

SUPPLY CHAIN RISK MANAGEMENT PRACTICE IN MALAYSIAN  
AUTOMOTIVE INDUSTRY

NORLAILE BINTI SALLEH HUDIN

A thesis submitted in fulfilment of the  
requirements for the award of the degree of  
Doctor of Philosophy (Management)

Faculty of Management  
Universiti Teknologi Malaysia

JUNE 2016

To my beloved family, my husband and son  
who still believe in me when I stopped believing in myself

## ABSTRACT

Organizations are experiencing increasing supply chain risks especially due to new business trends such as globalization and offshoring. For that reason, supply chain risk management is required to manage those risks effectively. Although there is a voluminous academic research on descriptive and conceptual model of supply chain risk management, evidences which describe the implementation of supply chain risk management in industry are limited. Therefore, the purpose of this research is to explore the implementation of supply chain risk management among Malaysian small and medium automotive companies. This study also explores the enablers to supply chain risk management implementation and barriers that impede this practice. Case study method was employed at three companies which were selected through purposeful sampling. By using thematic analysis, the data was analyzed and interpreted. The research results indicated that all three companies were heading towards more formal supply chain risk management implementation. Although the companies managed the supply chain risks based on TS16949 standard and company formal procedures, the tools used in the supply chain risk management, risk communication, training and risk responsibility were yet to be completely formalized. Pressure from customers and top management emerged as the primary enablers to such implementation. This study also revealed that barriers rooted from companies internal such as the lack of knowledge impeded the case companies from advancing their supply chain risk management implementation. The findings of this study offer a description of supply chain risk management implementation for organizations.

## ABSTRAK

Organisasi berhadapan dengan peningkatan risiko rantai bekalan terutamanya akibat tren baharu perniagaan seperti globalisasi dan penyumberan luar pesisir. Oleh kerana itu, pengurusan risiko rantai bekalan diperlukan untuk menguruskan risiko tersebut dengan berkesan. Walaupun terdapat banyak kajian akademik tentang model deskriptif dan konseptual pengurusan risiko rantai bekalan, bukti-bukti yang menggambarkan pelaksanaan pengurusan risiko rantai bekalan dalam industri adalah terhad. Maka, tujuan penyelidikan ini adalah untuk meneroka pelaksanaan pengurusan risiko rantai bekalan dalam kalangan syarikat automotif kecil dan sederhana Malaysia. Kajian ini juga meneroka pemboleh pelaksanaan pengurusan risiko rantai bekalan dan halangan yang mengekang amalan ini. Kaedah kajian kes dijalankan di tiga buah syarikat yang dipilih melalui persampelan bertujuan. Dengan menggunakan analisis tematik, data dianalisis dan diterjemahkan. Hasil kajian menunjukkan bahawa ketiga-tiga syarikat sedang menuju ke arah pelaksanaan pengurusan risiko rantai bekalan yang lebih formal. Walaupun syarikat tersebut menguruskan risiko rantai bekalan berdasarkan standard TS16949 dan prosedur formal syarikat, alat yang digunakan dalam pengurusan risiko rantai bekalan, komunikasi risiko, latihan dan tanggungjawab risiko belum lagi menjadi formal sepenuhnya. Tekanan dari pelanggan dan pengurusan atasan muncul sebagai pemboleh utama kepada pelaksanaan tersebut. Kajian ini juga mendedahkan bahawa halangan yang berpunca daripada dalaman syarikat seperti kekurangan pengetahuan telah mengekang syarikat kes daripada memajukan pelaksanaan pengurusan risiko rantai bekalan mereka. Dapatan kajian ini menawarkan deskripsi pelaksanaan pengurusan risiko rantai bekalan untuk organisasi.

## TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	<b>DECLARATION</b>	ii
	<b>DEDICATION</b>	iii
	<b>ACKNOWLEDGEMENT</b>	iv
	<b>ABSTRACT</b>	v
	<b>ABSTRAK</b>	vi
	<b>TABLE OF CONTENTS</b>	vii
	<b>LIST OF TABLES</b>	xiii
	<b>LIST OF FIGURES</b>	xiv
	<b>LIST OF APPENDICES</b>	xx
<b>1</b>	<b>INTRODUCTION</b>	
	1.1 Introduction	1
	1.2 Background	5
	1.3 Problem Statement	8
	1.4 Research Purpose	17
	1.5 Research Objectives	17
	1.6 Research Questions	18
	1.7 Scope of the Study	18
	1.8 Significance of the Study	20
	1.9 Definition of Terms	23
	1.10 Organization of Thesis	25
	1.11 Summary	25

<b>2</b>	<b>LITERATURE REVIEW</b>	<b>26</b>
2.1	Introduction	27
2.2	Risks in Supply Chain	28
2.3	Supply Chain Management	33
2.4	Risk Management	34
2.5	Supply Chain Risk Management	38
2.5.1	Risk Management Approaches	42
2.5.2	Supply Chain Risk Management Framework	48
2.5.2.1	Supply Chain Risk Management Methodology	48
2.5.2.3	Tools used in Supply Chain Risk Management	52
2.5.2.4	Techniques to Minimize Risks	53
2.5.2.5	Risk Communication	55
2.5.2.6	Supply Chain Risk Management Training	58
2.5.2.7	Risk Responsibility	60
2.5.3	Enablers to Risk Management	62
2.5.3.1	Corporate Governance	62
2.5.3.2	Compliance to Rules and Regulations	63
2.5.3.3	Firm Size	64
2.5.3.4	Internal Factors	65
2.5.3.5	Acknowledgement of Potential Benefits	66
2.5.3.6	Emergence of New Business Trend	68
2.5.3.7	Occurrence of Risk Events	69
2.5.3.8	The Vulnerabilities of Small and Medium Enterprises	70
2.5.3.9	Customers' Pressures	71
2.5.4	Barriers in Implementing Risk Management	73
2.6	Risk Management Research Landscape	81
2.7	Theoretical Framework	85
2.7.1	Institutional Theory	88
2.7.2	Contingency Theory	91

2.8	Conceptual Framework	93
2.8.1	Diffusion of Innovation Theory	94
2.9	Research Framework	102
2.10	Summary	105
<b>3</b>	<b>METHODOLOGY</b>	<b>105</b>
3.1	Introduction	105
3.2	Justification of the Research Paradigm	105
3.2.1	Positivism	107
3.2.2	Intrepretive Paradigm	109
3.2.2.1	Phenomenology as a Philosophy	110
3.3	Research Method and Methodology	112
3.4	Research Design	117
3.5	Sampling Strategy	119
3.6	Unit of Analysis	120
3.7	Number of Cases	121
3.8	Data Collection Procedures	122
3.8.1	Interview	123
3.8.2	Analysis of Documents	124
3.8.3	Observation	126
3.9	Data Analysis	127
3.10	Phases of the Study	130
3.11	Research Evaluation	131
3.12	Practical Challenges and Strategies to Overcome	135
3.13	Ethical Consideration	137
3.14	Summary	137
<b>4</b>	<b>FINDINGS</b>	<b>138</b>
4.1	Introduction	138
4.2	Company A	138
4.2.1	Risks at Company A	140
4.2.2	Research Question 1: Supply Chain Risk	

Management Implementation at Company A	141
4.2.2.1 Supply Chain Risk Management	
Methodology	141
4.2.2.2 Tools Used in Supply Chain Risk	
Management Methodology	146
4.2.2.3 Techniques to Minimize Risks	151
4.2.2.4 Risk Communication	157
4.2.2.5 Supply Chain Risk Management	
Training	161
4.2.2.6 Risk Responsibilities	164
4.2.3 Research Question 2: Enablers to Implement	
Supply Chain Risk Management at	
Company A	167
4.2.3.1 Acknowledgment of Supply Chain	
Risk Management Benefits	167
4.2.3.2 The Influence of Social System	167
4.2.3.2.1 The Influence of	
Customers as Social Actor	169
4.2.3.2.2 The Influence of Top	
Management as Social	
Actors	171
4.2.3.3 Company Size	173
4.2.4 Research Question 3: Barriers to Implement	
Supply Chain Risk Management Practices	
at Company A	175
4.2.4.1 Increased Workload	175
4.2.4.2 Lack of English Proficiency	177
4.2.4.3 Lack of Knowledge	178
4.2.4.4 Mistrust of Risk Analysis	181
4.2.4.5 Lack of Support and Involvement from	
Line-level Employees	182
4.2.4.6 Time Consuming	184
4.2.4.7 High Cost	185
4.2.5 Summary of Within-Case Analysis of	



	Company A	186
4.3	Company B	187
4.3.1	Risks at Company B	189
4.3.2	Research Question 1: Supply Chain Risk Management Implementation at Company B	190
4.3.2.1	Supply Chain Risk Management Methodology	190
4.3.2.2	Tools Used in Supply Chain Risk Management Methodology	198
4.3.2.3	Techniques to Minimize Risks	201
4.3.2.4	Risk Communication	208
4.3.2.5	Supply Chain Risk Management Training	211
4.3.2.6	Risk Responsibilities	213
4.3.3	Research Question 2: Enablers to Implement Supply Chain Risk Management Practices at Company B	215
4.3.3.1	Compliance with Regulation	215
4.3.3.2	The Influence of Social System	218
4.3.3.2.1	The Influence of Customers as Social Actors	218
4.3.3.2.2	The Influence of Top Management as Social Actors	219
4.3.3.3	Acknowledgement of Supply Chain Risk Management Benefits	221
4.3.3.4	Company Size	224
4.3.4	Research Question 3: Barriers to Implement Supply Chain Risk Management at Company B	226
4.3.4.1	Technical and Practical Difficulties	226

	4.3.4.2	High Cost	230
	4.3.4.3	Resistance to Change	231
	4.3.4.4	Time Consuming	232
	4.3.4.5	Lack of Data	234
	4.3.4.6	Lack of Knowledge	235
	4.3.5	Summary of the Within-Case Analysis of Company B	236
4.4		Company C	236
	4.4.1	Risks at Company C	237
	4.4.2	Research Question 1: Supply Chain Risk Management Implementation at Company C	239
	4.4.2.1	Supply Chain Risk Management Methodology	239
	4.4.2.2	Tools Used in Supply Chain Risk Management Methodology	249
	4.4.2.3	Techniques to Minimize Risks	252
	4.4.2.4	Risk Communication	256
	4.4.2.5	Supply Chain Risk Management Training	259
	4.4.2.6	Risk Responsibilities	262
	4.4.3	Research Question 2: Enablers to Implement Supply Chain Risk Management at Company C	264
	4.4.3.1	The Influence of the Supply Chain Risk Management Relative Advantage	264
	4.4.3.2	The Influence of the Parent Company as a Social Actor	266
	4.4.4	Research Question 3: Barriers to Implement Supply Chain Risk Management	268
	4.4.4.1	Time Consuming	268
	4.4.4.2	High Cost	271
	4.4.5	Summary of the Within-Case Analysis of Company C	273

4.5	Summary of findings	274
<b>5</b>	<b>DISCUSSION</b>	<b>278</b>
5.1	Introduction	278
5.2	Highlights on Major Findings	278
5.2.1	Discussion	281
	5.2.1.1 Supply Chain Risk Management Methodology	281
5.2.3	Tools used in Supply Chain Risk Management	283
5.2.4	Techniques to Minimize Risks	285
5.2.5	Risk Communication	289
5.2.6	Supply Chain Risk Management Training	291
5.2.7	Risk Responsibility	292
5.2.8	Enablers to Implement Supply Chain Risk Management	294
5.2.9	Barriers to Implement Supply Chain Risk Management	299
5.3	Conclusion of the Discussion	302
5.4	Implications of the Research	302
5.5	Recommendation	307
5.6	Limitations	309
	<b>REFERENCES</b>	<b>311</b>
	Appendices A - F	342-363

## LIST OF TABLES

<b>TABLE NO.</b>	<b>TITLE</b>	<b>PAGE</b>
2.1	Category and drivers of risks	21
2.2	Risks in automotive industry	31
2.3	The differences between traditional risk management and enterprise risk management	37
2.4	Supply chain management activities	41
2.5	Supply chain risk management framework, conceptual models and Practices	49
2.7	Benefits of risk management practice	67
2.8	Issues and barriers to implement risk management practice	74
2.9	Isomorphic pressures and mechanisms	90
3.1	Ontological and epistemological assumptions of positivism	107
3.2	Ontological and epistemological assumptions of interpretivism	109
3.3	Contrasting descriptive and interpretive phenomenology	111
3.4	Comparing quantitative and qualitative methodologies	113
3.5	Case study method	116
3.6	Interview guide	125
3.7	Phases of thematic analysis	128
3.8	Techniques to ensure the trustworthiness of qualitative research	138
4.1	Profiles of Informants of Company A	139
4.2	Profiles of Informants at Company B	188
4.3	Profiles of Informants at Company C	238
4.4	Example of time issue related with the revision of standard operation procedures	270
4.5	Summary of findings	274

## LIST OF FIGURES

<b>FIGURE NO.</b>	<b>TITLE</b>	<b>PAGE</b>
1.1	Continuum of risk management approach	24
2.1	The relationship between supply chain resilience, supply chain risk management and supply chain vulnerability	39
2.2	Risk management in the supply chain – new perspective	40
2.3	Supply chain management: Fundamental management components	40
2.4	A scope of supply chain risk management	42
2.5	Process of inter-organizational risk management	50
2.6	Theoretical framework	93
2.7	Factors related to organizational innovativeness	95
2.8	Conceptual framework	102
2.9	Research framework	103
3.1	Basic types of designs for case studies	118
3.2	Phases of the study	130
4.1	Supply chain risk management in new car model launch timeline	242
4.2	Example of the use of 4M in analysing risk	243
4.3	Monthly supply chain risk management at Company C	245
4.4	The incoming flow of supplies	246
4.5	The structure of supply chain risk management	247
4.6	Continual vs continuous training program	259
4.7	Relationship between research results and research conceptual framework	277

**LIST OF APPENDICES**

<b>APPENDIX</b>	<b>TITLE</b>	<b>PAGE</b>
A	Case Interview Question Guideline	337
B	Intellectual Research Audit Trail	345
C	Sample Interview Transcript	349
D	Sample Data Analysis of Research Question 1	357
E	5 Principles for Problem Solving Sheet	362
F	List of Publications	363

## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

SMEs in Malaysia account for 99.2 per cent of 518,996 of total establishments in the three main economic sectors of manufacturing, services and agriculture which contributes 32 per cent of the country's GDP (Wong, 2012). The electric and electronic industry, in particular, contributed RM214.9 billion to gross industry output and RM 282.2 billion export value, which constitute more than half of the nation's total export (Oxford Business Group, 2009). Nevertheless, the nature of business competition has shifted towards competition between supply chains rather than competition between individual companies (Uygun & Schmidt, 2011; Wen *et al.*, 2007; Lambert *et al.*, 1998; Schuetz *et al.*, 1999; Lummus & Vokurka, 1999). With such potential, small and medium enterprises (SMEs) in Malaysia have to remain competitive by embracing best business practice such as the supply chain management.

Based on a review of large number of supply chain management definitions conceptualized by scholars and practitioners, Stock and Boyer (2009) proposed the definition of supply chain management as the following:

“The management of a network of relationships within a firm and between interdependent organizations and business units consisting of material suppliers,

purchasing, production facilities, logistics, marketing, and related systems that facilitate the forward and reverse flow of materials, services, finances and information from the original producer to final customer with the benefits of adding value, maximising profitability through efficiencies, and achieving customer satisfaction.”

(Stock & Boyer, 2009: 706)

Despite the importance of supply chain management, the concept remains vague to many which results in poor implementation (Basnet, Corner & Wisner, 2003; Huber & Sweeney, 2007; Zhang & Li, 2011). Companies find that the definition and scope of the practice are somewhat confusing and hence lead to strong skepticism to implement it. Research evidence also indicated that the actual practice seldom portrays the practice in theory (Fawcett & Magnan, 2002; Naslund & Williamson, 2010). As a result, the evolution of supply chain management practices such as lean and agile supply chain management, reduction of supply base as well as outsourcing have been paradoxically proven to create new risks in supply chains and increase the vulnerabilities (Tang, 2006; Paulsson, 2004; Harland *et al.*, 2003; Juttner, 2005; Norman & Jansson, 2004; Wagner & Bode, 2006; Craighead *et al.*, 2007; Stecke & Kumar, 2009; Ancarani & Di Maro, 2012).

Returning back to the SMEs' context, the SMEs themselves have been identified to increase the risks in supply chain (Henschel, 2008; Finch, 2004). First, Okatch *et al.* (2011) explained that the SMEs were unable to produce high quality products on schedule and had lack of technological capability to compete in industry. Second, SMEs have the lack of formal risk analysis (Vaaland & Heide, 2007) and inadequate risk assessment training compared to large companies (Finch, 2004). As a result, the poor risk management of SMEs leads to business failure (Barnes *et al.*, 1998). To overcome these issues, coupling the supply chain management with risk management is required (Zsidisin & Ritchie, 2009; Kern *et al.*, 2012) so that any possibility of risks rising from the supply chain management activities or SMEs could be alleviated.



In order to understand the concept of supply chain risk management (SCRM), Norrman and Lindroth (2002, p.7) defined SCRM as “to collaboratively with partners in a supply chain or on your own, apply risk management process tools to deal with risks and uncertainties caused by, or impacting on, logistics related activities or resources in the supply chain”. To extract, the essence of SCRM discussion are (1) the risk management tools, and (2) the risks in supply chain. Regarding the former, common risk management process or methodology are risk identification, risk analysis, risk mitigation and risk monitoring (Blome & Schoenherr, 2011; Tang *et al.*, 2007; van Wyk *et al.*, 2008). Several tools oftenly used for risk identification are brainstorming, case-and-effect analyses, historical data, fault trees, likelihood impact matrices, process mapping and scenario planning (Waters, 2007). However, in order to identify supply chain risks, Norrman and Jansson (2004) strongly suggested to use fault tree analyses and the event tree analyses. The tools for risk assessment range from “softer” tool such as simple rating to more advanced tools for example simulation technique, real options, advanced statistical techniques and game theory (Barth, 2011). Meanwhile, the latter as previously discussed is a result of the current advancements of supply chain management practice such as outsourcing and reduction of supplier base as well as partnering with SMEs.

Unfortunately however, the existing literature has not much described the extent of SCRM implementation (Tang & Musa, 2011; Pfohl *et al.*, 2010; Thun & Hoenig, 2011). Due to that, Juttner (2005) stressed that the current understanding about SCRM implementation remained patchy. Responding to this matter, the current research attempts to answer the broad question of “how firms implemented SCRM?”. Eventually, the question of “what enables firms to implement this practice the way they do?” and “what barriers are challenging the implementation of SCRM?” would be addressed. At present, the literature shows that SCRM has been implemented either formally or informally. Formal practice is characterized by standardized procedure established by the management to achieve a degree of uniformity (Smith *et al.*, 2009) while informal practice is indicated by managers’ unawareness of risk management procedure (Smith *et al.*, 2009) and the absence of risk management vocabularies and jargons (Corvellec, 2009). Prior studies revealed

that most firms had implemented informal risk management (Tummala *et al.*, 1997; Burchett *et al.*, 1999; Lee & Ali, 2012).

The informal risk management which is reflected by the lack of cohesion with the standardized risk management procedure is possibly the result of barriers and challenges hindering the formal practice. Past researchers indicated that the lack of knowledge to use risk management tools and techniques emerged as the most frequent and persistent barrier to implement risk management (Ward *et al.*, 1991; Akintoye & MacLeod, 1997; Tummala *et al.*, 1997; Uher & Toakley, 1999; Burchett *et al.*, 1999; Raz *et al.*, 2002; Lyons *et al.*, 2004; Norazian *et al.*, 2008; Azhar *et al.*, 2008; MacNamee & Perera, 2010; Lombardi *et al.*, 2011). Apart from that, the management and employees negative attitude towards risk management practice (Ward *et al.*, 1991; Tummala *et al.*, 1997; Burchett *et al.*, 1999; Lyons *et al.*, 2004; Roa & Marie, 2007; Norazian *et al.*, 2008; Azhar *et al.*, 2008; Kallenberg, 2009), lack of industry model and guideline (Tummala *et al.*, 1997; Lyons *et al.*, 2004; Norazian *et al.*, 2008; MacNamee & Perera, 2010), cost (Carter, 1972; Tummala *et al.*, 1997; Lyons *et al.*, 2004; Roa & Marie, 2007) and time factor (Carter, 1972; Akintoye & MacLeod, 1997; Tummala *et al.*, 1997; Lyons *et al.*, 2004; Roa & Marie, 2007; Low *et al.*, 2009) are consistently debated as the primary challenges in practicing formal risk management. Nevertheless, the tendency of prior researchers to study each of these barriers as separate issues demands an extended investigation in order to determine the real problem, instead of the symptoms.

On the contrary, common enablers to implement risk management results in a standardized procedure which can be called formal practice (Smith *et al.*, 2009). This procedure or format is found in the common practices which are obligated by companies. Accordingly, Manab *et al.* (2010) and Abdullah *et al.* (2012) strongly claimed that rules and regulations were among the drivers to risk management adoption. The literature further indicates that the corporate governance practice emerged as the most influential driver in risk management adoption (Collier, 2005; Manab *et al.*, 2010). However, the effects of corporate governance may be non-existent in SMEs because these companies are usually owned and managed by the similar individual. Since compulsory conduct of risk management is released from SMEs, there is still a slim chance that these companies adopt a formal risk

management due to threats of sanctions or incentives offered by the focal company in the supply chain (Beatrice, 2003). Further evidence pointed that customers' influence is particularly important towards the implementation of SCRM (Bongaerts *et al.*, 2006) and that automotive suppliers have been responding towards their resource providers, the automakers who demanded and selected suppliers that implement SCRM (Norlaile Salleh Hudin & Abu Bakar Abdul Hamid, 2015). Moreover, SMEs could simply adopt SCRM voluntarily because they have higher risk perceptions compared to larger companies (Ellegaard, 2008). As a result, SMEs could implement formal risk management in respond to the acknowledgement of potential benefits, emergence of new business trends or exposure to risk events.

In the past few years, the awareness about SCRM has been increasing among practitioners although the concept is still at its infancy (Thun & Hoenig, 2011; Juttner *et al.*, 2003; Juttner, 2005; Vanany *et al.*, 2009). Thun and Hoenig (2011) further stressed that many companies had recognized the need to deal with risk issues in supply chain but surprisingly no further action has been taken to implement SCRM formally. This phenomenon raised intriguing questions of the barriers that impede these companies from implementing SCRM and inversely, how some other companies have been motivated to perform this practice. Therefore, the objectives of this study are threefold; to explore the implementation of supply chain risk, to explore the enablers that influence how a company implement SCRM, and to explore the barriers that challenged the implementation of SCRM.

## **1.2 Background**

The manufacturing sector in Malaysia had been given emphasized in the Second Industrial Master Plan which was carried out from 1996 until 2005. Some of the industrial clusters under the manufacturing are automotive, petrochemical, textile and apparel and furniture. In regards to the automotive industry, Malaysia has proudly established two car manufacturers which are PROTON (Perusahaan Otomobil Nasional) and Perodua (Perusahaan Otomobil Kedua Sendirian Berhad) in 1983 and 1994 respectively. To ensure these companies' survivability, the

government of Malaysia has geared up the automotive industry with two major development policies.

The first policy which was implemented between 1963 until 1982 aimed at encouraging local assembly and content (Hasli Hassan & Jomo, 2007). Instead of importing completely built-up units (CBU) from Europe, Malaysia strived to assemble the imported completely knocked-down (CKD) kits to open up employment opportunity and substitute imports of automobiles (Siti Iswalah Arshad, 2002). Paradoxically, this policy created the 'infant industry syndrome' in which the local suppliers produced high priced but poor quality parts due to uneconomical scale (Rokiah Alavi & Syezlin Hassan, 2001; Tambunan, 2009). The World Trade Organization (WTO) also found that Malaysia has violated the Trade Related Investment Measures (TRIMs) Agreement and consequently, Malaysia was given until 1<sup>st</sup> January 2004 to phase out the programme (Rajah Rasiah, 2007).

The SMEs of Malaysian automotive industry confronted the most severe effects from this. Unaware of this abolishment, the SMEs encountered the risks of business failure and affected sales (Rokiah Alavi & Syezlin Hassan, 2001). As widely known, SMEs account for 80 to 90 per cent of economic activity and 50 to 60 per cent of employment opportunities in many developing countries (United Nations, 2005). Malaysia is not an exception whereby SMEs in Malaysia remain the most important driver to support the growth of Malaysian economics. Thus, the materialization of that policy risks does not only affect individual SMEs, but Malaysia economies as a whole.

In response to the abovementioned problems, the second phase of Malaysian automotive industry development was launched from 1983 until present. It is the phase of 'national car' project (Hasli Hassan & Jomo, 2007) in which PROTON and Perodua were established. In 1988, the Vendor Development Programme was launched to stimulate the local automotive industry. According to Rokiah Alavi and Syezlin Hassan (2001) this programme helps to nurture the SMEs by linking these enterprises with foreign and local automotive manufacturers. Through these relationships, the SMEs enjoy the benefits of financial and technological assistance as well as the credibility from anchor companies to produce automotive parts for

them. The Annual Report of PROTON revealed that vendor development emerged among the seven areas of focus (PROTON, 2006). PROTON implemented tiering, rationalisation and consolidation exercise to improve its vendor base (PROTON, 2008) while working closely with vendors to enhance the quality and efficiencies.

The aim of the Third Industrial Master Plan which is to promote the local SMEs in the global supply chains has implied a strong urge to study SMEs especially in automotive industry. This is further supported by the increase of the number of SMEs in the electrical and electronics industry, as well as precision plastics components, stamping, tooling and machining activities, which evolved into global suppliers to multi-national companies (Third Industrial Master Plan, 2006). However, SMEs need to embrace the best business practice to gain the confidence of players in the global supply chains while ensuring that competitiveness and survivability of the SMEs are not questionable.

In the supply chain context, what seems to be more important is Malaysian automotive part manufacturers depend heavily on foreign supplies for raw materials (Sieh & Yiew, 1997). Although local content policy has been put into force, in reality the raw materials been used to manufacture parts are mostly imported (Rosli, 2006; Hassan Naziri Khalid *et al.*, 2006). The collaboration between local automotive part manufacturers and foreign partners is apparently at surface level because the foreign partners seem to fiercely guard their core technologies from changing hands.

As a result, only generic components, non-mechanical parts and low-tech parts can be produced by the local producers while engines, gearboxes and transmissions remain exclusively produced by the foreign partners (Abbott, 2003). In the latest evidence, Tham (2015) supported that Malaysian automotive industry remains a net importer of auto components and parts. This dependency is further extended to purchasing and R&D activities when the foreign partners act as a gate which control the selection of suppliers, purchase of moulds for production activity and monetary flow between the local producers and foreign customers.

Tainted by this over dependency, the future of Malaysian automotive industry seems to be disturbing as it is substantially prone to supply chain risk. Importing raw materials forced the local automotive part manufacturers to deal with high possibility of raw material shortages because the delivery surely can be easily affected by the mode of transportation, climate issue, political situation and regulation imposed by the suppliers' countries, instable currency exchange and natural disasters. Considering the potential contribution of SMEs to Malaysian economy, thus it is paramount to study SMEs. Furthermore, the high representation of small and medium enterprise in the total enterprise of a nation opens up an opportunity to obtain broader perspectives of the SCRM implementation.

### **1.3 Problem Statement**

Malaysian automotive companies have been stretching their supply chain to reach global scale because the current local market is not entirely developed to cater the demands for different types of parts. Obviously, several parts and components have yet been produced locally due to the lack of economies of scale. For example, Wan Hasrulnizam Wan Mahmood *et al.* (2009) reported that a Malaysian automotive company imported raw material from overseas due to the unique specification required for assembly process. In addition, Rashid Abdullah *et al.* (2008) and Tham (2004) provided further support when these studies discovered another automotive company which continuously imported parts and components from foreign suppliers, especially those related to engines, transmissions and fasteners because these parts and components were patented by the parent firm in Japan. Although the average local components have increased, in reality a major automotive company in Malaysia purchased raw materials from Malaysian based Japanese subsidiaries which imported parts from Japan (Tham, 2004; Jomo, 1994). A survey reported that 81.8 per cent of the Malaysian small and medium automotive parts manufacturers imported their raw materials (Hassan Naziri Khalid *et al.*, 2006). This survey further stated that 56.3 per cent of those importers purchased not more than 50 per cent of their raw materials from foreign suppliers while 25.5 per cent of them imported more than 50 per cent (Hassan Naziri Khalid *et al.*, 2006).

More recent study further confirmed that RM 4.4867 billion car parts and components were imported by automotive suppliers in Malaysia compared to only RM 2.2 billion of exports (Lim, 2012). Clearly, these evidences show that Malaysian automotive suppliers have heavy dependence on foreign suppliers through global sourcing and offshoring strategies.

In a bigger picture, global sourcing and offshoring strategies obviously are common practices among Malaysian automotive companies. By implementing global sourcing and offshoring, it indicates that automotive firms in Malaysia have positively responded to supply chain management which is “the management of upstream and downstream relationships with suppliers and customers in order to deliver superior customer value at less cost to the supply chain as a whole” (Christopher, 2011, p. 3). Nevertheless, the risks inherent in such strategies are easily overlooked and neglected due to their tempting return when in fact, other studies of more matured supply chain than the Malaysian’s have strongly proven that globalization strategy created additional dependencies. These additional dependencies raise complexity of supply networks and caused higher risk exposure (Harland *et al.*, 2003; Juttner *et al.*, 2003). The heavy reliance on foreign automotive suppliers has resulted in numbers of concerning situations for Malaysian automotive industry that urgently call for a solution known as SCRM. This is because, SCRM can help to identify potential sources of risks and implement appropriate strategies through a coordinated approach among supply chain risk members to reduce supply chain vulnerability (Juttner *et al.*, 2003).

The first concerning situation which emerges due to strong dependency on foreign suppliers is related to frequent late deliveries. Considering cost constraint, most imported parts and components are delivered to Malaysia through ocean liner compared to air freight. Currently, Malaysia sea ports in Klang, Pasir Gudang and Tanjung Pelepas serve as the main gate to incoming parts for automotive companies which mostly located in industrial park at Port Klang, Shah Alam and Pasir Gudang. However, Williams (2014) reported that logistics system in Malaysia is weak, inefficient and fragmented, thus results in port congestion. Another study found that the clearance procedures at Malaysian ports are also inefficient (Mohd Hafizzuddin Md Damiri, 2008). Due to that problem, Malaysian automotive companies which

depend largely on foreign suppliers are frequently facing late deliveries (Williams, 2014; Wan Hasrulnizam Wan Mahmood *et al.*, 2009).

Second, Resilinc Corporation (2013) reported that many automotive companies from different countries have suppliers located in hotspots for high-tech industrial areas known for susceptibility to natural disasters such as Ayutthaya province in Thailand and Tōhoku region in Japan. Without exception, many Malaysian automotive companies have foreign suppliers located in those areas. Earlier research by Sieh and Yew (1997) consistently reported that Japan based automotive parts and components manufacturers in Malaysia purchased more than 75 per cent of their materials from Japan. Abbott (2003) and Bernama (2014) further strengthen Sieh and Yew's (1997) finding when they reported that the biggest source of automotive parts and component import for Malaysia is Japan. As any other automotive companies in other parts of the world, Malaysian automotive companies therefore, are prone to the risks caused by natural disasters.

This situation is proven in 2011 when Japan was hit by major earthquake and tsunami which severely affected many suppliers that build parts and components for vehicles (Canis, 2011). The second- and third-tier suppliers of a Malaysian automotive company had to overcome depressing part shortages, especially on electronics, brakes, specialized paint and electronic transmissions (Jeffreys, 2011). Similarly, another Malaysian automotive company was also reported to be disrupted as this company used around 80 per cent of Japan-sourced content (Seow, 2011). With respect to PROTON, although the suppliers which are mostly SMEs did not operate in Japan, some of these suppliers sourced parts from Japan (Autoworld, 2011). Also, the major flood occurred in Thailand in 2011 adversely affected 10 Malaysian automotive companies located in that area (Jamaluddin bin Muhammad, 2011). For PROTON and Perodua, the flood caused their sales to drop 28 per cent and 11 per cent respectively for January 2012 (The Edge Markets, 2012).

Poor quality and increased prices of imported parts and components further exposed Malaysian automotive companies to higher risk. Despite strong support from the government to develop local automotive component industry, local suppliers are still relying on foreign technology which is far more advanced.



Moreover, producing parts and components locally is generally considered as uneconomical at the current pace of the local automotive parts and component industry. However, by importing parts and components from overseas, the impacts of any risks inherent in foreign partners are strongly believed to be also burdened by local automotive industry. For example, ASEAN aftermarket including Malaysia is saturated with imported parts from China (Dey, 2002). In 2012, Malaysia imports of car components from China reached 38.2 per cent compared to only 22.4 per cent from Japan. Ironically, Navarro (2008) admitted that in many cases, China automotive parts have poor quality that often lead to dangerous failure. As an instance, Aston Martin was forced to recall their sport cars when counterfeit plastic materials supplied from China was found in the accelerator pedal (Pomfret *et al.*, 2014). Considering the depreciation of Malaysian ringgit which led to higher cost of imported intermediate parts for automotive component sector (Oxford Business Group, 2015; Abbott, 2003) it is afraid that more parts and components will be sourced from China in future.

Despite those alarming evidences showing the vulnerabilities of Malaysian automotive supply chain, study concerning the implementation of SCRM in companies are rare in the current literature. A thorough review of the SCRM studies between 1995 to 2009 conducted by Tang and Musa (2011) reported that prior studies have mainly focusing on developing descriptive and conceptual model instead of exploring the industrial practices (Tang & Musa, 2011). The evidence about the process of SCRM implementation has been completely lacking (Pfohl *et al.*, 2010). In further support, majority of automotive SCRM implementation studies have been found to be conducted in the Western countries for example Blos (2009), Thun and Hoenig (2011), Thun *et al.*(2011) and Lavastre *et al.* (2012). Without detail evidence explaining how risk management is implemented at industrial settings, surprisingly there is a proliferation in the number of studies which focus on investigating the effects of managing supply chain risks toward supply chain and organizational performance. For example, Thun and Hoenig (2011), Norman and Jansson, 2004) and Fan *et al.* (2011) did not discuss in detail how companies in these studies performed risk management in their supply chain although all concluded that this practice caused positive effects on supply chain and organizational performance. In essence, this study does not intend to criticize the

effectiveness of the risk management being implemented. Instead, what is missing is a detail description on how successful SCRM is being carried out. Since supply chain is highly prone to disturbance and disruption, detail description of SCRM implementation can help other automotive companies deal with such risks in a better manner. Due to that reason, in-depth case studies using qualitative interview methods seem to be a better research design to reveal how automotive companies implement a successful SCRM.

In the scope of risk management implementation studies, past researches have shown great tendency to categorize risk management into formal and informal approaches. Nevertheless, many prior studies such as Norman and Jansson (2004), Tummala *et al.* (1997) and MacNamee and Perera (2010) have ignored to define the terms formal and informal risk management. Obviously, their claims are not based on well developed definitions proposed by Alderman and Lewis (1995) and Smith *et al.* (2009), *inter alia*. Consequently, this situation caused confusion among practitioners in setting their risk management implementation plan and envisaging the final outcomes.

What is so depressing about such vague definition is that it misled many automotive suppliers to think that they have implemented sound risk management system. In 1999, for example, General Motors, along with Ford Motors and Daimler-Crysler developed a standardized risk management system specifically for automotive companies which now has been diffused world wide. Surprisingly, many of the automotive suppliers of this Detroit 3 (General Motors, Ford Motors and Daimler-Crysler) such as Collin and Aikman, Delphi, Saab and Dana failed (Rosenberg, 2012; Cooney, 2008). It therefore raised one critical question: what is a good chain risk management? This major question leads us to think how surviving companies implement their SCRM? A formal risk management or informal one? To answer these questions, an interpretivists' approach should be taken compared to positivists' approach because the interpretivists' approach results in detail account of the context which describes multiple reality stemming from multiple perspectives of informants.

In addition, strict dichotomy of formal and informal approaches are usually applied in prior risk management implementation studies. Nevertheless, by taking risk maturity model (Hillson, 1997) and the diffusion of innovation theory (Rogers, 2003) into account, this study strongly argues that such typology oversimplifies the extent of risk management implementation. In the event where risk management practitioners perceived that they are pursuing formal risk management approach for example by complying with risk management standard, the oversimplification of risk management approach can lead them to think that they have formalized all constructs of their risk management practice including risk communication, training and responsibilities, among others when the truth is, several constructs actually require further attention to become formal practice.

The central concern about the lack of practitioners' understanding of formal and informal risk management approach is that practitioners may not realize that informal risk management has been highly criticized for its inadequateness to entirely understand the risks for effective mitigation (Nelson *et al.*, 2008), producing inconsistent results (Carr & Tah, 2001; Muhlbauer, 2004) and more severe implications of mistakes (Muhlbauer, 2004). Although a recent set of studies including Lalond and Boiral (2012), Boholm *et al.* (2012) and Corvellec (2009) strongly defended informal risk management, this study argues that the evidences provided by those studies could also be viewed as rare cases since the results were drawn from only small number of government linked organizations with extreme dominant power over other organizations. In general situation, typical SMEs neither have such strong financial and legislative support from government nor supreme power to control other parties in their supply chain.

Pertaining to the studies which have proven the relationship between SCRM implementation and increased supply chain performance (e.g. Thun & Hoenig, 2011; Norman & Jansson, 2004; Fan *et al.*, 2011), limited insight is found as to what enabled those companies to implement SCRM at the first place. Instead, these enablers are explored in separate studies such as Manab *et al.* (2010) and Abdullah *et al.* (2012), thus how these enablers influence the implementation of SCRM remain unexplained whilst in other branches of risk management discipline, this missing link has been strongly proven. For instance, organization that had failed risk

management was found to implement this practice for compliance with regulation (Collier & Agyei-Ampomah, 2008), reaping the reward for adopting good business practice and as an internal defense purposes (Ericson, 2006; Power, 2004). Based on these studies, reasonably, there is a strong link between companies' enablers and the effectiveness of SCRM. Therefore, studying the enablers that driven Malaysian automotive companies to perform SCRM is strongly needed in order to understand the effects that these enablers have on SCRM implementation. In addition, the result of investigating the link between the enablers and implementation of SCRM can help potential adopters to catch a glimpse of the possible outcome based on what have enabled them to manage supply chain risks.

Nevertheless, it is absolutely inappropriate to simply assume that any implementation of SCRM will fail if companies are driven by compliance with regulation, reward for adopting good business practice and internal defense purposes when there are tonnes of other factors that should be taken into consideration. Recognizing this issue and through extensive review of past studies, this study found that companies are constrained by certain barriers such as the lack of knowledge (Yaraghi & Langhe, 2011; Blos *et al.* 2009; Kleffner *et al.*, 2003), negative attitude (Norazian *et al.*, 2008; Azhar *et al.*, 2008; Kallenberg, 2009) and high implementation cost (Lombardi *et al.*, 2011; Odzaky *et al.*, 2009) which shaped their SCRM practice. Nonetheless, looking deeper into earlier studies, this study doubts that these barriers are interrelated and most of them are suspected to be the symptoms rather than the actual problem. This is because, negative attitude toward SCRM and perceived high implementation cost, for example, could be the results of the lack of knowledge. Earlier, Kleffner *et al.* (2003) verified that firms were uncertain of how managing risks can create values whereas Choudry and Iqbal (2013) found that people had unclear idea of the aim and purpose of implementing risk management system. Responding to this suspicion, case studies which enable in-depth investigation seems to be an appropriate means to clarify this issue.

Another gap in the literature is the lack of findings about risk management implementation among SMEs. The research trend reveals that studies about large firms are more common compared to SMEs (Vanany *et al.*, 2009). Freimut *et al.* (2001), van Wyk and Bowen (2008) and Corvellec (2009), for example, had

exclusively focus on large companies while Shen (1997), Akintoye and MacLeod (1997), Uher and Toakley (1999), Baker *et al.* (1999), Wood and Ellis (2003), Elkington and Smallman (2002), Lyons *et al.* (2004), Tang *et al.* (2007), Azhar *et al.* (2008), Kallenberg (2009), Boholm (2010) and MacNamee and Perera (2010) either showed lesser emphasizes on the size of firms or had a mixture of firm sizes in their studies. Studies of automotive SCRM such as Blos *et al.* (2009) and Thun and Hoenig (2011) also investigated medium and large companies. At the current pace of Malaysian automotive business, investigating SMEs context is extremely important because earlier researches confirmed that having these companies in a supply chain increases overall supply chain risks (Henschel, 2008; Finch, 2004). Worse, when one firm defaults, the other firms in the same supply chain have a higher probability of defaulting (Wagner *et al.*, 2009).

In a nutshell, several factors which are often attributed to SMEs caused the companies in this economic sector to be more susceptible to failure. First, these companies have limited capital and assets (Abor & Biekpe, 2007; Ellegaard, 2008; Smit & Watkins, 2012). Second, they have high employee turnover (Williamson, 2000; Beaver, 2002; Raghavan, 2005; Watt, 2007) and third, they have inadequate management skill and training (Smit & Watkins, 2012). Due to these shortfalls, SMEs are most exposed to the harmful effects of risks (Verbano & Venturini, 2013). These problems become a great concern to local automotive industry because half of Malaysian suppliers are suppliers to PROTON, with 62.7 per cent of them being SMEs (Norizah Mohamad, 2008; MITI, 2004).

In different areas of risk management such as project risk management, financial management and risk management in public sectors, a number of studies used purely qualitative case study approach (e.g. Wood & Ellis, 2003; Corvellec, 2009; Kallenberg, 2009). Compared to many other studies which also examined the implementation of risk management using quantitative approach such as Choudry and Iqbal (2013), Tang *et al.* (2007), Norazian *et al.* (2008), Tummala *et al.* (1997), Akintoye and McLeod (1997), the studies that have taken qualitative approach shown to reveal more detail information and unexpected findings which help to structure a new knowledge in the area. For example, the qualitative research conducted by Corvellec (2009) discovered provoking results that informal risk

management does not mean less beneficial than the formal one. Corvellec (2009) found that common formal methodology or process of risk management do not need to be explicit but can be embedded through managerial tactics. From this example, it shows that qualitative case study approach is utterly beneficial in discovering a different set of truth than commonly agreed by the positivists through their quantitative approach. For that reason, this study adopted the descriptive case study approach.

In addition, the value of the present literature should be further enhanced by accompanying the results with theoretical explanations. Although institutional and contingency theory dominates the current studies of risk management implementation as in Zsidisin *et al.* (2005), Collier *et al.* (2007), Woods (2009), Sarens and Christopher (2010) and Collier and Woods (2011), these theories are not utterly comprehensive to explain the phenomenon of SCRM implementation in Malaysian automotive industry. For example, the institutional and contingency theory have ignored the influence of organizational formalization and organizational innovation process offered by the diffusion of innovation. Without considering those aspects, the understanding of SCRM is limited, hence it is difficult to determine the areas that current practitioners should improve in order to manage their supply chain risks successfully. In addition, the diffusion of innovation theory uses multiple angles to explain the implementation of an innovation compared to the institutional and contingency theory which look at the situation through less broad perspective. In essence, the diffusion of innovation theory provides more plausible explanation by taking into account more interrelating factors rather than relying on explanation offered by the institutional and contingency theory which at times seems to be too parsimonious that it is insufficient to capture the dynamic in human actions. However, this study does not attempt to degrade the institutional and contingency theory, but introducing the diffusion of innovation theory to support the pluralism approach may help to bridge the lack in the current theoretical perspective.

#### **1.4 Research Purpose**

The purpose of this case study was to explore the implementation of SCRM among SMEs in Malaysian automotive industries by using descriptive case study approach. At this stage of the research, the implementation of SCRM is defined as SCRM methodology, tools used in SCRM, techniques to minimize risks, risk communication, SCRM training and risk responsibility as proposed by Alderman and Lewis (1995), Henschel (2008), Blos *et al.* (2009), Lavastre *et al.* (2012) and Ceryno *et al.* (2013). The final outcomes are described according to the continuum of formal or informal approach of SCRM. The descriptive case study approach is used because it helps to gain better understanding of the present status (Thomas *et al.*, 2011; Yin, 2003) which in this study refers to the status of SCRM implementation. By understanding how companies implement SCRM successfully, SMEs can avoid business failure which is rooted from poor risk management (Collier & Agyei-Ampomah, 2008; Barnes *et al.*, 1998). Risk management could have been conceptually established but the implementation of these practices remains unclear to the practitioners. Furthermore, the results also helps to devise the current theories being used to explore risk management implementation in industrial settings. Previous researchers had been relying heavily on institutional and contingency theory which unable to relate enablers and barriers of risk management implementation with how companies implement their risk management.

#### **1.5 Research Objectives**

The broad aim of this research has led to the development of the research objectives listed below:

- (1) To understand the implementation of SCRM in Malaysian automotive industry.
- (2) To explore the enablers to the implementation of SCRM in Malaysian automotive industry.

- (3) To identify the barriers which have challenged the implementation of SCRM in Malaysian automotive industry.

## **1.6 Research Questions**

Specifically, the current research attempts to address the research questions as follow:

- (1) How would the automotive companies describe their SCRM implementation?
- (2) What are the enablers to manage the supply chain risks among automotive companies? Which are the main enablers?
- (3) What, if any, have challenged them in managing the supply chain risks? Have these challenges been resolved or why do they still persist?

## **1.7 Scope of the Study**

This study primarily focuses on SMEs in automotive industries. This decision is justified by the tendency of high technological industries, such as automotive and electronics, in adopting the SCRM practices ahead of other industries with lesser technological focus. Furthermore, based on the fact that automotive industry is the leader in SCRM implementation (Murphy, 2010), it is best to investigate their current state of implementation as there is high prevalence of other firms in different supporting sectors to imitate or replicate them. In other



words, their current practice would most probably mould SCRM implementation in the later stages of the adoption curve.

In methodology scope, this study was conducted in descriptive case study research approach. Unlike typical used of case study for developing grounded theory, descriptive case study begins with a descriptive theory. The purpose of descriptive case study is to pay significant consideration on contextualization of a phenomenon which results in “thick description” about the situation of interest. These thick descriptions or comprehensive current findings, are then used to compare with the pre-existing theories, thus helping to devise new perspective on this issue. Since this study only investigated small number of firms, the findings of this study was only generalized internally. Other firms excluded from the sample of this study could have diverse approaches in implementing SCRM. Despite this limitation, the current research provides a starting ground for future discoveries in this area especially in relation with the theoretical basis.

Measuring the performance of companies against the implementation of the SCRM implementation is also beyond the scope of this study. Besides the fact that the benefits of this practice are intangible (Francis & Skitmore, 2005), it is difficult to unequivocally attribute the success with risk management (Bannerman, 2008). The success of a company could have been a combination of many factors for instance, good management skills and adoption of new technology. Moreover, unlike Thun and Hoenig (2011) as well as Wagner and Neshat (2012) who studied the performances of firms in Germany, Malaysian firms are relatively new to this concept. Therefore, measuring the company performance without rigor understanding about how companies manage their supply chain risks would seem to be in vain. This argument is in line with Lalonde and Boiral (2012, p. 293) who in parallel stressed that “the effectiveness of ISO 13000 (a risk management standard) is ultimately determined by *how* it is used by organizations, rather than merely whether or not they adopt its management framework”.

## 1.8 Significance of the Study

The selection of this research topic is justified for several reasons. First, from industrial perspective, manufacturers have shown huge concerns for their suppliers' performances for example the quality and delivery time (Neise, 2009), capability (Monczka *et al.*, 2010) and on-going supplies (Cheverton & van der Velde, 2011). These concerns, consequently, lead to an abundance of supplier selection studies (Javanmardi *et al.*, 2011; ). However, the supplier selection does not eliminate these problems entirely because it is just an initial process to manage supply risks. What seems to be more important is to maintain the consistency of suppliers' good performance and this could be done if the suppliers perform a SCRM continuously. Regrettably, there is lack of evidence that shows how supply chain risk are managed although SCRM has been proven to increase company performance (Wagner & Neshat, 2012; Thun & Hoenig, 2011). Additionally, there is extensive descriptive and conceptual models of SCRM (Tang & Musa, 2011) but little have been known about its implementation in industrial settings (Pfohl *et al.*, 2010; Thun & Hoenig, 2011). In other words, while abundance of research were conducted to develop conceptual models of SCRM and another set of research tested the effectiveness of managing supply chain risks, the evidence showing how those conceptual models being applied in real industrial settings and thus lead to the claimed effectiveness is apparently missing.

Second, evidences from studies in banking discipline reveal that although risk management have been performed rigorously based on standardized guidelines, many established banks such as Lehman Brothers and Merrill Lynch still failed during the economic crisis (Sorkin, 2008). Apparently, the issue here is not whether the principles behind risk management theory is flawed or not, but how the practitioners perceived it and implement it. According to Stulz (2008), the failure of risk management has been attributed to several conditions which are (1) heavy reliance on risk metrics, (2) ignoring a known risk because it is perceived as immaterial or difficult to be incorporated into risk models, and (3) extreme risk-taking due to perceived failure-free of risk management system. In addition, Corvellec (2009) and Lalonde and Boiral (2012) strongly argued that risk

management could also create a false safety net if the adopters did not entirely understand it. Past research also found that organization which have failed risk management was only concern with conforming to regulations (Collier & Agyei-Ampomah, 2008) and reaping the reward for adopting good business practice besides using it as an internal defense purposes (Ericson, 2006; Power, 2004). Therefore, it is exceedingly worthwhile to explore how practitioners perceived SCRM and understand the real enabler to SCRM implementation.

Since research on the effectiveness of SCRM is often relegated to the positivists approach, for example those conducted by Wagner and Neshat (2012) and Thun and Hoenig (2011), it assumed that there is only a single truth for a particular question and that this so called “truth” can be verified and validated most of the time with statistical approach. Therefore, data used by the positivists to measure firm or supply chain performance are mostly derived from return on investment (ROI), ROI growth, market share, market share growth, return on sales (ROS), and ROS growth (Sanchez & Perez, 2005), delivery timeliness, product quality, workforce productivity (Bigliardi & Bottani, 2014) and so on.

Nevertheless, the positivists’ researches failed to acknowledge the key aspects of the achievement process. This statement is bolstered by Pfohl *et al.* (2010) and Thun and Hoenig (2011) who found limited studies on SCRM implementation. In stark contrast, interpretivists’ researchers argued that in complex field such as management, the world cannot be completely determined, and that the environment and context where the business actors are functioning is more interesting than understanding the world at large. According to Laws and McLeod (2004), “the interest was in process rather than outcomes”. Sanders (1981, p.44) further elaborated that “case studies help us to understand processes of events, projects, programs and to discover context characteristics that will shed light on an issue or object”. In other words, from the interpretivists’ perspective, this research argues that understanding the details of successful SCRM implementation is far more important than identifying the effectiveness of this practice as commonly studied. For that reason, descriptive case study is performed in order to provide a detailed picture of a phenomenon. A descriptive case study does not attempt to build theoretical models (Thomas *et al.*, 2011). However it enables a study to devise a

conceptual model (Laws & McLeod, 2004) particularly about SCRM implementation in automotive industry.

At present, there is little evidence of SCRM implementation in developing countries particularly Malaysia. In addition, most previous researchers studied large companies and the perspective of SMEs have been neglected. Studies focusing on firms in automotive industries are also deemed to be scarce. Therefore, there is a wide open opportunity to study how firms implement SCRM based on Malaysian small and medium automotive companies' settings as to enrich the present literature. From the policy makers' point of views, the way that SCRM were being implemented could provide invaluable insights about the implications of the policies that the case companies had put into force. Although the evaluation of the effectiveness of such policies is beyond the scope of this research, this study could signal whether the exerted policies and regulations, for example the TS16949 standard, work as they are intended to. Besides, in-depth studies on any challenges that impede the implementation of the SCRM are suitable to be used by policy makers in innovating interventions to prevent those barriers from persisting.

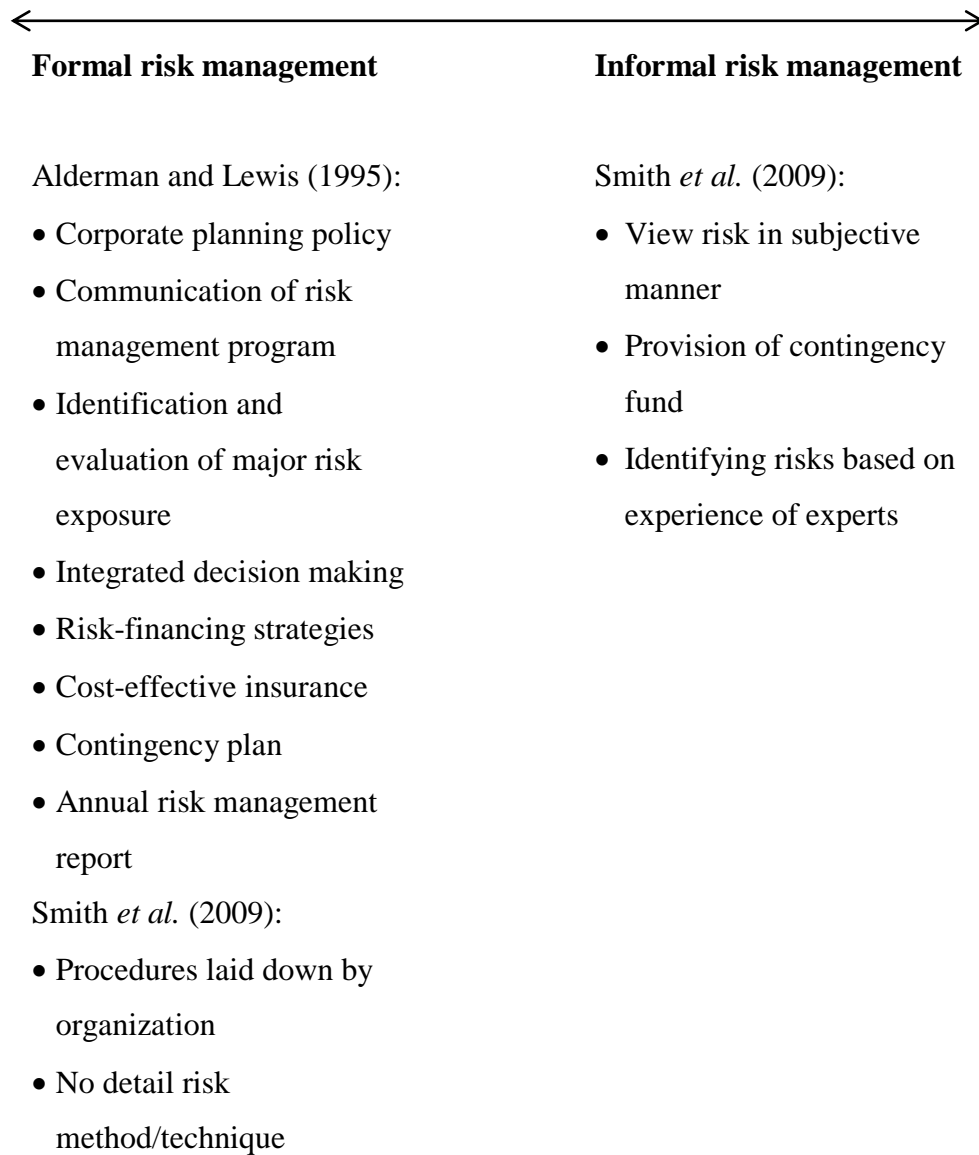
In terms of the academia, the current study would leverage theoretical contribution to the existing literature. To author's knowledge, there is yet a research which is accompanied by theoretical evidence in the field of SCRM, although other risk management fields has little, if not much exploration on this issue. Therefore, this study is conducted to combine contingency, institutional theory and diffusion of innovation theory which previously have been studied separately and turned out to be less successful in producing comprehensive interpretations. By applying pluralism approach, this research extends theoretical contributions to SCRM by bringing in the new perspective in understanding the implementation aspect of this practice.

## 1.9 Definition of Terms

For the purpose of clarifications, the important terms used in this study were defined as the following.

- Supply chain management is “to collaboratively with partners in a supply chain or on your own, apply risk management process tools to deal with risks and uncertainties caused by, or impacting on, logistics related activities or resources in the supply chain” Norrman and Lindroth (2002, p.7).
- Supply chain risk management (SCRM) is described as a practice which helps a company identify, analyze, assess, handle and control the occurrence and impact of risks inherent in firms and supply chain.
- Risk management approaches is defined as a continuum of formal and informal SCRM implementation instead of a strict typology of the two approaches as shown in Figure .1.
- Enablers refers to the factors that stimulate, encourage or motivate a firm to pursue a purely formalize approach of SCRM implementation which includes corporate governance, compliance to rules and regulations, firm size, firm internal factors, acknowledgment of potential benefits of SCRM, emergence of new business trends, occurrence of risk events, vulnerabilities of SME and customers’ pressures.
- Barriers indicate the factors that limit a company from implementing a purely formalized approach of SCRM implementation which includes lack

of knowledge, negative attitude, difficulties, time consuming, lack of industry accepted model or guidelines, expensive and etc.



**Figure 1.1** : Continuum of risk management approach

## REFERENCES

- Aabo, T., Fraser, J. R., & Simkins, B. J. (2005). The Rise and Evolution of the Chief Risk Officer: Enterprise Risk Management at Hydro One. *Journal of Applied Corporate Finance*, 17(3), 18-31.
- Abdullah, N. A., Zakuan, N., Khayon, M., Ariff, M. S., Bazin, M. E., & Saman, M. Z. (2012). Adoption of Enterprise Risk Management Practices in Organization: A Review. *International Journal of Business and Information Technology*, 2(1), 1-9.
- Ab Rahman, M. N., Ismail, A. R., Dero, B. M., & Rosli, M. E. (2008). Barriers to SCM Implementing. *Journal of Achievements in Materials and Manufacturing Engineering*, 31(2), 719-724.
- Abbott, J. P. (2003). *Developmentalism and Dependency in Southeast Asia: The Case of the Automotive Industry*. London: RoutledgeCurzon.
- Abor, J., & Adjasi, C. K. (2007). Corporate Governance and the Small and Medium Enterprises Sector: Theory and Implications. *Corporate Governance*, 7(2), 111-122.
- Adnan, H. (2008). Risk Management in Design and Build on Construction Projects in Malaysia. *International Conference on Construction and Build Technology* (pp. 39-50). Kuala Lumpur: IACT.
- AIAG. (2004, September). AIAG Offers Training To Prevent Supply Chain Disruption. *Quality Progress*, 37(9), p. 23.
- Akintoye, A. S., & MacLeod, M. J. (1997). Risk Analysis and Management in Construction. *International Journal of Project Management*, 15(1), 31-38.
- Akintoye, A., McIntosh, G., & Fitzgerald, E. (2000). A Survey of Supply Chain Collaboration and Management in the UK Construction Industry. *European Journal of Purchasing & Supply Management*, 6, 159-168.
- Akroush, M. N., Dahiyat, S. E., Gharaibeh, H. S., & Abu-Lail, B. N. (2011). Customer Relationship Management Implementation: An Investigation of a Scale's Generalizability and its Relationship with Business Performance in a Developing Country Context. *International Journal of Commerce and Management*, 21(2), 158-191.

- Alderman, J., & Lewis, S. J. (1995). Essential Elements Of A Formal Risk Management Program. *Offshore Technology Conference. 1*, pp. 119-126. Houston, Texas: Offshore Technology Conference.
- Alhojailan, M. I. (2012). Thematic Analysis: A Critical Review of its Process and Evaluation. *West East Institute International European Academic Conference* (pp. 8–21). Zagreb, Croatia: West East Institute.
- Altinay, L., & Paraskevas, A. (2008). *Planning Research in Hospitality and Tourism*. Oxford: Elsevier Ltd.
- Altuntas, M., Berry-Stolzle, T. R., Hoyt, R. E. (2011). Implementation of Enterprise Risk Management: Evidence from the German Property-Liability Insurance Industry, *The Geneva Papers*, 36, 414-439.
- Ana Sakura Zainal Abidin, Rosnah Mohd. Yusuff, Nooh Abu Bakar, Mohd. Azni Awi, Norzima Zulkifli, & Rasli Muslimen. (2013). Vendors' Design Capabilities Enabler Towards Proton Internationalization Strategy. In S.-l. Ao, & L. Gelman (Eds.), *Electrical Engineering and Intelligent Systems* (pp. 285-300). New York: Springer Science Business Media.
- Ancarani, A., & Di Maro, C. (2012). The Human Sides of Supply Chains: A Behavioral Perspective of Supply Chain Risk Management. In P. Evangelista, A. McKinnon, E. Sweeney, & E. Esposito (Eds.), *Supply Chain Innovation for Competing in High Dynamic Markets: Challenges and Solutions*. Hershey, PA: ICI Global.
- Andersson, R. (2008). Lean Six Sigma – A Way to Make the Supply Chain Robust and Resilient. *11th International QMOD Conference. 1*. Helsingborg: Emerald Group Publishing.
- Angkiriwang, R., Pujawan, I. N., & Santosa, B. (2014). Managing Uncertainty Through Supply Chain Flexibility: Reactive vs. Proactive Approaches. *Production & Manufacturing Research: An Open Access Journal*, 2(1), 50-70.
- Atkinson, W. (2006). Supply Chain Management: New Opportunities for Risk Managers. *Risk Management*, 53(6), 10-15.
- Autoworld. (2011, March 22). Proton Comments on Japan Earthquake. *Autoworld.com*.
- Azevedo, S., Machado, V., Barroso, A., & Cruz-Machado, V. (2008). Supply Chain Vulnerability: Environment Changes and Dependencies. *International Journal of Logistics & Transport*, 2(1), 41-55.
- Azhar, S., Ginder, W. C., & Farooqui, R. U. (2008). An Assessment of Risk Management Practices in the Alabama Building Construction Industry. *Proceedings of the 44<sup>th</sup> ASC Annual Conference on CD ROM*. Retrieved from <http://ascpro.ascweb.org/chair/paper/CPRT181002008.pdf>



- Barnes, M., Coulton, L., Dickinson, T., Dransfield, S., Field, J., Fisher, N., et al. (1998). A new approach to performance measurement for small and medium enterprises. *International Conference on Performance Measurement* (pp. 15-17). Cambridge: Cambridge University.
- Barth, S. (2011). *Managerial Perception and Assessment of Catastrophic Supply Chain Risks: An Empirical Study*. Munich: GRIN Publishing.
- Bassey, M. (2005). Three Paradigms of Educational Research. In A. Pollard (Ed.), *Readings for Reflective Teaching*. New York: Continuum.
- BBK/IndustryWeek Study Reveals Concerning Results About Supply Chain Risk Visibility as Economy Recovers. (2013, September 21). *Journal of Transportation*, p. 58.
- Bennett, S. P., & Kailay, M. P. (1992). An Application of Qualitative Risk Analysis to Computer Security for the Commercial Sector. *Proceedings of 8th IEEE Annual Computer Security Applications Conference* (pp. 64-73). San Antonio, TX: IEEE Computer Society Press.
- Bernamea. (2014, October 7). Car Prices could Drop Post-GST, but Beware of Costly Auto Parts. *The Borneo Post*.
- Bigliardi, B., Bottani, E. (2014). Supply Chain Performance Measurement: A Literature Review and Pilot Study Among Italian Manufacturing Companies. *International Journal of Engineering, Science & Technology*, 6(3), 1-16.
- Bipasha Ahmed. (2010). Not Telling it How it is. In R. Ryan-Flood, & R. Gill (Eds.), *Secrecy and Silence in the Research Process: Feminist Reflections* (pp. 96-104). Oxon: Routledge.
- Blackburn, J. D., Guide, V. D., Souza, G. C., & Van Wassenhove, L. N. (2004). Reverse Supply Chains for Commercial Returns. *California Management Review*, 46(2), 6-22.
- Blackhurst, J. V., Scheibe, K. P., & Johnson, D. J. (2008). Supplier Risk Assessment and Monitoring for the Automotive Industry. *International Journal of Physical Distribution & Logistics Management*, 38(2), 143-165.
- Blaikie, N. (2003). *Analyzing Quantitative Data: From Description to Explanation*. London: Sage Publications, Inc.
- Blaikie, N. (2009). *Designing Social Research* (2nd ed.). Cambridge: Polity Press.
- Bland, B., & Kwong, R. (2011, November 3). Supply Chain Disruption: Sunken Ambitions. *Financial Times*.

- Blome, C., & Schoenherr, T. (2011). Supply Chain Risk Management in Financial Crises—A multiple Case Study Approach. *International Journal of Production Economics*, 134(2011), 43-57.
- Blome, C., Groetsch, V. M., Henke, M., & Tang, C. S. (2012). A Comparative Study of Financial and Operational Measures in the Automotive Industry. In O. Khan, & G. A. Zsidisin (Eds.), *Handbook for Supply Chain Risk Management; Case Studies, Effective Practices and Emerging Trends* (pp. 153-162). Fort Lauderdale: J. Ross Publishing.
- Blos, M. F., Quaddus, M., Wee, H. M., & Watanabe, K. (2009). Supply Chain Risk Management (SCRM): A Case Study on the Automotive and Electronic Industries in Brazil. *Supply Chain Management: An International Journal*, 14(4), 247-252.
- Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Bode, C., & Wagner, S. M. (2009). Risk and security - a logistics service industry perspective. In S. M. Wagner, & C. Bode (Eds.), *Managing Risks and Security: The Safeguard of Long-term Success for Logistics Service Providers* (pp. 1-30). Bern: Haupt.
- Bond, V. J. (2013, April 18). Recall of Airbags Shows Risk of Global Supply Chains. *Automotive News*.
- Bongaerts, J. C., Lau, L., & Yessiva, S. K. (2006). Adoption of Management Systems by Companies According to International Standards – an Overview of the Empirical Literature and a Case Study on Automotive Suppliers in Saxony. *The IMRE Journal*, 1(1).
- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27-40.
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Brown, B., & Held, M. (2011). *Impact of the Disasters in Japan on U.S. Manufacturing Supply Chain*. New York: Deloitte Development LLC.
- Brown, P. A. (2008). A Review of the Literature on Case Study Research. *Canadian Journal for New Scholars in Education*, 1(1), 1-13.
- Bunkley, N. (2011, May 12). Piecing Together a Supply Chain. *New York Times*.
- Busch, J. (2011, September 12). Toyota: Rebuilding and Fortifying a Global Supply Chain - See moreToyota Rebuilding and Fortifying A Global Supply Chain. *Spend Matters*.

- Cachon, G. P., & Olivares, M. (2010). Drivers of Finished-Goods Inventory in the U.S. Automobile Industry. *Management Science*, 56(1), 202–216.
- Canis, B. (2011). *The Motor Vehicle Supply Chain: Effects of the Japanese Earthquake and Tsunami*. Washington, DC: Congressional Research Service.
- Carson, D., Gilmore, A., Perry, C., & Gronhaug, K. (2001). *Qualitative Marketing Research*. London: Sage Publications, Inc.
- Ceryno, P. S., Scavarda, L. F., Klingebiel, K., & Yuzgulec, G. (2013). Supply Chain Risk Management: A Content Analysis Approach. *International Journal of Industrial Engineering and Management*, 4(3), 141-150.
- Chakravarty, V. (2013). Managing a Supply Chain's Web of Risk. *Strategy & Leadership*, 41(2), 39-45.
- Chapman, C., & Ward, S. (2003). *Project Risk Management: Processes, Techniques and Insights* (2nd ed.). West Sussex: John Wiley & Sons, Ltd.
- Chapman, P., Christopher, M., Juttner, U., Peck, H., & Wilding, R. (2002). Identifying and Managing Supply Chain Vulnerability. *Logistics and Transport Focus*, 4(4), 59-64.
- Chenhall, R. H. (2003). Management Control Systems Design Within its Organizational Context: Findings from Contingency-based Research and Directions for the Future. *Accounting, Organizations and Society*, 28, 127–168.
- Cheverton, P., & van der Velde, J. P. (2011). *Understanding the Professional Buyer: What Every Sales Professional Should Know About How the Modern Buyer Thinks and Behaves*. London: Kogan Page Limited.
- Chomsky, N. (1959). Review of Skinner's Verbal Behaviour. *Language*, 35(1), 26-58.
- Chopra, S., & Sodhi, M. S. (2004). Managing Risk to Avoid Supply-Chain Breakdown. *MIT Sloan Management Review*, 46(1), 53-61.
- Choudry, R. M., & Iqbal, K. (2013). Identification of Risk Management System in Construction Industry in Pakistan. *Journal of Management in Engineering*, 29, 42-49.
- Christopher, M., & Peck, H. (2004). Building the Resilient Supply Chain. *The International Journal of Logistics Management*, 15(2), 1-13.
- Civcisa, G., & Grislis, A. (2014). ISO/TS 16949 among Latvian Production Companies Focused on Automotive Industry. *Agronomy Research*, 12(1), 255–262.
- Clark, D., & Takahashi, Y. (2011, March 12). Quake Disrupts Key Supply Chains. *Wall Street Journal*.
- Clarke, T., & Klettner, A. (2009). Governance Issues for SMEs. *Journal of Business Systems, Governance and Ethics*, 4(4), 23-40.

- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed.). New York: Routledge.
- Collier, P. M., & Agyei-Ampomah, S. (2008). *Management Accounting: Risk and Control Strategy*. Oxford, UK: Elsevier Ltd.
- Collier, P. M., Berry, A. J., & Burke, G. T. (2007). *Risk and Management Accounting: Best Practice Guidelines for Enterprise-wide Internal Control Procedures*. Oxford: Elsevier.
- Colquitt, L. L., Hoyt, R. E., & Lee, R. B. (1999). Integrated Risk Management and the Role of Risk Manager. *Risk Management and Insurance Premium*, 2(3), 43-61.
- Committee of Sponsoring Organizations of the Treadway Commission. (2004). *Enterprise Risk Management: Integrated Framework*. Jersey City, NJ: American Institute of Certified Public Accountants.
- Cook, T. A. (2011). *Mastering Purchasing Management for Inbound Supply Chains*. New York: Taylor & Francis Group, LLC.
- Cooney, S. (2008). Comparing Automotive and Steel Industry Legacy Cost Issue. In E. P. Loeffton (Ed.), *Emerging Business Issues* (pp. 83-100). New York: Nova Science Publishers, Inc.
- Cooper, D., & Grinder, B. (2009, Winter). Probability, Gambling and the Origins of Risk Management. *Financial History*(93), pp. 10-11.
- aellec, H. (2009). The Practice of Risk Management: Silence in not Absence. *Risk Management*, 11(3-4), 285–304.
- Craighead, C. W., Blackhurst, J., Rungtusanatham, M. J., & Handfield, R. B. (2007). The Severity of Supply Chain Disruptions: Design Characteristics and Mitigation Capabilities. *Decision Sciences*, 38(1), 131-156.
- Crawford, I. M. (1997). *Marketing Research and Information Systems*. Rome: Food and Agriculture Organization of the United Nations.
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Crotea, A. M., & Li, P. (2009). Critical Success Factors of CRM Technological Initiatives. *Canadian Journal of Administrative Sciences*, 20(1), 21-34.
- Dalla, R. L. (2006). *Exposing the "Pretty Women" Myth: A Qualitative Investigation of Stree-Level Prostituted Women*. Oxford: Lexington Books.
- D'Angelo, F., & Neto, J. A. (2008). The Lean Production Paradigm and the Influence of Automakers in the Industrial Organisation of Their Suppliers: The Case of the Brazilian Automotive Complex. *International Journal of Automotive Technology and Management*, 8(3), 254-269.

- Darke, P., Shanks, G., & Broadbent, M. (1998). Successfully Completing Case Study Research: Combining Rigour, Relevance and Pragmatism. *Information Systems Journal*, 8, 273-289.
- Das, T. K., & Teng, B. S. (2001). Trust, Risk and Control in Strategic Alliances: An Interated Framework. *Organization Studies*, 22(2), 251-283.
- Davenport, E. W., & Bradley, L. M. (2001). *Enterprise risk management: A consultative perspective*. Retrieved July 9, 2012, from <http://www.casact.net/pubs/dpp/dpp00/00dpp23.pdf>
- Davis, K. A. (1995). Qualitative Theory and Methods in Applied Linguistics Research. *TESOL Quarterly*, 29, 427-453.
- Dermer, J. (1977). *Management Planning and Control Systems: Advanced Concepts and Cases*. Homewood, Illinois: Irwin.
- Desender, K. (2007). On the Determinants of Enterprise Risk Management Implementation. *IRMA International Conference* (pp. 115-118). Vancouver, Canada: Information Resources Management Association.
- Deshpande, A. (2012). Supply Chain Management Dimensions, Supply Chain Performance and Organizational Performance: An Integrated Framework. *International Journal of Business and Management*, 7(8), 2-19.
- Dey, A. (2002). *The Impact of AFTA on the ASEAN Automotive Industry*. Kuala Lumpur: Frost & Sullivan Market Insight.
- Dickinson, G. (2001). Enterprise Risk Management: Its Origins and Conceptual Foundation. *The Geneva Papers on Risk and Insurance*, 26(3), 360-366.
- Dobson, P. J. (1999). Approaches to theory use in interpretive case studies—a critical realist perspective. *10th Australasian Conference on Information System* (pp. 259-270). Wellington, NZ: Emerald Group Publishing Limited.
- Dowling, M. (2004). Hermeneutics: An Exploration, *Nurse Researcher*, 1(4), 30 - 39.
- Drew, M. (2007). Information Risk Management and Compliance — Expect the Unexpected. *BT Technology Journal*, 25(1), 19-29.
- Ee, P. L., & Keng, S. (2003). *Advances in Mobile Commerce Technologies*. Hershey, PA: Idea Group, Inc.
- Ehrich, L. (2005). Revisiting phenomenology: its potential for management. In *Proceedings Challenges or organisations in global markets, British Academy of Management Conference* (pp. 1-13). Oxford: Said Business School, Oxford University.

- Elahi, E. (2013). Risk Management: The Next Source of Competitive Advantage. *Foresight : the Journal of Futures Studies, Strategic Thinking and Policy*, 15(2), 117-131.
- Elkington, P., & Smallman, C. (2002). Managing Project Risks: A Case Study from the Utilities Sector. *International Journal of Project Management*, 20(2002), 49-57.
- Ellegaard, C. (2008). Supply Risk Management in a Small Company Perspective. *Supply Chain Management: An International Journal*, 13(6), 425-434.
- Elo, S., & Kyngas, H. (2008). The Qualitative Content Analysis Process. *Journal of Advanced Nursing*, 62, 107-115.
- Ericson, R. V. (2006). Ten Uncertainties of Risk-Management Approaches to Security. *Canadian Journal of Criminology and Criminal Justice*, 48(3), 345-357.
- Fawcett, S. E., & Magnan, G. M. (2002). The Rhetoric and Reality of Supply Chain Integration. *International Journal of Physical Distribution and Logistics Management*, 32(5), 339-361.
- Fiala, P. (2005). Information Sharing in Supply Chains. *Omega*, 33, 419 – 423.
- Finch, P. (2004). Supply Chain Risk Management. *Supply Chain Management: An International Journal*, 9(2), 183-196.
- Fisher, M. L. (1997). What is the Right Supply Chain for your Product? *Harvard Business Review*, 75, 105-116.
- Fletcher, M., & Plakoyiannaki, E. (2011). Case Selection in International Business: Key Issues and Common Misconceptions. In R. Piekkari, & C. Welch (Eds.), *Rethinking The Case Study In International Business And Management Research*. Glos, UK: Edward Elgar Publishing Limited.
- Fluery, A. (1999). The Changing Pattern of Operations Management in Developing Countries: The Case of Brazil. *International Journal of Operations & Production Management*, 19(5/6), 552-564.
- Foley, M. A. (2014). *Hidden in Plain Sight: Manager-Employee Social Engagement Strategies* (Unpublished doctoral dissertation). Victoria University of Wellington, New Zealand.
- Franceschini, G., Galetto, M., Maisano, D., & Mastrogiacomo, L. (2011). ISO/TS 16949: Analysis of the Diffusion and Current Trends. *The Institution of Mechanical Engineers. Part B, Journal of Engineering Manufacture*. 225, pp. 735-745. Sage.
- Francis, A., & Skitmore, M. (2005). Risk Management within the Electrical Distribution Supply Industry in South East Queensland. *Journal of Financial Management of Property and Construction*, 10(1), 45-53.

- Freimut, B., Hartkopf, S., Kaiser, P., Kontio, J., & Kobitzsch, W. (2001). An Industrial Case Study of Implementing Software Risk Management. *8th European Software Engineering Conference* (pp. 277-287). Vienna, Austria: ACM.
- Frohlich, M. T., & Westbrook, R. (2001). Arcs of Integration: An International Study of Supply Chain Strategies. *Journal of Operations Management*, *19*, 185-200.
- Gastrow, M. (2012). A Review of Trends in the Global Automotive Manufacturing Industry and Implications for Developing Countries. *African Journal of Business Management*, *6*(19), 5895-5905.
- Geddes, D. A. (2013). *A Phenomenological Study of the Influence of Middle Level Management on upward Feedback in a Service Organization* (Unpublished master dissertation). Curtin University.
- Ghadge, A., Dani, S., & Kalawsky, R. (2012). Supply Chain Risk Management: Present and Future Scope. *International Journal of Logistics Management*, *23*(3), 313-339.
- Gill, M. (2014). The Possibilities of Phenomenology for Organizational Research. *Organizational Research Methods*, *17*(2), 118-137.
- Giorgi, A. (2009). *The Descriptive Phenomenological Method in Psychology: A Modified Husserlian Approach*. Pittsburgh, PA: Duquesne University Press.
- Giunipero, L. C., & Eltantawy, R. A. (2004). Securing the Upstream Supply Chain: A Risk Management Approach. *International Journal of Physical Distribution and Logistics Management*, *34*(9), 698-713.
- Glaser, B. G. (1998). *Doing Grounded Theory: Issues and Discussion*. Mill Valley, CA: Sociology Press.
- Global Supply Chain Risk Is Concentrated and Concealed in Sub-tier Suppliers. (2013, August 19). *SDCExec.com*.
- Giunipero, L. C., & Percy, D. H. (2000). World-Class Purchasing Skills: An Empirical Investigation. *Journal of Supply Chain Management*, *36*(4), 4-13.
- Goel, S. (2009). *Crisis Management: Master the Skills to Prevent Disasters*. New Delhi: Global India Publication Pvt. Ltd.
- Goh, S. K., & Hui, M. L. (2010). *The Impact of Global Financial Crisis: The Case of Malaysia*. Penang: Third World Network.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, *8*(4), 597-607.
- Golshan, N. M., & Rasid, S. Z. (2012). Determinants of Enterprise Risk Management Adoption: An Empirical Analysis of Malaysian Public Listed Firms. *International Journal of Social and Human Sciences*, *6*, 119-126.

- Goodstein, L. D., Nolan, T. M., & Pfeiffer, J. W. (1993). *Applied Strategic Planning: A Comprehensive Guide*. USA: McGraw-Hill Inc.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness. *Nurse Education Today*, 24, 105-112.
- Gray, C., & Mabey, C. (2005). Management Development: Key Differences between Small and Large Businesses in Europe. *International Small Business Journal*, 23(5), 467–485.
- Greene, M. R. (1963). Attitude Toward Risks and a Theory of Insurance Consumption. *Journal of Risk and Insurance*, 30(2), 165-182.
- Grix, J. (2004). *The Foundations of Research*. London: Palgrave MacMillan.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. Denzin, & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research*. Thousand Oaks: Sage Publications.
- Guest, G. (2015). Sampling and Selecting Participants in Field Research. In H. R. Bernard, & C. C. Gravlee (Eds.), *Handbook of Methods in Cultural Anthropology* (pp. 215-250). London: Rowman & Littlefield.
- Gupta, P. K. (2011). Risk Management in Indian Companies: EWRM Concerns and Issues. *The Journal of Risk Finance*, 12(2), 121-139.
- Gupta, S., Meng, F., Goh, M., & de Souza, R. (2012). Understanding Supply Chain Risk Management: An In-depth Analysis. In M. Garg, & S. Gupta (Eds.), *Cases on Supply Chain and Distribution Management: Issues and Principles* (pp. 349-372). Hershey: IGI Global.
- Hallikas, J., Karvonen, I., Pulkkinen, U., Virolainen, V.-M., & Tuominen, M. (2004). Risk Management Processes in Supplier Networks. *Int. J. Production Economics*, 90, 47–58.
- Hammister, J. W. (2012). Supply Chain Management Practices in Small Retailers. *International Journal of Retail & Distribution Management*, 40(6), 427 - 450.
- Hancock, B. (1998). *An Introduction to Qualitative Research*. Nottingham, UK: Trent Focus Groups.
- Harland, C. M. (1996). Supply Chain Management: Relationships, Chains and Networks. *British Journal of Management*, 7(1), 63-80.
- Harland, C., Brenchley, R., & Walker, H. (2003). Risk in Supply Networks. *Journal of Purchasing and Supply Management*, 9(2003), 51-62.



- Harland, C., Powell, P., Caldwell, N., Zheng, J., Woerndl, M., & Xu, S. (2003). Supply Network Risks Arising from e-Business: Findings from Empirical Research. *19th IMP-conference*. Lugano: IMP Group.
- Harrington, L. (2013). *Lean and Resilient: The New Automotive Supply Chain Hybrid*. Ohio: DHL Supply Chain Limited.
- Hasli Hassan, & Jomo, K. S. (2007). Rent-Seeking and Industrial Policy in Malaysia. In K. S. Jomo (Ed.), *Malaysian Industrial Policy*. Singapore: NUS Press.
- Hassan Naziri Khalid, Mohd Asri Abdullah, Abdul Aziz Abdul Latif, Aziz Abdul Majid, Katsumi, S., Watanabe, A., et al. (2006). *Small and Medium Industries and Their Linkages with Large Firms in Malaysian Automobile Industries*. Penang: Universiti Sains Malaysia.
- Hassard, J. (1993). *Sociology and Organization Theory: Positivism, Paradigms and Postmodernity*. Cambridge: Cambridge University Press.
- Hawkes, A. (2007, November 22). When Four Become One. *Accountancy Age*, p. 8.
- Hays, D. G., & Singh, A. A. (2012). *Qualitative Inquiry in Clinical and Educational Settings*. New York: The Guilford Press.
- Henriksen, P., & Uhlenfeldt, T. (2006). Contemporary Enterprise-Wide Risk Management Framework: A Comparative Analysis in a Strategic Perspective. In T. J. Andersen (Ed.), *Perspectives on Strategic Risk Management* (pp. 107-130). Denmark: Copenhagen Business School Press.
- Henschel, T. (2008). *Risk Management Practice of SMEs: Evaluating and Implementing Effective Risk Management Systems*. Berlin: Erich Schmidt Verlag GmbH & Co.
- Henschel, T., & Goa, S. (2010). Risk Management Practices of Scottish, Chinese and German Small and Medium-Sized Enterprises: A Cross-Country Study. *55th Annual World Conference of the International Council for Small Business*. Cincinnati.
- High-Profile Recalls Prompt a Hard Look at Supply Chain Risk Management Tactics. (2007, September). *Manufacturing Business Technology*, 25(9).
- Hill, R., & Stewart, J. (2000). Human Resource Development in Small Organizations. *Journal of European Industrial Training*, 24(2-3-4), 105-117.
- Hillson, D. A. (1997). Towards A Risk Maturity Model. *The International Journal of Project and Business Management*, 1(1), 35-45.
- Hintze, J. (2011, February). Best Friends Forever: Companies Realize Their Success Is Firmly Bonded To Their Suppliers' Solvency And Capacity To Ramp Up Quickly, So They Seek New Ways To Analyze Supply Chain Risk. *Treasury & Risk*.

- Hirschman, E. C. (1986). Humanistic Inquiry in Marketing Research: Philosophy, Method and Criteria. *Journal of Marketing Research*, 23, 237–249.
- Hitchcock, G., & Hughes, D. (1989). *Research and the Teacher*. London: Routledge.
- Hodkinson, P., & Hodkinson, H. (2001). The Strengths and Limitations of Case Study Research. *Learning and Skills Development Agency Conference*. Cambridge: Learning and Skills Development Agency.
- Hoffman, M. A. (2010). ERM Basics Same Across Sectors. *Business Insurance*, 44(41), 11-14.
- Hopkin, P. (2010). *Fundamentals of Risk Management: Understanding, Evaluating and Implementing Effective Risk Management*. Great Britain: Kogan Page Limited.
- Howe, K. (1988). Against the Quantitative-Qualitative Incompatibility Thesis or Dogmas Die Hard. *Educational Researcher*, 17(8), 10-16.
- Huber, B., & Sweeney, E. (2007). The Need for Wider Supply Chain Management Adoption: Empirical Results from Ireland. *Supply Chain Management: An International Journal*, 12(4), 245-248.
- Honda Risk Management*. (2014). Retrieved December 10, 2014, from Honda: [http://world.honda.com/CSR/governance/risk\\_management/](http://world.honda.com/CSR/governance/risk_management/)
- Humphrey, J., & Memodovic, O. (2003). *The Global Automotive Industry Value Chain: What Prospects for Upgrading by Developing Countries?* Vienna: United Nations Industrial Development Organization.
- Hunt, S. D. (2001). Positivism and Paradigm Dominance in Consumer Research: Toward Critical Pluralism and Rapprochement. *Journal of Consumer Research*, 18, 32-44.
- Jamaluddin bin Muhammad. (2011, October 17). Malaysian Auto Parts Plant Saves Some Equipment From Floods. *Bernama*.
- Jarrett, R. J. (1997). Should we Screen for Gestational Diabetes? *British Medical Journal*, 315(7), 736-737.
- Jeffreys, A. (Ed.). (2011). *The Report: Malaysia 2011*. Oxford: Oxford Business Group.
- Joffe, H., & Yardley, L. (2004). Content and Thematic Analysis. In D. F. Marks, & L. Yardley (Eds.), *Research Methods for Clinical and Health Psychology* (pp. 56-68). Thousand Oaks, CA: Sage Publications, Ltd.
- Johl, S., & Renganathan, S. (2010). Strategies for Gaining Access in Doing Fieldwork: Reflection of Two Researchers. *The Electronic Journal of Business Research Methods*, 8(1), 42-50.
- Johns, N., & Lee-Ross, D. (1998). *Research Methods in Service Industry Management*. London: Thompson Learning.

- Johnson, B., & Christensen, L. B. (2012). *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (4th ed.). Thousand Oaks: Sage Publications, Inc.
- Johnston, W. J., Leach, M. P., & Liu, A. H. (1999). Theory Testing Using Case Studies in Business-to-Business Research. *Industrial Marketing Management*, 28, 201–213.
- Jomo, K. S. (1994). The Proton Sage: Malaysian Car, Mitsubishi Gain. In K. S. Jomo (Ed.), *Japan and Malaysian Development: In the Shadow of the Rising Sun* (p. 263). London: Routledge.
- Jones, C. (2013, May 7). Companies Seen as 'Wide Open' to Supply Chain Risks. *Financial Times*, p. 4.
- Juttner, U. (2005). Supply Chain Risk Management: Understanding the Business Requirements from Practitioner Perspective. *The International Journal of Logistics Management*, 16(1), 120-141.
- Juttner, U., & Maklan, S. (2011). Supply Chain Resilience in Global Financial Crisis: An Empirical Study. *Supply Chain Management: An International Journal*, 16(4), 246-259.
- Juttner, U., & Zeigenbein, A. (2009). Supply Chain Risk Management for Small and Medium-Sized Businesses. In G. A. Zsidisin, & B. Ritchie (Eds.), *Supply Chain Risk: A Handbook of Assessment, Management, and Performance* (pp. 199-216). New York: Springer Science+Business Media, LLC.
- Juttner, U., & Ziegenbein, A. (2009). Supply Chain Risk Management for Small and Medium-Sized . In G. A. Zsidisin, & B. Ritchie, *Supply Chain Risk: A Handbook of Assessment, Management, and Performance* (pp. 199-216). New York: Springer Science+Business Media.
- Juttner, U., Christopher, M., & Baker, S. (2007). Demand Chain Management-Integrating Marketing and Supply Chain Management. *Industrial Marketing Management*, 36(3), 377-392.
- Juttner, U., Peck, H., & Christopher, M. (2003). Supply Chain Risk Management: Outlining and Agenda for Future Research. *International Journal of Logistics: Research & Applications*, 6(4), 197-210.
- Kallenberg, K. (2009). Operational Risk Management in Swedish Industry: Emergence of a New Risk Paradigm? *Risk Management*, 11(2), 90-110.
- Kassim M. Mohammed. (2014). Training to Manage Risk: Focusing on the Essential. *Journal of Advanced Management Science*, 2(1), 1-6.

- Kauppi, K. (2013). Extending the Use of Institutional Theory in Operations and Supply Chain Management Research: Review and Research Suggestions. *International Journal of Operations & Production Management*, 13(10), 1318-1345.
- Keenan, G. (2011, December 27). After a Year of Disasters, Japan's Auto Sector Fights Back. *The Globe and Mail*.
- Kersten, W., & Wente, I. M. (2012). Reactive Versus Proactive Supply Chain Risk Management- An Exploratory Study in Automotive Industry. In W. Kersten, T. Blecker, & C. M. Ringle (Eds.), *Managing the Future Supply Chain: Current Concepts and Solutions for Reliability and Robustness* (pp. 87-100). Lohmar: Josef Eul Verlag.
- Kersten, W., Held, T., Meyer, C. M., & Hohrath, P. (2006). Komplexitäts- und Risikomanagement als Methodenbausteine des Supply Chain Management. In I. Hasladen, & C. Maunch (Eds.), *Management am Puls der Zeit. Strategien, Konzepte und Methoden*. Munich: Tcw Transfer-Centrum Verlag.
- Kersten, W., Hohrath, P., & Böger, M. (2007). An Empirical Approach to Supply Chain Risk Management: Development of a Strategic Framework . *Technology*, 1-20.
- Kim, H.-Y., & McCann, P. (2013). Supply Chains and Locational Adjustment in the Global Automotive Industry. In A. Beer, & H. Evans (Eds.), *The Impacts of Automotive Plant Closure: A Tale of Two Cities* (p. 9). Oxon: Routledge.
- Kirchhoff, S. M. (2010). The U.S. Newspaper Industry in Transition. *Journal of Current Issues in Media and Telecommunications*, 2(1), 27-51.
- Kleindorfer, P. R., & Saad, G. H. (2005). Managing Disruption Risks in Supply Chains. *Production and Operations Management*, 14(1), 53-68.
- Klenke, K. (2008). *Qualitative Research in the Study of Leadership*. Bingley: Emerald Group Publishing Limited.
- Koh, S. C., Demirbag, M., Bayraktar, E., Tatoglu, E., & Zaim, S. (2007). The Impact of Supply Chain Management Practices on Performances of SMEs. *Industrial Management & Data Systems*, 107(1), 103-124.
- Kumar, M. (2013). Adoption of Lean Manufacturing in Indian Automotive Industry: An Analysis. *The IUP Journal of Mechanical Engineering*, VI(2), 15-42.
- Kumar, P., & Holmes, J. (1998). The Impact of NAFTA on the Auto Industry in Canada. In S. Weintraub, & C. Sands (Eds.), *The North American Auto Industry Under NAFTA* (Vol. XX, p. 92). Washington, DC: The Center for Strategic and International Studies.
- Lambert, D. M. (2008). *Supply Chain Management: Processes, Partnerships, Performance* (3rd Edition ed.). Sarasota: Supply Chain Management Institute.

- Lavastre, O., Gunasekaran, A., & Spalanzani, A. (2012). Supply Chain Risk Management in French Companies. *Decision Support Systems*, 52(2012), 828–838.
- Laverty, S. M. (2003). Hermeneutic Phenomenology and Phenomenology: A Comparison of Historical and Methodological Considerations, *International Journal of Qualitative Methods*, 2(3), 21-35.
- Laws, K., & McLeod, R. (2004). Case Study and Grounded Theory: Sharing Some Alternative Qualitative Research Methodologies with Systems Professionals. *Proceedings of the 22<sup>nd</sup> Internal Conference of Systems Dynamics Society*. Oxford, UK: Keble College
- LeCompte, M. (2000). Analyzing Qualitative Data. *Theory into Practice*, 39(3), 146-154.
- Lester, S. (1999). *An Introduction to Phenomenological Research*. Taunton, UK: Stan Lester Developments.
- Lethbridge, T. C., Sim, S. E., & Singer, J. (2005). Studying Software Engineers: Data Collection Techniques for Software. *Empirical Software Engineering*, 10(3), 311-341.
- Li, M., Pitts, B. G., & Quarterman, J. (2008). *Research Methods in Sports Management*. Morgantown, WV: Fitness Information Technology.
- Lichtman, M. (2013). *Qualitative Research in Education: A User's Guide* (3rd ed.). Thousand Oaks: Sage Publications, Inc.
- Lim, M. (2012). *Market Watch 2012: The Malaysian Automotive and Supplier Industry*. Kuala Lumpur: Malaysian-German Chamber of Commerce & Industry.
- Lin, A. C. (1998). Bridging Positivist and Interpretivist Approaches to Qualitative Methods. *Policy Studies Journal*, 26(1), 162-180.
- Lincoln, Y. S., & Guba, E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- Lo, S. M. (2013). Effects of Supply Chain Position on the Motivation and Practices of Firms Going Green. *International Journal of Operations & Production Management*, 34(1), 93-114.
- Lockamy III, A., & McCormack, K. (2012). Modeling Supplier Risks Using Bayesian Networks. *Industrial Management & Data System*, 112(2), 313-333.
- Lodree Jr., E., & Taskin, S. (2008). An Insurance Risk Management Framework for Disaster Relief and Supply Chain Disruption Inventory Planning. *Journal of the Operational Research Society*, 2008(59), 674-684.
- Loppacher, J. S., Cagliano, R., & Spina, G. (2010). Key Factors in Global Supply Headquarters-Subsidiary Control Systems. *Journal of Manufacturing Technology Management*, 21(7), 794 - 817.

- Luczak, J. (2013). Problem-Solving and Developing Quality Management Methods and Techniques on the Example of the Automotive Industry. *Bulletin of Dnipropetrovsk University*, 7(3), 20-29.
- Lummus, R. R., & Vokurka, R. J. (1999). Defining Supply Chain Management: A Historical Perspective and Practical Guidelines. *Industrial Management & Data Systems*, 11-17.
- Lynch, G. S. (2009). *Single Point of Failure: The 10 Essential laws of Supply Chain Risk Management*. Hoboken, NJ: John Wiley & Sons, Inc.
- MacGillivray, B. H., Sharp, J. V., Strutt, J. E., Hamilton, P. D., & Pollard, S. J. (2007). Benchmarking Risk Management Within the International Water Utility Sector. Part II: A Survey of Eight Water Utilities. *Journal of Risk Research*, 10(1), 105-123.
- Mack, L. (2010). The Philosophical Underpinnings of Educational Research. *Polyglossia*, 19, 5-11.
- MacKenzie, N., & Knipe, S. (2006). Research Dilemmas: Paradigms, Methods and Methodology. *Issues In Educational Research*, 16(2), 193-205.
- Mackey, A., & Gass, S. M. (2005). *Second Language Research: Methodology and Design*. New Jersey: Lawrence Erlbaum Associates, Inc.
- MacNamee, M., & Perera, S. (2010). The Practice of Risk Management by Cost Consultants in Northern Ireland. *RICS COBRA Research Conference*. Dauphine Universite Paris, 2-3 September, ISBN 978-1-84219-619-9.
- Manuj, I., & Mentzer, J. T. (2008). Global Supply Chain Risk Management. *International JOurnal of Physical Distribution and Logistics Management*, 38(3), 192-223.
- Manzouri, M., Mohd Nizam Ab Rahman, Haslina Arshad, & Ahmad Rasdan Ismail. (2010). Barriers of Supply Chain Management Implementation in Manufacturing Companies: a Comparison between Iranian and Malaysian Companies. *Journal of the Chinese Institute of Industrial Engineers*, 27(6), 456-472.
- Marchese, K. (2013). *The Ripple Effect: How Manufacturing and Retail Executives View the Growing Challenge of Supply Chain Risk*. New York: Deloitte Development LLC.
- Mariampolski, H. (2001). *Qualitative Market Research: A Comprehensive Guide*. Thousand Oaks, CA: Sage Publications, Inc.
- Matthison, S. (1988). Why Triangulate? *Educational Researcher*, March, 13-17.
- Matua, G. A., & Van der Wal, D. M. (2015). Differentiating between Descriptive and Interpretive Phenomenological Research Approach. *Nurse Research*, 22(6), 22-27.

- Maxwell, J. A. (1996). *Qualitative Research Design: An Interactive Approach* (Vol. 41). Thousand Oaks, California: Sage Publications, Inc.
- Maxwell, J. A. (2005). *Qualitative Research Design: An Interactive Approach* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Mayring, P. (2000). Qualitative Content Analysis. *Forum: Qualitative Social Research*, 1(2), Art. 20, Available at <http://www.qualitative-research.net/index.php/fqs/article/view/1089>.
- McDonald, C. (2010, June 9). Firms Going Global Often Overlook Supply Chain Risks. *National Underwriter*, 114(31), pp. 21-22.
- McKeown, T. J. (1999). Case Studies and the Statistical Worldview: Review of King, Keohane, and Verba's *Designing Social Inquiry: Scientific Inference in Qualitative Research*. *International Organization*, 53(1), 161-190.
- McLaren, T., Head, M., & Yuan, Y. (2002). Supply Chain Collaboration Alternatives: Understanding the Expected Costs and Benefits. *Internet Research: Electronic Networking Applications and Policy*, 12(4), 348-364.
- Malaysia: Business and Opportunities Investment Yearbook* (6th ed.). (2008). Washington: International Business Publications, USA.
- Mehra, B. (2002). Bias in Qualitative Research: Voices from an Online Classroom. *The Qualitative Report*, 7(1), Retrieved May 30, 2013 from, <http://www.nova.edu/ssss/QR/QR7-1/mehra.html>.
- Merna, T., & Al-Thani, F. F. (2011). *Corporate Risk Management* (2nd Edition ed.). Hoboken, New Jersey: John Wiley & Sons, Inc.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education* (2nd ed.). San Francisco: Jossey-Base Publishers.
- Meyr, H. (2009). Supply Chain Planning in the German Automotive Industry. In H.-O. Günther, & H. Meyr (Eds.), *Supply Chain Planning: Quantitative Decision Support and Advanced Planning Solutions* (pp. 343-366). Heidelberg: Springer-Verlag Berlin Heidelberg.
- Migiro, S. O., & Ambe, I. M. (2008). Evaluation of the Implementation of Public Sector Supply Chain Management and Challenges: A Case Study of the Central District Municipality, North West Province, South Africa. *African Journal of Business Management*, 2(12), 230-242.
- Mikecz, R. (2012). Interviewing Elites : Addressing Methodological Issues. *Qualitative Inquiry*, 18(6), 482–493.
- Miles, M. B., & Huberman, A. M. (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. Newbury Park: Sage Publications.

- Mills, A. J. (2010). *Encyclopedia of Case Study Research* (Vol. I). Thousand Oaks, CA: Sage Publications, Inc.
- MITI. (2004). Signing Ceremony of MOU between SMIDEC, AFM, JAMA & JAPIA on the Technical Experts Programme for the Automotive Industry, MITI, Kuala Lumpur, 1-5.
- Mitroff, I. I., & Alpaslan, M. C. (2003). Preparing for Evil. *Harvard Business Review*, 81(4), 109-115.
- Mohammad Alias, Asmaddy Haris, & Asharaf Mohd Ramli. (2009). Involvement of Bumiputera in the Automotive Supporting Industry: A Critical Evaluation. *Persidangan Kebangsaan Ekonomi Malaysia IV*, 2, pp. 199-207. Kuantan, Pahang.
- Mohan, A. V. (2011). Internal and External Resources for Enhancing Innovation Capabilities – An Exploratory Study based on Cases from Malaysian Automotive Sector. In P. Intarakumnerd (Ed.), *How to Enhance Innovation Capability with Internal and External Sources* (pp. 105-149). Jakarta: ERIA.
- Mohd Azman Idris, Nor Faridah Ab Aziz, & Salliza Zailee. (2014). The Adoption of Management Systems Standards & Best Practices in Malaysia (Current and Future Trend). *Nang Yan Business Journal*, 1(1), 105–112.
- Mohd Nishat Faisal, Banwet, D. K., & Shankar, R. (2006). Supply Chain Risk Mitigation: Modeling the Enablers. *Business Process Management Journal*, 12(4), 535-552.
- Mohd Rosli. (2006). The Patterns of Subcontracting Arrangements in the Malaysian Automobile Industry. *Studies in Business and Economics*, 12(2), 31-46.
- Monczka, R. M., Handfield, R. B., Guinipero, L. C., Patterson, J. L., & Waters, D. (2010). *Purchasing and Supply Chain Management*. Hampshire: Cengage Learning.
- Mondragon, A. E., Lyons, A. C., Michaelides, Z., & Kehoe, D. F. (2006). Automotive Supply Chain Models and Technologies: A Review of Some Latest Developments. *Journal of Enterprise Information Management*, 19(5), 551-562.
- Montello, D. R., & Sutton, P. C. (2006). *An Introduction to Scientific Research Method in Geography*. Thousand Oaks, CA: Sage Publications, Inc.
- Mudambi, R., & Schrunder, C. P. (1996). Progress towards Buyer-Supplier Partnerships. *European Journal of Purchasing & Supply Management*, 2(3), 119-127.
- Muhammad Farooq Joubish, Muhammad Ashraf Khurram, Aijaz Ahmed, Syeda Tasneem Fatima, & Kamal Haider. (2011). Paradigms and Characteristics of a Good Qualitative Research. *World Applied Sciences Journal*, 12(11), 2082-2087.
- Munson, C. L., & Rosenblatt, M. J. (2001). Coordinating a Three-Level Supply Chain with Quantity Discounts. *IIE Transactions*, 33, 371-384.



- Muralidhar, K. (2010). Enterprise Risk Management in the Middle East Oil Industry: An Empirical Investigation across GCC Countries. *International Journal of Energy Sector Management*, 4(1), 59-86.
- Murphy, P. R., & Wood, D. (2011). *Contemporary Logistics* (10th ed.). New Jersey: Prentice Hall.
- Murphy, S. (2010, March 1). Managing Risk: An Interview with Gary Lynch. *Supply Chain Management Review*.
- MFGWatch Survey: Manufacturers Continue To Experience High Levels of Supply Chain Risk, Do Not Add Jobs, Maintain Capacity As Expected. (2010, February 10). *Defense & Aerospace Week*, p. 118.
- Nadia Jamil, Rosli Besar, & Sim, H. K. (2013). A Study of Multicriteria Decision Making for Supplier Selection in Automotive Industry. *Journal of Industrial Engineering*, 2013, 1-22.
- National Research Council. (1989). *Improving Risk Communication*. Washington, DC: National Academy Press.
- Neise, P. (2009). *Managing Quality and Delivery Reliability of Suppliers by Using Incentives and Simulation Models*. Munich: Herbetz Utz Verlag GmbH.
- Neuman, W. L. (1997). The Meaning of Methodology. In W. L. Neuman (Ed.), *Social Research Methods: Qualitative and Quantitative Approaches* (pp. 60-84). Boston: Allyn and Bacon.
- New Strategies Address Supply Chain Risks. (2012, January 30). *Material Handling & Logistics*.
- Norani Nordin, Baba Md Deros, & Dzuraidah Abd Wahab. (2010). A Survey on Lean Manufacturing Implementation in Malaysian Automotive Industry. *International Journal of Innovation, Management and Technology*, 1(4), 374-380.
- Norazian Mohd Yusuwan, Hamimah Adnan, Ahmad Faris Omar, Kamaruzaman Jusoff. (2008). Clients' Perspectives of Risk Management Practice in Malaysian Construction Industry, *Journal of Politics and Law*, 1(3), 121-130.
- Norizah Mohamad. (2008). *Parts suppliers involvement in customer's product development activities*. (Unpublished thesis). Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
- Norlaile Salleh Hudin, & Abu Bakar Abdul Hamid. (2014). Drivers to the Implementation of Risk Management Practices: A Conceptual Framework. *Journal of Advanced Management Science*, 2(3), 163-169.

- Norlaile Salleh Hudin, & Abu Bakar Abdul Hamid. (2015). Supply Chain Risk Management in Automotive Small and Medium Enterprises in Malaysia. *Applied Mechanics and Materials*, 773-774, 799-803.
- Norman, A., & Jansson, U. (2004). Ericsson's Proactive Supply Chain Risk Management Approach After a Serious Sub-Supplier Accident. *International Journal of Physical Distribution and Logistics Management*, 34(5), 434-456.
- N.A. Auto Industry to See Big Supply Chain Bottleneck Within 5 years, Study Warns. (2013, November 12). *Automotive News*.
- Odeyinka, H. A. (2000). An Evaluation of the Use of Insurance in Managing Construction Risks. *Construction Management and Economics*, 18(5), 519-524.
- Okatch, B. A., Mukulu, E., & Oyugi, L. (2011). Constraints to Subcontracting Arrangements between SMEs and Large Firms in the Motor Vehicle Industry in Kenya. *International Journal of Business and Social Science*, 2(15), 208-223.
- Okumus, F., Altinay, L., & Roper, A. (2007). Gaining Access for Research: Reflections from Experience. *Annals of Tourism Research*, 34, 7-26.
- Olson, D. L., & Wu, D. D. (2008). *Enterprise Risk Management: Volume I of Financial Engineering and Risk Management*. Singapore: World Scientific.
- Olson, D. L., & Wu, D. D. (2010). A Review of Enterprise Risk Management in Supply Chain. *Kybernetes*, 39(5), 694-706.
- Orr, D. R., & Heng, A. (2010). A Formal Risk Management Process for Instrumentation Projects at the Anglo-Australian Observatory. *Conference on Modeling, Systems Engineering and Project Management for Astronomy IV*. 77318. San Diego, CA: SPIE- INT SOC Optical Engineering.
- Osborne, J. W. (1994). Some Similarities and Differences Among Phenomenological and Other Methods of Psychological Qualitative Research. *Canadian Psychology*, 35(2), 167-189.
- Ostadi, B., Aghdasi, M., & Kazemzadeh, R. B. (2010). The Impact of ISO/TS 16949 on Automotive Industries and Created Organizational Capabilities from Its Implementation. *Journal of Industrial Engineering and Management*, 3(3), 494-511.
- Otley, D. T. (1980). The Contingency Theory of Management Accounting: Achievement and Prognosis. *Accounting, Organizations and Society*, 5(4), 413-428.
- Oxford Business Group. (2009). *The Report: Malaysia 2008*. London: Oxford Business Group.

- Oxford Business Group. (2015, January 26). *Malaysia Gearing up for Auto Growth*. Retrieved June 27, 2015, from Oxford Business Group Website: <http://www.oxfordbusinessgroup.com/news/malaysia-gearing-auto-growth>
- Ozgener, S., & Iraz, R. (2006). Customer Relationship Management in Small–Medium Enterprises: The Case of Turkish Tourism Industry. *Tourism Management*, 27, 1356–1363.
- Pagach, D., & Warr, R. (2011). The Characteristics of Firms that Hire Chief Risk Officers. *The Journal of Risk and Insurance*, 78(1), 185-211.
- Park, Y. W., Hong, P., & Roh, J. J. (2013). Supply Chain Lessons from the Catastrophic Natural Disaster in Japan. *Business Horizons*, 56, 75-85.
- Patton, M. Q. (1980). *Qualitative Evaluation Methods*. Beverly Hills, CA: Sage.
- Payne, A., & Frow, P. (2005). A Strategic Framework for Customer Relationship Management. *Journal of Marketing*, 69, 167–176.
- Pearson, M. (2012, April). Part I: Insights on Supply Chain Risk. *Logistics Management (Highlands Ranch, Co.)*, 51(4), p. 24.
- Perry, C. (1998). Processes of a Case Study Methodology for Postgraduate Research in Marketing. *European Journal of Marketing*, 32(9/10), 785-802.
- Pezzuto, I. (2010). Miraculous Financial Engineering or Legacy Assets? In R. Kolb (Ed.), *Lessons from the Financial Crisis: Causes, Consequences and Our Economic Future*. Hoboken, NJ: John Wiley & Sons, Inc.
- Pires, S., Weinstock, M., & Andrade, G. (2013). Supply Chain Risk Management in the Brazilian Automotive Industry: A Case Study. *Proceedings of the 18th International Symposium on Logistics* (pp. 177-186). Vienna, Austria: Nottingham University Business School.
- Produk Komponen Boleh Berdaya Saing. (2014, Februari 17). *Utusan Malaysia*.
- Polit, D. E., & Beck, C. T. (2008). *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (8th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Polit, D. F., & Beck, C. T. (2014). *Essentials of Nursing Research: Appraising Evidence for Nursing Practice* (8th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Pollack, A., & Lohr, S. (2011, April 27). A Japanese Plant Struggles to Produce a Critical Auto Part. *The New York Times*.
- Ponomarov, S. Y., & Holcomb, M. C. (2009). Understanding the Concept of Supply Chain Resilience. *The International Journal of Logistics Management*, 20(1), 124-143.
- Potter, L. E., von Hellens, L., & Nielsen, S. (2010). The Practical Challenges of Case Study Research: Lessons from the Field. *5th Conference on Qualitative Research in IT*. Brisbane: QUT, Griffith University and ANU.

- Power, M. (2004). *The Risk Management of Everything: Rethinking the Politics of Uncertainty*. London: Demos.
- Prendergast, G. P., Li, S. S., Li, C. (2014). Consumer Perceptions on Salesperson Gender and Credibility: An Evolutionary Explanation. *Journal of Consumer Marketing*, 31(3), 200-211.
- PROTON. (2006). *PROTON Annual Report 2006*. Shah Alam, Malaysia: PROTON Holdings Berhad.
- PROTON. (2008). *PROTON Annual Report 2008*. Shah Alam, Malaysia: PROTON Holdings Berhad.
- PROTON. (2011). *PROTON Annual Report 2011*. Shah Alam, Malaysia: PROTON Holdings Bhd.
- Punyasavatsut, C. (2008). SMEs in the Thai Manufacturing Industry: Linking with MNES. In H. Lim (Ed.), *SME in Asia and Globalization* (pp. 287-321). Jakarta Pusat: Economic Research Institute for ASEAN and East Asia.
- Rahman, S. (2011). An Exploratory Study of Outsourcing 3PL Services: An Australian Perspective. *Benchmarking: An International Journal*, 18(3), 342 - 358.
- Rajah Rasiah. (2007). Globalization and Malaysian Response. In J.-S. Shin (Ed.), *Global Challenges and Local Responses: The East Asian Experiences*. Oxon: Routledge.
- Rakowski, Tang, C. Y., Kammala, Sorraphetpisai, & Mathur, S. (2010). *Supply Chain and Distribution Management*. Munchen: GRIN Verlag.
- Rashid Abdullah, Maharjan Keshav Lall, & Tatsuo, K. (2008). Supplier Development Framework in the Malaysian Automotive Industry: Proton's Experience. *Int. Journal of Economics and Management*, 2(1), 29-58.
- Rasli Muslimen, Sha'ri Mohd Yusof, & Ana Sakura Zainal Abidin. (2011). Lean Manufacturing Implementation in Malaysian Automotive Components Manufacturer: A Case Study. *Proceedings of the World Congress on Engineering. I*. London, UK: International Association of Engineers.
- Reiners, G. M. (2012). Understanding the Difference between Husserl's (Descriptive) and Heidegger's (Interpretive) Phenomenological Research. *Journal of Nursing & Care*, (1)5, doi:10.4172/2167-1168.1000119
- Renner, M., & Taylor-Powell, E. (2003). *Analysing Qualitative Data*. Madison, Wisconsin: Programme Development & Evaluation, University of Wisconsin-Extension Cooperative Extension.
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). New York: The Free Press.
- Rokiah Alavi, & Syezlin Hassan. (2001). The Impact of TRIMs on Malaysian Automotive SME Vendors. *Kajian Malaysia*, XIX(2), 27-60.

- Rosenberg, J. M. (2012). *The Concise Encyclopedia of The Great Recession: 2007-2012*. Maryland: Scarecrow Press, Inc.
- Rosli. (2006). The Automobile Industry and Performance of Malaysian Auto Production. *Journal of Economic Cooperation*, 27, 89-114.
- Rowley, J. (2002). Using Case Studies in Research. *Management Research News*, 25(1), 16-27.
- Rubin, A. (2000). Standards for Rigor in Qualitative Inquiry. *Research on Social Work Practice*, 10(2), 173-178.
- Russell Bernard, H. (2013). *Social Research Methods: Qualitative and Quantitative* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Sadgrove, K. (2005). *The Complete Guide to Business Risk Management* (2nd Edition ed.). Hants, England: Gower Publishing Limited.
- Supplier Turmoil: It Ain't Over Till It's Over. (2006, June 19). *Automotive News*.
- Sahay, B. S., & Mohan, R. (2006). 3PL Practices: An Indian Perspective. *International Journal of Physical Distribution and Logistics Management*, 36(9), 666 - 689.
- Salimi, M. (2013). A Lean Production Framework for Malaysian Automotive and Heavy Machinery Industry. *Middle-East Journal of Scientific Research*, 13(11), 1544-1550.
- Sanders, J. R. (1981). Case Study Methodology: A Critique. In Welsh, W. W. (Ed.). *Case Study Methodology in Educational Research. Proceedings of 1981 Minnesota Evaluation Conference*. Minnesota: Minnesota Research and Education Center.
- Sanders, P. (1982). Phenomenology: A New Way of Viewing Organizational Research. *The Academy of Management Review*, 7(3), 353-360.
- Scannell, T. V., Curkovic, S., Wagner, B. J., & Vitek, M. J. (2013). Supply Chain Risk Management within the Context of COSO's Enterprise Risk Management Framework. *Journal of Business Administration Research*, 2(1), 15-28.
- Schrøder, P. W. (2006). Impediments to Effective Risk Management. In T. J. Andersen (Ed.), *Perspective on Strategic Risk Management* (pp. 65-88). Copenhagen: Copenhagen Business School Press.
- Schuetz, J., Deering, M., Kilpatrick, J., & Derocher, B. (1999). *Energizing the Supply Chain: Trends and Issues in Supply Chain Management*. New York: Deloitte Consulting.
- Schwartz, M. (2011, May/June). The Race to Manage Risk in the Automotive Supply Chain. *Supply Chain Europe Magazine*, pp. 14-16.

- Shah, S. K., & Corley, K. G. (2006). Building Better Theory by Bridging the Quantitative–Qualitative Divide. *Journal of Management Studies*, 43(8), 1821-1832.
- Sharma, S. K., & Bhat, A. (2014). Supply Chain Risk Management Dimensions in Indian Automobile Industry: A Cluster Analysis Approach. *Benchmarking: An International Journal*, 21(6), 1023-1040.
- Shavelson, R. J., & Townes, L. (2002). *Scientific Research in Education*. Washington, DC: National Research Council, National Academy Press.
- Shi, D., Daniels, R., & Grey, W. (2004). *Managing Supply Chain Risks with Derivatives*. New York, USA: IBM Re.
- Shimizu, T., Park, Y. W., & Hong, P. (2012). Project Managers for Risk Management: Case for Japan. *Benchmarking: An International Journal*, 19(4/5), 532 - 547.
- Shivashankarappa, A. N., Ramalingam, D., L., S., & Anbazhagan, N. (2011). An Exploratory Study of ERM Perception in Oman and Proposing a Maturity Model for Risk Optimization. *9th Australian Information Security Management Conference* (pp. 215-222). Perth: Edith Cowan University.
- Shosha, G. A. (2015). Employment of Colaizzi's Strategy in Descriptive Phenomenology: A Reflection of A Researcher, *European Scientific Journal*, 8(27), 31-43.
- Sidhu, J. S., Mahalingam, E., & Choong, E. H. (2014, January 20). NAP: To Promote Competitive and Sustainable Domestic Industry. *The Star*.
- Sieh, L. M., & Yiew, S. W. (1997). Malaysia: Electronics, Autos, and the Trade - Investment Nexus. In W. Dobson, & S. Y. Chia (Eds.), *Multinationals and East Asian Integration* (pp. 131-150). Ontario: International Development Research Center.
- Singh, N. (2014). Automotive Industry Response to Its Global QMS Standard ISO/TS-16949. In K. Das (Ed.), *Globalization and Standards: Issues and Challenges in Indian Business* (pp. 121-142). New Delhi: Springer India.
- Singh, P. J., Smith, A., & Sohal, A. S. (2005). Strategic Supply Chain Management Issues in the Automotive Industry: An Australian Perspective. *International Journal of Production Research*, 43(16), 3375–3399.
- Siti Iswalah Arshad. (2002). *Malaysia*. Kuala Lumpur: Automotive Unit of Industries Division, Ministry of International Trade and Industry.
- Smit, Y., & Watkins, J. A. (2012). A Literature Review of Small and Medium Enterprises (SME) Risk Management Practices in South Africa. *African Journal of Business Management*, 6(21), 6324-6330.

- Smith, N. J., Merna, T., & Jobling, P. (2009). *Managing Risk in Construction Projects* (2nd ed.). Oxford, UK: Blackwell Publishing Limited.
- Smith, R. M., Munro, R. A., & Bowen, R. J. (2004). *The ISO/TS 16949 Answer Book: A Step-by-Step Guide for Automotive Suppliers*. Chico: Paton Press LLC.
- Snyder, J. (2011, May 30). Survey Finds Suppliers Short on Capacity. *Crain's Detroit Business*, 27(22).
- Sodhi, M. S., Son, B. G., & Tang, C. S. (2011). Researchers' Perspectives on Supply Chain Risk Management. *Production and Operations Management*, 21(1), 1-13.
- Sodhi, M. S., Son, B. -G., & Tang, C. S. (2011). Researchers' Perspectives on Supply Chain Risk Management. *Production and Operation Management*, doi: 10.1111/j.1937-5956.2011.01251.x.
- Sorkin, A. R. (2008, September 14). Lehman Files for Bankruptcy; Merrill Is Sold. *The New York Times*.
- Sridharan, U. V., Caines, W. R., & Patterson, C. C. (2005). Implementation of Supply Chain Management and its Impact on the Value of Firms. *Supply Chain Management: An International Journal*, 10(4), 313-318.
- Stock, J. R., & Boyer, S. L. (2009). Developing a Consensus Definition of Supply Chain Management: A Qualitative Study. *International Journal of Physical Distribution & Logistics Management*, 39(8), 690-711.
- Storey, J., Emberson, C., Godsell, J., & Harrison, A. (2006). Supply Chain Management: Theory, Practice and Future Challenges. *International Journal of Operations & Production Management*, 26(7), 754-774.
- Strauss, A. (1995). Notes on the Nature and Development of General Theories. *Qualitative Inquiry*, 1(1), 7-18.
- Stulz, R. M. (2008). Risk Management Failures: What Are They and When Do They Happen? *Journal of Applied Corporate Finance*, 20(4), 58-67.
- Sundram, V. P., Abdul Razak Ibrahim, & Govindaraju, V. G. (2011). Supply Chain Management Practices in the Electronics Industry in Malaysia. *Benchmarking: An International Journal*, 18(6), 1463-5771.
- Sunjka, B. P., & Sklar-Chik, M. (2012). Supply Chain Risk and Small and Medium Manufacturing Enterprises in South Africa. *42nd International Conference on Computers and Industrial Engineering* (pp. 199(1-15)). Cape Town: Curran Associates, Inc.
- Svensson, G. (2000). A Conceptual Framework for the Analysis of Vulnerability in Supply Chains. *International Journal of Physical Distribution and Logistics Management*, 30(9), 731-749.

- Svensson, G. (2002). A Conceptual Framework of Vulnerability in Firms' Inbound and Outbound Logistics Flows. *International Journal of Physical Distribution and Logistics Management*, 32(2), 110-134.
- Svensson, G. (2004). Key Areas, Causes and Contingency Planning of Corporate Vulnerability in Supply Chains: A Qualitative Approach. *International Journal of Physical Distribution and Logistics Management*, 34(9), 728-748.
- Swinney, R., & Netessine, S. (2009). Long-Term Contracts Under the Threat of Supplier Default. *Manufacturing & Service Operations Management*, 11(1), 109–127.
- Tambunan, T. (2009). *Development of Small and Medium Enterprises in ASEAN Countries*. New Delhi: Readworthy Publications (P) Ltd.
- Tan, K. C. (2001). A Framework of Supply Chain Management Literature. *European Journal of Purchasing & Supply Management*, 7, 39-48.
- Tan, P. (2006, May 5). Proton Wants Certified Vendors. *Paultan.org*.
- Tang, C. S. (2006). Perspectives in Supply Chain Risk Management. *International Journal of Production Economics*, 103(2006), 451-488.
- Tang, W., Qiang, M., Duffield, C. F., Young, D. M., Lu, Y. (2007). Risk Management in Chinese Construction Industry, *Journal of Construction Engineering and Management*, Dec, 944-956.
- Tang, O., & Musa, S. N. (2011). Identifying Risk Issues and Research Advancements in Supply Chain Risk Management. *International Journal of Production Economics*, 133, 25-34.
- Tang, W., Qiang, M., Dffield, C. F., Young, D. M., & Lu, Y. (2007). The definitive handbook of business continuity management. *Journal of Construction Engineering and Management*, 944-956.
- Teller, J. (2013). Portfolio Risk Management and Its Contribution to Project Portfolio Success: An Investigation of Organization, Process, and Culture. *Project Management Journal*, 44(2), 36–51.
- Tellis, W. (1997). Application of a Case Study Methodology. *The Qualitative Report*, 3(3).
- Teng, S. G., Ho, S. M., Shumar, D., & Liu, P. C. (2006). Implementing FMEA in a Collaborative Supply Chain Environment. *International Journal of Quality and Reliability Management*, 23(2), 179-196.
- Tengku Noor Shamsiah Tengku Abdullah. (2010, July 9). Proton's Economic Contribution Significant: MIA. *MySinchew*.
- The Challenges Ahead for Supply Chain*. (2010). *McKinsey Global Survey Results*. McKinsey Global.



- Tham, S. Y. (2015). Diversification and Industrial Policies in Malaysia. In Felipe, J. (Ed.). *Development and Modern Industrial Policy in Practice: Issues and Country Experiences*. Cheltenham, UK: Edward Elgar Publishing
- Tham, S. Y. (2004). Malaysian Policies for the Automobile Sector: Focus on Technology Transfer. In R. Busser, & Y. Sadoi (Eds.), *Production Networks in Asia and Europe: Skill Formation and Technology Transfer in the Automobile Industry*. London: RoutledgeCurzon.
- Thomas, J. R., Nelson, J. K., & Silverman, S. J. (2011). *Research Methods in Physical Activity*. Champaign, IL: Human Kinetics.
- Thomas, A. R. (2010). *Supply Chain Security: International Practices and Innovations in Moving Goods Safely and Efficiently*. Santa Barbara, California: Greenwood Publishing Group.
- Thomas, D. A., Ayers, K., & Pecht, M. (2002). The “Trouble Not Identified” Phenomenon in Automotive Electronics. *Microelectronics Reliability*, 42, 641–651.
- Thorpe, E., & Thorpe, S. (2011). *The Pearson CSAT Manual 2011*. New Delhi, India: Dorling Kindersley (India) Pvt. Ltd.
- Thun, J.-H., & Hoenig, D. (2011). An Empirical Analysis of Supply Chain Risk Management in the German Automotive Industry. *International Journal of Production Economics*, 131(2011), 242-249.
- Thun, J.-H., Druke, M., & Hoenig, D. (2011). Managing Uncertainty – An Empirical Analysis of Supply Chain Risk Management in Small and Medium-Sized Enterprises. *International Journal of Production Research*, 49(18), 5511–5525.
- Transport Industry Division. (2010). *Malaysian's Automotive Industry: Business Opportunities*. Kuala Lumpur: Malaysian Industrial Development Authority.
- Trkman, P., & McCormack, K. (2009). Supply Chain Risk in Turbulent Environments—A Conceptual Model for Managing Supply Chain Network Risk. *International Journal of Production Economics*, 119, 247–258.
- Tummala, V. M. R., Leung, H. M., Mok, C. K., Burchett, J. F., Leung, Y. H. (1997). Practices, Barriers and Benefits of Using Risk Management Approaches in Selected Hong Kong Industries, *International Journal of Project Management*, 15(5), 297-312.
- Uher, T. E., & Toakley, A. R. (1999). Risk Management in the Conceptual Phase of a Project. *International Journal of Project Management*, 17(3), 161-169.

- United States International Trade Commission. (2011). *ASEAN: Regional Trend in Economic Integration, Export, Competitiveness and Inbound Investment for Selected Industries*. Darby, PA: DIANE Publishing.
- Uygun, Y., & Schmidt, A. (2011). Performance Measurement for interorganizational Collaborations of SMEs. In H. J. Kreowski, B. Scholz-Reiter, & K. -D. Thoben (Eds.), *Dynamics in Logistics: Second International Conference, LDIC 2009 Bremen, Germany, August 2009, Proceedings* (pp. 169-190). Dordrecht: Springer-Verlag Berlin Hiedelberg.
- Vaaland, T. I., & Heide, M. (2007). Can the SME Survive the Supply Chain Challenges? *Supply Chain Management: An International Journal*, 12(1), 20–31.
- Vanany, I., Suhaiza Zailani, Nyoman Oujawan. (2009). Supply Chain Risk Management: Literature Review and Future Research. *International Journal of Information System and Supply Chain Management*, 2(1), 16-33.
- van Wyk, R., Bowen, P., & Akintoye, A. (2008). Project Risk Management Practice: The case of a South African Utility Company. *International Journal of Project Management*, 26(2008), 149–163.
- Vesper, J. L. (2006). *An Incomplete History of Risk Management (Chapter 1)*. In Risk Assessment and Risk Management In a Pharmaceutical Industry: Clear and Simple, [www.pda.org/bookstore](http://www.pda.org/bookstore).
- Vokurka, R. J. (1998). Supplier Partnerships: A Case Study. *Production and Inventory Management Journal*, 39(1), 30-35.
- Wagner, S. M., & Bode, C. (2006). An Empirical Investigation into Supply Chain Vulnerability. *Journal of Purchasing & Supply Management*, 12, 301–312.
- Wagner, S. M., & Bode, C. (2008). An Empirical Examination of Supply Chain Performance Along Several Dimensions of Risk. *Journal of Business Logistics*, 29(1), 307-325.
- Wagner, S. M., & Bode, C. (2009). Dominant Risks and Risk Management Practices in Supply Chain. In G. A. Zsidisin, & B. Ritchie (Eds.), *Supply Chain Risk: A Handbook of Assessment, Management and Performance* (pp. 271-290). New York: Springer.
- Wagner, S. M., & Neshat, N. (2012). A Comparison of Supply Chain Vulnerability Indices for Different Categories of Firms. *International Journal of Production Research*, 1-15.
- Wagner, S. M., Bode, C., & Koziol, P. (2009). Supplier Default Dependencies: Empirical Evidence from the Automotive Industry. *European Journal of Operational Research*, 199, 150–161.

- Wahlberg, A. A., & Sjoberg, L. (2000). Risk Perception and the Media. *Journal of Risk Research*, 3(1), 31-50.
- Walsh, D. (2012, March 12). Overseas Oversold? *Crain's Detroit Business*, 28(11), p. 1.
- Walsham, G. (1993). *Interpreting Information Systems in Organisations*. Chichester: Wiley.
- Wan Hasrulnizzam Wan Mahmood, Mohd Razali Muhamad, & Nurulain Mat Tahir. (2009). Supply Chain Management: After Business Process Re-Engineering. *International Journal of Social, Education, Economics and Management Engineering*, 3(5), 58-63.
- Waters, C. D. (2007). *Supply Chain Risk Management: Vulnerability and Resilience in Logistics*. London: Kogan Page Publishers.
- Webster, D. C., & Ryntz, R. A. (2012). Pigments, Paints, Polymer Coatings, Lacquers and Printing Inks. In J. A. Kent (Ed.), *Handbook of Industrial Chemistry and Biotechnology* (12 ed., pp. 1117-1130). New York: Springer Science+Business Media.
- Wen, C., Li, X., & Bai, Y. (2007). Research on Dynamic Supply Chain Integration Network Model Based on Collaboration Theory and Non-Linear Polya Processes. *International Conference on Wireless Communications, Networking and Mobile Computing* (pp. 6091 - 6094). New Jersey: IEEE.
- Whiting, L. S. (2008). Semi-structured Interviews: Guidance for Novice Researchers. *Nursing Standard*, 22(23), 35-40.
- Williams, M. (2014, January-March). Gaining Power Through Diversity. *Automotive Logistics*, p. 62.
- Wimmer, R. D., & Dominick, J. R. (2011). *Mass Media Research: An Introduction* (9th ed.). Boston, MA: Wadsworth, Cengage Learning.
- Winer, R. S. (2001). A Framework for Customer Relationship Management. *California Management Review*, 43(4), 89-105.
- Wong, A. (2012, July 5). SMEs to Account for 41% of GDP by 2020. *The Edge Financial Daily*.
- Wood, G. D., Ellis, R. C. T. (2003). Risk Management Practices of Leading UK Cost Consultant
- Woods, M. (2009). A Contingency Theory Perspective on the Risk Management Control System within Birmingham City Council, *Management Accounting Research*, 20, 69-81.
- Wu, T., Blackhurst, J., & Chidambaram, V. (2006). A Model for Inbound Supply Risk Analysis. *Computers in Industry*, 57, 350-365.

- Wu, T., Daniel, E., Hinton, M., & Quitas, P. (2013). Isomorphic Mechanisms in Manufacturing Supply Chains: a Comparison of Indigenous Chinese Firms and Foreign-Owned MNCs. *Supply Chain Management: An International Journal*, 18(2), 161–177.
- Yaraghi, N., & Langhe, R. G. (2011). Critical Success Factors for Risk Management Systems. *Journal of Risk Research*, 14(5), 551-581.
- Yatim, P. (2010). Board Structures and the Establishment of a Risk Management Committee by Malaysian Listed Firm. *Journal of Management and Governance*, 14, 17-36.
- Yin, N. L. (2004). *Implementing Your Business Continuity Plan*. Singapore: GMH Continuity Architects.
- Yin, R. K. (1994). *Case Study Research: Design and Methods* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Yin, R. K. (2003). *Applications of Case Study Research* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Yin, R. K. (2003). *Case Study Research: Design and Methods* (Vol. 5). Thousand Oaks, CA: Sage Publications, Inc.
- Yin, R. K. (2011). *Qualitative Research: From Start to Finish*. New York: The Guildford Press.
- Yong Lin, & Li Zhou. (2011). The Impacts of Product Design Changes on Supply Chain Risk: A Case Study. *International Journal of Physical Distribution and Logistics Management*, 41(2), 162-186.
- Young, R., & Jordan, E. (2008). Top Management Support: Mantra or Necessity? *International Journal of Project Management*, 26(7), 713-725.
- Zahedirad, R., & Shivaraj, B. (2011). Supply Chain: Barriers and Benefits Indian SMEs. *SCMS Journal of Indian Management*, October-December, 11-30.
- Zentis, T., & Schmitt, R. (2013). Technical Risk Assessment for an Ensured and Efficient Product Development on the Example of Medical Engineering. *23rd CIRP Design Conference* (pp. 387-398). Bochum: Springer.
- Zolkos, R. (2011). Supply Risks Take Priority: Disaster in Japan Highlights Exposures Many Companies Face. *Business Insurance*, 45(31), 9-10.
- Zsidisin, G. A., & Ritchie, B. (2009). *Supply Chain Risk: A Handbook of Assessment, Management and Performance*. New York: Springer Science+Business Media.
- Zsidisin, G. A., Panelli, A., & Upton, R. (2000). Purchasing Organization Involvement in Risk Assessments. *Supply Chain Management: An International Journal*, 5(4), 187-197.

Zwißler, F., & Hermann, M. (2012). Supply Chain Risk Management in the Electronics Industry. In J. Emblemståg (Ed.), *Risk Management for the Future - Theory and Cases* (pp. 467-495). Rijeka: InTech.