COMPETITIVE ADVANTAGE OF MALAYSIAN SMALL MEDIUM ENTERPRISES: IMPACT OF SUPPLY CHAIN MANAGEMENT PRACTICES, ENVIRONMENTAL UNCERTAINTY AND SUPPLY CHAIN FLEXIBILITY

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ABSTRACT

Today’s businesses are compelled to develop flexible capabilities to enable it to effectively respond to greater volatility and complexity of the fast changing environments. The current study proposes that a firm that adopts supply chain management practices would achieve competitive advantage and this is because of the influence of flexibility in the supply chain which in turn is driven by environmental uncertainties. The research framework consists of four constructs namely environmental uncertainty, supply chain management practice, supply chain flexibility and competitive advantage. The relationship between these constructs shall be investigated within the same framework in the context of SMEs in Malaysia, thus, filling the gap in supply chain literature in Malaysia by providing a new framework for research.

The data collection method used is a self-administered survey questionnaire and the instruments of measures had been adopted from previous researches. Data collected from the pilot study was used to conduct exploratory factor analysis to assess the dimensionality of items in view of the new research environment and business condition. Subsequently, a field study using an online self-administered survey questionnaire yielded 250 usable responses from the SME industry. Structural equation modelling was used to analyze the data results as it produces better results in terms of fitness and more accurate and efficient in estimating multiple items of the latent constructs.
The results support the hypothesized relationships presented in the theoretical framework, that is, the independent path which examine the effect of the exogenous constructs and endogenous constructs as well as the mediating path which examine the role of supply chain flexibility as the mediator in the relationship of supply chain management practices and competitive advantage.

Some of the gaps in literature that this study was able to fill include expanding on existing models by integrating the four constructs in one theoretical framework and tested the theory in the SME sector. Testing mediation using the triangle approach in this study is novel because it has not been seen to be used for empirical supply chain management studies locally before. One of the most important contribution of this study is employing the resampling method of bootstrapping to test the mediation effect of supply chain flexibility, thus managed to achieve full mediation which had not been demonstrated in previous studies before.
I certify that I have supervised / read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in quality and scope, as a thesis for the fulfilment of the requirements for the degree of Doctor of Philosophy.

This thesis was submitted to Asia e University and is accepted as fulfillment of the requirements for the degree of Doctor of Philosophy.
I hereby declare that the thesis submitted in fulfilment of the PhD degree is my own work and that all contributions from any other persons or sources are properly and duly cited. I further declare that the materials has not been submitted either in whole or in part, for a degree at this or any other university. In making this declaration, I understand and acknowledge any breaches in this declaration constitute academic misconduct, which may result in my expulsion from the programme and/or exclusion from the award of the degree.

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Signature of Candidate: Date: 25 July 2018
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CHAPTER 1: INTRODUCTION

1.1 Introduction

It can be seen that globalization happening around the world has been made more challenging by environmental uncertainties, businesses have realized that competing at firm level is just not enough to gain sustainable competitive advantage and increase firm performance. In fact Lummus, Duclos and Vokurka (2003), in their seminal study on supply chain flexibility, affirmed that businesses competing with each other has to move beyond the level of the firm management towards the level of supply chain management for the purpose of achieving the desired level of competitiveness. Moving back before the onslaught of globalization, this scenario is seemingly different where firm performance is dependent on the effective management of the day to day running of the company, managing labour costs, ensuring good quality of products and services, effective sales and the marketing of products and services and providing good after sales service. Thirty or forty years ago, when Malaysia experienced stability politically, economically and socially, it is safe for firms to focus their competition predominately on pricing, product mix and providing customer service. For example, in purchasing activities, negotiations seldom move beyond price bargaining, merchandising placements, trade offers and volume ordering. Moving forward to thirty or forty years later where the pace of technology advancement is both fast and furious, the changes in the world and the business environment are both rapid and unpredictable, Malaysian
firms can no longer afford to conduct business just the way it was by focusing on lowering prices or providing trade offers to compete. Now they must rise to the occasion and confront these all-encompassing changes that have been made more challenging by uncertainties with new and much more holistic organizational strategies the stretch from the supply level to the delivery to the end users.

Findings from global supply chains surveys such as the Global Supply Chain Trends Survey 2010 - 2012 (Geissbauer & D’heur, 2010) and IBM’s Global Chief Supply Chain Officer (2009) survey revealed that supply chain volatility and environmental uncertainty have risen to a level where it is called the new normal. These surveys also revealed that striving for a flexible supply chain is among the top supply chain trends. Seen as the antidote in addressing uncertainties, flexibility is what companies with top supply chains are striving hard to achieve in order to be able to response swiftly to changing market conditions, costs and external disruptions affecting companies’ operations, all of which could adversely impact revenues. The significance of being flexible was very much felt during the past two years, from middle 2014 to 2016, where the fluctuations of the Malaysian ringgit caused havoc in many supplies and purchases contracts, especially those with the long duration terms.

However, it has been noted that SMEs in Malaysia, and Asia in general, are traditional, small, outdated, complacent and continues to operate in lower level of the value chain, competing on costs/prices in a fast changing environment thus resulting in a low survival rate of less than 10 per cent businesses making it through the 10 year mark (Goh, 2002; Khoo, 2010). Given that statistic, local businesses, notably the
SMEs, need to develop effectiveness in operating the supply chain particularly given their significant role in the economy and must intensify steps to increase productivity and competitiveness in the face of intense competition, both at the global and regional levels.

On that note, the present research is about studying the firm’s competitiveness from the aspects of supply chain management. The central objective of the study is that implementing supply chain management practices is to create a major source of competitiveness which is measured by achieving competitive advantage. In that regard, it is clear that being competitive is the major concern, and this study examine the factors contributing to achieving competitive advantage. The factors being studied are supply chain management practices, environmental uncertainty and supply chain flexibility. Hence, this research is about developing and testing a model that will confirm the relationship of the four constructs in the context of SMEs in Malaysia underpinned by industrial operations, resource-based view and dynamic capability theories.

The list of firms are obtained from the 14th Edition/2015 of the SME Malaysia Business Directory which was endorsed by the Malaysia Ministry of International Trade and Industry (MITI) and the Small and Medium Enterprises Association (SAMENTA). Based on the Economic Census 2011, the percentage of firms in particular small and medium enterprises over total establishments in the country is 97.31 per cent (SME Malaysia, 2015).
1.2 Background of the Study

Businesses in their endeavor to manage the changing demands, supply volatility, technological and competitors’ unpredictability would recognize the significance and impact that flexibility within the supply chain has on achieving high level of firm effectiveness and thus higher competitiveness that ultimately lead to improving the overall business performance. Hence, businesses that implement strategies to better manage the supply chain to be gain higher flexibility and responsiveness, shall have an edge coping with the challenges and difficulties, particularly under conditions of environmental uncertainty, over those that are less flexible. Indeed, the focus on achieving flexibility at the supply chain level has emerged as a significant business operations strategy to cope with the changes and challenges of environmental uncertainty, to improve performance and gain competitive advantage.

Acknowledging that the new normal is flexibility, the National Economic Advisory Council Malaysia (NEAC) recognizes the importance of making Malaysia nimble and flexible in order to withstand a rapidly changing external environment, recession in developed economies and competition from emerging economies as well as globally. Ali, Jaafar and Mohamad (2008) reported that by improving local businesses competitive advantage, Malaysia has the opportunity to create an additional value which translates to approximately 12 per cent of gross domestic product growth. Local businesses in Malaysia are predominantly made up of small medium enterprises (SMEs) and covering many sectors. According to the publication SME Malaysia (2015), Malaysia’s gross domestic product is supported by these categories of small