Innovative, Marketing and Supportive Capability Impacts towards Logistics Performance

¹Mohd Fathi Mohamad, ²Zulkifli M Udin, Kamal Imran Sharif

School of Technology Management & Logistics, College of Business, Universiti Utara Malaysia

¹mohdfathiphd@gmail.com, ²zulkifli@uum.edu.my, ³kamailimran@uum.edu.my

Abstract— Logistics function as an important role in business operation. Due to the increasing competition in this industry, organization should make sure the business logistics is efficient and effective. In achieving the increase in performance and indirectly increase the profit of an organization, logistics is an important element that need be taken into consideration seriously. This paper investigates the effect of innovative, marketing and supportive capability towards logistics performance. the study has been conducted in towards the SME organization in area of Putrajaya. 117 respondents from SME's were collected to identify the relationship of innovative, marketing and supportive capability towards the logistics performance. Hence, factor analysis was done includes the correlation and regression analysis to examine relationship that exists. The findings identify that that innovative, marketing and supportive capability that contribute to logistics performance.

Index Terms—: Innovative, Marketing, Supportive, Logistics Performance

1. INTRODUCTION

Logistic performance having grown in importance lately. It has been brought to the center of attention of many organization to evaluate the effectiveness of logistics performance [1]. This study to examine the link or relationship between the innovative, marketing, and supportive capability towards the logistic performance. The research problem of this study is firm does not realize that logistic performance can contribute to higher income of the firm. So, this study is to study the factor (innovative, marketing, and supportive capability) that can impact the logistic performance. However, it is not widely recognized that their benefits go well beyond that [2]. This is because most company feels that to improve the logistic performance incurred high cost and may not worth of what profit they will gain. Does the innovative, marketing, and supportive contributes to the logistics performance of the firm?

Due to the highly competitive environment, organization should play important role in term of logistics performance. A great result in logistics performance can increase the efficiency. The inefficiency of the business in logistics, the firm could not meet the customer expectation as this will affect the competitive advantage of the firm against the rivals [3]. The performance of the logistic carrier can affect the effectiveness of the whole function of a company. It follows the procedure of selecting a suitable transport carrier is important to the firm's success.

Malaysia ranked 32 in the Logistics Performance Index (LPI) with score 3.43 with 75.3% of the performance. This is different with Singapore that score 4.14 in the 5th rank of the top LIP (The World Bank, 2016). The gap of the ranking is quite far with Singapore. Singapore LPI rank is at 5 that score 97.4% of the performance. Malaysia must make an improvement in the logistics performance. This is because the LPI shows the ability to span many functions of the organization by right can represents the value of firm resource. It is not impossible if Malaysia do something to build up the core competencies of business in the country.

Most of the business facing with the increasing competition especially for international business in term of logistic. This involve the knowledge in customer demands for product and supplier responsiveness. This scope of study is limit on Small and medium-sized enterprises (SMEs). According to [4], SMEs is not aware of the importance of logistics performance for company competitiveness. The supporting of system is lower than large enterprise. Based on the study, only 42% SMEs use benchmark to measure their logistics performance. Therefore, SMEs to some better changes to improve the management such as in term of innovative, marketing and supportive to get better in logistics performance.

2. LITERATURE REVIEW

2.1Relationship between innovative and logistic performance

Studying the impact of innovative towards the logistic performance has been common research lately. There are positive related to business performance. The result implies that innovative is the important direct driver of performance. Learning orientation might only give very little value or not at all if there is no strong innovative capability. Innovative capability can be different follow the circumstances in environment occurs in its internal or external factors. This case is considered as pre-emptive that stimulate by the environment. So, company must implement innovation continuously and the important to greater chance to accomplish its performance through innovations [5].

[6] states that innovative capability was found out that the capability can assemble the information of logistics. Several businesses have practices of this favorable to understanding mobilization. These practices empower business to revel in greater result of company performance and makes it hard for competitors to be at the same level up as well. According to [7] there are specify a momentous connection between development innovations, logistics competencies and organizations performance. This is show that innovative is very important to improve logistics performance. It is shown that logistics have a positively impacts from their logistics capabilities. Logistics innovativeness and logistics service differentiation is important which both positively influence logistics performance of the firms. The outcome offer visions into what firms could need to stress as crucial or main to develop capabilities which can effectively impact performance [8].

Firm innovativeness is correlated with the increase of market oriented strategy and implementation of market-oriented strategy. The strongest connection of the three exists between collection and use of market information and firm innovativeness, the better outcome of the logistics performance. Therefore, we can make the hypothesis that innovative is significant with logistics performance [9].

Innovative capability is referring to new knowledge creation that focus on the organizational level. Facilitators of information deployment, and construction are also essential to improve this capability [6]. The Knowledge can be transfer to information that use to improve the logistic performance. According to [10] firms can maximize systematic efficiency through sharing information with customer and shippers. We can see innovative capability is related with logistic performance.

The innovative even practice in retail store source from condition that puts the company in a favorable for old factors such as product, price, place and promotion. Logistics operation play an important role to success the retail store. The important for overall small business is happiness and satisfaction of the customer [11]. The greater purpose for organization to innovate is to attain remunerations, such as superior business position and better company performance [12]. In general, research suggest that innovative is related with firm performance that leads to logistics performance of the many business as well as SMEs. The data collected from the SMEs shows positive relation with the business performance. The innovativeness can have impacted the IT capability and employee empowerment.

According to [12] results found that innovative is not direct related with the growth of SMEs. Innovative capability that involve IT and employee empowerment can increase the investment in industry. This can increase the knowledge resources of the firms. The findings also suggest that undesirable effect worker empowerment on organization performance may even have if there is no IT support. Therefore, managers of the company should practice IT to control other resources or inputs

and strengthen their positive influence on organization performance through this way.

H1: The innovative of the firm, is positive relationship with logistics performance of the firm.

2.2 Relationship between marketing performance and logistic performance

Marketing capability can be well-defined as a firm's patterns relating the resources that taken over time to time of the firm to the market-related necessities of the corporate that turn out to be rooted as practices continuously [13]. Marketing performance is a key to identify that organization authorization is over short-run survival to long-run growth. Market performance can be seen by increased in sales value, increased sales volume, and increased the market share [14].

The logistics function has a significant impact on the company's overall flexibility and its ability to adapt to customer requirements and customization demands. To support the desire competitive strategy, company should respond with any changes of customer behavior and deserves. This can include measure and managing the marketing performance behind their larger peers in doing so [4]. The company marketing process should be either standardization or adaptation depending on customer requirements in the market. Standardization is similar perspective in marketing strategy.

Some studies that support standardization have shown commonly positive impact on firm performance. Standardization is marketing process such as distribution, pricing, logistics, promotional, advertising for firms to achieved performance. The process is important to save time of product to market by reducing time need. Whereas adaptation requires customization of the marketing efforts to meet buyer requirements, thus reach firm performance. Both of the strategies are involved distribution to make sure the products is reach by the customer. This positive impact the firm performance by make sure the products are accessible in targeted market [15].

According to [16], marketing has highlighted the significance for accomplishing corporate objectives. The research will conclude, and brief explain the starring role of marketing in the planned program of the companies in the business and also the impression on business performance by rearrange the conception of marketing orientation within the framework of the logistics business. Efficiency and effectively of the firm is be subject to decisive the needs and wants of aim markets and make sure the satisfactions to those markets greater than what the rivals do. The explanation for activity of marketing is that it significant to superior business performance. To improve the capability of an organization to compete in the market place, marketing has compromise the same chains. However, market-orientation may not have related to perform business objective because could have slight influence by some industry circumstances.

Marketing should commitment on bringing greater assessment to buyers and the business at a lower budget. Therefore, marketing strategy can be defined as a technique by which an organization attempt to influence its aim in the markets position. Moreover, marketing strategy may start with market place exploration. This means that attitudes and needs and opponents' goods are rule on and carry on through into promotion, distribution, advertising, and consumers servicing, container, distribution and sales [17]. Therefore, we can see that it is indirectly improve the logistic performance because the strategy engaging in wider distribution. The capable in distribution is significant and positive with business performance.

The study of marketing capability is attainment reputation since company achievement is likely to be reliant on the growth of well-conceived marketing tactics and the proficiency to accomplish them [18]. Many study also argued that to achieve better in business performance, better profit or better business growth, firms must have stronger in marketing capability. This include the process of transforming business inputs into valued productions. The outputs are constructed rely on marketing mix. Besides, marketing is consistently supported that company accomplishment is reliant on improvement in marketing tactics and ability to achieve them [13]. This planning is to maintain the competitive advantage, enjoy better performance, and marketing effectiveness.

According to [19], marketing capabilities are essential source of business performance and competitive advantage. We must consider larger aspect that is operational to grasp marketing competencies. For example, like outside-in, inside-out, and straddling capabilities. Logistics performance is also considered the effectiveness of managing shelf, product and information to get competitive advantage over the competitor [11]. Effectiveness in the customer service through sharing information with customer and shippers while lower down the cost able to affect the logistics performance [10]. Clearly that the literature reveals that positive relationship of marketing capability and the orientations it leading to the better logistics performance.

[13] study about marketing capability in Korea. They define marketing capability is a company's designs practice that repeatable the inputs of the company to the needs of the business that become entrenched as procedures from time to time that related with market. All the previous study found that there is positive significant relationship between marketing capability with firm performance and logistics. The result was significant.

H2: Marketing capability is positively related with the logistic performance

2.3 Relationship between supportive capability and logistic performance

There are many support activities by [20]. These activities are reduced costs, exclusive events, increased value creation and increased productivity. One of the variable measuring the

performance of core competencies and among them measure the performance of activities which support a positive correlation. Core skills of competency makes for a different organization of their competitors in the same field of activity. Supportive activities typically use computer applications to facilitate the day-care service, advance time and have a great achievement. Use of computer could be more exclusive, simple, and uniform the business. Using Information System, supportive activities can help to increases in productivity contribution. Therefore, Information System is a major impact on the performance of support activities that may affect the logistics performance.

The operation of transportation and logistics is regulating the efficiency of moving the products. This is closely related components of logistics services, information systems and infrastructure of the logistic system which is known as supportive activities [20]. [21] study on activity-based costing techniques. This activity is consider as supporting activities. The result is slightly difference between the firm that use ABC technique and not. Firm that operate at first three years, there are not positive correlation. After three years, the activity-based costing shows positive relation with firm performance.

Elements within the chain and their connection use of technology are significantly illustrative with their association with the concepts of order management. The essential fact in the supply chain is regarding the services are managed in logistics department, whether complete through in-house management or by logistics facility providers. For example, like freight system makes the work faster [22].

According to [23], in the name of the ultimate buyers, transportation show business an important role for the numerous steps that effect in the transformation of inputs into useful goods or outputs. The capable to handle entirely the activities will influences the production and sale. For the time being, the third-party logistics industries request of opposite logistics as it brings out a new market for. The current research provides the insight of this matter that related between the dynamic environments. Similar to [24] research is like green logistic as supportive capability. By using this capability and knowledge, company can make better decision on developing the strategy to improve logistic performance.

H3: Supportive capability is positively related with the logistic performance

3. METHODOLOGY

This research used the basic element exploration that implemented with SPSS 23 to construction of dissimilarity causes. This is to classify the erection of relationships among the scales items in our survey. To analyse all the collection data, this research uses statistical method as SPSS to get the result. Data analysis in this phase that is based on quantitative analysis which is a multifarious procedure prepared in continuous collaboration with the statistics. Firstly, the survey was made then it will be

194

Int. J Sup. Chain. Mgt Vol. 7, No. 4, August 2018

contributed by e-mail or by hand. It is depending on the proper way can reach the target sample. When the whole thing of data was poised, the analysis began. The data is using to check the hypotheses that has been constructed from the questionnaires that will be hand out to the sample of 118 [25]. The questionnaires are barely possible to for whole populace to be analyse and because of this the designate random sample method is essential to be conducted. The respondent structure enclosed a variety sort of machinery, manufacturing and services industries, including chemicals, electronic, instruments, and computer and management services in Putrajaya.

4.FINDINGS

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data.

4.1 Reliability analysis

Reliability is important to identify the quality of measurement. Reliability is the "uniformity" or "repeatability" of the procedures in each variable. The Cronbach's Alpha by each variable is show at the table below. All the variables are reliable. The highest value is innovative capability (.876) and the lowest is supportive capability (.840). The second highest is marketing capability (.874) and the second lowest is logistics performance (0.868).

4.2 Mean, Min, Max and Standard deviation

This section is show the principal of propensity. Plus, principal of propensity of a dissemination is an estimation of the "centre" of a spreading of standards. All the variables mean did not show much difference. The highest mean is marketing capability. SMEs in Putrajaya is concern about the marketing capability to compete with big company in that area. Marketing capability is easier to develop. Mostly they used social media to create the demand. The lowest mean is innovative capability. This capability is quite difficult to develop but very important. This is because the creativity and skills needed to improve it.

Second highest is logistics performance and followed by supportive capability. The highest minimum value is logistics performance at the value of 2.00 while the lowest minimum number is supportive capability which is at 1.00 and both of innovative and marketing capability show same of minimum value at 1.50. The maximum value is 5.00 for marketing capability, supportive capability, and logistics performance. Only innovative capability gets maximum value 4.50 which is consider the lowest. The lowest standard deviation is innovative capability (.469) which represent the data set are close to the mean of the data set, on average. The highest standard deviation is supportive capability (.639) means that the values in the data set are farther away from the mean, on average. The second lowest is marketing capability (.514) and second highest is logistics performance (.582).

4.3 Pearson Correlation Analysis

Correlation coefficient r measures the course and the strong point of a linear connection between two variables. To interpret its value, we must see the value of r is closest to:

All the variables show in Pearson's r correlation is close to 1. So, we can conclude that there is strong relationship between each variable. The highest correlation is supportive capability with logistics performance (p<.01, r=.743). Both of innovative capability and marketing capability indicate moderate uphill positive relationship with logistics performance. Innovative capability indicates (p<.01, r=.671) and marketing capability (p<.01, r=.630).

4.4 Multiple Regression Analysis + Hypothesis Testing Result

Linear regression is one of the most general statistical techniques. This technique is very popular and simple models.

Result in the regression analysis shows that 59.6% independent variables can be measure by logistics performance (R^2 =.596, F=55.629, p<.01). So, the figure was explained by Innovative Capability, Marketing Capability and Supportive Capability. Based on the table, Innovative Capability and Supportive Capability shows positive relationship. Supportive capability indicates (β = .470, t = 4.578, p<.01) highly positive relationship with Logistics Performance compare to Innovative Capability (β = .263, t = 3.002, p<.01). However, Marketing Capability indicate (β =.113, t=1.222, p>.01) no relationship with Logistics Performance.

Result indicates that supportive capability (r=.470, sig=.000, p<.01) shows the highest of positive significant result towards logistics performance. Next, innovative capability (r=.263, sig=.003, p<.01) shows positive significant towards logistic performance. However, marketing capability (r=.113, sig=.224, p>.01) shows no significant relationship towards logistic performance.

5. CONCLUSION

This study is focus on the effect of innovative capability, marketing capability and supportive capability towards logistic performance. The limitation of the study on the firm capability among the SMEs in Putrajaya, Kuala Lumpur, Malaysia. This study could be beneficial for education, business and society to improve logistics performance which is important to lead to business performance.

This study can be as recommended approach in their technique to achieve competitive advantage as we notice that logistic is the important matter that we must be concerned about. This study will explore the more effective way in logistics performance. It is significant relationship with business performance to get higher profit. So, we can see clearly that logistic is very important to be

study because it was contributing with business activities and the study will help uncover critical factor that contribute to logistics that many researchers were not able to explore. This result findings can identify the factors that related contribute to logistics performance of SMEs.

The company can get to know the effective way to achieve the business performance. The information that gain from the study may open the eyes of the firms to that there are a several factors to improve logistics performance. Logistics is important subcomponents in business as society and economy cannot function without logistics as well as SMEs. The study is to realise the firms that logistics is related with the firm performance which it optimally managed for smooth functioning of production and distribution operations. It would be beneficial to society so considering that logistics performance can increasing their standard of living. The greater the innovation, and supportive capability, the greater quality products and services that customer feel. To the researcher in doing this study have attained new knowledge and skills that researcher be able to use in their career.

REFERENCES

- [1] J. P. Alexandre Reis Graeml, "Measuring Logistics Performance: the Effectiveness of Mmog/Le as Perceived by Suppliers in the Automotive Industry," *J. Oper. supply Chain Manag.*, vol. 4, no. 1, pp. 1–12, 2011.
- [2] A. Malmsjö, "A sketch of a methodology for designing supportive information systems," *Kybernetes*, vol. 35, no. 6, pp. 880–898, 2006.
- [3] S. Sakchutchawan, P. C. Hong, S. K. Callaway, and A. Kunnathur, "Innovation and Competitive Advantage: Model and Implementation for Global Logistics," *Int. Bus. Res.*, vol. 4, no. 3, pp. 10–21, 2011.
- [4] A. Taschner, "Improving SME logistics performance through benchmarking," *Benchmarking An Int. J.*, vol. 23, no. 7, pp. 1780–1797, 2016.
- [5] G. A. K. G. Thomas M Hult, Robert F. Hurley, "Innovativeness: Its antecedents and impact on business performance," *Ind. Mark. Manag.*, vol. 33, no. 5, pp. 429– 438, 2004.
- [6] C. Annique Un and A. Montoro-Sanchez, "Innovative capability development for entrepreneurship," *J. Organ. Chang. Manag.*, vol. 23, no. 4, pp. 413–434, 2010.
- [7] A. zafe. Acar and A. Gunsel, "THE EFFECTS OF PROCESS INNOVATION IN LOGISTICS SERVICE," 2016.
- [8] P. M. Ralston, S. J. Grawe, and P. J. Daugherty, "Logistics salience impact on logistics capabilities and performance," *Int. J. Logist. Manag.*, vol. 24, no. 2, pp. 136–152, 2013.
- [9] S. Erdil, O. Erdil, and H. Keskin, "The relationships between market orientation, firm innovativeness and innovation performance," J. Glob. Bus. ..., vol. 1, no. 1, pp. 1–11, 2004.
- [10] H. S. Bae, "The influencing factors of logistics integration and customer service performance for value creation of port logistics firms," *Asian J. Shipp. Logist.*, vol. 28, no. 3, pp. 345–368, 2012.

- [11] M. Ltifi and J. Gharbi, "The Effect of Logistics Performance in Retail Store on the Happiness and Satisfaction of Consumers," *Procedia Econ. Financ.*, vol. 23, pp. 1347–1353, 2015.
- [12] A. M. Roman Kmieciak, Anna Michna, "Innovativeness, empowerment and IT capability: evidence from SMEs," *Ind. Manag. Data Syst.*, vol. 112, no. 5, pp. 707–728, 2012.
- [13] S. Shin and K. Damon Aiken, "The mediating role of marketing capability: evidence from Korean companies," *Asia Pacific J. Mark. Logist.*, vol. 24, no. 4, pp. 658–677, 2012.
- [14] M. Piriyakul and C. Kerdpitak, "Mediation Effects of Logistics Performance on Collaboration and Firm Performance of Palm Oil Companies: PLS Path Modeling," J. Manag. Sustain., vol. 1, no. 1, pp. 90–98, 2011.
- [15] N. M. Abdullah Saif, "How does Marketing Strategy Influence Firm Performance? Implementation of Marketing Strategy for Firm Success," *Int. J. Innov. Econ. Dev.*, vol. 1, no. 3, pp. 7–15, 2015.
- [16] P. M. Panayides, "Marketing in Asia-Pacific Logistics Companies: A Discriminant Analysis between Marketing Orientation and Performance," *Asia Pacific J. Mark. Logist.*, vol. 16, no. 1, pp. 42–68, 2004.
- [17] G. Adewale, M. Adesola, and Oyewale.I.O, "Impact of Marketing Strategy on Business Performance A Study of Selected Small and Medium Enterprises (Smes) In," J. Bus. Manag., vol. 11, no. 4, pp. 59–66, 2013.
- [18] R. Amit and P. J. H. Schoemaker, "Strategic assets and organizational rent," *Strateg. Manag. J.*, vol. 14, no. 1, pp. 33–46, 1993.
- [19] H. Chahal and J. Kaur, "Development of marketing capabilities scale in banking sector," *Meas. Bus. Excell.*, vol. 18, no. 4, pp. 65–85, 2014.
- [20] E. Bacha, "The impact of information systems on the performance of the core competence and supporting activities of a firm," *J. Manag. Dev.*, vol. 31, no. 8, pp. 752–763, 2012.
- [21] W. J. Kennedy, J. Wayne Patterson, and L. D. Fredendall, "An overview of recent literature on spare parts inventories," *Int. J. Prod. Econ.*, vol. 76, no. 2, pp. 201–215, 2002.
- [22] M. Vivaldini, S. R. I. Pires, and F. B. de Souza, "Improving Logistics Services Through the Technology Used in Fleet Management," *J. Inf. Syst. Technol. Manag.*, vol. 9, no. 3, pp. 541–562, 2012.
- [23] Y. Tseng, W. L. Yue, and M. A. P. Taylor, "The role of transportation in logistics chain," *East. Asia Soc. Transp. Stud.*, vol. 5, pp. 1657–1672, 2005.
- [24] K. Sari and G. Yanginlar, "The impact of green logistics practices on firm performance: Evidence from Turkish healthcare industry," *Proc. POMS 26th Annu. Conf.*, pp. 1–6, 2015.
- [25] R. V Krejcie and D. W. Morgan, "Determining Sample Size for Research Activities," *Educ. Psychol. Meas.*, vol. 30, pp. 607–610, 1970.