency of the paradigm of positivism/quantitative or interpretative / qualitative paradigm has been used by researchers. This grid has shown that more paradigmatic quantitative / positivist studies have been conducted for the phenomenon of outsourcing, which indicates that the paradigm positivist/quantitative study are more appropriate for the phenomenon of outsourcing. Mid-level managers were identified as respondents to Malaysian automotive organizations for this study. This chapter depicts that 690 automotive organizations predominate in this industry and questionnaires were sent to all automotive organizations using the directory of Malaysian automotive institute.

There are thirteen states in Malaysia and the majority of the sample in western Malaysia is ninety percent of the total sample, while only ten percent is in the east Malaysia from Sarawak and Saba. This chapter shows that non-probability sampling was used to collect data for this study. Already well established and mature measures have been taken for this study to ensure the validity of the study's content. A pilot study was conducted and the results of a pilot study were discussed in the chapter. As this study uses structural equation modeling (SEM) through smartPLS 3, the data analysis procedure, the use of SEM, the factor analysis and the level of significance were determined in this chapter.

## **CHAPTER 4: DATA ANALYSIS**

### **4.1 Introduction**

The analysis of descriptive data and the modeling of structural equations (SEM) are presented in this chapter. SmartPLS 3 version was used for SEM while the SPSS 21.0 version was used for the descriptive statistics. To establish the causal relationships represented in the research model, the SEM technique was used to create the measurement model. Therefore, the chapter presents the results of the statistical analysis to test the research model and hypotheses. In order to test the hypotheses, the following steps have been identified:

1. Demographic and descriptive results
2. Evaluate the measurement model by Partial Least Square (PLS)
3. Test the structural model on PLS for hypotheses testing
4. Mediation and moderation analysis using PLS

### **4.2 Data Preparation for Analysis**

Out of 690 organizations, 337 usable responses were collected in this study. Automotive organizations in Malaysia formed the unit of analysis for this study. For accuracy the collected data were scanned first and accordingly 337 automotive organizations were studied. After that, they were cleaned (for 337 questionnaires) and the code for each indicator/item was given.

### **4.3 Response Rate**

The survey questionnaires were distributed to the managers of the automotive industry organizations in Malaysia. A total of 690 questionnaires were sent to managers and 359 were returned, representing 52%. After data cleaning, leaving the questionnaires having missing values and incomplete there were 337 questionnaires ready for analysis, which are reported in Table 4.1. As 337 questionnaires were appropriate to use for the

purposes of data analysis which is shown in Table 4.1. So, totally, the results of this study conducted using 337 questionnaires of intermediate level managers.

**Table 4.1: Questionnaires Response**

<b>Distributed Questionnaire</b>	<b>Returned Questionnaires</b>	<b>%</b>	<b>Usable Questionnaires</b>	<b>%</b>
690	359	52	337	48

#### **4.4 Demographic Analysis of Respondents**

This section provided the demographics of the participants. This information, the results of the descriptive analysis show the characteristics of (a) gender, (b) level of education, (c) age and (d) work experience. The demographic characteristics of the respondents are presented in Table 4.2. It indicates that 100% of the respondents were men. In terms of education level of employees, the majority (67%) had a bachelor's degree and others (23%) had a master's degree or doctorate. The categorization of age indicated that there is no manager under 28 in the sample of this research. Then, (36%) are between 28 and 35 years old, (44%) are between 36 and 45 years old, (20%) are between 46 and 55 years old.

The work experience of participants ranged from 2 years to more than 20 years. In particular, (70%) of respondents have work experience of 2 to 10 years, while (20%) have work experience of 11 to 20 years. Only (10%) of respondents has experience of more than 20 years.

**Table 4.2:** Demographic Summary of Survey Respondents

Category	Demographic	Frequency	Percent
Gender	Male	337	100
	Female	0	0
Education	Bachelor Degree	226	67
	Master/PhD	111	33
Age	28-35	122	36
	36-45	148	44
	46 years old and above	67	20
Work experience	2 to 10 years	236	70
	11 to 20 years	67	20
	More than 20 years	34	10

#### **4.5 Variables Descriptive Statistics**

Data was collected from middle managers who are responsible for outsourcing business management in Malaysian automotive industry organizations. The researcher collected a total of 337 usable questionnaires and, as the previous non-probability sample showed, was used. Here are the descriptive statistics of all variables used in this study.

##### **4.5.1 Outsourcing Success**

Outsourcing success was measured by a 7-point likert scale. As is seen in Table 4.3, the mean score and standard deviation is  $5.38 \pm 0.88$  ( $M \pm SD$ ). This shows that most respondents had a greater than average score (i.e. 4) for successful outsourcing. Among the indicators of the variable, (OS4) indicates the highest value ( $5.51 \pm .75$ ). It explains that "enhanced economies of scale" are appropriate in outsourcing the focal organization's engagement with its vendor. The respondents' agreement on "enhanced economies of scale" is higher than the other indicators of successful outsourcing. Still,

the smallest average value ( $5.22 \pm 1.04$ ) is reported by (OS8), which is "satisfaction of focal organizations with the overall benefits of outsourcing". But relatively, there is no significant difference in the agreement of respondents in respect of each indicator. This means that all results are seen as co-equally important. For the original SPSS output of the frequency, average, minimum, maximum please refers to appendix c section 1 outsourcing success.

**Table 4.3:** Descriptive Statistics for Outsourcing Success

Variable/Items	Mean	Std. Deviation
<b>Outsourcing success</b>	<b>5.38</b>	<b>0.88</b>
(OS1) Refocus on core business	5.40	.888
(OS2) Enhanced our competence	5.50	.787
(OS3) Access to skilled personnel	5.42	.828
(OS4) Enhanced economies of scale	5.51	.752
(OS5) Control of expenses	5.34	.948
(OS6) Reduction for risk of technological obsolescence	5.39	.877
(OS7) Increased access to key information	5.26	.995
(OS8) Satisfaction with overall outsourcing benefits	5.22	1.038
<b>Valid N (listwise)</b>	<b>337</b>	

Note: A 7-point likert scale was used. Scale: 1 = strongly disagree; 7 = strongly agree

#### 4.5.2 Vendor Management Capability

Vendor management capability was assessed with a 5-point likert scale. As seen in Table 4.4, the average score is  $3.40 \pm 1.00$  ( $M \pm SD$ ). This indicates that most respondents have above average scores (i.e. 3) for vendor management capability. Out of the indicators of the variable, (VMC4) indicates the highest value ( $3.69 \pm .93$ ). It explains that "systematic process to manage vendors" is appropriate for the ability of the focal organization to manage its vendors as part of outsourcing. Respondents' agreement on "systematic process to manage vendors" is more elevated than other indicators of vendor management capability. However, the lowest average value ( $3.13 \pm 1.01$ ) is

given by (VMC1), which is the "process for vendor selection" of focal organizations. But relatively, we see no significant difference in the agreement of respondents for each indicator. This implies that all vendor management activities are seen as co-equally important. For the original SPSS output of average, frequency, minimum, maximum, please refer to the vendor management capability in appendix c, section 2.

**Table 4.4:** Descriptive Statistics for Vendor Management Capability

Variable/Item	Mean	Std. Deviation
<b>Vendor management capability</b>	<b>3.40</b>	<b>1.00</b>
(VMC1) Processes for vendor selection	3.13	1.007
(VMC2) Evaluation of outsourcing performance	3.43	1.004
(VMC3) Management of outsourcing projects	3.41	.966
(VMC4) Systematic processes to manage vendors	3.69	.930
(VMC5) Systematic processes to control vendors	3.28	.989
<b>Valid N (listwise)</b>	<b>337</b>	

Note: A 5-point likert scale was used. Scale: 1 = strongly disagree; 5 = strongly agree

### 4.5.3 Partnership Quality

The quality of the partnership was assessed via a 5-point likert scale. As seen in Table 4.5, the average score is  $3.42 \pm 1.14$  ( $M \pm SD$ ). This shows that most respondents have above average scores (i.e. 3) for partnership quality. Within the indicators of the variable, (PQ3) indicates the greatest value ( $3.51 \pm 1.11$ ). It shows that "willing to comply each other's request" between focal organization and vendor is appropriate in subcontracting commitment. Respondents' agreement on "willing to comply each other's request" is higher than other indicators of partnership quality. However, the lowest average value ( $3.16 \pm 1.28$ ) is shown in (PQ5), which is "cooperative in conducting business" between the focal and the vendor organization respectively. But relatively, there is no significant difference in terms of agreement of respondents for each indicator. This means that all the indicators of partnership quality are seen as equally important. For the original SPSS output of frequency, average, minimum and maximum, please refer to appendix C, section 3, partnership quality.



**Table 4.5:** Descriptive Statistics for Partnership Quality

Variable/Items	Mean	Std. Deviation
<b>Partnership Quality</b>	<b>3.42</b>	<b>1.14</b>
(PQ1) Decisions of business objectives and direction together	3.46	1.144
(PQ2) Solve problems together	3.50	1.089
(PQ3) Willing to comply each other's request	3.51	1.097
(PQ4) Interested in each other's problems	3.46	1.128
(PQ5) Cooperative in conducting business	3.16	1.276
(PQ6) Make beneficial decisions under any circumstances	3.48	1.205
(PQ7) Understand each other's business objective and process	3.48	1.190
(PQ8) Share benefits and risks	3.28	1.058
(PQ9) Perform prespecified agreements and promises	3.44	1.109
<b>Valid N (listwise)</b>	<b>337</b>	

Note: A 5-point likert scale was used. Scale: 1 = strongly disagree; 5 = strongly agree

#### 4.5.4 Trust

Trust was measured via a 5-point likert scale. As seen in Table 4.6, the average score is  $3.70 \pm 0.93$  ( $M \pm SD$ ). This shows that most respondents have above-average trust levels (i.e. score 3). Among the indicators of the variable, (TR5) indicates the highest value ( $3.88 \pm .87$ ). It explains that "open and honest when problems occurred" is appropriate in the subcontracting engagement. Respondents' agreement on making "open and honest when problems have occurred" is higher than other indicators in trust. Still, the lowest average value ( $3.51 \pm .97$ ) is reported from (TR9), which is "trusted completely". But relatively, no significant difference is seen in the agreement of respondents on each indicator. This means that all the indicators of trust are seen as equally important. For the original SPSS output of frequency, average, minimum and maximum please refer to appendix c, section 4, trust.

**Table 4.6:** Descriptive Statistics for Trust

Variable/Items	Mean	Std. Deviation
<b>Trust</b>	<b>3.70</b>	<b>0.93</b>
(TR1) Beneficial decisions under any circumstances	3.78	.935
(TR2) Assistance without exceptions	3.77	.923
(TR3) Sincere at all times	3.81	.902
(TR4) Friendly relations	3.79	.903
(TR5) Open and honest when problems occurred	3.88	.869
(TR6) Helped for making critical decisions	3.70	.937
(TR7) Willing to provide assistance	3.56	.968
(TR9) Trusted completely	3.51	.970
(TR10) Great confidence	3.53	.970
<b>Valid N (listwise)</b>	<b>337</b>	

Note: A 5-point likert scale was used. Scale: 1 = strongly disagree; 5 = strongly agree

#### 4.5.5 Human Capital

Human capital was measured via a 7-point likert scale. As seen in Table 4.7, the average score is  $5.04 \pm 1.03$  ( $M \pm SD$ ). This shows that most respondents have above average scores (i.e. 4) for human capital. Of the indicators of this variable, (HC4) indicates the highest value ( $5.24 \pm .94$ ). It explains that "employees' experts in particular jobs and functions" is appropriate in the outsourcing engagement. The respondents' agreement on "employees' experts in particular jobs and functions" is higher than other indicators in human capital. However, the lowest average value ( $4.93 \pm 1.06$ ) is seen in (HC3) which is "employees are creative and bright ". But relatively, no significant difference is seen in the agreement of respondents for each indicator. This means that all indicators of human capital are seen as equally important. For the original SPSS output of frequency, average, minimum and maximum please refer to appendix c, section 5, human capital.

**Table 4.7:** Descriptive Statistics for Human Capital

Variable/Items	Mean	Std. Deviation
<b>Human Capital</b>	<b>5.04</b>	<b>1.03</b>
(HC1) Highly skilled employees	5.05	1.034
(HC2) Employees best in industry	5.02	1.023
(HC3) Employees are creative and bright	4.93	1.064
(HC4) Employees experts in particular jobs and functions	5.24	.943
(HC5) Employees develop new ideas and knowledge	4.95	1.101
<b>Valid N (listwise)</b>	<b>337</b>	

Note: A 7-point likert scale was used. Scale: 1 = strongly disagree; 7 = strongly agree

#### 4.5.6 Knowledge Sharing

Knowledge sharing was measured with a 5-point likert scale. As seen in Table 4.8, the mean score is  $3.02 \pm 1.09$  ( $M \pm SD$ ). This indicates that most respondents have slightly above average scores (i.e. 3) for knowledge sharing. Among the indicators of the variable, (KS6) indicates the highest value ( $3.33 \pm 1.12$ ). It explains that "Share each other's know-where and know-whom" is appropriate for the outsourcing of the commitment between the focal and vendor organization. Respondents' agreement on "Share each other's know-where and know-whom" is higher than other indicators of knowledge sharing. Still, the lowest average value ( $2.66 \pm 1.08$ ) is seen in (KS4) which is "share business knowledge obtained from newspapers, magazines, journals, and television". But relatively, no significant difference is seen in the agreement of respondents for each indicator. For the original SPSS output of frequency, average, minimum and maximum please refer to appendix c, Section 6, knowledge sharing.

**Table 4.8:** Descriptive Statistics for Knowledge Sharing

Variable/Items	Mean	Std. Deviation
<b>Knowledge Sharing</b>	<b>3.02</b>	<b>1.09</b>
(KS1) Share business proposals and reports	3.13	1.132
(KS2) Share business manuals, models, and methodologies	2.87	1.071
(KS3) Share success and failure stories	3.31	1.103
(KS4) share business knowledge obtained from newspapers, magazines, journals, and television	2.66	1.084
(KS5) Share know-how from work experience	2.67	1.044
(KS6) Share each other's know-where and know-whom	3.33	1.122
(KS7) share expertise obtained from education and training	3.19	1.103
<b>Valid N (listwise)</b>	<b>337</b>	

Note: A 5-point likert scale was used. Scale: 1 = strongly disagree; 5 = strongly agree

#### 4.5.7 Degree of Outsourcing

The degree of outsourcing was assessed using a 5-point likert scale. As seen in Table 4.9, the average score is  $3.71 \pm 0.68$  ( $M \pm SD$ ). This shows that most respondents have above average scores (i.e. 3) for the degree of outsourcing. Among the indicators of the variable, (DOO12) indicates the highest value ( $4.08 \pm .63$ ). It explains that "outsourcing level for shipping activity" is appropriate which is more than outsourced to a moderate extent in the outsourcing commitment. The respondents' agreement for the shipping activity agreement is greater than others in terms of outsourcing. However, the lowest average value ( $3.25 \pm .83$ ) is reported from (DOO9), which is the "outsourcing level for purchasing activity ". But relatively, no significant difference is seen in the respondent agreement for each indicator. This shows that all levels of outsourcing are seen as equally important. For the original SPSS output of frequency, average, minimum and maximum please refer to appendix c, section 7, degree of outsourcing.

**Table 4.9:** Descriptive Statistics for Degree of Outsourcing

Variable/Item	Mean	Std. Deviation
<b>Degree of outsourcing</b>	<b>3.71</b>	<b>0.68</b>
(DOO1) Outsourcing level for accounting activity	3.72	.533
(DOO3) Outsourcing level for assembly activity	3.70	.807
(DOO5) Outsourcing level for information systems activity	3.62	.653
(DOO6) Outsourcing level for machining/manufacturing activity	3.58	.631
(DOO7) Outsourcing level for payroll activity	3.59	.698
(DOO8) Outsourcing level for product repair activity	3.72	.539
(DOO9) Outsourcing level for purchasing activity	3.25	.833
(DOO11) Outsourcing level for sales force activity	3.96	.431
(DOO12) Outsourcing level for shipping activity	4.08	.627
(DOO13) Outsourcing level for training activity	3.74	.774
(DOO14) Outsourcing level for warehousing activity	3.80	1.002
<b>Valid N (listwise)</b>	<b>337</b>	

Note: A 5-point likert scale was used. Scale: 1 = not outsourced at all; 5 = totally outsourced

#### 4.5.8 Partners' Compatibility

Partners' compatibility was measured via a 7-point likert scale. As seen in Table 4.10, the average score is  $5.07 \pm 1.14$  ( $M \pm SD$ ). This shows that most respondents have above average scores (i.e. 4) for partner compatibility. Among the indicators of the variable, (PC1) indicates the highest value ( $5.32 \pm .90$ ). It explains that "similar operating philosophies" between the focal and the vendor organization are appropriate in the outsourcing commitment. Respondents' agreement on "similar operating philosophies" is greater than other indicators of partners' compatibility. Still, the lowest mean value ( $4.72 \pm 1.47$ ) is seen in (PC3) which is "work as a team" between focal organization and vendor. But relatively, no significant difference is seen in respondent agreement for each indicator. This implies that all indicators of partners' compatibility are seen as equally important. For the original SPSS output of frequency, average, minimum and maximum please refer to appendix c, section 8, partners' compatibility.

**Table 4.10:** Descriptive Statistics for Partners' Compatibility

<b>Variable/Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Partners' compatibility</b>	<b>5.07</b>	<b>1.14</b>
(PC1) Similar operating philosophies	5.32	.896
(PC2) Similar management style	4.81	1.423
(PC3) Work as a team	4.72	1.467
(PC4) Receptive to new solutions	4.99	1.257
(PC5) Cost as an important element	5.20	.958
(PC6) Quality as an important element	5.28	.893
(PC7) delivery time as an important aspect	5.14	1.102
(PC8) Flexible reaction to demand	5.08	1.097
<b>Valid N (listwise)</b>	<b>337</b>	

Note: A 7-point likert scale was used. Scale: 1 = strongly disagree; 7 = strongly agree

#### 4.6 Common Method Variance

Where respondents self-report on a single scale, there is a probability for indicating different ratings, rather than true ratings (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This gives rise to inexact measurements and, therefore, establishes inexact relationships, known as the "common method variance" (CMV). The variance of the common method as a kind of parasitic internal consistency, that happens when the apparent correlation between indicators, or possibly constructs, comes from their common source (J.-S. Wang & Pho, 2009). To overcome the possibility of a common method variance, different likert scales were used in this study as a 5-point likert scale used for some variables and a 7-point likert scale for the rest of the variables. As This is the procedural remedy to control common method variance by using different likert scales for variables of model and open ended questions (Tehseen, Ramayah, & Sajilan, 2017).

#### 4.7 Assessment of Multivariate Assumptions

Here is an evaluation of the multivariate hypotheses in relation to this study.

#### 4.7.1 Normality

Normality represents the form of the distribution of sample data among the population. Normality is employed to explain a curve that is bell-shaped and symmetrical. The highest scoring frequency is illustrated in the mid portion, with lower frequencies at extremes (Wallnau, 2000). From this point of view, asymmetry and flattening have been described to verify whether the data have a normal distribution or not. A skewness value of more than 3 and a kurtosis value of more than 10 are analytic for those who deviate from normality (Kline, 2015). Some researchers have indicated that a value of  $\pm 1.0$  for threshold is a guideline for determining what is normal (George & Mallery, 2003; G. A. Morgan, Griego, & Gloeckner, 2000).

In this stratum, this study applied a value of  $\pm 1.0$  as a threshold to verify skewness and kurtosis. Value in the range of  $\pm 1.0$  considered as normal distribution while value greater than  $\pm 1.0$  considered as deviating from normality. Kurtosis is the measure of the peak of the curve, which does not affect the analysis effectively. Negative kurtosis means a flatter distribution, at the same time as a positive value represents a peak distribution.

The result of Table 4.11 indicates that all skewness and kurtosis statistics are not in the range of  $\pm 1.0$ , showing that all indicators have not retained a suitable level of asymmetry and flattening which indicates that the distribution of data is not normal.

**Table 4.11: Skewness and Kurtosis Statistics**

<b>Outsourcing Success</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Skewness</b>	<b>Kurtosis</b>
	<b>Statistic</b>	<b>Statistic</b>	<b>Statistic</b>	<b>Statistic</b>
Outsourcing success (OS1)	3	6	-1.647	2.004
Outsourcing success (OS2)	3	6	-1.892	3.414
Outsourcing success (OS3)	3	6	-1.68	2.516
Outsourcing success (OS4)	3	6	-1.87	3.638
Outsourcing success (OS5)	3	6	-1.516	1.325
Outsourcing success (OS6)	3	6	-1.632	2.039
Outsourcing success (OS7)	3	6	-1.339	0.695
Outsourcing success (OS8)	3	6	-1.258	0.333
<b>Vendor Management Capability</b>				
Vendor Management Capability (VMC1)	2	5	-0.2	-1.865
Vendor Management Capability (VMC2)	2	5	-0.553	-1.24
Vendor Management Capability (VMC3)	2	5	-0.666	-1.232
Vendor Management Capability (VMC4)	2	5	-0.92	-0.237
Vendor Management Capability (VMC5)	1	4	-0.726	-1.301
<b>Partnership Quality</b>				
Partnership Quality (PQ1)	2	5	-0.273	-1.461
Partnership Quality (PQ2)	1	5	-0.561	-1.021
Partnership Quality (PQ3)	1	5	-0.552	-1.03
Partnership Quality (PQ4)	2	5	-0.3	-1.43
Partnership Quality (PQ5)	2	5	0.328	-1.655
Partnership Quality (PQ6)	2	5	-0.204	-1.564
Partnership Quality (PQ7)	2	5	-0.224	-1.535
Partnership Quality (PQ8)	2	5	-0.249	-1.585
Partnership Quality (PQ9)	2	5	-0.313	-1.418
<b>Trust</b>				
Trust (TR1)	2	5	-0.956	-0.002
Trust (TR2)	2	5	-0.978	0.042
Trust (TR3)	2	5	-1.043	0.328
Trust (TR4)	2	5	-1.035	0.256
Trust (TR5)	2	5	-1.128	0.768
Trust (TR6)	2	5	-0.922	-0.222
Trust (TR7)	2	5	-0.756	-0.778
Trust (TR9)	2	5	-0.718	-0.94
Trust (TR10)	2	5	-0.73	-0.887



**Table 4.11:** Skewness and Kurtosis Statistics Continued

<b>Human Capital</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Skewness</b>	<b>Kurtosis</b>
	<b>Statistic</b>	<b>Statistic</b>	<b>Statistic</b>	<b>Statistic</b>
Human Capital (HC1)	2	6	-1.493	2.263
Human Capital (HC2)	2	6	-1.226	0.914
Human Capital (HC3)	2	6	-1.245	1.23
Human Capital (HC4)	3	6	-1.282	0.803
Human Capital (HC5)	3	6	-0.797	-0.696
<b>Knowledge Sharing</b>				
Knowledge Sharing (KS1)	2	5	0.15	-1.641
Knowledge Sharing (KS2)	2	5	0.52	-1.466
Knowledge Sharing (KS3)	2	5	-0.179	-1.559
Knowledge Sharing (KS4)	2	5	1.148	-0.393
Knowledge Sharing (KS5)	2	5	1.039	-0.619
Knowledge Sharing (KS6)	2	5	-0.161	-1.556
Knowledge Sharing (KS7)	2	5	-0.013	-1.654
<b>Degree of Outsourcing</b>				
Degree of Outsourcing (DOO1)	3	5	-0.138	-0.477
Degree of Outsourcing (DOO3)	2	5	-0.703	0.095
Degree of Outsourcing (DOO5)	2	4	-1.484	0.883
Degree of Outsourcing (DOO6)	2	4	-1.251	0.426
Degree of Outsourcing (DOO7)	2	5	-0.923	0.232
Degree of Outsourcing (DOO8)	3	5	-0.093	-0.491
Degree of Outsourcing (DOO9)	2	5	-0.339	-1.194
Degree of Outsourcing (DOO11)	3	5	-0.249	2.35
Degree of Outsourcing (DOO12)	2	5	-0.203	0.083
Degree of Outsourcing (DOO13)	2	5	-0.742	0.355
Degree of Outsourcing (DOO14)	2	5	-0.547	-0.726
<b>Partners' Compatibility</b>				
Partners' Compatibility (PC1)	3	6	-1.482	1.565
Partners' Compatibility (PC2)	2	6	-0.959	-0.556
Partners' Compatibility (PC3)	2	6	-0.862	-0.783
Partners' Compatibility (PC4)	2	6	-1.148	0.066
Partners' Compatibility (PC5)	3	6	-1.252	0.697
Partners' Compatibility (PC6)	3	6	-1.386	1.354
Partners' Compatibility (PC7)	3	6	-1.079	-0.246
Partners' Compatibility (PC8)	3	6	-0.998	-0.363
<b>Valid N (listwise)</b>	<b>337</b>			

#### **4.7.2 Assessment of Multicollinearity**

Multicollinearity refers to a strong correlation between predictor variables (Tabachnick & Fidell, 2007). Multicollinearity problems can significantly influence the quality and results of the regression model. In addition, multicollinearity weakens the ability to determine the relative roles of each independent variable. In other words, if multicollinearity exists, it will decrease the total variance explained. Therefore, it is important to solve this problem. Although it is not necessary to check and address multicollinearity in PLS analysis, this is not necessary for the reflective variable/s but applicable for the formative variable/s. But in this study, the possibility of multicollinearity was evaluated by calculating VIF (variance inflation factor) values for both reflective (VMC vendor management capability, PQ partnership quality, TR trust, HC human capital, KS knowledge sharing) and formative variable (DOO degree of outsourcing) as a model have both reflective and formative variables.

It has been argued that the VIF value greater than 10 certainly indicates a serious collinearity problem (JF Hair, Anderson, Babin, & Black, 2010). It is recommended that if the variables have high multicollinearity, the variables should be eliminated. So this study take the threshold VIF value of 10 for this study according to (JF Hair et al., 2010). For this study, the results of the multicollinearity test were reported in Table 4.12. In addition, Table 4.12 indicates that there is no problem of multicollinearity of all the variables and the mediator since the VIF values are less than 10.

**Table 4.12: Multicollinearity Assessment**

Variables	DOO	HC	KS	OS	PC	PC for HC and OS	PC for KS and OS	PQ	TR	VMC
DOO				4.428						
HC				2.876						
KS				2.844						
OS										
PC				3.978						
PC for HC and OS				4.244						
PC for KS and OS				3.200						
PQ	2.234			4.980						
TR	5.134			6.952						
VMC	3.156			5.156						

#### 4.8 Structural Equation Modeling (SEM) Via smartPLS

Partial Least Square has been employed to evaluate both structural and measurement models. The PLS algorithm permits each indicator to vary as it contributes towards the amalgamated score of the latent variable. PLS examines variables that are evaluated by psychometric scales. In addition, it is able to determine the directions and forces of the predetermined associations. Like alternate structural equation modeling techniques, a process with two steps is commonly used in PLS (Chin et al., 2003; Chwelos, Benbasat, & Dexter, 2001; Karimi, Somers, & Gupta, 2004; Ko, Kirsch, & King, 2005).

The measurement model is evaluated initially, in the same direction as the factor analysis. The next step is to evaluate the structural model in order to provide path coefficients that show associations of each variable. Estimating the measurement model results in factor loads and item measures of reliability to latent variables. While the structural model valuation shows the path coefficients for significant effects on inter-variables relationships. Unlike SEM based on covariance, significance path coefficients in PLS-SEM can only be seen through a re-sampling method with jackknifing or bootstrapping options. In this study, the data analysis employed bootstrapping.

PLS SEM is able to handle formative and reflective models of measurement. Reflective indicators are seen as functions of latent variable, and variations in latent variable are reflected in changes in dummy (manifest) variables (J. F. Hair et al., 2011). Reflective indicators are seen by single direction arrows which point from latent variables to indicator variables; the associated relationship coefficients are named as external loadings in SEM. On the other hand, formative indicators are thought to cause latent variable, and variations in the indicators result in changes in the value of the latent variable (Diamantopoulos & Winklhofer, 2001; J. F. Hair et al., 2011). Formative indicators may be seen as single-pointed arrows pointing to inward latent variable from indicator; the associated coefficients for such formative relations are marked as external weights in SEM. On the basis of previous empirical studies, all constructs have been operationalized as reflective constructs, with the exception of the degree of outsourcing which is a formative construct.

As we saw in Chapter 3, the data collected for this research was analyzed using SmartPLS. After drawing the model in PLS and transferring the SPSS data with the '.csv' format, the model estimates were made. This model shows that the numbers on the arrows between the variables represent the standardized regression coefficients. In addition, the numbers on the lines between each variable and its indicators are factor / outer loadings. Finally, the numbers inside the circles represent the value of  $R^2$ .

The data collected for this work was analyzed using an SEM technique. SEM is a second-generation multivariate analysis technique that is popular with researchers. SEM overcomes the weaknesses of first-generation techniques such as principal component analysis and linear regression (Hair Jr & Lukas, 2014). The SEM statistical models aim to test the hypotheses of research that have been developed from the theory by examining the relationships between variables, the direction of relations and their meaning (Hair Jr et al., 2016). It has been argued that SEM is preferred to other

techniques such as principal component analysis, factor analysis, discriminant analysis, or multiple regressions, because SEM provides flexibility in the interaction between theory and the data.

#### **4.9 Confirmatory Measurement Assessment**

All eight variables of this research are of first order construct. These first-order constructs were evaluated in PLS. The two-step method, which is often used in PLS analysis in first-order constructs, was used because it is the appropriate approach to perform the evaluation of the measurement model (Anderson & Gerbing, 1988).

#### **4.10 Evaluation of The Measurement and Structural Model**

PLS has been widely adopted by scholars (Bontis, 1998; Bontis & Girardi, 2000; Cabrita & Bontis, 2008), largely due to its ability to model linear associations without considering the limitations of other SEM techniques, such as normality and large sample size which coordinates with estimated indicators (Chin et al., 2003).

PLS simultaneously models structural paths as well as measurement paths. The algorithm in PLS permits each indicator to vary as it feeds into the composite score of the latent variable. As with other structural equation modeling techniques, a two-step process is generally used in PLS (Chin et al., 2003; Chwelos et al., 2001; Karimi et al., 2004; Ko et al., 2005; H.-H. Teo, Wei, & Benbasat, 2003; Wixom & Watson, 2001).

Total eight variables used for this study, of which only one degree of outsourcing (DOO) is formative and seven remaining variables: outsourcing success (OS), vendor management capability (VMC), partnership quality (PQ), Trust (TR), human capital (HC), knowledge sharing (KS) and partners' compatibility (PQ) are reflective variables. Degree of Outsourcing (DOO) is also a mediator between the relationship of Vendor Management Capability (VMC), Partnership Quality (PQ), Trust (TR) and Outsourcing Success (OS). Figure 4.1 illustrates the measurement model for this study.

In the figure below the moderation of the compatibility of the partners between the relationship of the human capital and the success of the outsourcing is represented with (PC for HC and OS). The moderation of partner compatibility between the knowledge sharing relationship and the success of outsourcing is also described with (PC for KS and OS).

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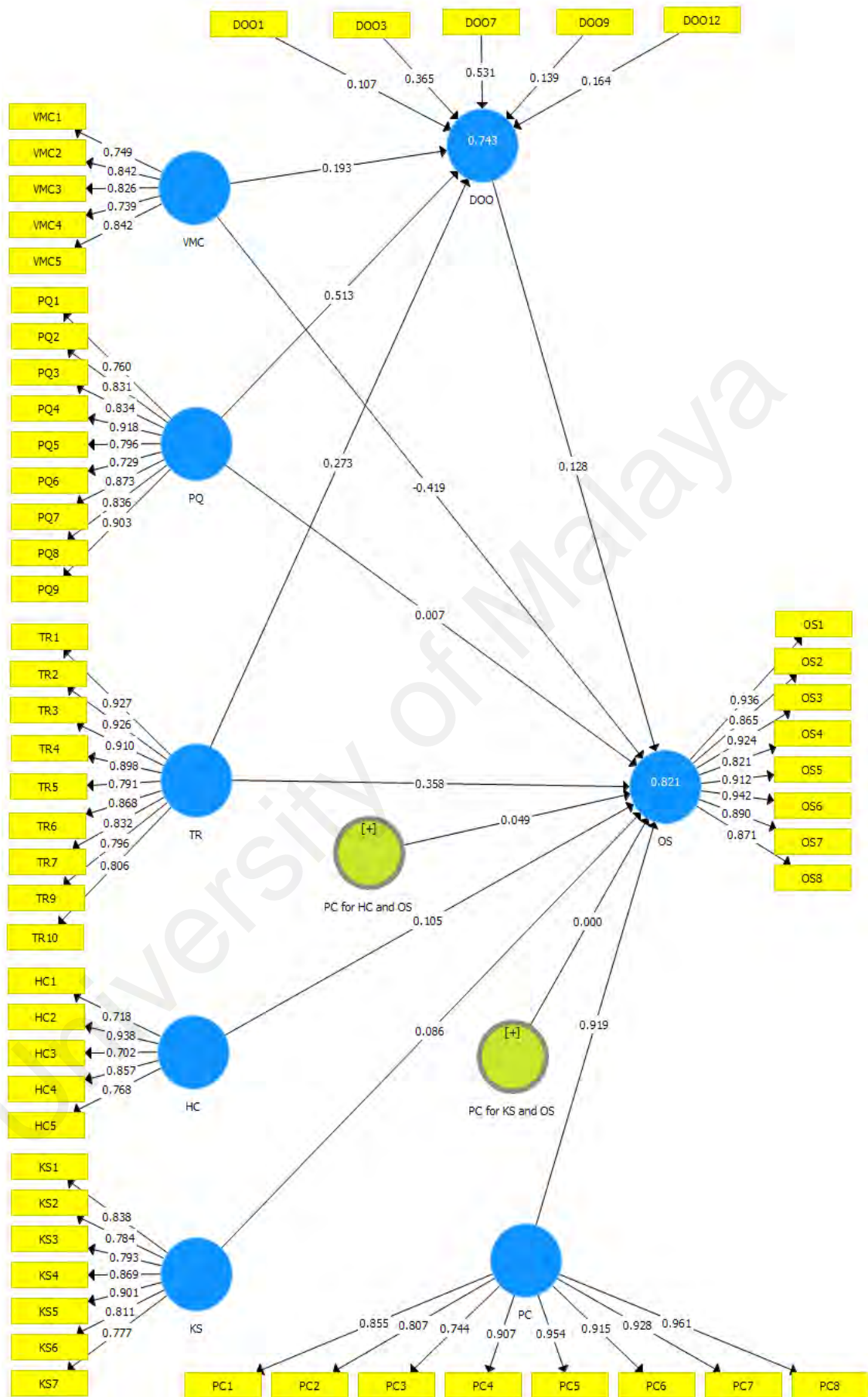


Figure 4.1: Measurement Model of Variables

Figure 4.1 above represents the measurement model of the study. It shows that the factor / outer loadings of all the reflective variables are equal to or greater than 0.70, which is the threshold value for the factor / outer loadings of all reflective variables (Hair Jr et al., 2016). Table 4.13 below also shows the factors / outer loadings of all the reflective variables together with composite reliability, average variance extracted (AVE) and subsequently their explanation.

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**Table 4.13:** Factor / Outer Loadings, Composite Reliability and AVE of Reflective Variables

Indicators / Items	Factor / Outer Loadings	Composite Reliability	Average Variance Extracted (AVE)
HC1	0.718	0.899	0.642
HC2	0.938		
HC3	0.702		
HC4	0.857		
HC5	0.768		
KS1	0.838	0.937	0.682
KS2	0.784		
KS3	0.793		
KS4	0.869		
KS5	0.901		
KS6	0.811		
KS7	0.777		
OS1	0.936	0.97	0.803
OS2	0.865		
OS3	0.924		
OS4	0.821		
OS5	0.912		
OS6	0.942		
OS7	0.89		
OS8	0.871		
PC1	0.855	0.967	0.786
PC2	0.807		
PC3	0.744		
PC4	0.907		
PC5	0.954		
PC6	0.915		
PC7	0.928		
PC8	0.961		
PQ1	0.76	0.953	0.694
PQ2	0.831		
PQ3	0.834		
PQ4	0.918		
PQ5	0.796		
PQ6	0.729		
PQ7	0.873		
PQ8	0.836		
PQ9	0.903		

**Table 4.13:** Factor / Outer Loadings, Composite Reliability and AVE of Reflective Variables Continued

Indicators / Items	Factor / Outer Loadings	Composite Reliability	Average Variance Extracted (AVE)
TR1	0.927	0.963	0.745
TR2	0.926		
TR3	0.91		
TR4	0.898		
TR5	0.791		
TR6	0.868		
TR7	0.832		
TR9	0.796		
TR10	0.806		
VMC1	0.749		
VMC2	0.842		
VMC3	0.826		
VMC4	0.739		
VMC5	0.842		

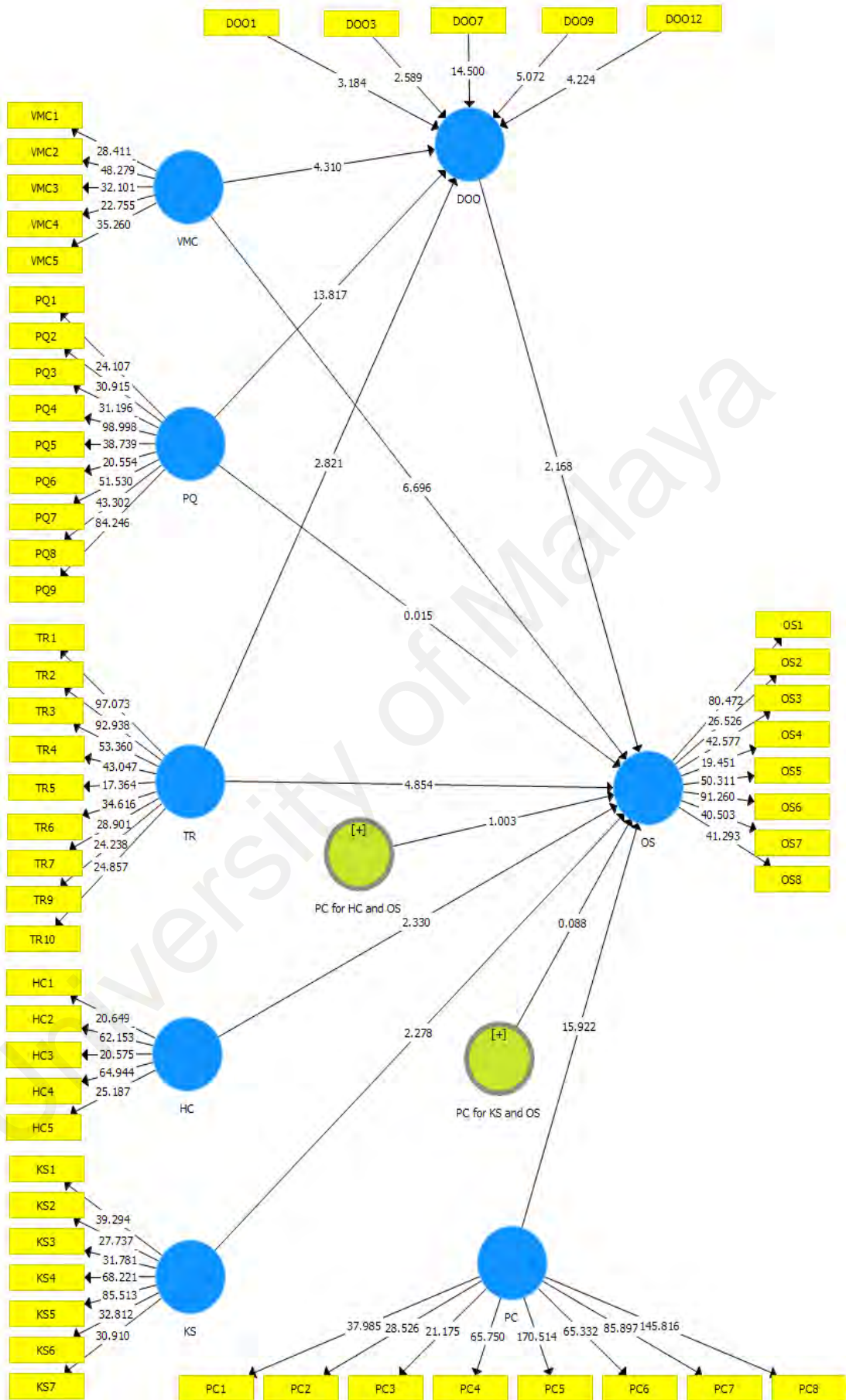
The same factor / outer loading criteria do not apply to the formative variables since the formative variables have weights rather than loadings. There is no absolute rule for the threshold value of formative variables for outer weights that can be used to determine the relative contribution of each indicator to variable, or its relative importance. To do this, one must test whether the outer weights in the formative measurement models are significantly different from zero using the bootstrap procedure.

Bootstrapping also plays a crucial role in the evaluation of the structural model path coefficients (Hair Jr et al., 2016). With this, the values of t are calculated to evaluate the significance of each weight of the indicator. Figure 4.2 below illustrates the bootstrapping results. The results show that the level of outsourcing indicators (DOO1) for accounting activity, (DOO3) level of outsourcing for assembly activity, (DOO7) level of outsourcing for payroll, (DOO9) level of outsourcing for the purchasing activity, (DOO12) level of outsourcing for the shipping activity are significant with

values greater than 1.96. This confirms that these indicators have a relative importance to variable (DOO).

The results showing that indicator (DOO1) level of outsourcing for accounting activity, (DOO3) level of outsourcing for assembly activity, (DOO7) level of outsourcing for payroll, (DOO9) level of outsourcing for purchasing activity, (DOO12) level of outsourcing for shipping activity are significant by having values greater than 1.96. This is confirming that these indicators have relative importance to variable (DOO).

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**Figure 4.2: Structural Model of Variables**

Thus, all indicators of the degree of outsourcing (DOO) have been removed from both the measurement model and the structural model of this study because they have no relative contribution to the variable or its relative importance except indicator (DOO1), (DOO3), (DOO7), (DOO9) and (DOO12). The percentage of removed indicators / items from complete model is app. 10 % which is less than 20 %. These indicators were retained in the model with moderate to greater outsourcing, as described in the descriptive statistics to exploit the best combination of outsourcing. These are important indicators with the respective level of outsourcing and this study will revolve around it in the next section.

Based on the importance of these indicators, the measurement model retains only the indicators mentioned above for the degree of outsourcing variable with reference to Figure 4.1 and all other indicators are removed from the degree of outsourcing.

#### **4.11 Reflective Measures Validity**

Generally, validity refers to the degree to which an instrument actually measures the variable it is supposed to measure (Peter, 1981). In other words, validity refers to the extent to which the concept is defined by the measures. There are two types of validity that can be applied to reflective measures: convergent validity and discriminant validity. Convergent validity evaluates the degree of correlation between two measures of the same concept. While on the other hand, discriminant validity is the degree to which two conceptually similar concepts are distinct (JF Hair et al., 2010).

#### **4.12 Convergent Validity**

Convergent validity can be evaluated by the average variance extracted (AVE) among the measurements. To confirm the convergent validity, the value of AVE must be greater than 0.50, which means that at least 50% of the measurement variance has been captured by the variable. Below the AVE value of each reflective variable has been shown and explained.

#### **4.12.1 Outsourcing Success AVE**

All factor loading values of the outsourcing success variable are equal to or greater than 0.70 and the factors which enter into these variables are in agreement with the predictions of theory as well as the total variance explained by the factor 80.30 percent.

#### **4.12.2 Vendor Management Capability AVE**

All factor loadings of variable vendor management capability are equal or more than 0.70 and the factors which are part of those variables are in harmony with theoretical predictions where the total variance is explicated by the factor as 64.10 percent.

#### **4.12.3 Partnership Quality AVE**

All factor loading values of variable partnership quality are equal or more than 0.70 and the factors which are in those variables are in line with theoretical predictions and the total variance shown by the factor as 69.40 percent.

#### **4.12.4 Trust AVE**

All factor loading values of variable trust are equal or more than 0.70 and the factors that fall into those variables is in line with theoretical predictions where the total variance is explained by the factor as 74.50 percent.

#### **4.12.5 Human Capital AVE**

All factor loading values of variable human capital are equal or more than 0.70 and the factors that fall into those variables is in line with theoretical predictions and the total variance explicated by the factor as 64.20 percent.

#### **4.12.6 Knowledge Sharing AVE**

All factor loading values of variable knowledge sharing are equal or more than 0.70 and the factors which fall into those variables is in line with theoretical predictions where the total variance is explained by the factor as 68.20 percent.

#### **4.12.7 Partners' Compatibility AVE**

All factor loading values of variable partners' compatibility are equal or more than 0.70 and the factors which fall into those variables is in line with theoretical predictions and the total variance explicated by the factor as 78.60 percent.

#### **4.13 Reflective Measures Reliability**

Reliability can be seen as the extent to which a variable (or set of variables) is consistent in what it is meant to measure. In other words, the reliability of a measure is related to the stability and consistency with which the instrument evaluates the concept and helps to assess the "quality" of a measure. To further investigate the reliability of reflective variables, Cronbach's alpha and composite reliability which mentioned in previous table as well estimates can be calculated using PLS-SEM. As it was mentioned before Cronbach's alpha is used to assess internal consistency. In addition, this reliability index is considered the most appropriate reliability coefficient, which assesses the reliability of a set of indicators. The generally acceptable value for Cronbach's alpha is greater than 0.70 (Field, 2009).

In addition, Dillon Goldstein's composite or Rho reliability is used to evaluate the internal consistency of latent variables. Several authors have suggested that composite reliability should be greater than 0.6 for exploratory purposes and greater than 0.70 for an adequate confirmatory purpose (Bagozzi & Yi, 1988). The level of reliability of all reflective variables is shown in Table 4.14. The results of this study showed that composite reliability for all variables exceeds the required threshold of 0.70. Likewise, Cronbach's alpha of all the variables are more than the value of 0.70, therefore all the reflective variables indicators achieved an acceptable level of reliability.

**Table 4.14:** Cronbach's Alpha and Composite Reliability of Reflective Variables

Variables	Cronbach's Alpha	Composite Reliability
HC	0.864	0.899
KS	0.924	0.937
OS	0.965	0.970
PC	0.962	0.967
PQ	0.945	0.953
TR	0.957	0.963
VMC	0.862	0.899

The table below illustrates the outer weight values of the formative variable degree of outsourcing for the indicators retained after the significance test.

**Table 4.15:** Formative Variable Outer Weights

Indicators/Items	Degree of Outsourcing
DOO1	0.107
DOO3	0.365
DOO7	0.531
DOO9	0.139
DOO12	0.164

In conclusion, it was found that all reflective variables factor / outer loadings meet the criteria and that no single indicator of all reflective variables was removed from the measurement and structural model. For the formative variable indicator (DOO1), (DOO3), (DOO7), (DOO9) and (DOO12) was retained in the final model of measurement and structural while all other indicators of the degree of outsourcing have been removed. Therefore, Figure 4.1 represents the final measurement model of this study and Figure 4.2 represents the final structural model of this study. Subsequent sections of this study will unveil the results and discussion for this step-by-step study.

#### **4.14 Discriminant Validity**

Discriminant validity implies that measurements of a given construct differ from measurements of another construct (Hulland, 1999). Discriminant validity assessment is currently a widely accepted prerequisite for analyzing relationships between latent



variables. For the modeling of the variance-based structural equation, such as partial least squares, the Fornell-Larcker criterion and cross-loadings are the conventional methods for evaluating discriminant validity. Authors depicted that these two conventional approaches do not reliably detect the lack of discriminant validity. While a relatively new approach has been proposed to evaluate the discriminant validity that is an alternative approach, based on the multithread-multimethod matrix, to evaluate the discriminant validity: the ratio heterotrait-monotrait (HTMT) correlations. The authors demonstrate superiority over Fornell-Larcker and cross-loading (Henseler, Ringle, & Sarstedt, 2015). The suitability of Fornell-Larcker and cross-loadings criteria for establishing discriminant validity there are only few findings on it. It has been suggested from the perspective of recent researches that Fornell-Larcker criteria is not effective (J. F. Hair, Henseler, Dijkstra, & Sarstedt, 2014).

It had been showed by the authors that neither cross-loadings nor the assessment of the Fornell-Larcker criterion allows users of variance based SEM to determine the discriminant validity of their measures. But as a solution for this critical issue authors suggested heterotrait-monotrait ratio of correlations (HTMT) as a new approach to assess discriminant validity in variance-based SEM. Authors demonstrated efficacy and superiority of HTMT approach over Fornell-Larcker and cross loadings for discriminant validity assessment. It had been argued by the authors that the two conventional approaches for assessing discriminant validity in variance-based SEM, the Fornell-Larcker and the assessment of cross loadings have an unacceptability low sensitivity, which is depicting that they are largely unable to detect a lack of discriminant validity (Henseler et al., 2015).

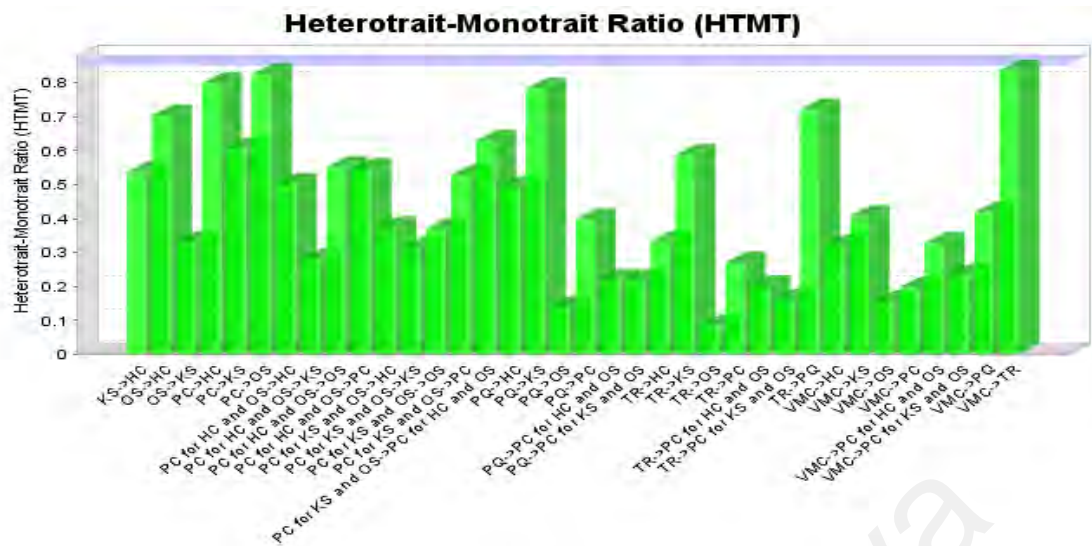
There are twin ways to use HTMT to evaluate discriminant validity: (1) as a criterion or (2) as a statistical test. The first approach, using the HTMT as a criterion, involves comparing it to a predefined threshold. If the level of HTMT exceeds the threshold, it

can be concluded that there is a lack of discriminant validity. The precise threshold level of the HTMT is questionable. Some writers suggest a threshold of 0.85 (Clark & Watson, 1995; Kline, 2015), while others propose a value of 0.90 (Gold & Arvind Malhotra, 2001; T. S. Teo, Srivastava, & Jiang, 2008). This study applied a 0.85 threshold value to evaluate the discriminant validity for the HTMT approach. HTMT threshold value of 0.85 had been applied because it is the most conservative criteria as the lowest specificity rates of all the simulations conditions had been achieved by it. This suggested that HTMT 0.85 can point to discriminant validity problems in research situations in which HTMT 0.90 indicate that discriminant validity has been established. As compare to HTMT 0.85 value, owing to its higher threshold HTMT 0.90 always has higher specificity rates. It requires HTMT 0.85 threshold value to assess discriminant validity if the strictest standards are followed (Henseler et al., 2015). The table below represents the establishment of discriminant validity across HTMT.

**Table 4.16: Heterotrait-Monotrait Ratio (HTMT)**

Variables	HC	KS	OS	PC	PC for HC and OS	PC for KS and OS	PQ	TR	VMC
HC									
KS	0.537								
OS	0.703	0.333							
PC	0.798	0.607	0.825						
PC for HC and OS	0.502	0.281	0.551	0.545					
PC for KS and OS	0.374	0.314	0.371	0.528	0.629				
PQ	0.494	0.782	0.143	0.398	0.220	0.219			
TR	0.333	0.586	0.086	0.270	0.201	0.163	0.721		
VMC	0.320	0.407	0.157	0.198	0.328	0.236	0.418	0.835	

Below is the graphical representation of Heterotrait-Monotrait Ratio (HTMT) as it is establishing that all values are below than 0.85 which is confirming that there is no discriminant validity issue in this study.



**Figure 4.3:** Heterotrait-Monotrait Ratio (HTMT)

#### 4.15 Formative Measures Validity

Formative measures are thought to be free of errors (Edwards & Bagozzi, 2000). As a result, traditional reliability measures are not appropriate (Jarvis, MacKenzie, & Podsakoff, 2003). In addition, assessing the validity of the variable using convergent and discriminant validity is not a reasonable criterion (Diamantopoulos & Sigauw, 2006; Fornell & Larcker, 1981). Instead, establishing the validity of the content before data collection is essential (Hair Jr et al., 2016). The validity of the content for all instrumental scales was evaluated by a review of the literature and a panel of experts, as discussed in Chapter 3. The recommended steps for the validation of formative measures are to verify collinearity means VIF indicators and to evaluate the meaning and relevance of the formative indicators.

##### 4.15.1 Formative Measures Collinearity

Comparing with reflective indicators, the collinearity of the formative indicators was considered problematic from a methodological and interpretative point of view. High collinearity among the formative indicators can negatively influence the statistical significance and weights of the indicators (Hair Jr et al., 2016).

The Variance Inflation Factor (VIF) can be used to estimate the level of collinearity. The VIF value of 10 or more indicates that the collinearity problem is serious. Table 4.12 indicates that collinearity is not present for the degree of outsourcing (DOO), which is the only formative variable of this study because the value (VIF) is below the threshold value of 10.

#### **4.15.2 Significance and Relevance of the Formative Indicators**

The final step in evaluating the formative measurement model is the estimation of the significance of its weights. The relative importance of each indicator in relation to variable was examined using the outer weights of the indicators. A bootstrap approach was applied to estimate the importance of outer weights and to determine whether the formative indicators contributed significantly to the variable degree of outsourcing. The previous depicted Figure 4.2 shows that indicators of the formative variable degree of outsourcing contribute significantly to its variable, since all outer weights are positive and significant with a value greater than 1.96.

#### **4.16 Significance and Relevance of The Structural Model Relationships**

The execution of the PLS-SEM algorithm gives the researcher path coefficients which represent fully standardized regression coefficients (path weights). These coefficients may take values from -1 to +1, thus representing both the strength and the magnitude of the hypothetical relationships between two latent variables. The estimated trajectory coefficients close to +1 indicate a strong positive relationship and the other way around for negative values that are usually statistically significant (i.e., different from zero in the population). The greater the magnitude of the path, the more statistically significant the path (i.e., different from zero in the population).

The bootstrapping procedure was used to test if a path coefficient differs from zero in the population. In addition, the relationship between two latent variables should be meaningful and relevant. Since PLS-SEM assumes that the data is not normally

distributed, a non-parametric boot procedure would be more appropriate for determining the significance of the coefficients. The bootstrapping procedure "estimates the standard errors of the parameter estimates, calculates the ratio of a parameter estimate to its standard error and compares this statistic with the t distribution to obtain the p-value" (Rönkkö & Evermann, 2013).

Therefore, researchers should report the path coefficients, both the t and p values, as well as the bootstrap confidence interval for the predefined significance level  $\alpha$ . This study used bootstrapping to evaluate the statistical significance of the PLS trajectory model. It has been suggested that path coefficients greater than 0.20 are significant while path coefficients less than 0.10 are not significant. In addition, path coefficients close to +1 have a strong positive relationship and are statistically significant, and a similar argument applies to negative relationships (Hair Jr et al., 2016). Table 4.17 shows the results of the hypothesis testing using bootstrapping.

**Table 4.17: Path Coefficients Results**

Hypotheses	Paths	Coefficients $\beta$	Standard Error	T Statistics	P Values	Decision
H1c	DOO -> OS	0.128	0.057	2.168	0.031	Supported
H4	HC -> OS	1.105	0.046	2.330	0.020	Supported
H5	KS -> OS	0.086	0.038	2.278	0.023	Supported
H6	PC -> OS	0.919	0.058	15.922	0.000	Supported
H2a	PQ -> DOO	0.513	0.043	13.817	0.000	Supported
H2	PQ -> OS	0.007	0.065	0.015	0.988	Not Supported
H3a	TR -> DOO	0.273	0.064	2.821	0.005	Supported
H3	TR -> OS	0.358	0.075	4.854	0.000	Supported
H1a	VMC -> DOO	0.193	0.048	4.310	0.000	Supported
H1	VMC -> OS	-0.149	0.062	6.696	0.000	Supported

Note: \*P < 0.05 (95 % confidence interval)

### Relationship between VMC and OS

The association between vendor management capability and outsourcing success (H1), (p = 0.00; t = 6.70) was not supported since it was negatively statistically significant.

### **Relationship between VMC and DOO**

Hypothesis H1a ( $p = 0.00$ ;  $t = 4.31$ ) was supported with a positive relationship observed between vendor management capability and degree of outsourcing which was statistically significant as well.

### **Relationship between DOO and OS**

Hypothesis H1c ( $p = 0.03$ ;  $t = 2.17$ ) was supported by a positive relationship observed between outsourcing success and degree of outsourcing which was statistically significant as well.

### **Relationship between PQ and OS**

The positive relationship between partnership quality and outsourcing success H2, ( $P = 0.99$ ;  $t = 0.02$ ) was not supported since it was not statistically significant.

### **Relationship between PQ and DOO**

Hypothesis H2a, ( $p = 0.00$ ;  $t = 13.82$ ) was supported with a positive relationship observed between partnership quality and degree of outsourcing which was statistically significant.

### **Relationship between TR and OS**

Hypothesis H3, ( $p = 0.00$ ;  $t = 4.85$ ) was supported by a positive relationship observed between trust and outsourcing success which was statistically significant.

### **Relationship between TR and DOO**

Hypothesis H3a, ( $p = 0.01$ ;  $t = 2.82$ ) was supported by a positive relationship observed between trust and degree of outsourcing which was statistically significant.

### **Relationship between HC and OS**

Hypothesis H4, ( $p = 0.02$ ;  $t = 2.33$ ) was supported by a positive relationship observed between human capital and outsourcing success which was statistically significant as well.

### Relationship between KS and OS

Hypothesis H5, ( $p = 0.02$ ;  $t = 2.28$ ) was supported by a positive relationship observed between knowledge sharing and outsourcing success which was statistically significant.

### Relationship between PC and OS

Hypothesis H6, ( $p = 0.00$ ;  $t = 15.92$ ) was supported by a positive relationship observed between partners' compatibility and outsourcing success which was statistically significant.

Following is the summary of each hypothesis with respect to its relationship and significance.

**Table 4.18:** Summary of Direct Hypotheses Testing Results

Hypotheses	Relationship	T –Statistics	P – Value	Results
H1	Vendor management capability has a positive relationship to outsourcing success	6.7	0	Not Supported
H1a	Vendor management capability has a positive relationship with the degree of outsourcing	4.31	0	Supported
H1c	Degree of outsourcing has a positive effect on outsourcing success	2.17	0.03	Supported
H2	Partnership quality has a positive relationship with outsourcing success	0.02	0.99	Not Supported
H2a	Partnership quality has a positive relationship with the degree of outsourcing	13.82	0	Supported
H3	Trust has a positive effect on outsourcing success	4.85	0	Supported
H3a	Trust has a positive effect on the degree of outsourcing	2.82	0.01	Supported
H4	Human capital has a positive influence on outsourcing success	2.33	0.02	Supported

**Table 4.18:** Summary of Direct Hypotheses Testing Results Continued

Hypotheses	Relationship	T –Statistics	P – Value	Results
H5	Knowledge sharing has a positive relationship to outsourcing success	2.28	0.02	Supported
H6	Partners' compatibility has a positive influence on outsourcing success	15.92	0	Supported

Note: \*P < 0.05 (95 % confidence interval)

#### 4.17 Assessment of R<sup>2</sup> Level

R<sup>2</sup> is the level of variance in the dependent variable accounted for by the independent variables. The coefficient of determination R<sup>2</sup> is considered a measure of the predictive accuracy of the model, and is calculated as the squared correlation between the dependent variable and the predicted values. It can range from 0 to 1 with values closer to 1 indicating a higher degree of predictive accuracy. However, it is not easy to establish rules of thumb for acceptable R<sup>2</sup> values because it depends on the complexity of the model and the field of research. For example, R<sup>2</sup> values of 0.20 are considered high in disciplines such as consumer behavior. In marketing studies, R<sup>2</sup> values of 0.75, 0.50, or 0.25 for endogenous latent variables may be described as moderate, substantial or low, respectively (J. F. Hair et al., 2011).

R<sup>2</sup> values are shown in table 4.19. Adjusted R<sup>2</sup><sub>adj</sub> takes into account the complexity of the model and adjusts the R<sup>2</sup> accordingly and is useful for comparing the predictive ability of other PLS-SEM models.

**Table 4.19:** Comparison of Acceptable R<sup>2</sup> Values

Authors	Weak	Moderate	Substantial	Field
(Chin, 1998)	0.19	0.33	0.67	Information System
(J. Cohen, 1988)	0.02	0.13	0.26	Behavioral Sciences
(J. Hair, C. Ringle, & M. Sarstedt, 2011)	0.25	0.50	0.75	Marketing



Therefore, Table 4.20 gives full details on the  $R^2$  of the variables. The results showed that the coefficient of determination,  $R^2$ , was 0.82 for the success of outsourcing (OS) and 0.74 for the degree of outsourcing (DOO). According to (J. Hair et al., 2011), standard, the explanatory power of this structural model was determined to be substantial.

**Table 4.20:**  $R^2$  and  $R^2_{adj}$  Values of Variables

<b>Constructs</b>	<b><math>R^2</math></b>	<b><math>R^2_{adj}</math></b>	<b>Determination</b>
OS	0.82	0.81	Substantial
DOO	0.74	0.74	Moderate

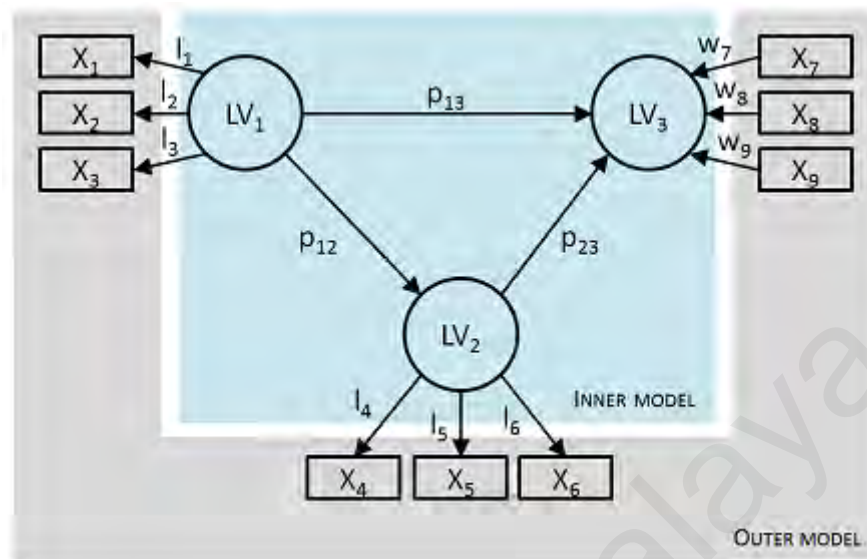
#### 4.18 Mediation Analysis

PLS-SEM mandates a separate test procedure to analyze the mediation effect. The simple cause-and-effect relationship between two variables assumes that the independent latent variable directly affects the dependent latent variable in the absence of any other influence. In reality, a relationship between two latent variables is generally more complex than a simple direct relationship; it can be mediated by one or more latent variables.

There is a mediating effect when a third variable (mediator) intervenes between a predictive variable and a result variable. It has also been argued that the most popular interpretation of mediation is to explain why there is a relationship between exogenous and endogenous constructs (Hair Jr & Lukas, 2014).

Figure 4.4 illustrates an illustration of an effect. The path p13 or the direct effect between LV1 and LV3 is a single path represented with an arrow pointing from LV1 to LV3. In addition, there is a mediating or indirect effect that goes through LV2 (mediation variable) using paths p12 and p23. This is an indirect effect represented by

two arrows - one from LV1 to LV2 and the other from LV2 to LV3 (Baron & Kenny, 1986).



**Figure 4.4:** Example of a simple PLS-SEM path model (Baron & Kenny, 1986)

However, more recent studies have proposed an approach for conducting a mediation analysis (Zhao, Lynch Jr, & Chen, 2010). These researchers suggested establishing a mediation test: the bootstrap indirect effect test (LV1 to LV3) will serve this purpose. It has been argued that in order to establish a mediation, all that matters is that the indirect effect is significant. Simply run the Hayes Preacher script and generate "bootstrap results for indirect effects" to determine whether the indirect effect is significant or not. In this study, the theoretical model has a mediator degree of outsourcing (DOO). Namely, the relationships between vendor management capability (VMC), partnership quality (PQ), trust (TR) and outsourcing success (OS) are mediated by the degree of Outsourcing (DOO). It is shown in Table 4.21 that (DOO) is a mediator between (VMC) and (OS) relations, since the relationship is significant with a value of 2.03 t at a value of 0.04 P. Also (DOO) is a mediator between the relation of (PQ) and (OS) that the relation is significant with 2.17 t of value at 0.03 P value. While at the same time (DOO) is not a mediator between the relationship of (TR) and (OS) that the relationship is not significant with a value of 1.58 t to 0.12 P value.

**Table 4.21: Mediation Effect**

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
PQ -> DOO					
PQ -> OS	0.074	0.071	0.034	2.169	0.031
TR -> DOO					
TR -> OS	0.022	0.021	0.014	1.576	0.116
VMC -> DOO					
VMC -> OS	0.026	0.025	0.013	2.033	0.043

Note: \*P < 0.05 (95 % confidence interval)

Following is the summary of each mediation effect hypothesis with respect to its relationship and significance.

**Table 4.22: Summary of Mediation Hypotheses Testing Results**

Hypotheses	Relationship	T – Statistics	P-Value	Results
H1b	The relationship between vendor management capability and the outsourcing success is mediated by the degree of outsourcing	2.03	0.04	Supported
H2b	The relationship between partnership quality and outsourcing success is mediated by degree of outsourcing	2.17	0.03	Supported
H3b	The relationship between trust and outsourcing success is mediated by degree of outsourcing	1.58	0.12	Not Supported

Note: \*P < 0.05 (95 % confidence interval)

#### 4.19 Moderation Analysis

The moderating effect of partner compatibility (PC) on the relationship among human capital (HC) and outsourcing success (OS), between knowledge sharing (KS) and the success of outsourcing (OS) has been tested. The bootstrapping process was conducted to find the statistical significance of the moderating effect. The results show that (PC) did not moderate the relationship between (HC) and (OS), ( $p = 0.32$ ,  $t = 1.00$ ) that was not statistically insignificant at  $p < 0.05$ . The results also demonstrate that (PC) did not moderate the relationship between knowledge sharing (KS) and success of outsourcing

(OS), ( $p = 0.93$ ,  $t = 0.09$ ) that was not statistically significant at  $p < 0.05$ . Table 4.23 presents the results of the moderation analysis for the compatibility of the partners of the moderator variable (PC).

**Table 4.23: Moderating Effect**

Moderating Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
PC for HC and OS -> OS	0.047	0.047	0.047	1.003	0.317
PC for KS and OS -> OS	-0.005	-0.006	0.057	0.088	0.930

Note: \* $P < 0.05$  (95 % confidence interval)

Following is the summary of each moderating hypothesis with respect to its relationship and significance.

**Table 4.24: Summary of Moderating Hypotheses Testing Results**

Hypotheses	Relationship	T – Statistics	P - Value	Results
H4a	The relationship between human capital and outsourcing success is moderated by partners' compatibility	1.00	0.32	Not Supported
H5a	The relationship between knowledge sharing and outsourcing success is moderated by partners' compatibility	0.09	0.93	Not Supported

Note: \* $P < 0.05$  (95 % confidence interval)

## Summary

Chapter 4 begins with descriptive statistics that have been analyzed for all variables. Respondents' response rate and demographic analysis were discussed, showing that the majority of respondents have an undergraduate level of education equivalent to 67 % of the total number of respondents. The majority of respondents are under 36-45 years of age, or 44 % of the total respondents. From the point of view of work experience, the

majority 70 % of respondents have 2 to 10 years of work experience serving organizations.

In descriptive statistics, the average of all variables has been analyzed and interpreted, showing that all variables have a mean value greater than the average value or, in other words, more than the center point of the likert scale. The skewness and kurtosis of each indicator of each variable was analyzed for an interpretation that shows that the data has a non-normal distribution such as skewness and kurtosis having a value greater than the threshold value.

A multicollinearity evaluation has been done which shows that all the variables having VIF values below the threshold value, so there is no multicollinearity problem. A measurement model was evaluated which showed that all the reflective variable indicators maintained a threshold value equal to or greater than 0.70. Whereas for the degree of outsourcing formative variable, the indicators (DOO1), (DOO3), (DOO7), (DOO9) and (DOO12) retained in the model, all remaining withdrawn because these indicators are significant and have a relative importance for the degree of outsourcing variable. The HTMT method was used to evaluate the discriminant validity. Results of all the reflective variables showing that this study model established a discriminant validity since all the values of the variables are less than 0.85.

The study also maintained variables reliability and the validity of all reflective variables in the model since all AVE values are greater than 0.50 and the Cronbach's alpha and composite reliability is greater than 0.70 which establishes convergent validity. This study contains a total of 15 hypotheses, of which 10 were accepted while 5 were rejected after their test.

## **CHAPTER 5: DISCUSSION OF RESULTS AND CONCLUSION**

### **5.1 Introduction**

The research objectives based on the hypotheses tested were discussed in the first section of this chapter. The implication of the study was followed after that. The body of knowledge accumulated from the point of view of the contribution of study and practice is then discussed. Suggestions for potential future research and the limitations of the study are presented in the last section.

### **5.2 Discussion**

In order to provide a robust and balanced structured system for creating value for the whole enterprise, modern enterprises make use of specialists rather than generalists. This requires collaboration between specialists to do business in new ways. Partners retain their influence in the enterprise as outsourcing is a form of popular collaboration. Commercial transactions in the manufacturing sector are also conceived as a network of specialists.

Chapters 1 and 2 highlighted the unique characteristics of outsourcing manufacturing. For the focal organization in the manufacturing process, the factors that create value for the whole enterprise are the trust, the human capital and the compatibility of the partners. At the same time, the degree of outsourcing as a mediator between partnership quality, the vendor management capability and the success of the outsourcing affirming the most significant relationship for the creation of total value. In order to ensure the creation of total value of the company, the outsourcing of manufacturing must be carefully managed. Due to the tangible nature of the product/s and process manufacturing outsourcing has the instinctive advantage.

Gaps in existing epistemology regarding the general issues associated with the outsourcing of manufacturing in the first chapter identified three questions that need to

be addressed followed by five research objectives. Corresponding to each research objective had been discussed in the next section.

### **5.2.1 Objective 1**

**To analyze the impact of vendor management capability on outsourcing success in Malaysian automotive industry.**

The process of outsourcing manufacturing is composed of focal organization and suppliers. One of the most important tasks of the focal organization is the management of the suppliers. It has been measured in terms of selection, evaluation, management and control of suppliers in an appropriate manner. For outsourcing projects at the same time, the focal organization has the desired management process (H.-S. Han et al., 2008). Vendor management capability and successful outsourcing have a positive relationship that is an established phenomenon (Chan & Chin, 2007; H.-S. Han et al., 2008; Lee, 2001). Later in the context, the study attempts to verify it and verify hypothesis 1 (H1).

**H1:** Vendor management capability has a positive relationship to outsourcing success

The vendor management capability and the success of outsourcing after the empirical analysis of the study confirms the significant ( $p < 0.05$ ) negative relationship ( $t = 6.70$ ) between them. It is one of the factors that have a direct impact on the success of outsourcing for the (H1), the vendor management capability has obtained the appropriate score negatively.

These two significant relationship variables are apparently understandable as the degree of outsourcing required for this relationship. Degree of outsourcing will determine what and how much outsourcing the particular business requires for the success of outsourcing.

It had been depicted that vendor management capability depends on how much and which activity any organization outsource. This is one of the reason vendor management capability have negative significant direct relationship with outsourcing

success. It had been figured out that activities (DOO1) level of outsourcing for accounting activity, (DOO3) level of outsourcing for assembly activity, (DOO7) level of outsourcing for payroll, (DOO9) level of outsourcing for purchasing activity, (DOO12) level of outsourcing for shipping activity are the activities if outsourced moderate to greater extent, then optimal outsourcing success can be achieved in Malaysian automotive industry. It is depicted by most of the managers of this industry organization who have two to ten years of experience by mature respondents having the age of thirty six to forty. They showed that vendor management capability of focal organization depends on how much and which activity then outsource. If they outsource above activities then optimal outsourcing success can be achieved.

### **5.2.2 Objective 2**

**To examine the influence of partnership quality on outsourcing success in Malaysian automotive industry.**

In the process of resource exchange, the quality of partnership explains the relational governance. The success of outsourcing directly takes the impact of this relational governance that was discussed in this study. It is measured in terms that the focal organization and the vendor are generally cooperative in conducting business, both are amenable to complying with each other's demands, they solve most problems together and make decisions together (H.-S. Han et al., 2008).

In this stratum, it has also been measured that both understand the activity, purpose and process of each by sharing the benefits and risks (Lee, 2001). The quality of the partnership and the success of outsourcing have a positive relationship that is a well-established phenomenon (E. Ee et al., 2013). In addition, in the context of the Malaysian automotive industry, this study attempts to verify hypothesis two (H2).

**H2: Partnership quality has a positive relationship with outsourcing success**



The quality of the partnership and the success of outsourcing after empirical analysis confirm the non-significant relationship ( $p > 0.05$ ) positive ( $t = 0.02$ ) between them. With regard to the factors that have a direct effect on the success of outsourcing, the quality of partnership does not get the appropriate score.

The relationship between these two variables is not statistically significant for the hypothesis (H2). The relationship between the two variables is apparently understandable as the degree of outsourcing needed for this relationship. Degree of outsourcing will determine what and how much outsourcing the particular business requires for the success of outsourcing.

It had been depicted that partnership quality depends on how much and which activity any organization outsource. Though partnership quality have direct positive insignificant relationship with outsourcing but to attain optimal outsourcing success, particular activities needed which Malaysian automotive industry have to outsource. Alone partnership quality cannot attain optimal outsourcing success in the context of Malaysian automotive industry. Because these organizations keep some activities with them while other they outsource to attain efficiency. This is the reason partnership quality have positive insignificant direct relationship with outsourcing success. Below activities will be discussed which Malaysian automotive industry organizations need to outsource.

It had been figured out that activities (DOO1) level of outsourcing for accounting activity, (DOO3) level of outsourcing for assembly activity, (DOO7) level of outsourcing for payroll, (DOO9) level of outsourcing for purchasing activity, (DOO12) level of outsourcing for shipping activity are the activities if outsourced moderate to greater extent, then optimal outsourcing success can be achieved in Malaysian automotive industry. It is depicted by most of the managers of this industry organization who have two to ten years of experience by mature respondents having the age of thirty

six to forty. They showed that partnership quality of focal organization depends on how much and which activity then outsource. If they outsource above activities then optimal outsourcing success can be achieved.

### **5.2.3 Objective 3**

**To analyze the impact of trust on outsourcing success in Malaysian automotive industry.**

For business continuity and efficiency, trust is the foundation of long-term relationships. It can be analytical of the degree of integration between two organizations, because trust is a component of the relational capital of an organization (Sambasivan & Nget Yen, 2010; Sambasivan et al., 2011). This study argues that this relational governance directly affects the success of outsourcing. It is measured in terms that the vendor is sincere at all times and the vendor has friendly relations with focal organization who is ready to provide assistance to the focal organization without exception and the vendor makes useful decisions in all circumstances (H.-S. Han et al., 2008).

In this stratum, it has been measured that the vendor is open and honest when problems have arisen with the focal organization, the vendor has helped the organization to make critical decisions, the vendor is always ready to provide the required information to the focal organization, the vendor can fully trust and the focal organization has great trust in the vendor (Park & Lee, 2014). As regards exploring the contribution of trust to different degrees of outsourcing to the success of outsourcing, little empirical research has been done and also to explore trust independently. Of different degree of outsourcing, it is hard to pinpoint and exists in many facets (Qi & Chau, 2013). In the context of Malaysian automotive industry, therefore the study attempts to verify it and ascertain hypothesis three (H3).

**H3:** Trust has a positive effect on outsourcing success

The trust and success of outsourcing after the empirical analysis of the study confirms ( $p < 0.05$ ) the positive relationship ( $t = 4.85$ ) between them. One of the factors that have a direct impact on the success of outsourcing, trust has obtained the appropriate score. Therefore, these two variables have a significant statistical relationship.

The relationship between the two variables can be contingent because once the focal organizations have more trust in the vendors they outsource more because they trust them and end up improving the success of outsourcing. As trust is social dimension from the realm of social exchange theory which is confirmed by the results that if managers of focal organizations have more trust on vendors then optimal outsourcing success can be obtained through repeated and social exchanges between focal and vendor organization in Malaysian automotive industry.

But one interesting thing to find here is how much outsourcing is needed to achieve an optimal level of success. So, for the creation of total value of the company, it is desirable to explore the contribution of trust to various degrees of outsourcing. The degree of outsourcing will determine which and how much outsourcing a particular activity requires for the optimal success of outsourcing.

#### **5.2.4 Objective 4**

**To evaluate the relationship between human capital and outsourcing success in Malaysian automotive industry.**

The potential of the organization in relation to its staffing refers to human capital. Since they cannot increase value without it, human capital is the other lynchpin of intangible values (Gamerschlag, 2013). This study argues that this relational governance directly affects the success of outsourcing. It is measured in terms that the focal organization develops new ideas and knowledge, they are competent in their particular tasks and functions, they are creative and vivid, they are widely regarded as premier in the industry and they are significantly skilled (Subramaniam & Youndt, 2005).

It has been found that human capital is an important factor in successful outsourcing, particularly vital for organizations' strategic efforts to create value (Sharda & Chatterjee, 2011).

In the context of contemporary outsourcing, when outsourcing takes place, it is still possible to lose a significant human capital from the organization that is needed to be maintained in the organization. In fact, they are assets of the organization and generate economies of scale with their expertise and skills to succeed in outsourcing. In this perspective of continuing the approach of balance and to make a structured and robust and balanced system, it is important to evaluate the direct impact of human capital on the success of outsourcing. In the context of the Malaysian automotive industry, the study therefore attempts to verify hypothesis 4 (H4).

**H4: Human capital has a positive influence on outsourcing success**

The success of human capital and outsourcing after the empirical analysis of the study confirms that the relationship ( $p < 0.05$ ) positive ( $t = 2.33$ ) between them. One of the factors that have a direct impact on the success of outsourcing, human capital has obtained the appropriate score. Therefore, these two variables have a significant statistical relationship to each other.

Most of the managers having experience of two to ten years depicted through results that if focal organization have human capital with the organization then optimal outsourcing success can be achieved. Because through human capital, organizations expertise enhanced which not only create efficiency for the organization but also have spillover effect from focal to vendor organization.

As knowledge becomes obsolete, human capital can become obsolete as skills learned in the past lose value and employees forget that knowledge impairment has a negative impact on value creation (Almeida & Carneiro, 2009). Which need same operating, management philosophies between focal and vendor organization in the shape of

partners' compatibility. As what impact it will be between the relationship of human capital and outsourcing success if both have same operating and management philosophies.

### **5.2.5 Objective 5**

**To examine the impact of knowledge sharing on outsourcing success in Malaysian automotive industry.**

The dissemination of knowledge and activities that are conducive to the transfer of knowledge between the focal and vendor organization refers to knowledge sharing (D. M. Jain & Khurana, 2016; Qi & Chau, 2013, 2015). This study argues that this relational governance directly affects the success of outsourcing. Appropriate ideas and technologies to create new opportunities have been brought by knowledge sharing and transfer between partners. This suggests that there is an impact of knowledge sharing on the success of outsourcing (Moon et al., 2016; Yu, 2014).

It is measured in terms of focal organization and vendor sharing the expertise from training and education, share each other's know-where and know-whom, sharing the know-how of the work experience, sharing knowledge acquired in newspapers, magazines, journals and television, share their stories of failure and success, share business propositions and relationships with each other, share manuals, models and business methodologies (Lee, 2001).

In a context of contemporary outsourcing, the correct collaborative sharing and dissemination of expertise and information are important for the creation of total value of the company. In the context of the Malaysian automotive industry, the study attempts to verify hypothesis 5 (H5).

**H5:** Knowledge sharing has a positive relationship to outsourcing success

The sharing of knowledge and the success of outsourcing after the empirical analysis of this study confirms that the relationship ( $p < 0.05$ ) positive ( $t = 2.28$ ) between them.

One of the factors that have a direct impact on the outsourcing of knowledge sharing has achieved the appropriate score. These two variables have a significant statistical relationship with each other. At the same time, knowledge sharing between the focal organization and the provider can involve a high risk of ownership and cost increases, which will result in negative outcomes of successful outsourcing (Brusoni & Prencipe, 2011; Kamuriwo & Baden-Fuller, 2016).

As depicted earlier once organization have human capital then spill effect can be created through knowledge sharing between focal and vendor organization. Most of the senior respondents i-e from thirty six to forty five years old of this study confirmed the direct significant impact of knowledge sharing on outsourcing success. Once expertise knowledge of one organization of Malaysian automotive industry share with other organization it is creating rippling effect in the shape of optimal level of outsourcing success which we can figure out through the significant relationship of these two variables. The reason is because of sharing of expertise knowledge of one organization helping other organization to improve overall performance of business in the shape of outsourcing success in Malaysian automotive industry context.

Projects may suffer from coordination problems without effective sharing of information. Which need the same philosophy of operation, management between the focal organization and the vendor in the form of the compatibility of the partners. As what impact partners' compatibility assert between the relationship of knowledge sharing and outsourcing success if introduced between them.

#### **5.2.6 Objective 6**

**To evaluate the mediating effect of degree of outsourcing between the relationship of 1) vendor management capability and outsourcing success, 2) partnership quality and outsourcing success, 3) trust and outsourcing success, while examining the impact of degree of outsourcing on outsourcing success.**

The degree of outsourcing refers to the level of involvement of external resources and the propensity of an organization in the context of outsourcing (Gorla & Somers, 2014; McIvor, 2009). This study argues that organizations have different and optimal levels of outsourcing. It is measured in terms of outsourcing the accounting activity of organizations, current level of outsourcing of assembly activity, current level of payroll activity outsourcing, current level of outsourcing of purchasing activities and current level of shipping activity outsourcing (Espino-Rodríguez & Padrón-Robaina, 2005; Gilley & Rasheed, 2000).

Rather than total in-sourcing or total outsourcing of outsourcing decisions, selective outsourcing has been proposed as a better option, in other words, it is positively correlated with the success of outsourcing (Mary C Lacity et al., 1996; Lee et al., 2004; Shi, 2010; Väyrynen & Kinnula, 2012). A higher degree of outsourcing, from moderate to greater extent, decisively affects both the greatest perceived benefits and the satisfaction of the focal organizations. Therefore, without really proposing total outsourcing, one cannot deny that a high degree of outsourcing is not at all undesirable but even beneficial for the focal organization. The alleged benefits of the degree of outsourcing assert a mediating role in the satisfaction obtained between trust, partnership quality, vendor management capability and the success of outsourcing (Gonzalez et al., 2015). In the context of the Malaysian automotive industry, the study therefore attempts to verify it and ascertain below hypotheses.

**H1a:** Vendor management capability has a positive relationship with the degree of outsourcing

**H1b:** The relationship between vendor management capability and the outsourcing success is mediated by the degree of outsourcing

**H1c:** Degree of outsourcing has a positive effect on outsourcing success

**H2a:** Partnership quality has a positive relationship with the degree of outsourcing

**H2b:** The relationship between partnership quality and outsourcing success is mediated by degree of outsourcing

**H3a:** Trust has a positive effect on the degree of outsourcing

**H3b:** The relationship between trust and outsourcing success is mediated by degree of outsourcing

The vendor management capability and the degree of outsourcing after empirical analysis of the study confirm that the relationship ( $p < 0.05$ ) positive ( $t = 4.31$ ) between them. The relationship between these two variables is statistically significant for hypothesis H1a.

The vendor management capability and the success of outsourcing influenced by the degree of outsourcing after the empirical analysis of the study confirms that the positive ( $p < 0.05$ ) relationship ( $t = 2.03$ ) between them. This mediation path is statistically significant for the H1b hypothesis.

The degree of outsourcing and outsourcing success after the empirical analysis of the study confirms that ( $p < 0.05$ ) the positive relationship ( $t = 2.17$ ) between them. The relationship between these two variables is statistically significant for the H1c hypothesis.

The quality of the partnership and the degree of outsourcing after empirical analysis of the study confirms that the relationship ( $p < 0.05$ ) positive ( $t = 13.82$ ) between them.

The relationship between these two variables is statistically significant for hypothesis H2a.

The empirical analysis of this study confirms that the positive ( $p < 0.05$ ) relationship ( $t = 2.17$ ) between partnership quality and the success of outsourcing is influenced by the degree of outsourcing. This mediation path is statistically significant for hypothesis H2b. Trust and the degree of outsourcing after empirical analysis confirm that ( $p < 0.05$ )



the positive relationship ( $t = 2.82$ ) between them. The relationship between these two variables is statistically significant for the H3a hypothesis.

The empirical analysis of the study confirms that the positive ( $p > 0.05$ ) relationship ( $t = 1.58$ ) between trust and the success of outsourcing was not influenced by the degree of outsourcing. This mediation path is not statistically significant for the H3b hypothesis.

In a modern outsourcing context, the degree of outsourcing is very important as it determines the amount of outsourcing desired by an organization.

It had been figured out that activities (DOO1) level of outsourcing for accounting activity, (DOO3) level of outsourcing for assembly activity, (DOO7) level of outsourcing for payroll, (DOO9) level of outsourcing for purchasing activity, (DOO12) level of outsourcing for shipping activity are the activities if outsourced moderate to greater extent, then optimal outsourcing success can be achieved in Malaysian automotive industry. It is depicted by most of the managers of this industry organization who have two to ten years of experience by mature respondents having the age of thirty six to forty. They showed through results that vendor management capability and partnership quality of focal organization depends on how much and which activity they outsource. If they outsource above activities then optimal outsourcing success can be achieved.

While trust have direct significant relationship with outsourcing success while degree of outsourcing asserting no mediating role between them. Because focal and vendor organization have trust on each other for which what and how much activity one organization outsource does not matter much.

As the findings of this study of the Malaysian automotive industry has revealed that moderate to greater outsourcing is feasible for focal organizations with activities described above. The results revealed that the degree of outsourcing occurs if the focal

organization and the vendor organization have an appropriate partnership quality and a vendor management capability to succeed in outsourcing.

### **5.2.7 Objective 7**

**To analyze the moderating effect of partners' compatibility between the relationship of 1) human capital and outsourcing success, 2) knowledge sharing and outsourcing success, while evaluating the impact of partners' compatibility on outsourcing success.**

The concept of compatibility of the partners comes from the theoretical aspects of the theory of social exchanges (SET). Rather than a competing dependency, compatible partners have a complementary reliance to this perspective. The ability to list tasks and make efforts together productively in a solution-oriented way refers to the compatibility of partners. It had been recognizes that the management style is consistent across the focal and vendor organization by recognizing the similarity in operating philosophies.

The focal and vendor organization work as one, displaying teamwork to improve the alliance, showing mutual respect and commitment despite understanding some of the differences between them. It is measured in terms of focal and vendor organization as a team to improve the partnership, the vendor is open to new ideas which will enhance the strategic value of the alliance, and both have a style of similar management, the same operational philosophies (Whipple & Frankel, 2000). In this stratum, it was also measured that the focal and vendor organization consider flexible responses to demand, delivery time, quality and cost as important elements for doing business from the point of view of outsourcing (Kroes & Ghosh, 2010).

Any attempt to ensure successful outsourcing success can be improved by regulating cultural compatibility and competing priorities in an ongoing outsourcing contract (Daityari et al., 2008; Kannan & Choon Tan, 2004; Matthyssens et al., 2008; Tallon, 2008). From this perspective, the compatibility of partners has a direct impact on the

success of outsourcing and asserting a moderating role for the orientation of the total value of business between the relationships of human capital, the knowledge sharing and the success of outsourcing. In the context of the Malaysian automotive industry, the study therefore attempts to verify it and ascertain below hypotheses.

**H4a:** The relationship between human capital and outsourcing success is moderated by partners' compatibility

**H5a:** The relationship between knowledge sharing and outsourcing success is moderated by partners' compatibility

**H6:** Partners' compatibility has a positive influence on outsourcing success

The success of human capital and outsourcing was not moderated by the compatibility of the partners after the empirical analysis of the study confirmed that the relationship ( $p > 0.05$ ) positive ( $t = 1.00$ ) between them. This moderation is not statistically significant for hypothesis H4a.

The knowledge sharing and the success of outsourcing were not moderated by the compatibility of the partners after the empirical analysis of the study confirms that ( $p > 0.05$ ) a positive relationship ( $t = 0.09$ ) between them. This moderation is not statistically significant for hypothesis H5a.

The empirical analysis of the study confirms the positive ( $p < 0.05$ ) relationship ( $t = 15.92$ ) between partners' compatibility and success of outsourcing. The relationship between these two variables is statistically significant for hypothesis H6.

Above results depicted that if there is partners' compatibility between focal and vendor organization then optimal outsourcing success can be achieved. It is giving message that if both organizations have similar operating philosophies, same management style and competitive priorities like time and delivery then this will result in optimal level of outsourcing success.

Culture within and outside organizations is important. In Malaysian automotive industry most of the hiring is based on local workforce which is the policy in many of the other industries of Malaysia. Because of more local workforce the cultural aspect is same among organizations in the shape of partners' compatibility which is leading towards direct significant relationship of partners' compatibility on outsourcing success. That's why because of more local workforce competitive priorities among the organizations of Malaysian automotive industry is same, so it is creating direct impact in that way but don't have any significant impact if one use it as moderator.

### **5.3 Implications of The Study**

To explain and evaluate the critical factors affecting the success of outsourcing in the manufacturing industry is the main purpose of this study. A triadic relationship, i.e. a focal organization, a vendor and a consumer, has been identified for the outsourcing of manufacturing. Only business-to-business (B2B) aspects are the subject of this study. The following research questions were formulated with reference to the epistemology and ontology of the scope of research.

#### **5.3.1 Research Questions**

**1. What impact vendor management capability, partnership quality, trust, human capital, knowledge sharing, degree of outsourcing and partners' compatibility have on outsourcing success?**

When organizations depend on external resources, dependency management influences the leverage of the organization (Pfeffer & Salancik, 2003). The important decision in dependency management for outsourcing viability is the degree of outsourcing. It is linked with the organization's propensity involvement which organizations outsources moderately, to a greater extent or totally outsources a particular activity / function.

There is a positive relationship between the degree of outsourcing and the success of outsourcing that has been revealed in this study. The concepts previously proposed by

Espino-Rodríguez and Padro'n-Robaina (2004) and Gilley and Rasheed (2000) lend support to this study. The highest outsourcing rate was reported in this study if the level of outsourcing is moderate or higher means to greater extent. Following ideas / recommendations based on these facts about dependency management for success in outsourcing are offered.

Organizations are more likely to achieve their outsourcing success goals if the degree of outsourcing is moderate or higher. Activities that have worked with internal resources, organizations could focus more on them through this. Instead of the power attributed to vendor for each activity, the reliance is mainly on the number of outsourced activities.

Prior to the formal completion of the contract, a thorough review of the organization's resource capacity and identification of the resources required of potential vendors must be conducted (Sampson, 2000). Modify the organizational interdependence through collaborations, the degree of outsourcing perceived as a strategic tool. Organizations should outsource the activities / functions described in the objective section from the point of view of the Malaysian automotive industry, as the results show that the degree of outsourcing influences the success of the outsourcing. Two governance structures support the process of contracting outsourcing resources. Relational governance works as a result of the reciprocity of the collaborative enterprise and contractual governance is linked with the achievement of legal compliance in the outsourcing contract (Ferguson et al., 2005).

It has been established in this study that the success of outsourcing depends on good contractual governance. This study identifies the responsibility of each party in the outsourcing of manufacturing from the point of view of the theory of social exchange. In the exchange process, the role of relational governance has been verified. From this point of view, it has been measured and denoted by trust. This improves the success of the outsourcing and facilitates the closure of the structural hole. As a result, the direct

impact of trust on outsourcing has been tested in this study. From this point of view, the high level of success of outsourcing comes from a higher level of trust.

Follow the recommendations addressed to the focal organizations of the manufacturing sector on the basis of this topic. As it accumulates greater importance for the resource exchange mechanism, from a more abstract perspective, the focal and vendor organization must attend to trust. Reducing operational expenses is the goal of outsourcing. In light of this, it is expected that from organizations (Lam & Han, 2005). The predominant factor among partners is trust (Dyer, 1997). The focal organization could reduce effort, time and costs. Vendor performance towards the success of outsourcing can be improved. So, trust created this comfortable and supportive work environment.

This study is empirically tested and comes with the results that greater trust, higher will be the outsourcing of success. The focal organization may reduce contract governance over time while the vendor will be more responsibility-focused as well. Cooperation is important for the synergistic partnership. Therefore, it makes value for money. For survival and mutual benefits, each organization is advised to assume its own responsibilities. These elements could also be useful for the results of outsourcing for both and lead to greater commitment, trust and cooperation.

By having a direct relationship with the success of outsourcing trust in the fundamentals of the positive social climate from the point of view of the focal organization that is findings of this research. Achieving a sustainable competitive advantage is a key element in improving the assets of an organization. To prove the ability to create effective competitions between organizations some organizational theorists apply the rules of human capital by means of developing individual human resources. Characteristics of human capital and its role in the organizations had been empirically tested in present research from the perspective of outsourcing context. Higher the

human capital higher will be outsourcing success as depicted in the findings of empirical analysis.

This is also indicative of the fact that going in outsourcing contract there is always probability to lose human capital of organization. As outsourcing cuts across activities / functions, this study found that if the focal organization kept human capital with them, it would increase the success of outsourcing.

Organizations act such as to increase benefits and decrease costs in social exchange theory. Useful cooperation and the bringing together of various resources to reach new perspectives is the main benefit of knowledge sharing. Knowledge sharing positively contributes to the effectiveness of the outsourcing contract by using expertise. This study empirically tested and found that higher knowledge sharing would be the success of outsourcing in the positive direction.

## **2. What mediating role degree of outsourcing asserting between the relationship of vendor management capability, partnership quality, trust and outsourcing success in Malaysian automotive industry?**

The degree of outsourcing characterizes the proportion of activities / functions outsourced by the focal organization (Gonzalez et al., 2015). Organizations can achieve superior performance because of the use of complementary resources by outsourcing vendors for successful outsourcing (McIvor, 2009). A higher degree of outsourcing has a decisive influence on the perceived superior benefits and satisfaction of the focal enterprises. The alleged benefits of the degree of outsourcing assert a mediating role in the satisfaction obtained between the vendor management capability, partnership quality, the trust and the success of the outsourcing (Gonzalez et al., 2015).

This study has empirically tested the degree of outsourcing as a mediator between vendor management capability, partnership quality, trust and outsourcing success. It has been revealed that the degree of outsourcing is a mediator between partnership quality,

trust and the success of outsourcing. But is not a mediator between the relationship of trust and the outsourcing success. It can be said based on this study empirical findings that trust has more direct impact rather than mediated through degree of outsourcing as if focal and vendor organization both have trust then it directly enhance outsourcing success. Therefore, the higher the trust, the greater the success of outsourcing will not be mediated by the degree of outsourcing.

While the partnership quality is mediated by the degree of outsourcing, because it has a significant relationship with the success of outsourcing if it is mediated by the degree of outsourcing. The success of outsourcing will be enhanced if the degree of outsourcing asserts a mediating role between the partnership quality and the success of outsourcing. The vendor management capability does not have a positive relationship with the success of outsourcing, whereas this study confirms that if this relationship mediated with the degree of outsourcing then this path is positively significant. Degree of outsourcing affirmed the role of mediator between the relationship of vendor management capability and outsourcing success, which had been confirmed by the empirical analysis of this study. If the degree of outsourcing explains the relationship between vendor management capability and the outsourcing success, the success of outsourcing will be positively enhanced.

### **3. What moderating role partners' compatibility asserting between the relationship of human capital, knowledge sharing and outsourcing success in Malaysian automotive industry?**

Partners' compatibility is said to be basic to the success of interdependence and exchange in the point of view of social exchange theory. In the context of outsourcing, this study assesses the role of partners' compatibility. Additional dependence can be improved by a compatible partner (Al-Natour & Cavusoglu, 2009; Hessels & Terjesen, 2010).



High level compatibility could lead to greater outsourcing success compared to contractual governance. This study empirically confirms that the greater the compatibility of partners, the greater the success of outsourcing. As a result, partner compatibility has a direct impact on the success of outsourcing. Having stated that, the compatibility of this partner is not asserting a moderating role between the relationship of human capital, knowledge sharing and the success of outsourcing.

The three variables i-e human capital, knowledge sharing and partners' compatibility have a direct relationship to the success of outsourcing. As the human capital, knowledge sharing, compatibility of partners would be higher the success of outsourcing would also be higher but the partners' compatibility ensuring no moderating role between them. In Malaysian automotive industry context, most of the workforce in this industry is local which is harnessing same cultural and competitive priorities due to which partners' compatibility not asserting any moderating role. But these same cultural and competitive priorities among the focal and vendor organization asserting the direct relationship between the partners compatibility and the success of the outsourcing for the creation of total value of the company and for the model represented.

The focal organization may reduce the concentration on vendor management activities when partners are compatible for better results by offloading activities in which they are not good. The study presented the following recommendations to focal organizations based on the effect of partners' compatibility with contractual governance. To improve vendor compatibility first the focal organization should evaluate the opportunities. Such as "communicating philosophies and operating values" and "teamwork" are the best options for these cost free techniques. To improve the partnership quality, it was construed that these methods as socialization processes could be used. Switching costs can also dictate the need for vendor training and development because the importance of

the outsourced activity represents the level of interplay between the focal and the vendor organization. To select the best management alternative, focal organizations have several opportunities.

As it is crucial for their survival, vendors must then be alive to the importance of their nimbleness with the focal organization (Nazli Wasti, Kamil Kozan, & Kuman, 2006). In the context of outsourcing manufacturing through the degree of outsourcing for total value creation, the partnership quality could garner value for each party. The compatibility of the focal organization with the vendor also plays a major role outside of this. With regard to the contractual governance elements, the extent of the impact received from the quality of the partnership and the compatibility of the partners is different.

Due to the degree of outsourcing, the impact of the partnership quality is higher on the success of outsourcing than the vendor management capability to manage the success of outsourcing. By way of comparison to reduce the operational cost of activities, the degree of outsourcing is more critical to increase the contribution received from vendor management capability and the partnership quality. Rather than moderates the relationship of human capital and knowledge sharing on outsourcing success the influence of partners' compatibility is higher directly on outsourcing success with regards to partners' compatibility. To reduce operational expenses and increase efficiency, the direct role of partners' compatibility is more important for the creation of total enterprise value in the form of successful outsourcing. Below is the summary of all objectives with respect to each hypothesis and their results.

**Table 5.1:** Summary of Objectives with Results of Hypotheses

Research Questions	Objectives	Hypotheses	Relationship	Results
1: What impact vendor management capability, partnership quality, trust, human capital, knowledge sharing, degree of outsourcing and partners' compatibility have on outsourcing success?	1: To analyze the impact of vendor management capability on outsourcing success in Malaysian automotive industry.	H1	Vendor management capability has a positive relationship to outsourcing success	Not Supported
	2: To examine the influence of partnership quality on outsourcing success in Malaysian automotive industry.	H2	Partnership quality has a positive relationship with outsourcing success	Not Supported
	3: To analyze the impact of trust on outsourcing success in Malaysian automotive industry.	H3	Trust has a positive effect on outsourcing success	Supported
	4: To evaluate the relationship between human capital and outsourcing success in Malaysian automotive industry.	H4	Human capital has a positive influence on outsourcing success	Supported
	5: To examine the impact of knowledge sharing on outsourcing success in Malaysian automotive industry.	H5	Knowledge sharing has a positive relationship to outsourcing success	Supported

**Table 5.1:** Summary of Objectives with Results of Hypotheses Continued

Research Questions	Objectives	Hypotheses	Relationship	Results
<p>2: What mediating role degree of outsourcing asserting between the relationship of vendor management capability, partnership quality, trust and outsourcing success in Malaysian automotive industry?</p>	<p>6: To evaluate the mediating effect of degree of outsourcing between the relationship of 1) vendor management capability and outsourcing success, 2) partnership quality and outsourcing success, 3) trust and outsourcing success, while examining the impact of degree of outsourcing on outsourcing success.</p>	H1a	Vendor management capability has a positive relationship with the degree of outsourcing	Supported
		H1b	The relationship between vendor management capability and the outsourcing success is mediated by the degree of outsourcing	Supported
		H1c	Degree of outsourcing has a positive effect on outsourcing success	Supported
		H2a	Partnership quality has a positive relationship with the degree of outsourcing	Supported
		H2b	The relationship between partnership quality and outsourcing success is mediated by degree of outsourcing	Supported
		H3a	Trust has a positive effect on the degree of outsourcing	Supported
		H3b	The relationship between trust and outsourcing success is mediated by degree of outsourcing	Not Supported

**Table 5.1:** Summary of Objectives with Results of Hypotheses Continued

Research Question	Objectives	Hypotheses	Relationship	Results
3: What moderating role partners' compatibility asserting between the relationship of human capital, knowledge sharing and outsourcing success in Malaysian automotive industry?	7: To analyze the moderating effect of partners' compatibility between the relationship of 1) human capital and outsourcing success, 2) knowledge sharing and outsourcing success, while evaluating the impact of partners' compatibility on outsourcing success.	H4a	The relationship between human capital and outsourcing success is moderated by partners' compatibility	Not Supported
		H5a	The relationship between knowledge sharing and outsourcing success is moderated by partners' compatibility	Not Supported
		H6	Partners' compatibility has a positive influence on outsourcing success	Supported

During this study, several theoretical and managerial implications were simultaneously discovered and sketched out. The managerial and theoretical contributions of the study are therefore explained in the following section.

#### **5.4 Study Contributions**

Following are the theoretical and managerial contributions of study.

##### **5.4.1 Theoretical Contributions**

The current study has deployed a balanced approach to creating total value of business in the form of successful outsourcing by developing a robust and balanced structured system for the manufacturing sector. There is a structural hole when talking about outsourcing system as one of the big problems is how much organizations need to outsource to get optimal benefits from outsourcing. While at the same time retain

proficient human capital which is creating value for organizations as when organization go for outsourcing there is always probability to lose human capital as outsourcing cut activities / functions transversely which ultimately hurt outsourcing success and benefits.

This study provides a robust and balanced structured system to solve this problem in order to obtain optimal benefits of outsourcing by using a balanced approach of the degree of outsourcing and with a direct impact of trust, human capital and the knowledge sharing for successful outsourcing. As was missing in previous research and differs from other conventional frameworks in the same research, is one of the important contributions of this study. Deriving the theoretical framework, this study brings together understanding of manufacturing management and supply chain management. With regard to outsourcing in the meantime, the framework addressed the exact nature of the manufacturing supply chain.

This study has assigned a relational perspective by operationalizing the theory of social exchange through value creation and relational rent despite the responsibility of the focal organizations. Several new ideas to theory and practice have been discovered by this study. Neglected aspects of previous studies attempt to answer with this research.

Previously not been addressing the issue of lay off, as whenever any industry and / or organization talk about outsourcing there is always taking place of massive lay off consequently which result in loss of human capital. This study confirms through its unique and balanced combination by depicting results of study as though organization go for outsourcing of (DOO1) accounting activity, (DOO3) assembly activity, (DOO7) payroll activity, (DOO9) purchasing activity, (DOO12) shipping activity while keeping human capital with them then optimal outsourcing success can be achieved in Malaysian automotive industry. This is the breakthrough contribution of this study which has not been done before. Nobody previously in literature able to depict what are

those activities which outsource while at the same time keeping human capital with organization able to achieve optimal outsourcing success. This study does it specifically in the context of Malaysian automotive industry.

With regard to organizational dependence and resource exchange, the direct and moderating impact of partners' compatibility has been tested. Partners' compatibility does not have a significant moderating effect on the success of outsourcing, but this study found the direct impact of partners' compatibility positively significant for the success of outsourcing. When partner compatibility is high, the results support the view that contractual governance could work better this means that if focal and vendor organization have same management style, operating philosophies and competitive priorities like delivery and time then optimal outsourcing success can be achieved. The effectiveness of contractual governance can be achieved by the level of compatibility between the partners that had been digging out in this study. Aspects that had not been tested before were central to this study.

While pursuing a balanced approach, this study tested the direct and indirect effect of the degree of outsourcing with different levels of outsourcing among important factors such as the vendor management capability, partnership quality, and the trust in success of outsourcing. This is a new and distinct approach and, in the context of modern business, a desperate need for a robust and balanced structured system through the operationalization of the paradigm of social exchange theory that was lacking in previous studies.

It gives an idea of what and the amount of activity to outsource in the relational exchange between focal organization and vendor, which is another predominant contribution of this study. In order to strengthen their resource base when organizations do not have the necessary resources, they tend to build relationships with alternate organizations (Pfeffer & Salancik, 2003). In addition, moderate to greater outsourcing

reported the optimal success of outsourcing. This adds substantial value as this discovery is considered a novelty.

The empirical analysis also confirms the direct relationship of partners' compatibility to the success of outsourcing that is lacking in previous studies and is a new contribution in the literature to test the direct impact of partners' compatibility. Relational governance adds value to contractual governance because contractual and relational governance is needed to support the success of resource exchange.

In the theoretical fundamental research section of chapter one, it is detailed that the theory of social exchange was applied to overseeing the exchange process after analyzing different theories of outsourcing and also mentioned why the theory of social exchange had been chosen and applied. To determine the success of outsourcing, this theory produces a unique conceptual framework. Without assuming purpose or results of outsourcing as a whole, this theory allows to supervise the context. The fundamental ontological assumption of a positivist research field is the removal of the investigator from research that was later confirmed by the application of this theory.

#### **5.4.2 Managerial Contributions**

The biggest challenge is to reduce costs and create efficiencies to increase profitability in internal operations (Lam & Han, 2005). To address the above challenge, outsourcing helps organizations. In the context of outsourcing, this study explains some strategies that help organizations reduce costs, increase efficiency, and improve profitability.

As study confirms that accounting activity, assembly activity, payroll activity, purchasing activity and shipping activity are the important activities to outsource of Malaysian automotive focal organizations while other activities don't have relative importance. By outsourcing these activities to vendors optimal outsourcing success can be achieved as depicted through results of this study. When organizations outsource above activities then it will create efficiencies for organizations by offloading the



activities in which vendors are good in it and also they will be able to generate economies of scale from it rather than to in source in which focal organization are not that good as compare to vendor organization.

Cost will also be reduced as specialist will perform the activities in which they have expert. Through generating economies of scale by performing activities through experts the cost will also be reduced which is the main impetus to for outsourcing.

To understand contractual governance responsibility and the importance of relational governance as a way of improving outsourcing success overall, the framework presented can serve as a guide for planning the outsourcing process in the manufacturing sector, for example determining the degree of outsourcing appropriate level to attain outsourcing success. To evaluate the success of outsourcing efforts in the manufacturing sector, the overall value of the model proposed by this study is its capacity to be used as an instrument.

Adequacy of vendor management capability with respect to the degree of outsourcing, level of outsourcing degree directly and indirectly especially to the success of outsourcing can be assessed. The level of compatibility between the focal and vendor organization can be understood by the organizations, and the quality of the partnership they must maintain through the degree of outsourcing for the success of the outsourcing.

This study also highlights the direct impact of trust as it will improve the overall satisfaction of outsourcing and achieve the desired goals of outsourcing. Another contribution of this study is that it adds human factors like human capital, knowledge sharing that have a direct impact on the overall satisfaction of outsourcing to conserve human capital while going into an outsourcing project will create value for businesses.

Not all elements are equally important with respect to the context of the study. From this point of view, the focal organization must see the vendor management capability

because its expected results favorable for outsourcing depend on how much and which activity they outsource.

An appropriate level of trust must be demonstrated by focal organizations and vendors. Rather than working for the organization, it will help them work with the organization. This aspect creates a favorable and comfortable working environment. Both must be on the same page, exploiting their corporate culture and align their skills. For situations where the cost of switching vendor is high, this is practical and convenient for partners who are tied up for long-term contracts.

For mutual benefit and survival, so the model presented here offers ways to improve the flexibility of outsourcing. On the outsourcing of the manufacturing sector in Malaysia which focuses on the automotive industry, this is a rare and unique type of study. For the improvement of business and industry, these research results can be implemented.

### **5.5 Limitation and Direction for Future Research**

Due to the complexity and nature of social phenomena, costs, time, research in the commercial and management sciences are always limited by various limitations. One example of this is that the study has not been able to examine the effect of outsourcing in a business to consumer (B2C) context. From this point of view, the consumer aspects of the model could be combined in future studies. Another limitation of this study is that study would not be able to cover vendor organizations respondents. A study which only conducts to see from vendors' perspective by covering the respondents of vendor organizations only can give deep insight about vendors to achieve success of outsourcing.

Not been able to apply multiple sources to collect data is another limitation of this study. A study which can collect data both from focal and vendor organization can add another dimension to study. Might be new and some more interesting findings can be

discovered by applying this multiple source approach. Might be this can enhance further coherent understanding on outsourcing phenomenon.

Another limitation of this study is that this study opt only positivist approach due to time and cost constraints. A mixed method approach by applying multiple sources as to collect data both from focal and vendor organization will enrich data for deeper understanding from both perspectives.

The current study has applied a method of pure positivist research in terms of methodology. In a neo-positivist research field of mixed methods (qualitative study followed by a quantitative method or vice versa) can be tested in the future. Perhaps through this more interesting and successful discovery for companies can be discovered. With minor adjustments in construct definitions, it is also possible to study other types of collaborative business mergers (merger, franchise). Researchers are working on one of the halal supply chain types, but future research on halal outsourcing needs to be discovered as it will provide new and interesting information not only about the supply chain, halal supply chain, but also on outsourcing. It will contribute to the body of knowledge and broaden the horizon of the supply chain and outsourcing.

## **5.6 Conclusion**

The theory of social exchange is a good starting point for considering outsourcing as it is one of the main findings of this research. The theory of social exchange may better interpret the unique characteristics of outsourcing manufacturing, which are the results confirmed by this study. By explaining the success of outsourcing in the manufacturing context, this study reveals the importance of vendor management capability, partnership quality, trust, degree of outsourcing, human capital, knowledge sharing and partners' compatibility. The focal and vendor organization should strive to be as agile as possible, as partners who are compatible may further contribute to contract governance.

To outsourcing success in the manufacturing sector using structural equation modeling, this study contributes to the body of knowledge because it provides validated explanations that constitute the measurement constructs. In this stratum model identified and these factors fully explain eighty-two percent variance of the success of outsourcing. For the planning and evaluation of the outsourcing function and its success, in addition, many of the practical implications described in this study are very important. For the manufacturing supply chain and to outsource an operational function with a robust and balanced structured system, the current study could ultimately serve as a research base.

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