Impact of Supply chain Management Practices on Competitive Advantage and Performance of Food and Beverages Organizations in Brunei Darussalam

1Kabiru Jinjiri Ringim
1Nasiru Abdullahi
2Kabiru Maitama Kura

1Business Administration Department, ABU Business School, Ahmadu Bello University Zaria. Kabirujinjiri@yahoo.com; elnasir@gmail.com, Tel:234-8062103566
2Department of Management Teknologi, UTB School of Business, Universiti Teknologi Brunei Darussalam, Kabiru.kura@utb.edu.bn, Tel: 673-8354025

Abstract
Supply chain management practices contributed to supply chain Performance and activities related to supply chain management that create and enhanced level of supply chain responsiveness in competitive business marketplace. The objectives of this study were to examine the impact of supply chain management practices such as strategic supplier partnership, customer relationship, information sharing on competitive advantage and performance of Food and Beverages Organizations in Brunei Darussalam. Cross-sectional survey research on 182 sampled Foods and Beverages Organizations in Brunei Darussalam were selected from a population of 300 using simple random sampling technique of probability sampling method. Descriptive and inferential statistics (Correlation and Regression Analysis) were employed to analyze the relationship and test the hypotheses of the study. The findings of the survey revealed that strategic supplier partnership, customer relationship, information sharing have related to competitive advantage and performance of Food and Beverages Organizations in Brunei Darussalam. In addition, strategic supplier partnership, customer relationship, information sharing have significant and positive impact on competitive advantage and performance. Strategic
supplier’s partnership was found to be insignificant with organizational performance. The outcome of this study provides vital information on the influence and impact of Supply chain Management Practices dimensions on competitive advantage and performance of Food and Beverages Organizations. The managerial implication of this study is for Food and Beverages Organizations. In Brunei to focus on practical customer relationship and information sharing with partners to ensure organization’s competitive advantage and performance.

Keyword: Supply Chain Management Practices, Strategic Supplier Partnership, Customer Relationship, Information Sharing, Competitive Advantage, Performance, Food and Beverages Organizations, Brunei Darussalam.

1.0 INTRODUCTION
In this modern world, competition between businesses is widely increasing. More businesses are now focusing their attention to providing products and services that are of value than their competitors as the marketplace in which businesses operate today is commonly recognized as being complex and turbulent (Christopher, 2000). Supply chain aims to increase customer response, improve profitability and deliver value to customers (Said, 2012). This is due to the increase in customer demands for fast delivery and higher quality products or services that vigorously rising from local to global market (Christopher, 2000). Thus, to improved performance, organization needs to get the right product, with the right price at the right time. Thus, the reason in pursuing this study is to emphasize how organization focus on their supply chain in order to deliver their products or services effectively and to support the Brunei Darussalam’s national vision, Wawasan 2035, the nation has been working toward achievement of a dynamic and sustainable economy by 2035. Currently in Brunei Darussalam, there is an increase in number of entrepreneurial enterprise (SMEs) with the expansion in food and beverages (F&B) outlets and considered e-commerce technologies as a platform to enhance their performances (Chen & Holsapple, 2012). Therefore, it has become part of organization plan for technology investment to achieve operational
excellence (Srinivasan & Swink, 2015). Hence, it is vital to emphasize the importance of SCM practices towards achieving competitive advantages and organizational performance.

Supply chain management has dual purpose. Firstly, is to improve the performance of an individual organization and the entire supply chain and Secondly, to focus on reducing organizational cost (Li & Lin, 2006). SCM concepts combined from different theories such as Strategic Management and theory of the formation of the organization such as logistics, production, inventory management, accounting management, research and development. There are various research on supply chain management practices that include upstream and downstream side of supply chain such as outsourcing, supplier partnership, information technology sharing, cycle time compression and continuous process flow, as part of supply chain management practices (Donlon, 1996). Furthermore, Tan, Kannan & Handfield, (1998) argued that quality, purchasing, and customer relationship as the supply chain management practices. While, Li, Rangu-Nathan and Rao (2005) argued that strategic supplier partnership, information sharing, information quality, internal lean practices, customer relationship and postponement as part of supply chain management practices. Tan, Kannan & Handfield, (1998) asserted that supply chain management practices should be in form of quality purchasing, and customer relationship.

The researches on supply chain management practices were more on cross-functional teams, long-term relationship, supplier base reduction, and supplier involvement that focused on five supply chain practices (outsourcing, strategic supplier partnerships, customer relationship, information sharing, and product modularity to create supply chain responsiveness (Lee, 2004, Li, Ragu-Nathan & Rao, 2005). The key aspects of supply chain management practices were supply chain integration, information sharing, customer service management, geographic proximity, JIT capabilities and supply chain leadership (Tan, Lyman & Wisner, 2002; Min & Menzer, 2004). The effect of supply chain in the manufacturing process includes predictability, flexibility, reduce
inventory planning whilst in operation includes performance of resources to reduce the lead-time and reduce unnecessary cost. By utilizing supply chain assets, products and information, it leads to effective supply chain management that will maximize supply chain profitability (Sunil Chopra & Peter Meindl, 2007).

Therefore, in this study, the main three-dimensional for SCM practices are strategic suppliers, customer relationship management, and information sharing, that can help to improve business performance (Min, Mentzer, William & Smith, 2001). There is a need to understand the effect of the SCM Practices and Performance of Food and Beverages companies in Brunei Darussalam context in view of the scanty of the studies on the Supply chain Management Practices that tested SCM Practices factors, Competitive advantage and Organizational Performance of Food and Beverages Companies. Hence, this study seeks to investigate to what extent does supply chain management practices such as strategic supplier partnership, customer relationship, information sharing impact on supply chain competitive advantage and organizational performance of Food and Beverages organizations in Brunei Darussalam? The paper is organized as follows. A review of relevant literature, analyzed and synthesized the research findings of past studies to develop a conceptual framework, methodology, presentation of data analysis results, discussions of findings, provided the managerial implications of the study, limitation and conclusion.

2.0 LITERATURE REVIEW
2.1 Organization Performance

Organizational performance refers to how an organization succeeding in accomplishing their goals. The short-term objectives of SCM are mostly to increase productivity and manage inventory, while in the long run, the objectives are to increase market share and overall profits. Other organizational initiative, inclusive of supply chain management and other departments will all lead to enhancing organizational performance. SCM practices will not only help to achieve organizational performance, but also
the competitive advantage of an organization in the market. Some of the factors in assisting to achieve competitive advantages are price/cost, quality, delivery dependability, time to market, and product innovation. Previous studies have measured organizational performance on both financial and non-financial criteria (Llorens, Ruiz & Molina, 2003).

2.2 Competitive Advantage

Competitive advantage is a condition that allows an organization to produce goods or services at a lower price or in a more desirable outcomes. These conditions allow the organization doing relatively better than their market rivals as a result of the organizations’ unique features that differentiate them from its competitors (Tracey, Vonderembse & Lim, 1999). The competitive advantages can be from price/cost, quality, delivery, product innovation, and flexibility (Tracey, Vonderembse & Lim, 1999). When an organization able to achieve competitive advantage, it suggests that the organization is able to achieve one or more of the following capabilities such as offering lower prices, higher quality, higher dependability, and shorter delivery time. With these capabilities, it helps to enhance the organizational performance (Souza & William, 2000). Also cost, quality, dependability and speed of delivery were suggested as some of the critical competitive priorities for manufacturing organization (Wheelwright, 1978; Thatte, 2007). Competitive advantage dimensions included price/cost, quality, delivery dependability, and time to market (Stalk, 1988; Vesey, 1991; Handfield & Pannesi; 1995, Kessler & Chakrabarti, 1996; Zhang, 2001). Moreover, competitive capabilities were classified into five dimensions such as competitive pricing, premium pricing, value to-customer quality, dependable delivery, and product innovation (Fawcett & Smith, 1995; White, 1996; Skinner, 1985; Roth & Miller, 1990; Tracey, Vonderembse & Lim, 1999). Moreover, price, quality, delivery dependability, time to market, and product innovation were suggested as the dimension of competitive advantage Thatte(2007).
2.3 Supply Chain Management (SCM) Practices

SCM practices have been defined as a set of activities in an organization to promote effective management of its supply chain. SCM practices are strategic suppliers partnership, customer relationship management, and information sharing, that can help to improve business performance (Min, Mentzer, William & Smith, 2001). Supply chain framework developed in this study is shown in Figure 1.0. The framework proposes that SCM practices are positively related to SCM responsiveness and influence SCM organizational performance both directly and indirectly. Supply chain management (SCM) elicits competitive advantage resulting performance improvements (Joshi, Nepal, Rathore & Sharma, 2013). Supply chain management concept consists of collaboration with partners in the channel, which include customers, distributors and suppliers. Other vital components of SCM include operations, integration, distribution and purchasing. SCM consist of integrated and detailed process-oriented approach, which affects the control of the supply chain. This aim to create value for consumer, by using both customer service as well as reducing the cost (Giannocearo & Pontrandolfo, 2002).

2.3.1 Strategic Suppliers Partnership

Strategic supplier represents the long-term relationship between the organization and suppliers. Strategic suppliers are trained to promote mutual benefit and participate in important policy areas related to one or more courses between the two sides for example, the technology and product markets (Rangan & Yoshino, 1995). A strategic partnership emphasizes, long-term, association and encourages mutual planning and problem solving efforts (Gunasekaran, Patel & Tirtiroglu, 2001). It has also proven that a long-term perspective between supplier and buyer increase the intensity of firm and supplier integration. Strategic partnership with suppliers enables organizations to work effectively with a few important suppliers who are willing to share responsibility, risk and reward for the success of the products. By having strategic partnership with suppliers, both will benefit by contributing knowledge and resources to workmore
effectively. By communicating in the early stage during product design process, it can be more cost-effective. Hence, by sharing knowledge and working together at the earliest stage, it can help the organization to reduce wasteful time and effort. Previous studies have underlined the significant contribution of Strategic Suppliers Partnership with a positive effect on performance outcomes (Ahmed, Ahmed & Najmi, 2018; Silva, Gome & Sarkis, 2019). AlSheyadi, Muylildermans and Kauppi (2019) proposed that most organizations have an identical goal of Strategic Suppliers Partnership, which is increasing profit and long-term competitive advantage. Strategic Suppliers Partnership catalyst this organizational performance via extensive coordination between supply chains partners through long periods of joint activities and mutual goals of maximizing profit (Fernando, Jasmi & Shaharudin, 2019). Based on this view, this study postulates that a higher level of Strategic Suppliers Partnership may lead to greater business-partner collaboration and coordination to support decision making which in turn increase intangible operational benefit such as financial performance. Thus, the study postulates the effect of Strategic Suppliers Partnership on performance asbelow:

H01: There is positive significant impact of strategic supplier partnership on competitive advantage and performance of food and beverages organizations in Brunei Darussalam.

2.3.2 Customer Relationship Management

Customer relationship management practices handle complaints, customer satisfaction, and long-term relationship establishment. Organization can establish long-term relationship with customers, by improving basic operation to fulfill customer satisfaction and tackle customer complaints (Jo & Tan, 2002). Hence, customer relationship management is not only focusing on inbound customer relationship, but also outbound in SCM. It supports the communication between customers locally and globally in the right time, right place and standard quality. By having customer relationships, it provides platform for organization to sustain customer satisfaction, values, and customer loyalty, which helps to differentiate their
products than competitors (Bhimani & Ncube, 2006). Customer relationship has also been recognized as an internal component for organization’s market strategy to improve sales and profits (Bommer, O’Neil & Treat, 2001). Good relationship with supply chain members, including customers, is essential for successful implementation of SCM.

H02: There is positive significant impact of customer relationship management on competitive advantage and performance of food and beverages organizations in Brunei Darussalam.

2.3.3 Information Sharing

Information sharing means information is communicated between partners where the accuracy, adequacy, and timeliness refer to the quality of information. It is believed that information and share is an important part of effective supply chain management (Li & Lin, 2006). It is best to ensure that the information shared between supplier partners are general information and any important information that are crucial for supplier to know some of the identified elements that comprises information sharing consist of data acquisition, processing, storage, presentation, forecast data, inventory status, order status, and performance status (Simatupang & Sridharan, 2002). Although, information can be a catalyst for competitive advantage, it is best to ensure a clear understanding of supply chain concepts and be willing to openly share information with supply chain partners. Information can be shared with policy information or activities related to the logistics. By sharing information regularly, this can ensure the supply chain partners can work as a single entity. Together, they can understand the needs of the end customer better and hence can respond to market change quicker. When sharing information between supply chain partners and organization, the information is useful for both parties and can be a competitive advantage. Prior studies have also highlighted that the quality of information sharing and communication between supply chain partner has significant advantages on overall cost reduction (Yeniyurt, Wu, Kim & Cavusgil, 2019) through the use of the paperless transaction and efficient documentation via an online network. Based on this view, GICS
capable of replacing the conventional flow of handling information by making the maritime supply chain operation more efficient and productive, which translates into enhanced financial performance. Thus, this study postulates the hypothesis as below:

\[ \text{H_03: There is positive significant impact of information sharing on competitive advantage and performance of food and beverages organizations in Brunei Darussalam.} \]

2.4 Conceptual Framework

In this study, SCM practices consist of three reliable dimensions, which include strategic supplier partnership, customer relationship and information sharing. Strategic supplier partnership means long-term relationship between the organization and suppliers. Customer relationship represents the practices on customer satisfaction and long-term relationship establishment. While information sharing means the information communicated between partners is adequate and accurate that will reflect the quality of the information. This research adapted the supply chain management practices (supplier partnership, customer relationship and information sharing) conducted according to Brunei context, focusing on food and beverages (F&B) organizations. The construct and instruments were adapted from the previous study that have been developed valid and reliable to measure supply chain management practices (Said, 2012, Li Ragu-Nathan & Rao, 2005). The literature also represents supply chain management practices from different perspectives with goal of improving competitive advantage of firm. By improving competitive advantage of the firm, organization could improve its performance. Three dimensions of supply chain management practices that lead to competitive advantage and organizational performance was demonstrated in Figure 1.0.
SUPPLY CHAIN MANAGEMENT PRACTICES

![Research Model]

**Model Specification**

The study employed the multiple regression models to test the impact of Supply Chain Management Practices on Competitive advantage and Performance of Food and Beverages Organizations in Brunei. Supply Chain Management Practices was proxies by three essential variables; Strategic Suppliers Partnership, Customer Relation Management, and Information Sharing. The Multiple regression models were also developed to test the hypotheses on the influence of the independent variables on the dependent variable (Competitive Advantage and Organization Performance). The regression model that captured the hypotheses of the study as thus presented:

\[
\text{ORG PERFM} = \alpha + \beta_1\text{SSP} + \beta_2\text{CRM} + \beta_3\text{IS} + \varepsilon_i
\]
COMP ADVT = α + β₁SSP + β₂CRM + β₃IS + εᵢ

Where:

ORG PERFM = Organization Performance

COMP ADVT = Competitive Advantage

SSP = Strategic Suppliers Partnership

CRM = Customer Relation Management

IS = Information Sharing

εᵢ = error term

**Decision Rule:** The decision to accept or reject the alternate hypothesis (Hₐ) of the statistical test was based on the 95% confidence level @0.05 margin of error. We reject the alternate hypothesis if the P value is at or more than the 5% (0.05) level of significance from the regression output.

The theoretical model adopted for this study was derived from the competitive advantage theory. Porter (1998) has argued that linkage between suppliers’ value chains and a firm’s value chain is a strategy that provides the companies with opportunities to improve their competitive position. An effective supply chain management practices can create short-term economic benefits as well as a long-term competitive advantage (Folinaset, Manthou, Sigala & Vlachopoulou, 2004). Therefore, to improve the company’s performance through supply chain management practice dimension, companies must plan the strategy of integrating cross-functional activities and effectively link itself with the supply chain partners. (Lambert et al., 1998). The supply chain integration strategy creates value for a company’s customers and draws suppliers and customers into the value creation process (Vickery, Jayaram, Droge, & Calantone, 2003). The theory was appropriate for this study because strategic supplier’s partnership, customer relationship management and information sharing can explain interaction of competitive advantage and organizational performance.
3.0 METHODOLOGY

3.1 Research Design

The study used a survey research design and cross-sectional research by adopting the quantitative method. The advantages of obtaining cross-sectional data study can be exploratory, descriptive or explanatory (Neumann, 2003). Babbie (2007) shares the same views by stating that there are three purposes of social research, exploration, description, and explanation each of them with different objectives for the research design. The study was quantitative. The quantitative analysis applied to describe current conditions or to investigate relationships, between the study variables. Also, it helped in answering questions concerning the current state of the subject under study (Creswell et al., 2003). Also, the cross-sectional research design adopted, because the information about the independent variables and dependent variables collected at a point in time.

3.2 Population, Sampling Size method, Techniques and Data collection strategy

This study employed probability sampling method so that each element in the population has the privilege of having an equal chance of being selected in the sampling process (Asika, 2010). Krejcie and Morgan (1970), Table for determining sample size for a finite population was used to arrive at the sample size of 165 from the total population of 300 Foods and Beverages Organizations in Bandar Seri Begawan, Brunei Darussalam. Therefore, for anticipated non-response bias and unreturned or completed questionnaires, the questionnaires were increased by 10% added to the above minimum sample size given by the formula to make it 182 organizations. The addition of 10% to the sample size of 165 was to take care of other unavoidable errors such as incorrect filling and failure of some respondents to return questionnaire (Israel, 2013). Therefore, 182 questionnaires were distributed to the respondents, 166 were adequately filled and returned both online and by hand delivery and collection strategy with the help of a research assistant. The questionnaire was initially distributed through Google Form, a web-based online survey in order to
gain advantages such as faster responses and lower cost. After the collection of data through the questionnaire, based on the responses of the samples, tables were prepared and the data collected was analyzed and interpreted with the help of tables and figures and statistical tool used was IBM SPSS version 20. The reason for employing the SPSS was to facilitate valid answers, such as missing values, means, median, and standard deviation based on numerical techniques to present and summarize data (Kotler, P & Keller, K. L, 2009).

3.3 Measurement of Variables

The study adapted the constructs and instrument developed by Said, 2012, Li Ragu-Nathan & Rao, 2005 and aligned with the conceptual aspect of each construct regarding strategic supplier partnership, customer relationship, level of information sharing and competitive advantage. The questionnaire consisted of three sections comprising questions related to SCM practices, Competitive advantage, and Organizational Performance and lastly demographic section. The first section, focusing on supply chain management practices consists of questions that focus on three main SCM Practice instruments: strategic supplier partnership (six items), customer relationship (5 items), and level of information sharing (six items). The second section Competitive advantage as uni-dimensional consist of questions on: price/cost, quality, product innovation, and time to market, delivery dependability and goal attainment. These two sections, adapted from the past studies instrument developed (Li, Ragu-Nathan & Rao, 2005). The third section, organizational performance was adapted from Tucker & Thorne, (2010). The questionnaire was presented in Appendix. Measurement items were anchored using the five-point Likert scale (1 = strongly agree to 5 = strongly disagree).

3.4 Validation of Instrument and Method of Data Analysis

The questionnaire instrument validation was done by experts in academic and professional practice. The reliability coefficient for the SCM Practices scale ranges from Strategic Supplier Partnership .782, Customer relationship .791, Information Sharing .846. Competitive advantage .862
and Organizational Performance was .750 suggesting good reliability. In order to ensure all data are filled correctly, data screening, cleaning and treatment of outliers were done in SPSS. Hence, any questionnaire with missing data or incomplete were rejected.

In this study, Bivariate Pearson analysis was performed between all the variables to determine whether there are correlation between the variables. The output was used to test the relationship of the SCM Practices, Organizational Performance and Competitive Advantage. Multiple linear regression analysis was performed between the independent variables (Strategic supplier partnership, customer relationship and Information sharing) and dependent variables (Organizational performance and Competitive advantage) in order to determine the impact between variables and to test whether the hypotheses are accepted/rejected.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Descriptive Statistics of the Variables

The section presents the descriptive statistics of the primary variables in the study. These variables include Supply chain Management Practices (Strategic Suppliers Partnership, Customer Relationship, and Information Sharing), Competitive Advantage and OrganizationPerformance
For descriptive statistic, SPSS tabulation was conducted to discover the mean of each Supply chain Management Practices (Strategic Suppliers Partnership, Customer Relationship, and Information Sharing), construct in order to assess the extent of Supply chain Management Practices adoption among the food and beverages organization’s in Brunei. As displayed in Table 1.0, the mean of Strategic Suppliers Partnership, Customer Relationship, and Information Sharing, Competitive Advantage and Organization Performance showed that most companies fairly adopted Supply Chain Management Practices in their organization. It is worth to note that the minimum number of means is 1, and the maximum number is 5 as demonstrated in the 5-point Likert scale. The value of mean can be interpreted as the level of agreement among Food and Beverages companies with more than 3.5 (value) can be considered high in Supply Chain Management Practices implementation (Thun and Müller, 2010).

From the examination, the mean for all Supply chain Management variables was above 3.5, and this indicated that most companies were indeed adopting Supply Chain management practice in their organization based on a high level of agreement. For competitive advantage and organization performance dimensions, the measurement has indicated a comparatively higher level of agreement among other variables, which
signified the indirect effect of Competitive Advantage and organization performance dimension based on the high level of agreement amongst respondents.

Table 1.1: Inter – Correlations of Major Variables

<table>
<thead>
<tr>
<th></th>
<th>SSP</th>
<th>CR</th>
<th>IS</th>
<th>COM ADVTG</th>
<th>ORGN PF</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADVTG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORGN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SSP</th>
<th>CR</th>
<th>IS</th>
<th>COM</th>
<th>ADVTG</th>
<th>ORGN</th>
<th>PF</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADVTG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORGN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS output

Table 4.2. Shows the overall correlation result that Strategic Suppliers Patnership (SSP), Customer Relation (CR), Information Sharing (IS),
Competitive Advantage (COM.ADVTG), Organization Performance (ORGN PF) are significant at p<.05. Customer Relation (CR) was the highest score of correlation with Competitive Advantage (Com advtg) @ (r=0.526, p<0.1) while, information sharing was the lowest score of association with Competitive advantage @ (r=0.452, p<0.01). Also, information sharing has the highest score of correlation with organization performance @ r=.501, p<0.1) while, strategic suppliers partnership has the lowest score of association with Organization Performance @ (r=0.375, p<0.01).

4.3 Tests for Violation of Assumptions for Multiple Regressions

For this study, the researcher checked for outliers, normality, multicollinearity, and homoscedasticity to achieve the underlying assumptions of regression analysis. The normality assumption achieved since all the bars of the histogram is close to a normal curve. Also, the normal probability plot also satisfied the homoscedasticity assumptions of the variance of the random error component since all the points lie along 45° diagonal line. Homoscedasticity result was achieved as there was no pattern in the data distribution and residuals that scattered randomly around the horizontal line through 0. Therefore, the assumption of homoscedasticity requires that the variable or constant variable is the same for all values of the independent variable of the error term. The Durbin Watson value of 2.150 in this study met the general rule of thumb and assures the assumption of independence of error term. This study used the residual scatter plot to check for linearity. The residual scores concentrated at the center along the zero (0) point as shown in the plot, thus, suggesting the linearity assumption not violated. The result multicollinearity check using VIF, Tolerance and Correlation results between independents variables revealed that the VIF was less than 10, Tolerance was more than 0.1 and Pearson correlation indicators for all independent variables are less than 0.8 which is often less problematic.
4.4.2 Multiple Regressions

Table 1.2 Multiple Regressions: Impact of Supply chain Management Practices on Organization Performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Std. Beta</th>
<th>T-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGN PERFM</td>
<td>6.588</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>SSP</td>
<td>.132</td>
<td>1.499</td>
<td>.137</td>
</tr>
<tr>
<td>CR</td>
<td>.307</td>
<td>3.555</td>
<td>.001</td>
</tr>
<tr>
<td>IS</td>
<td>.365</td>
<td>4.298</td>
<td>.000</td>
</tr>
<tr>
<td>R</td>
<td>.612</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADR²</td>
<td>.356</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Ratio</td>
<td>20.359</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Sig.</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.W</td>
<td>2.150</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2019.*

Multiple regressions were conducted to examine the impact of Supply chain Management Practices (Strategic Suppliers Partnership, Customer Relationship, and Information Sharing) to Organization Performance of food and beverages industry in Brunei. The overall result shows the model jointly explained 61% of the variance of Supply Chain Practices and Organization Performance. The model was significant at 1% level (F=20.359, sig=000). The predictor variables (Strategic Suppliers Partnership, Customer Relationship, and Information Sharing) with
exception of Strategic Suppliers Partnership were found to be statistically significant association with Organization Performance.

**Table 1.3 Multiple Regressions: Impact of Supply chain Management Practices on Competitive Advantage**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Std. Beta</th>
<th>T-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP ADVATG</td>
<td>2.947</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>SSP</td>
<td>.298</td>
<td>3.600</td>
<td>.000</td>
</tr>
<tr>
<td>CR</td>
<td>.338</td>
<td>4.158</td>
<td>.000</td>
</tr>
<tr>
<td>IS</td>
<td>.249</td>
<td>3.111</td>
<td>.002</td>
</tr>
<tr>
<td>R</td>
<td>.666</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.444</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADR²</td>
<td>.427</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Ratio</td>
<td>13.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Sig.</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.W</td>
<td>1.363</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2019.*

Multiple regressions were conducted to examine the impact of Supply chain Management Practices (Strategic Suppliers Partnership, Customer Relationship, and Information Sharing) on Competitive Advantage of food and beverages industry in Brunei. The overall result shows the model jointly explained 66% of the variance of Supply Chain Practices and Competitive Advantage. The model was significant at 1% level (F=13.027, sig=000). The predictor variables were found to be a statistically significant association with competitive advantage.
4.5 DISCUSSION OF FINDINGS AND HYPOTHESIS TESTING

To determine the most contributory explanatory variables best predict Organization Performance and Competitive advantage, multiple regression analysis was conducted to test the hypothesis. A model of regression developed that was statistically significant at 1%. The results indicate that Strategic Suppliers Partnership, Customer Relationship, and Information Sharing jointly explained 66% of the variance of competitive advantage and 61% of the variance of organization performance. Three predictor’s variables - Strategic Suppliers Partnership, Customer Relationship, and Information Sharing were found to have statistically related to the competitive advantage. Two predictor’s variables - Customer Relationship, and Information Sharing were found to have statistically related to organization performance.

H₀₁: There is positive significant impact of strategic supplier partnership on competitive advantage and organizational performance of food and beverages industry in Brunei.

Table 1.2 shows that multiple regression analysis between strategic suppliers partnership and organizational performance of food and beverages industry in Brunei is not significant (β =0.132., p=0.137 at 10% level) which shows that the p-value is higher than the level of significance. However, the multiple regression analysis between strategic suppliers partnership and competitive advantage of food and beverages industry in Brunei was significant @ (β =0.298., p=.000 at 1%). Therefore, the research alternate hypothesis was accepted (H₀₄). Findings on strategic supplier’s partnership have no significant impact on the organization’s performance but strategic supplier’s partnership has positive significant impact on competitive advantage. It shows that in the service organizations like food and beverages has strong strategic supplier’s partnership influence on organization’s competitive advantage in Brunei. It has also proven that a long-term perspective between supplier and buyer increase the intensity of firm and supplier integration, mutual planning and problem solving effort to improve product quality. The study results agreed with
the findings of Gunasekaran, Patel & Tirtiroglu, (2001) who argued that Strategic partnership with supplier’s enables organizations to work effectively with a few important suppliers who are willing to share responsibility, risk and reward. The indirect effect of improvement gained from Strategic Suppliers Partnership adoption might be due to effective and efficient key processes of order completion between suppliers, obtaining resources, procurement process and integrative supply chain processes that improve financial performance through enhance supply chain operation. Consistent with the finding by Mohan, Wong & Soh (2018), when the efficiency of supply chain increased, the benefits to supply chain operation (such as reduced energy consumption, overall cost reduction and increase revenue) can also be increased which translates into improving financial performance outcome. Further, the result of Strategic Suppliers Partnership adoption in the service organization supply chain may increase financial performance via reduction of paper used for documentation, which reduces the overall cost of documentation materials for supporting service supply chain processes (Fernando et al., 2019; Lai, Lun, Wong & Cheng, 2011).

H₀₂: There is positive significant impact of customer relationship on competitive advantage and organizational performance of food and beverages industry in Brunei.

Table 1.2 shows that regression analysis between customer relationship and organizational performance of food and beverages industry in Brunei is positively significant (β=.307, p=0.000 at 1%). Therefore, the research alternate hypothesis was accepted (H₀₂). The finding indicates that customer relationship has a significant impact on organization performance. It shows that in the service organization, customer relationship suggests how positive and open attitude, the managers should interact with customers to constantly determine their expectation. Also to frequently receive feedback on level of customer satisfaction. Thus, effective customer relationship may influence customer satisfaction which leads to organization performance. This finding is in line with the work of (Bhimani & Ncube, 2006, Bommer, O’Neil & Treat, 2001).
H₀₃: There is positive significant impact of information sharing on competitive advantage and organizational performance of food and beverages industry in Brunei.

Table 1.2 shows that regression analysis between information sharing and organization performance of food and beverages industry in Brunei is positively significant (β =0.365, p=0.000 at 1% level). Therefore, the research alternate hypothesis was accepted (H₀₃). Also, the information sharing has a significant impact on organization performance. It shows that in service organization’s level of information sharing with partners helps to establish business planning, share proprietary information as a result of advancement in in changing customer’s needs, and business knowledge of core business processes. This finding is in line with the work of Davenport, Harris, DeLong & Jacobson, (2001), and Simatupang & Sridharan, (2002). Successful coordination and cooperation between supply chain players may catalyst Information Sharing processes, which in turn become more effective and efficient. For instance, the coordination of information sharing such as the collaborative process of purchasing, manufacturing, marketing, logistics, and information among supply chain players may increase responsiveness and agility (Fernando and Satthhasivam, 2017) that in turn, increase the value and quality of services and efficiency. Enhanced quality services drive customer demand which translates into long term organizational profit. The finding is also validated with the results by Woo, Kim, Chung & Rho, (2016) in which information sharing improve long term financial performance by fulfilling the customer demand through sharing green strategies, technologies and information capabilities that reduced environmental impact and disposal cost. Further studies also indicate that close integration practice such as information sharing reduces the organizational risk in economic and market uncertainty via information sharing and mutual decision-making that reduce the future cost of operation (Maksimovic,2018).
4.5.1 Managerial implication

The study offers several implications for the food and beverages industry in Brunei. As Supply chain Management Practices – (Strategic Suppliers Partnership, Customer relationship Management, Information Sharing) have proven to have a positive impact on financial Competitive advantage and organization performance of food and beverages organization in Brunei., the food and beverages manager should be motivated to implement Supply Chain Management Practices to achieve competitive advantage. The identification of Strategic Suppliers Partnership, Customer relationship Management, Information Sharing variables also enables Food and Beverages managers to establish feasible strategies to enforce Supply Chain Management practices within and external boundaries of Service organization hierarchy. The strategies in the long term may reinforce more collaborative action between supply chain partners to improve Food and Beverages supply chain competitiveness.

4.5.2 Limitation and future research

The study has several limitations that can be addressed in future study. First, this study investigated the impact of Supply Chain Management Practices and applicability of only three variables: Strategic Suppliers Partnership, Customer relationship Management, Information Sharing can be established in Food and Beverages organizations. However, the Supply Chain Management Practices variables by no means represent a complete list of Supply Chain Management Practices dimension/concept that can be investigated in the Food and Beverages domain. Many Supply Chain Management Practices are still under-research and mostly ignored by scholars in the Food and Beverage domain. Hence, future study should include another Supply Chain Management concept as well, for expending complete understanding of Supply Chain Management Practices impact on organizational performance. Second, as Supply Chain Management concept is still an emerging concept in a developing country, the likability of the respondents to capture inaccurate responses.
5.0 Conclusion and Recommendations

The study investigated the impact of Supply Chain Management Practices (Strategic Suppliers Partnership, Customer Relationship, Information Sharing and Competitive advantage and Organizational Performance of food and beverages organization in Brunei. Based on the research hypotheses and the research objectives. The findings revealed that Supply Chain Management Practices (Strategic Suppliers Partnership, Customer Relationship, Information Sharing and Competitive advantage and Organizational Performance of food and beverages organization in Brunei. Consequently, in the Service organization Strategic Suppliers Partnership, Customer Relationship, Information Sharing impact on Competitive advantage and Organizational Performance of food and beverages organization in Brunei. The result of Correlation analysis indicates that there are significant relationships found between the variables of Supply Chain Management Practices (Strategic Suppliers Partnership, Customer Relationship, Information Sharing and Competitive advantage and Organizational Performance of food and beverages organization in Brunei.

REFERENCES


implications”, Resources, Conservation and Recycling, ElsevierB.V., 55, 6, 631–638
Maksimovic, M. (2018), “Greening the future: Green Internet of Things (G-IoT) as a key technological enabler of sustainable development”, Internet of Things and Big Data Analytics toward Next-Generation Intelligence, Springer, 283–313


