

THE MODERATING EFFECT OF JIT ON THE RELATIONSHIP BETWEEN SCOR MODEL ON SUPPLY CHAIN PERFORMANCE IN MALAYSIA MANUFACTURING INDUSTRY

Nurhayati Kamarudin ¹
Prof. Datuk. Dr. Izaidin Abdul Majid ²

^{1,2} Universiti Teknikal Malaysia Melaka, Jalan Hang Tuah, Melaka, MALAYSIA

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Abstract: *The SCOR Model is one of the most applied reference models to support the description of supply chains and understanding the relationship between supply chain operation reference and supply chain performance. The Supply Chain Operations Reference (SCOR) model owes a standard thought to perceive an activity of the Supply Chain Council that provides a framework for characterizing supply chain management practices and processes with the result in best class performance. This article investigates potentials for future extensions of the model. The survey from been distributed to 1,100 companies in Malaysia manufacturing industry for extension potentials population. By an exhaustive analysis of 265 samples were returns to be evaluated for this article. This exploratory study investigates the relationship between supply chain operation reference (SCOR) Model effect by moderating of Just-In-Time (JIT) and supply chain performance based on the five decision areas provided in SCOR Model Version 10.0 (PLAN, SOURCE, MAKE, DELIVER, RETURN) and five key supply chain performance derived from supply chain business management experts. The questionnaire tool by Supply Chain Council is used to analyse requirements on modelling tools to support the application of a respective extended SCOR Model. A concept of a tool support which accomplishes most of the requirements is described and realised as a prototype which is introduced in this article. The results show that planning processes are important in all SCOR supply chain planning decision areas. Collaboration was found to be most important in the Plan, Source and Make planning decision areas, while teaming was most important in supporting the Plan and Source planning decision areas. Process measures, process credibility and process integration were found to be most critical in supporting the deliver planning on the decision area. Using these results, the study discusses the implications of the findings and suggests several a venue for future research.*

Keywords: *Supply Chain Operation Reference (SCOR) Model, Just-In-Time, Supply Chain Performance*

Introduction

The research is conducted in the most rapidly developing business and economic in Malaysia, namely towards implement the Supply Chain Operation References (SCOR) Model, as well as the best practices and apply it to the business by further ahead to improvising it for the best industry work by quantities and performance toward competitors (Chibba, 2017). As indicated by Tseng (2011), this enable company is to examine correctly the linkages between a firm's supply base management and financial success. Therefore, this study proposed reporting the highest levels of financial and operational performance will be emphasizing not only internal quality initiatives, but also initiatives relating to the management of all elements of their supply chain including customers and suppliers, and the quality of delivered products.

Specifically, the (Bauhof *et al.*, 2004) expressed the key parts of the SCOR Model of the processes involved in the performance measurement which focuses on the five supply chain processes. This is on the planning, sourcing, production making, delivery and product return process. As indicated in the supply chain council (SCC, 2010), an effective process practices set has been implemented in supply chain management performance. Then again, the idea of the supply chain management performance enhances organization which develops competence and effectiveness through an innovative process system (Gunasegaram *et al.*, 2004).

This study is investigating the performance level of organization of manufacturing company in Malaysia industry by using the moderating impact of Just-In-Time (JIT) on the connection between the SCOR Model. Determination of significant worth included products and services will be measured based on the analysis towards the SCOR Model performance moderated by the JIT into several stages of the Plan, Source, Make, Deliver and Return. Supply Chain Operation Reference (SCOR) Model related in activity of provider which is suppliers, makers is manufacturers, wholesalers and clients for enhancing and incorporating the proceeding with the performance into the manufacturing companies as a whole in a sorted out and high-performing plan of action (Chopra and Meindl, 2010). Tan K.C (2012) pointed out that “practical business with the common goal of resourcefully and successfully management is leading the successful cooperation in supply chain management”. In this way, coordination of the SCOR Model is required to decide and build up the output from the stock into finished products (Fitra and Kamariah, 2014). Therefore, it is also believed that the key to achieving the objectives of using the SCOR Model. Due to, minimize the waste and more an incentive to the client to enhance the interior procedures of organizations be aligned. In addition, implementing the Just-In-Time (JIT) to cut expenses and solve of the issues in the supply chain organization (Burgessetal, 2006; Cigolinietal, 2004).

Problem Statement

Supply chain management and performance in the manufacturing industry have attracted a lot of affecting factors amongst researchers. The manufacturing industry is imperative in the present business to develop as a country towards altered products and services and cost ingenious creations through the commercial center is turning into a more incorporated commercial center. It is identified with more advancement wealth, competitiveness and economic growth (Thurik and Wennekers, 2004). Thus, identified globalization and demanding worldwide will compete with the technology advancement. It creates an altogether new business condition for rivalry and in addition giving the chances to succeed

(Jorge and Alvarado, 2012). Therefore, numerous organizations turn out to be more clients arranged regarding decreasing reaction time to client asks for and enhancing quality as procedures to trail upper hand in Malaysia Manufacturing companies (R Tasmin, 2013).

In terms of industrial activities in the country, organizations concentrated on center skills and endeavors to achieve upper hand by viably overseeing buying exercises with suppliers towards manufacturing operation into performance measurement to improve business performance (Piszcalski, 2002). Therefore, a significant competitive advantage in manufacturing industries is needed to enhance the effectiveness of the product and supply chain process towards better performance (Arawati A. and Za'faran H., 2011). Thus, supply chain process models and SCOR Model performance measurement has been perceived as one of the central points in process assessment and change of manufacturing industries (Patrik Jonsson and Magnus, 1999; Georgise, 2011; Lucato, 2017).

This study concerning towards the relationship between supply chain performance accomplishments on Supply Chain Operation Reference (SCOR) Model in Malaysian manufacturing company. Furthermore, in identifying the key factors in making them perform in supply chain management. This study explores the business world which changes the supply chain and highlights the SCOR Model performance that gives an overview of the latest trends taking place in the supply chain process of the companies. Additionally, Chairul *et al.*, (2016) categorized the SCOR Model as a reliable and flexible system that should be aided by the management of a basic leadership process which might prove company's performance.

Research Objectives

1. To investigate the pre-valance of SCOR Model practices in Supply Chain Performance.
2. To measure the adapted SCOR Model by moderating effect of JIT towards achieving Supply Chain Performance in Malaysia manufacturing industry.

Literature Review

Since its independence in 1957, Malaysia has achieved an impressive development of its manufacturing sector and of its overall economy. Indeed, Malaysia manufacturing is related to the business activity, in fact the report showed that the market was volatile pending operational cost and other regulatory processes as mentioned by Federal of Malaysia Manufacturing in 2018. Throughout the years, researchers have shown great interests and efforts in distinguishing manufacturing industry from the gross domestic product (GDP) to be stable the sector's contribution (Bank Negara Malaysia, 2015). Indeed, distinguishing these concepts is important of the performance, growth and contribution of the sector to the economy of Malaysia. Therefore, this concept is important to avoid the confusion of applying findings in Malaysia manufacturing studies or vice versa (Lee *et al.*, 2016). Malaysia was identified as one of the few countries that swam against the tide of de-industrialisation that had swept the developing world since the 1980s, despite being very resourceful rich in manufacturing industry (Grieve, 2017).

The Supply Chain Operation Reference (SCOR) Model framework was developed in 1999 by Bowersox *et al.* (1999) based on operational, planning and control, and behavioural. Thus, framework was additional developed by Sadraoui *et al.* (2014) to comprise eight business processes: plan, acquire, make, and deliver, product design / reform, capability organization,

process design / redesign, and dimension. However, the SCOR model has developed by the Supply-Chain Council is a process reference model that serves as an analytical instrument for supply chain management. In additionally, the Supply-Chain Council releases the first version of the SCOR model. It integrated Plan, Make, Source, and Deliver as the stages of the supply chain in addition to metrics, best practices, and technology (Phelps, 2006; Galazzo, N. 2006; Magnusson, 2010). Furthermore, the Version 4.0 was the first to include the “Return” stage of the supply chain. Presently, Version 10.0 of the SCOR-model is the twelfth revision since the Model’s introduction in 1996. Those, revisions Model illustrated when it is determined by Council members that changes should be made to smooth the progress of the use of the Model in practice.

Determination of significant worth included products and services will be measured based on the analysis towards the SCOR Model performance moderated by the JIT into several stages of the Plan, Source, Make, Deliver and Return. Supply Chain Operation Reference (SCOR) Model related in activity of provider which is suppliers, makers is manufacturers, wholesalers and clients for enhancing and incorporating the proceeding with the performance into the manufacturing companies as a whole in a sorted out and high-performing plan of action (Chopra and Meindl, 2010). Tan K.C (2012) pointed out that “practical business with the common goal of resourcefully and successfully management is leading the successful cooperation in supply chain management”. In this way, coordination of the SCOR Model is required to decide and build up the output from the stock into finished products (Fitra and Kamariah, 2014). Therefore, it is also believed that the key to achieving the objectives of using the SCOR Model. Due to, minimize the waste and more an incentive to the client to enhance the interior procedures of organizations be aligned. In addition, implementing the Just-In-Time (JIT) to cut expenses and solve of the issues in the supply chain organization (Burgessetal, 2006; Cigolinietal, 2004).

The manufacturing sector is important and the emergence of the manufacturing industry of the economy is generally acknowledged (Sampath, 2014). Hence, it has made colossal business openings and is the motor of financial development globally. (Govende *et al.*, 2015) defined leveraging on the usage of information technology and communication has revolutionized operations and across businesses. Therefore, the manufacturing industries need to strategize, differentiate and compete in the global marketplace, the integration of new horizons in sustaining and growing businesses to remain competitive. Moreover, in the recent global financial crisis, the manufacturing industry remains the strongest among all areas (Tan, 2017). In the meantime, many manufacturing industries have kept up their force as well as actually, increment their ability and capacity. For instance, Emerson (2011) have commented towards SCOR Model in manufacturing industry in a more grounded nearness, connecting straightforwardly to entrepreneurs, and giving inventive arrangements that suit the current financial atmosphere for a long-lasting business relationship that will pay it over.

In addition, the Department of Statistics Malaysia found a total of 1,028,301 employees are engaged in Malaysian manufacturing industry sector (Jaideep, 2018). They concluded that researchers have endeavored to locate the following huge thing that will give the Malaysian assembling industry the edge in the market by acquainting thoughts with enhance the item through creative and another, propelled process. Jaidee (2018) have suggested that studies should involve exploring a new concept for products for making improvements. These studies can be considered as early discussion for an improved performance in Malaysian manufacturing industry.

Daghfous (2017) acknowledges that supply chains, known as support pull philosophy. In addition, items are pulled through the framework based on clients' necessities. In any case, Robin (2013) characterized that supply chain with the succession ventures on will create an output, beginning with the handling of crude materials, ceaselessly with the generation of maybe a progression of middle of the road sources of info, and closures with final assembly and distribution. According to (Govindan et al., 2017) which mentions about supply chain uncertainty refers to basic decision-making circumstances in which the chief needs compelling control activities or can't precisely anticipate the effect of conceivable control activities on framework conduct in light of an absence of comprehension. In addition, the present condition state and a predictable model which presented supply chain performance indicator and variable (Badawy, 2016).

Furthermore, Marchi (2017) has defined that the supply chain is a structure of the organization, people, equipment, performance, in the process of moving an item or office from supplier to client. Clorec (2017) has refined supply chain exercises change ordinary resources, crude materials and apparatus into a total item that is delivery to the end client. Furthermore, supply chain frameworks utilize items that perhaps will re-emerge the supply chain anytime where the exceptional esteem is recyclable. In addition, supply chains are continuously being viewed as an included element, and closer dealings between the associations directly through the tie to upper hand, diminish expenses and help to manage a reliable client bolster (Pasanen, 2015). Particularly, in a push philosophy of value chain products, they are pushed through the material flow with regard to the optimum level of supply (Omarah, 2007). Subsequently, makers take an interest with each other just amid their supply chains, and no measure of improvement at the maker's end can compensate for the inadequacy in supply chain which decreases the maker's capacity to contend (Jose M., 2010).

Pasanen (2015) called supply chain management as the incorporated arranging, coordination, and control of all calculated business process and exercises in the supply chain. Those are, to deliver a great value to buyer at less cost than the supply chain all in all while fulfilling the prerequisites of different partners in the supply chain network. As pointed out by Gunasekaran (2015), the envelopment and mix of individuals and mechanical resources are basic to fruitful supply chain incorporation. Among other factors suggested by Pasenan (2015) which defines the process goals of supply chain management components that typically provide information for the supply chain networks. Moreover, it refers to the objective progress of goods from your suppliers' suppliers to your company to eventually your customers' customer. The processes refer to SCOR Model processes which are the plan, source, make, deliver, return and enable (Delipinar, 2016). Moreover, factors measured in setting process goals comprise of transactional efficiency for sale deal orders, buy orders, work requests, and return approvals, substitution requests, and estimates (Oksanen, 2015).

The SCOR Model has been tenderly greeted by industry since it was introduced (Vijay, 2005). This process reference model is considered to make a possible statement among supply chain members (SCC, 2010). Daghfous (2017) has given general words to correspondence and it is utilized to clarify measure and gauge the supply chain course of action. SCOR model display joins the idea of the business procedure re-building, benchmarking and best practices. Moreover, the SCOR model demonstrates is supplier and intended for the displaying and advancement supply chain of extending nations. SCOR model display incorporates all the execution of supplier, client, material streams and all market relations (Patil KS, 2015).

In their study, the SCOR model show comprises of five fundamental procedures, Plan (P), Sources (S), Make (M), Deliver (D) and Return (R). The SCOR model demonstrating advance begins with the speculation that any supply chain process can be spoken to as a course of action of the procedures Plan, Source, Make, Deliver and Return (Gary L.; 2011 and Delipinar; 2016). In expansion, XLi (2014) has additionally characterized the arrangement supplier adjusts to best take care of the demand and supply the sourcing, manufacturer and delivery needs. It contains three levels of process. Level 1 is the best level that arrangements with process write. Additionally, it characterizes an extent of a supply chain. Level 2 is the development level which manages process classifications. Level 3 is the process segment level and is the most minimal conceivable level in the extent of the SCOR model display.

In supply chain studies, Uraikin *et al.*, (2017) defined JIT is a "draw" plan of development, where solid guidelines exhibit a flag for an item to be consumed and manufactured. Moreover, it can be well thought as a philosophy for the waste decrease and constant enhancement, a process which is in charge of and decrease inventory, a way to grow throughput, and a manufacturing development system (Lahti, 2016). In addition, in 1990s Leite (2015) received the organizations overall utilizing the term lean instead of JIT to feature the objective of such frameworks of delivering exactly what is vital when it is fundamental and in the required amounts 'only' – not pretty much. In addition, the term lean turned into a super-set and JIT as one of the systems to go lean.

Gunasekaran *et al.*, (2017) measured processes belonging to a supply chain is fundamental in improving performance into one tool for organization of the measurement. To meet the targets, the yield of the process encouraged by the supply chain must be estimated and contrasted and an arrangement of rule. As indicated by Harvard Business School Professor Michael Porter, any activity in a company's value chain that does not present genuine sensible change is a candidate for outsourcing to a partner that can offer a cost or centrality advantage. Hence, Sweeney (2012) characterized this investigation propensity to outsource more capacities. Besides, the supply chain expands well far from the interior elements of an affiliation. Then again, this presents open doors for aggressive change and business adaptability which additionally exhibits as a superior requirement for correspondence, in arrangement commitment, desire, and aggregate objectives between supply chain accomplices for the most ideal performance (Kocoglu, 2011).

In addition, Han *et al.*, (2017) have presented the representative of the organization structure performance estimation display which has five phases. Beginning with business level for considering by and large after-deals monetary performance and it is then taken after with process level in which parts and obligations in regards to supply chain exercises after deals with management are being talked about. Next, the movement level of an interior and outer from the business performance is being considered as far as unwavering quality. Moreover, alternate levels are responsiveness to clients, lead time, waste and cost management and use of aggregate resources. At long last the fifth level that individual analysts came to creativity and advancement as far as innovative work, Human Resources use and data innovation is by presenting change administration as one of other use of SCOR show in supply chain performance (Chan; 2014, Pasanen *et al.*; 2015, Tarasewicz *et al.*; 2016).

A critical finding rose in this examination is a noteworthy association instrument, a performance measurement backings to enhance the performance in accordance with supply

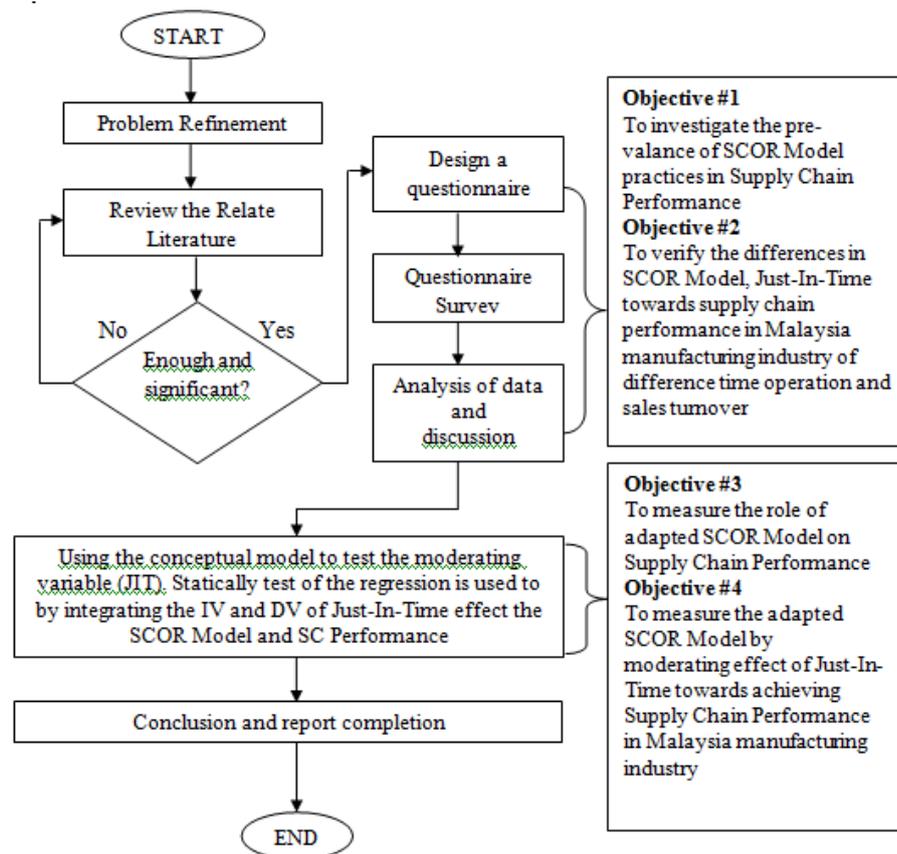
chain greatness (Nguyen, 2018). In this way, (Rezaee, 2018) pointed that despite the fact that supply chain is changed to a typical arrangement in manufacturing levels and a limitless number of papers are accessible on hypotheses and practices of supply chain association, chain performance estimation has not been paid idea respectfully. In any case, to this premise, a large portion of the creators assume that supply chain performance estimation isn't appropriately being focused and it is abused (Beamon, 1999; Holmberg, 2000; Gunasekaran et al., 2001; Chan and Qi, 2003; Chan et al., 2003; Gunasekaran et al., 2004; Schmitz and Platts, 2004; Folan and Browne, 2005; Park et al., 2005; Chelariu et al., 2014).

Methodology

The purpose of this study is to develop the SCM system, a few methodologies were considered to be used. Comparisons were made where the pros and cons of each methodology were taken into careful consideration. The comparisons were made in order to identify the best methodology that needed to be employed during the course of this project. By employing right methodology, it is hoped that the system can be developed within the time frame set and ultimately fulfils the objectives of this project. The efficiency of the organization on keeping track and maintain an up-to-date and reliable supply chain data and increase efficiency. Supply Chain Operation References (SCOR) Model is the best practices and apply it to the business by further ahead to improvising it for the best industry work by quantities and performance toward competitors. In addition, this study adds to the body of knowledge by providing new data and empirical insights into the relationship between Supply Chain Operation References (SCOR) Model performance and business management impact of company.

The study described and explain the contend towards the current supply chain management research has not analytically address the contact towards supply chain process, information sharing an important for the management, supply chain drive had been conducted in all department and the business performance is highlighted. The gap exists in the relationship between SCOR Model and the business performance. Without a complete assessment, the literature base found is neither complete nor realistic in this study. Therefore, these studies investigate the contact among supply chain process, information sharing, supply chain drive, and business performance. The next stage is data collection. Survey and case study approaches were chosen for the present study. In investigating the implement indicators and the factor of the SCOR Model, JIT and Supply Chain Performance a set of questionnaires has been developed based on the criteria determined from the literature (second research objective). Initially, the questionnaire was tested through a pilot study to ascertain the validity and reliability of each indicator for each research variable in the questionnaire before it is distributed to the population studied in the final survey. The result from the final survey was then analysed statistically to test whether the hypothesis generated in the present research are supported. IBM SPSS 19.0 software is chosen for this purpose. The analysis comprises the questionnaire screening analysis, descriptive analysis, reliability and correlation analysis, testing of hypothesis and factor analysis.

Prabir (2007) examines supply chain performance measurement developed in terms of efficiency with respect to practical parameter across five distinctive task spaces which are plan, source, make, delivery, and return. There are five essential key execution markers (KPI) distinguished in every activity space. Figure 3.1 captures the process flow of the present research.



Finding

Firstly, this study provides give a clear picture of the attributes of information investigations of the respondents. Furthermore, the study results shown from the data exploration in statistical analyses from the outcome variable, such as normality, linearity, and homoscedasticity. In addition, present the validity and reliability of the data measurement from this research. Lastly, the results of one-way analysis of variance (ANOVA) are presented for the purpose of descriptive hypothesis testing. Therefore, the result can be able to compare the actual top-line into business process of efficiency.

Factor analysis forms a factor by placing the closely related individual items together. A factor is a kind of super-factor communicated by a gathering of factors having high between connections however low relationships with some other gathering (Burns and Burns, 2008). According to Williams *et al.* (2010), factor analysis serves three purposes: (i) it reduces the number of variables; (ii) it examines unidimensionality of constructs and; (iii) it determines to construct validity of the questionnaire. In this study, factor analysis is used to determine the unidimensionality and validity of the constructs, namely (i) SCOR Model, (ii) Just-In-Time and; (iii) supply chain performance.

The result of factor analysis (Table 1) which revealed from the total of 50 items, five components were successfully formed for the entire construct of SCOR Model, namely: (i) Plan (P) (Eigen-values = 27.05); (ii) Sources (S) (Eigen-values = 4.47); Make (P) (Eigen-values = 2.40); Delivery (D) (Eigen-values = 1.70) and; Return (R) (Eigen-values = 1.18). The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO-MSA) obtained was 0.973 and Barlett's test of sphericity was significant at ($p= 0.01$), therefore factor analysis is

appropriate. Both have met the factor analysis criteria (Dugard *et al.*, 2010; Williams *et al.*, 2010). Collectively, the five components explain 75.1% of the total variance, which is higher than the 60% threshold (Hair *et al.*, 2006). Items with factor loading greater 0.30 were retained.

Table 1: Factor Analysis for SCOR Model

SCOR Model	Factor Loading
Plan (P)	
Overall Plan Factor Loading	0.71
Source (S)	
Overall Source Factor Loading	0.67
Make (M)	
Overall Make Factor Loading	0.78
Delivery (D)	
Overall Delivery Factor Loading	0.84
Return (R)	
Overall Return Factor Loading	0.81

Table 2 illustrates the factor analysis output of the moderating variable Just-In-Time and the dependent variable supply chain performance. Which is the entire variable been compute become one construct of the factor analysis. This study analyzes the moderating and dependent variable to observed, described and correlated to uncover the underlying structure of a relatively large set of variables. Furthermore, exploratory factor analysis (EFA) is to identify the underlying relationships between measured variables. All fifty-five items with factor loading values above 0.30 were successfully retained. The Eigen-values was 1.805. The KMO-MSA produced was 0.50 and the Barlett's Test of Sphericity was significant at p-value = 0.00, therefore factor analysis is appropriate. Again, the outcomes indicate the suitability of factor analysis for JIT. The cumulative percentage of variance explained was 75.02%, which was greater than 60% (Hair *et al.*, 2006). The factor loading value JIT 0.83 and supply chain performance 0.69 were found in the analysis.

Table 2: Factor Analysis for JIT and Supply Chain Performance

Variable	Factor Loading
Moderating Variable	
Just-In-Time (JIT)	0.83
Dependent Variable (SCP)	
Supply Chain Performance	0.69

The reliability test or internal consistency test has been performed prior to the full-scale questionnaire distribution to ensure the items in questionnaire measure what they are supposed to measure. A reliability analysis was performed in this section. Cronbach's alpha (α) is considered the most popular indicator of internal consistency, the α -values of variables

used in this study are shown in Table 3. The α -values of all variables were considered as preferable and reliable with $\alpha > 0.70$ (Pallant, 2011).

Table 3: Reliability Analysis

Variable	No. of Items	Cronbach's Alpha (α)
COMBINED (SCOR MODEL, JIT and SCP) *SCOR (Supply Chain Operation Reference) - Independent *JIT (Just-In-Time) - Moderating *SCP (Supply Chain Performance) - Dependent	265	0.913

Correlation is conducted to determine the strength of the relationship between two continuous variables (Zou et al., 2003). In determining the relationship between two variables of interval-level or continuous scales, Pearson correlation coefficient or product moment correlation coefficient (r) is normally used (Zou et al., 2003). According to Pallant (2011), r -value can only fall in between -1 to +1, in which the sign indicates the relationship (positive and negative) while the absolute value provides the indication of the strength of the relationship. In interpreting the strength of relationship, Elifson et al. (1998) suggested that r -value of zero (0) should be referred to as no relationship and one (1) as perfect relationship; meanwhile r -value which ranged from 0.01 to 0.03 should be considered as weak, from 0.31 to 0.70 should be regarded as moderate and from 0.71 to 0.99 should be interpreted as strong.

It is obvious from Table 4.16 that all pairs of variables in this study have established a positive and significant correlation (p -value < 0.01) with a strong correlation. SCOR Model and supply chain performance obtained the highest r -value with perfect positive correlation (1.00). Although another strong r -value (0.81) was recorded between SCOR Model (independent variable) and Just-In-Time (moderate variable) towards supply chain performance (dependent variable), it was well above the preferably cut-off value of 0.30 (Pallant, 2011).

Table 4: Correlation between SCOR Model, Just-In-Time and Supply Chain Performance

	SCOR Model	Just-In-Time	SC Performance
SCOR Model	1		
Just-In-Time	0.81	1	
SC Performance	1.00	0.81	1

SC Performance: Supply Chain Performance

**Correlation is significant at the 0.01 level (2-tailed)

This study explained the descriptive statistical tests performed. It started with the descriptive results in regards to characteristics and demographic information of Malaysia manufacturing industry participated in this study. Then, the data were carefully treated for missing values, outliers, normality, linearity and homoscedasticity to ensure that they were suitable for multivariate analyses. Subsequently, the factor analysis has successfully categorized the independent variables, known as SCOR Model into five factors, namely plan, source, make, delivery and return. The moderating was Just-In-Time which comprised of reliability, demand variability cost and asset management, efficiency and responsiveness. The dependent variable was supply chain performance. Thus, construct validity prevailed. The mean and standard deviation values of various constructs were presented. To be specific, it is to answer the first research question of the level of the SCOR Model have been implemented in the industry using supply chain performance.

The result shows the Malaysia manufacturing demonstrated a high level of SCOR Model towards supply chain performance. In addition, the reliability of internal consistency of items was achieved through evaluation on Cronbach's alpha values.

Conclusion

As discovered from this study the majority of the organizations under study were young or early organization and consequently the related technical entrepreneurs' operation timeless and their operation time were also in an early stage in involvement in business. As revealed by the analysis based on the SCOR Model measure of organization performance, a large majority of the organization under study may be classified as into the inter-relationships of the performance attribute variables. Moreover, into develops efficient measurement model that can resolve supply chain performance complication by strengthening the model. This is an advantage for the supply chain management of the organization in the Malaysia manufacturing industry as it appears that they have already adopted entrepreneurial propensity in the management of their organizations. This study is required to make a substantial contribution to improving organizational performance in the Malaysia manufacturing industry in terms of offering one special type of management style, i.e. SCOR Model performance measurement approach in the management approach in the management of organizations. These supports the suggestion made by Delipinar (2016) the managers who want to make their organizations more effectively are well-advised to follow several of Delipinar's suggestions.

Potential supply chain management and great supply chain performance are essential for the present business achievement. Organizations need an adjusted budgetary in term of productivity that identified with supply chain performance to accomplish most advantages for the future accomplishment. To date, there has been no far-reaching study that has investigated the connection between the SCOR Model and supply chain performance. The target of this examination was to comprehend the directing impact of Just-In-Time on the connections between the SCOR Model on supply chain performance in Malaysia fabricating industry.

Thusly, this examination integrated surviving exploration in different SCOR Model and store network execution and proposes a far-reaching research system to investigate the part of SCOR Model and inventory network execution in the present production network administration. The consequence of this study shows as analytical reveal that the effect of Just-In-Time towards SCOR Model on supply chain performance has a positive relationship in supply chain management. The viable SCOR Model finding has enhances all the four-parts supply chain performance (reliability, responsiveness, cost and asset management efficiency). Both effective SCOR Model and effective supply chain performance are necessary to achieve

optimal business performance. This study finding has important implications for the future researcher beneficial. For the following future research should test the aggregate model in supply chain setting that influence the business performance.

This study likewise adds to the writing by expanding the information on the linkage between the SCOR Model and the supply chain performance of the assembling business. Numerous examinations have investigated the linkages between supply chain management and the execution of associations utilizing the supply chain performance measure (Pasanen, 2015; Patil, 2015; Geng, 2017). Specifically, Martin (2009) and Pasanen (2015) considered the immediate linkage between the SCOR Model and association performance. Be that as it may, none of these took a gander at particular business ventures in the Southeast Asian area and particularly in Malaysia. Consequently, this study has figured out how to broaden geological scope of the investigation, and by setting up a critical relationship between SCOR Model and performance, it has loaned extra belief to the past finding.

Since to the knowledge of the researcher, following extensive investigation and consultation, there has been no academic study conducted in Malaysia manufacturing industry, therefore, this study offers some empirical analysis and descriptive analysis to the Federal Malaysia Manufacturing (FMM)-status companies and the owner-managers who run these companies. This analysis provides a broad overview with regard to the characteristics of the organizations and the entrepreneurs. More important is that the findings of this study will be made available in the public domain for future reference.

Although, the analyses of the relationships between the Malaysia manufacturing industry status organizations and their lead owner-managers or entrepreneurs with the performance of the firms and the level of supply chain performance in the manufacturing industry did not significant results, the fact it is an exploratory study into a new business context offers some beneficial contribution to the literature.

Future study ought to likewise consider making progress toward a bigger example estimate. On account of leading exploration in the Malaysia producing industry, it is additionally proposed that it ought to incorporate all Federal of Malaysia Manufacturing (FMM)-status associations, i.e. counting the joint-wander associations and remote possess associations. Thusly not exclusively may it acquire reactions, i.e. as far as a greater number of test estimate which will loan comfort while utilizing the different factual tests yet additionally it will enable correlation with be made among these distinctive sorts of organizations.

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