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**SUPPLY CHAIN MANAGEMENT PRACTICES AND
PERFORMANCE OF TEXTILE AND APPAREL FIRMS IN
MALAYSIA**

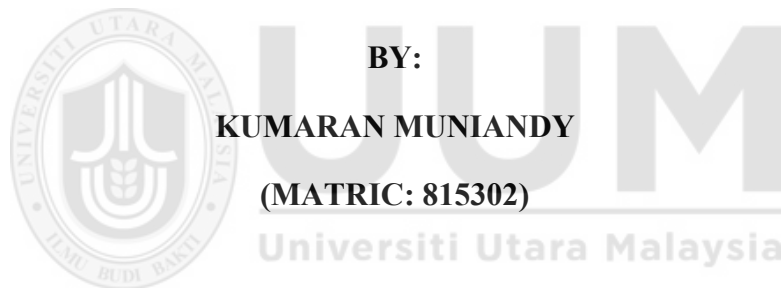


KUMARAN MUNIANDY

UNIVERSITI UTARA MALAYSIA

2017

**SUPPLY CHAIN MANAGEMENT PRACTICES AND PERFORMANCE
OF TEXTILE AND APPAREL FIRMS IN MALAYSIA**



**Thesis Submitted to
School of Business Management
Universiti Utara Malaysia
In Partial Fulfillment of the Requirements for the Degree of Master Science
(Management)**



**Pusat Pengajian Pengurusan
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SCHOOL OF BUSINESS MANAGEMENT

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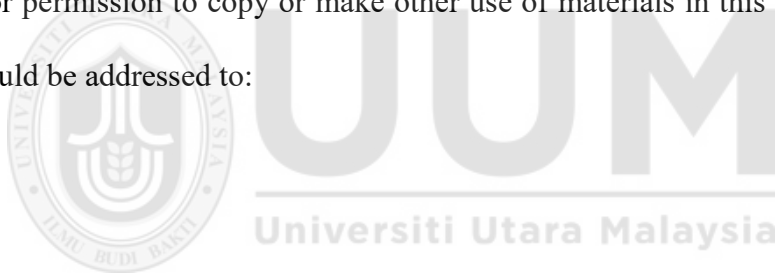
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ABSTRACT

Supply Chain Management (SCM) plays a significant role in determining the success of manufacturing companies. Despite the relevance and applicability of SCM to manufacturing firms, the review of the previous research reveals that there is limited research that attempted to investigate the effect of SCM practices on the performance of manufacturing companies, particularly among the textile and apparel companies in Malaysia. As a result, there is not only lack of information but also little knowledge concerning SCM practices and its effect on the performance of textile and apparel companies in the country. This study initiates an attempt to address this limitation by examining the relationship between SCM practices and the performance of textile and apparel firms in Malaysia. By using structured questionnaire, the data for the study was collected from 100 firms operating in the textile and apparel industry. The results of the analysis of the data indicate that SCM practices such as customer relationship, strategic supplier partnership, and strategic outsourcing adopted by the textiles firms are significantly associated to their performance.

Keywords: supply chain management practice, customer relationship, strategic supplier partnership, strategic outsourcing, and organizational performance.

ABSTRAK

Pengurusan rantaian bekalan memainkan peranan penting dalam menentukan kejayaan sesebuah syarikat pembuatan. Walaupun pengurusan rantaian bekalan relevan dan sesuai kepada firma-firma pembuatan, kajian kesusasteraan mendedahkan bahawa terdapat penyelidikan terhad yang mengkaji hubungan antara amalan pengurusan rantaian bekalan dengan prestasi firma perkilangan, terutamanya di syarikat tekstil dan pakaian di Malaysia. Oleh yang demikian terdapat bukan sahaja kekurangan maklumat tetapi juga pengetahuan yang sedikit mengenai amalan pengurusan rantaian bekalan dan hubungannya dengan prestasi syarikat tekstil dan pakaian di Negara ini. Kajian ini merupakan satu usaha untuk mengatasi had tersebut dengan mengkaji hubungan antara amalan pengurusan rantaian bekalan dengan prestasi syarikat tekstil dan pakaian di Malaysia. Dengan menggunakan soal selidik berstruktur, data untuk kajian ini telah dikumpulkan daripada 100 firma yang beroperasi dalam industry tekstil dan pakaian. Hasil analisis data menunjukkan bahawa amalan pengurusan rantaian bekalan seperti perhubungan pelanggan, perkongsian pembekal strategik, dan penyumberan luar strategik yang diguna pakai oleh syarikat tekstil dan pakaian mempunyai hubungkait yang signifikan berkaitan dengan prestasi syarikat mereka.

Kata Kunci: amalan pengurusan rantaian bekalan, perhubungan pelanggan, perkongsian strategic pembekal, penyumberan luar strategik, dan prestasi organisasi.

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TABLE OF CONTENTS

PERMISSION TO USE	iii
ABSTRACT	iv
ABSTRAK	v
ACKNOWLEDGEMENT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE: INTRODUCTION	1
1.1 Introduction	1
1.2 Background of Study	2
1.3 Problem Statement	4
1.4 Research Questions	5
1.5 Objective of the Study	6
1.6 Scope of the Study	6
1.7 Significance of the Study	7
1.7.1 Theoretical Contribution	7
1.7.2 Practical Contribution	7
1.8 Definitions of Key Terms	8
CHAPTER TWO: LITERATURE REVIEW	9
2.1 Introduction	9
2.2 Supply Chain Management	9
2.3 Supply Chain Management Practices	12

2.3.1	Customer Relationship	14
2.3.2	Strategic Supplier Partnership	15
2.3.3	Strategic Outsourcing	16
2.4	Organizational Performance	18
2.5	Supply Chain Management Practices and Organizational Performance	20
2.6	Summary	21
CHAPTER THREE: METHODOLOGY		22
3.1	Introduction	22
3.2	Research Framework	22
3.3	Hypotheses Development	24
3.4	Measurement of Research Variables	24
3.5	Questionnaire	25
3.6	Reliability and Validity of Measurement	26
3.7	Target Population and Sampling	27
3.8	Data Collection Method	27
3.9	Statistical Analysis	27
3.10	Summary	28
CHAPTER FOUR: THE RESULTS		29
4.1	Introduction	29
4.2	Demographic Characteristics of the Respondents	29
4.3	Supply Chain Management Practices and Performance	36

4.4	Relationship between SCM Practices and Performance	36
4.4.1	Results of the Pearson Correlation Analysis	37
4.4.2	Multiple Regression	38
4.5	Summary of the Results of the Hypothesis Testing	40
4.6	Conclusion	40
CHAPTER FIVE: CONCLUSION AND RECOMMENDATION		41
5.1	Introduction	41
5.2	Overview of the Study	41
5.3	Conclusion	42
5.3.1	Relationship between Customer Relationship and Organizational Performance	43
5.3.2	Relationship between Strategic Supplier Partnership and Organizational Performance	44
5.3.3	Relationship between Strategic Outsourcing and Organizational Performance	44
5.4	Implications of the Study	45
5.5	Limitations of the Study	46
5.6	Suggestions for Future Study	46
REFERENCES		48
APPENDIX		60

LIST OF TABLES

Table 3.1	Measurement of Research Variables	25
Table 3.2	Result of Reliability Analysis	26
Table 4.1	Demographic Characteristic of Respondents	29
Table 4.2	Mean Values of Supply Chain Management Practices and Performance	36
Table 4.3	Results of Pearson Correlations Analysis	37
Table 4.4	Results of Multiple Regression Analysis	49
Table 4.5	Summary of Hypothesis Testing	40

LIST OF FIGURES

Figure 3.1	Research Framework	23
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LIST OF ABBREVIATIONS

CR	Customer Relationship
DSAM	Direct Selling Association Malaysia
FMM	Federation of Malaysian Manufacturers
IBBM	Institute Bank-Bank Malaysia
MATRADE	Malaysian External Trade Development Corporation
MGMA	Malaysian Garment Manufacturers Association
MIDA	Malaysian Investment Development Authority
MKMA	Malaysian Knitting Manufacturers Association
MOF	Ministry of Finance
MTMA	Malaysian Textile Manufacturers Association
MQA	Malaysian Qualifications Agency
OP	Organizational Performance
ROA	Return on Assets
ROI	Return on Investments
SCM	Supply Chain Management
SCMP	Supply Chain Management Practices
SME CORP.	Small and Medium Enterprises Corporation
SPSS	Statistical Package for Social Science
SO	Strategic Outsourcing
SSM	Suruhanjaya Syarikat Malaysia
SSP	Strategic Supplier Partnership

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The textile and apparel industry plays a significant role in the Malaysian economy. According to the Malaysian Investment Development Authority (MIDA), the textile and apparel industry is one of the main contributors to the manufacturing sector in Malaysia. The Department of Statistic Malaysia reported that in 2011, the exports from the textile and apparel firms were valued at RM10.81 billion and they contributed about 1.7% of the total growth experienced by the manufacturing sector in Malaysia.

The textile and apparel industry is considered important to the manufacturing sector in Malaysia. Despite the importance of the textile and apparel industry, the literature indicates that as an area of study, firms in this particular industry have not received much research emphasis. More specifically, the review of literature reveals not only limited studies have investigated textile and apparel firms but also research in this area seems to be neglected as well. As a result, there is not much information about the nature of textile and apparel firms as well as how these firms are being managed in the Malaysian context.

In view of the gaps in research and information, this study attempted to examine textile and apparel firms from the SCM perspective. More precisely, the study represents an effort to investigate the relationship between SCM practices and performance of textile and apparel firms in Malaysia.

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REFERENCES

- Alvarado, U. Y., & Kotzab, H. (2001). Supply Chain Management: The Integration of Logistics in Marketing. *Industrial Marketing Management*, 30(2), 183-198.
- Balsmeier, P. W., & Voisin, W. (1996). Supply Chain Management: A Time Based Strategy. *Industrial Management* 38(5), 24–27.
- Barthelemy, J. (2003), “The Seven Deadly Sins of Outsourcing”, *The Academy of Management Executive*, Vol.17 No.2, pp. 87-98.
- Basnet, C., Corner, J., Wisner, J., & Tan, K. C. (2003). Benchmarking Supply Chain Management Practice in New Zealand. *Supply Chain Management: An International Journal*, 8(1), 57-64.
- Bommer, M., O’Neil, B., & Treat, S. (2001). Strategic Assessment of the Supply Chain Interface: A Beverage Industry Case Study. *International Journal of Physical Distribution & Logistics Management*, 31(1), 11-25.
- Boubekri, N. (2001). Technology Enablers for Supply Chain Management. *Integrated Manufacturing Systems*, 12(6), 394-399.
- Boyson, S., Corsi, T., Dresner, M. and Rabinovich, E. (1999), “Managing Effective Third Party Logistics Relationships: What Does it take?” *Journal of Business Logistics*, Vol. 20 No. 1, pp. 73-100.
- Brewer, P. C., & Speh, T. W. (2000). Using The Balanced Scorecard to Measure Supply Chain Performance. *Journal of Business Logistics*, 21(1), 75-92.
- Carmignani, G. (2009). Supply Chain and Quality Management: The Definition of A Standard to Implement A Process Management System in A Supply Chain. *Business Process Management Journal*, 15(3), 395-407.

- Carr, A. S., & Smeltzer, L. R. (1999). The Relationship of Strategic Purchasing to Supply Chain Management. *European Journal of Purchasing & Supply Management* (5), 43-51.
- Chan, Humphreys, P., & Lu, T. H. (2001). Order Release Mechanisms in Supply Chain Management: A Simulation Approach. *International Journal of Physical Distribution & Logistics Management*, 31(2), 124-139.
- Chandra, C., & Kumar, S. (2000). Supply Chain Management in Theory and Practice: A Passing Fad or A Fundamental Change? *Industrial Management & Data Systems*, 100(3), 100-113.
- Chen IJ, Paulraj A. (2004). Towards A Theory of Supply Chain Management: The Constructs and Measurements. *Journal of Operations Management*, 22(2):119–50.
- Chin, K.-S., Tummala, V. M. R., Leung, J. P. F., & Tang, X. (2004). A Study on Supply Chain Management Practices: The Hong Kong Manufacturing Perspective. *International Journal of Physical Distribution & Logistics Management*, 34(6), 505-524.
- Chopra, & Meindl, P. (2003). *Supply Chain Management: Strategy, Planning, and Operation* (2ed.). Singapore: Pearson Education.
- Chopra, & Meindl, P. (2007), “Supply Chain Management: Strategy, Planning, And Operation” *Pearsoned Prentice Hall*, PP 3-25.
- Cooper, & Ellram, L. M. (1993). Characteristics of Supply Chain Management and The Implication for Purchasing and Logistics Strategy. *The International Journal of Logistics Management*, 4(2), 13-24.

- Cox, A. (2004). The art of the possible: Relationship Management in Power Regimes and Supply Chains. *Supply Chain Management: An International Journal*, 9(5), 346-356.
- Cronin, J. J., and Morris, M. H. (1989), "Satisfying Customer Expectations: The Effect on Conflict and Repurchase Intentions in Industrial Marketing Channels", *Journal of the Academy of Marketing Science*, Vol.17 No.1, pp.41-49.
- Croxton, K. L., Garcia-Dastugue, S. J., Lambert, D. M., and Rogers, D. S. (2001), "The Supply Chain Management Processes", *The International Journal of Logistics Management*, 12(2), pp. 13-36.
- Dadzie, K. Q., & Winston, E. (2007). Consumer Response to Stock-out in The Online Supply Chain. *International Journal of Physical Distribution & Logistics Management*, 37(1), 19-42.
- Dale, B. G., Lascelles, D. M., & Lloyd, A. (1994). *Supply Chain Management and Development*. New York: Prentice-Hall.
- Department of Statistics Malaysia Official Portal.(2017). *Dosm.gov.my*. Retrieved from <https://www.dosm.gov.my/v1/>
- Donlon JP (1996). Maximizing Value in The Supply Chain. *Chief Executive* 1; 117:54–63.
- Domberger, S. (1998) .The Contracting Organization: A Strategic Guide to Outsourcing. Oxford: Oxford University Press.
- Ellram, L. M. (1991), "Supply Chain Management: The Industrial Organization Perspective", *International Journal of Physical Distribution and Logistics Management*, 21(1), pp. 13-22.

- Ellram, L. (2004). *Supply Chain Management Research*: Arizona State University.
- Elmuti, D. (2003), “The Perceived Impact of Outsourcing on Organizational Performance”, *American Journal of Business*, Vol.18 No.2, pp.33-42.
- Elofson, G., and Robinson, W. N. (2007). Collective Customer Collaboration Impacts on Supply Chain Performance. *International Journal of Production Research*, 45(11), 2567-2594.
- Ennew, C. T., (2003), “Just Try in to Keep The Customer Satisfied? Delivering Service Through Direct and Indirect Channels”, *Interactive Marketing*, Vol. 5, pp. 131–143.
- Fawcett, S. and Magnan, G. (2001), *Achieving World-class Supply Chain Alignment: Benefits, Barriers, and Bridges*, Center for Advanced Purchasing Studies, Arizona State University Research Park, Tempe, AZ.
- Federation of Malaysian Manufacturers(2017). *Fmm.org.my*. Retrieved from <http://www.fmm.org.my/>
- Franceschini, F., Galetto, M., Pignatelli, A., and Varetto, M. (2003) Outsourcing: Guidelines for A Structured Approach. *Benchmarking: An International Journal*, 10(3), pp 246 – 240.
- Gavin, T. A. and Matherly, C. M. (1997) Outsourcing: An Operational Auditing Perspective. *Managerial Auditing Journal*, 12(3), pp 116 – 122.
- Gorane, S., & Kant, R. (2017). Supply Chain Practices and Organizational Performance: An Empirical Investigation of Indian Manufacturing Organizations. *International Journal of Logistics Management, The*, 28(1).

- Gunasekaran, A., Patel, C., &Tirtiroglu, E. (2001). Performance Measures and Metrics in A Supply Chain Environment. *International Journal of Operations & Production Management*, 21(1/2), 71-87.
- Hadaya, P., &Pellerin, R. (2010).Determinants of Construction Companies' Use of Web-BasedInterorganizational Information Systems.*Supply Chain Management: AnInternational Journal*, 15(5), 371-384.
- Harrison, A. and New, C. (2002), "The Role of Coherent Supply Chain Strategy and Performance Management in Achieving Competitive Advantage: An International Survey", *Journal of The Operational Research Society*, Vol. 53, pp. 263-71.
- Holmberg S., (2000),"A Systems Perspective on Supply Chain Measurements", *International Journal of Physical Distribution & Logistics Management*, Vol. 30 Iss 10 pp. 847 – 868.
- Homburg, C., Koschate, N. and Hoyer, W. D. (2005), "Do Satisfied Customers Really Pay More? A Study of The Relationship between Customer Satisfaction and WillingnesstoPay", *Journal of Marketing*, Vol.69 No.2, pp. 84-96.
- Jennings, D. (2002) Strategic Sourcing: Benefits, Problems and A Contextual Model. *Management Decision*, 40(1), pp 26 – 34.
- Kayakutlu, G., &Buyukozkan, G. (2010).Effective Supply Value Chain Based on Competence Success.*Supply Chain Management: An International Journal*, 15(2), 129-138.
- Khang, T. S., Arumugam, V., Chong, A. Y.-L., & Chan, F. T. S. (2010). Relationship between supply chain management practices and organisation performance: a case

- study in the Malaysia service industry. *International Journal Modelling in Operations Management*, 1(1), 84-106.
- Khong, K. W., (2005), “The Perceived Impact of Successful Outsourcing on Customer Service Management”, *Supply Chain Management: An International Journal Vol.10 No.5, pp.402–411*.
- Kim. (2006b). Effects of Supply Chain Management Practices, Integration and Competition Capability on Performance. *Supply Chain Management: An International Journal* 11(3), 241-248.
- Kleindorfer, P. R., & Van Wassenhove, W. L. N. (2004). Managing Risk in Global Supply Chains. In H. Gatigon & J. Kimberly (Eds.), *The Alliance on Globalization: Cambridge University Press*.
- Koh, S. C. L., Demirbag, M., Bayraktar, E., Tatoglu, E., & Zaim, S. (2007). The Impact of Supply Chain Management Practices on Performance of SMEs. *Industrial Management & Data Systems*, 107(1), 103-124.
- Kolawa, A. (2004), “Outsourcing is Not the Enemy”, *Wall Street Journal*, February 24, 2004, page B2.
- Lambert, & Cooper, M. C., (2000), Issues in Supply Chain Management. *Industrial Marketing Management*, 29, 65-83.
- Lankford, W.M. and Parsa, F. (1999), Outsourcing: A Primer. *Management Decision*, 37(4), pp 310 – 316.
- Li, S., and Lin, B. (2006), “Assessing Information Sharing and Information Quality in Supply Chain Management”, *Decision support systems*, Vol.42 No. 3, pp.1641-1656.

- Li, S., Rao, S. Subba, Ragu-Nathan, T. S., and Ragu-Nathan, B. (2005), "Development and Validation of A Measurement Instrument for Studying Supply Chain Management Practices." *Journal of Operations Management*, 23(6), 618-641.
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., and Rao, S. Subba (2006), "The Impact of Supply Chain Management Practices on Competitive Advantage and Organizational Performance", *Omega*, 34(2), pp. 107-124.
- Linder, J. C., Cole, M. I. and Jacobson, A. L. (2002) Business Transformation through Outsourcing. *Strategy and Leadership*, 30(4), pp 23 – 28.
- Ling, L. (2007). *Supply Chain Management: Concepts, Techniques and Practices*, from www.worldscibooks.com/business/6273.html
- Lummus,&Vokurka. (1999a). Defining Supply Chain Management: A Historical Perspective and Practical Guidelines. *Industrial Management & Data Systems*, 99(1), 11-17.
- Mahoney, J. T., & Pandian, J. R. (1992). The Resource Based View within the Conversation of Strategic Management. *Strategic Management Journal*, 13(5), 363–380.
- McIvor, R. (2002). A Practical Framework for Understanding the Outsourcing Process, *Supply Chain Management: An International Journal*, 5(1), pp 22 – 36.
- McIvor, R. (2003), Outsourcing: Insights from the Telecommunications Industry. *Supply Chain Management: An International Journal*, 8(4), pp 380 – 394.
- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., et al. (2001). Defining Supply Chain Management, *Journal of Business Logistics*, 22(2).

- MIDA; *Malaysian Investment Development Authority*. Mida.gov.my. Retrieved from <http://www.mida.gov.my/home>.
- Min S, Mentzer JT. (2004), Developing and Measuring Supply Chain Concepts. *Journal of Business Logistics*, 25(1):63–99.
- Mittal, V., and Kamakura, W. A. (2001), “Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effect of Customer Characteristics”, *Journal of Marketing Research*, Vol.38 No.1, pp.131-142.
- Moberg, C. R., Cutler, B. D., Gross, A., &Speh, T. W. (2002), Identifying Antecedents of Information Exchange within Supply Chains. *International Journal of Physical Distribution and Logistics Management* 32(9), 755–770.
- Monczka, R. M., Petersen, K. J., Handfield, R. B., &Ragatz, G. L. (1998), Success Factors in Strategic Supplier Alliances: The Buying Company Perspective. *Decision Science*, 29(3), 5553–577.
- Mouritsen, J., Skjøtt-Larsen, T., &Kotzab, H. (2003), Exploring the Contours of Supply Chain Management. *Integrated Manufacturing Systems*, 14(8), 686-695.
- Noble D. (1997), Purchasing and Supplier Management as a Future Competitive Edge. *Logistics Focus*, 5(5):23–7.
- Power, Sohal, A., &Rahman, S. U. (2001). Critical Success Factors in Agile Supply Chain Management: An Empirical Study. *International Journal of Physical Distribution and Logistics Management* 31(4), 247-265.
- Schneller, E. and Smeltzer, L. (2006), *Strategic Management of the Health Care Supply Chain*, Jossey-Bass, San Francisco, CA.

- Scott, C. and Westbrook, R. (1991), “New Strategic Tools for Supply Chain Management”, *International Journal of Physical Distribution and Logistics*, 21(1), pp. 23-33.
- Sezen, B. (2008), Relative Effects of Design, Integration and Information Sharing on Supply Chain Performance. *Supply Chain Management: An International Journal*, 13(3), 233-240.
- Sprague, L. G., &Callarman, T. E. (2010), Supply Management is Not a Beer Game. *Journal of Supply Chain Management*, 46(1), 9-11.
- Stuart, F. I. (1997), Supply Chain Strategy: Organizational Influence through Supplier Aaliances. *British Academy of Management* 8(3), 223–236.
- Sufian M. Qrunfleh (2010), Alignment of Information Systems with Supply Chains: Impacts on Supply Chain Performance and Organizational Performance: *published PhD thesis*. University of Toledo.
- Sundram V. P. K., Ibrahim A. R. and Govindaraju V.G.R. C (2011), “Supply Chain Management Practices in the Electronics Industry in Malaysia Consequences for Supply Chain Performance’ *Benchmarking: An International Journal* Vol. 18 No. 6, pp. 834-855.
- Stock, G.N., Greis, N.P, &Kasarda, J.D. (2000), Enterprise Logistics and Supply Chain Structure: The Role of Fit. *Journal of Operations Management*, 18 (5), pp.531-47.
- Sweeney, E. &O`Riordan, A. (2007).*Outsourcing and its Role in the Supply Chain*, from <http://arrow.dit.ie/cgi/viewcontent.cgi?article=1012&context=nitlbk>

- Tan KC, Lyman SB, Wisner JD, (2002), Supply Chain Management: A Strategic Perspective. *International Journal of Operations and Production Management*, 22(6):614–31.
- Tan KC, Kannan VR, Handfield RB (1998), Supply Chain Management: Supplier Performance and Firm Performance. *International Journal of Purchasing and Materials Management*, 34(3):2–9.
- Trkman, P., McCormack, K., Oliveira, M. P. V. d., &Ladeira, M. B. (2010), The Impact of Business Analytics on Supply Chain Performance. *Decision Support Systems*, 49, 318-327.
- Turner, J. R. (1993), “Integrated Supply Chain Management: What's Wrong With ThisPicture?” *Industrial Engineering*, 25(12), pp. 52-55.
- Tyndall, G., Gopal, C., Partsch, W., &Kamauff, J. (1998).*Supercharging Supply Chains: New Ways to Increase Value Through Global Operational Excellence*. New York, NY: John Wiley & Sons.
- Utah, R., (2013). E-book IBM Statistics for Window Versi 21.0.PejabatTeknologi Maklumat 9/02/2013.
- Verhoef, P. C. (2003), “Understanding the Effect of Customer Relationship Management Efforts on Customer Retention and Customer Share Development”, *Journal of Marketing*, Vol. 67 No. 4, pp.30–45.
- Vickery, S., Calantone, R., and Droge, C. (1999), “Supply Chain Flexibility: An Empirical Study”, *The Journal of Supply Chain Management*, 35(3), pp. 16-24.
- Vickery, S. K., Jayaram, J., Droge, C., &Calantone, R. (2003). The Effects of An Integrative Supply Chain Strategy on Customer Service and Financial

- Performance: An Analysis of Direct Versus Indirect Relationships. *Journal of Operations Management*, 21 (5), pp.523-539.
- White, A. & Mohdzain, M. (2009), “An Innovative Model of Supply Chain Management: A Single Case Study in The Electronics Sector”, *International Journal of Information Technology and Management*, Vol. 8 No. 1, pp. 69-84.
- Wines, L., (1996).High Order Strategy for Manufacturing.*The Journal of Business Strategy*, 7(4), 32-33.
- Wolf, J. (2011). Sustainable Supply Chain Management Integration: A Qualitative Analysis of the German Manufacturing Industry,*Journal of Business Ethics*,102(2), 221-235.
- Wong, Tjosvold, D., Wong, W. Y. L., & Liu, C. K. (1999).Relationships for Quality Improvement in the Hong Kong-China Supply Chain.*International Journal of Quality & Reliability Management*, 16(1), 24-41.
- Yamin S, Gunasekruan A, Mavondo FT (1999). Relationship between Generic Strategy, Competitive Advantage and Firm Performance: An Empirical Analysis. *Technovation*, 19(8):507–18.
- Yap, L. L., & Tan, C. L. (2012). The effect of service supply chain management practices on the public healthcare organizational performance. *International Journal of Business and Social Science*, 3(16).
- Yeung, A.C.L. (2008), “Strategic Supply Management, Quality Initiatives, and Organizational Performance”, *Journal of Operations Management*, Vol. 26, pp. 490-502.

Yoshino, M. Y., & Rangan, S. (1995). *Strategic alliances: An entrepreneurial approach to globalization*.

Zhang, Q. Y. (2001), "Technology Infusion Enabled Value Chain Flexibility: A Learning and Capability- Based Perspective", *Doctoral Dissertation*, University of Toledo, Toledo, OH.



APPENDIX



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Dear Sir/Madam,

This survey seeks to explore **SUPPLY CHAIN MANAGEMENT PRACTICES AND PERFORMANCE OF TEXTILE AND APPAREL FIRMS IN MALAYSIA**. The information obtained from this survey is important for me to meet the objective of the research in fulfilling the requirement for Master of Science Management (MSc.) of University Utara Malaysia (UUM). This survey will take approximately 10 minutes to be completed.

Please do not disclose your name or contact details on the questionnaire. It will remain anonymous. Your information will be treated strictly confidential and used only for statistical analysis and academic purposes. Your honesty and sincere answers to the questions asked are very much appreciated.

I sincerely thank you for your participation and cooperation in this study.

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SECTION A

Kindly tick (√) the appropriate answer.

1. What is your gender?

Male Female

2. What is your age?

Below 20 20-29
 30-39 40-49
 50 and above

3. Race

Malay Indian
 Chinese Others

4. Marital Status

Single Married
 Divorce

5. Position in Company

CEO / President President
 Director Manager
 Others (lain – lain).....(Please state)

6. Highest Academic Level

Bachelor Degree Master Degree
 STPM Diploma

- SPM Certificate
 Others (Please state)

7. Total years of working experience

- 1 – 5 years 6 – 10 years
 11- 15 years > 15 years

8. Length of service at your company

- Less than 1 year
 1 - 2 years 3 - 4 years
 4 - 6 years >6 years

9. Number of employees in your company?

- 100 - 250 251 – 500
 501 – 1000 over 1000

10. What is your legal form of your company? (Circle one) 1 2 3 4 5

1. Sole proprietorship
2. Partnership
3. Private limited company
4. Public limited company
5. Others (specify) _____

11. Indicate the association/s that your company is registered to:

- Malaysian External Trade Development Corporation (MATRADE)
- Malaysian Textile Manufacturers Association (MTMA)
- Malaysian Knitting Manufacturers Association (MKMA)
- Malaysian Garment Manufacturers Association (MGMA)
- Small and Medium Enterprises Corporation (SMEs Corp. Malaysia)
- Federation of Malaysian Manufacturers (FMM)
- Others (lain – lain) (Please state)

12. What is the size of your company?

- Micro
- Small
- Medium
- Large

13. Annual sales turnover (RM) in 2016:

- Below RM300,000
- Within RM300,000 to RM15 Million
- Within RM15 Million to RM 50 Million
- More than RM50 million

14. What is the supply chain position of your company?

- Upstream (*closer to raw material*)
- Midstream
- Downstream (*closer to consumers*)
- All the above

15. How many suppliers do your company have?

< 5

6-19

20-99

> 100

16. To what extent does your company emphasized on supply chain management?

Not at all

A little

Very much



SECTION B

Organizational performance refers to the extent an organization is able to achieve its market-oriented as well as financial objectives. By using the following scale, rate the performance of your company for the past five years.

Scale: 1 = Significant decrease, 2 = Decrease, 3 = Remain the same, 4 = Increase, 5 = Significant increase.

	STATEMENT	SCALE				
		1	2	3	4	5
1.	Sales					
2.	Growth in sales					
3.	Return on investment (ROI)					
4.	Growth in return on investment.					
5.	Market share					
6.	Growth in market share					
7.	Profit margin					
8.	Overall competitive position.					
9.	Deliver dependability (on-time delivery, order fill rate, frequency of delivery, and delivery speed) performance					
10	Cost saving					
11	Product and service quality					
12	Forecasting accuracy					
13	Reduced inventory level					
14	Flexibility (firm's ability to adapt to changes in the business environment)					
15	Return on assets (ROA)					
16	Customer satisfaction					

SECTION C

The following statements explain the customer relationships emphasized in supply chain management. By using the following scale, please indicate your level of agreement with each of following statements.

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

	STATEMENT	SCALE				
		1	2	3	4	5
1.	We frequently interact with customers to set reliability, responsiveness, and other standards for us.					
2.	We frequently measure and evaluate customer satisfaction.					
3.	We frequently determine future customer expectations.					
4.	We facilitate customers' ability to seek assistance from us.					
5.	We periodically evaluate the importance of our relationship with our customers.					
6.	Flexibility towards variety of demands from customers (product mix, volume and delivery)					
7.	Commitment to improve the management of everything that customers suggest					
8.	We share a sense of fair play with our customers					
9.	We have frequent follow-up with its customers for quality/service feedback					
10.	We frequently evaluate the formal and informal complaints of its customers					

SECTION D

To what extent do you agree with the following statements describing the strategic supplier relationships in your company's supply chain management? Kindly use the following scale.

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

	STATEMENT	SCALE				
		1	2	3	4	5
1.	We consider quality as our number one criterion in selecting suppliers.					
2.	We regularly solve problems jointly with our suppliers.					
3.	We have helped our suppliers to improve their product quality.					
4.	We have continuous improvement programs that include our key suppliers.					
5.	We include our key suppliers in our planning and goal-setting activities.					
6.	We actively involve our key suppliers in new product development processes.					
7.	We rely on few dependable suppliers					
8.	We certify our suppliers for quality					
9.	We strive to establish long term relationship with our suppliers					
10.	We rely on few high-quality suppliers					

SECTION E

The following statements explain strategic outsourcing of services in your organization.

To what extent do you agree with these statements? Please use the following scale to rate your agreement.

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

	STATEMENT	SCALE				
		1	2	3	4	5
1.	Organization outsources some of the manufacturing activities from outside vendors					
2.	Organization has reliable and committed outsourcing partners.					
3.	Organization outsources the manufacturing activities to focus on core competencies.					
4.	Improvement in customer services due to outsourcing.					
5.	Organization grabs the opportunity of emerging technology through outsourcing.					
6.	Inventory liabilities of the organization have gone down due to outsourcing.					
7.	Organization has succeeded in diverting capital investment due to outsourcing.					

8.	The orientation of my company has shifted from managing vertical functions to integrating full stream processes from the supplier to the consumer					
9.	My company has developed and is pursuing a plan to establish and maintain business partnerships					
10.	My company extensively measures logistics performance in terms of cost, productivity, customer service, asset management, and quality					
11.	My company successfully utilizes time-based logistics solutions like continuous replenishment, quick response, and just-in-time with customers and/or suppliers					
12.	Manufacturing or logistics information systems in my company are being expanded to include more integrated applications					
13.	My company utilizes more strategies to postpone movement and final product configuration today than two years ago					
14.	My company has procedures in place to facilitate reverse logistics					
15.	My company has undergone extensive logistics process re-engineering during the past two years					
16.	My company considers logistics as one of the core strengths					
17.	My company believes in the strategic values of using IT in our supply chain. Therefore, the development of IT is driven and planned by senior management					
18.	My company has partnerships with customers / suppliers who operate under principles of rewards and risks.					
19.	Management emphasis has shifted from managing separate logistics functions to managing whole supply chain.					
20.	My company has common, agreed to policies and procedures to standardize logistic operation					

-THE END, THANK YOU –