An Early Examination of the Blue Ocean Strategy and Innovation Performance in Manufacturing Firms

Rapiah Mohamed[#1], Che Zuriana Muhammad Jamil[*2], Hafizah Abd-Mutalib[#3]

[1,2,3]*Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia Sintok, Kedah, Malaysia*

[1]rapiah@uum.edu.my

[2]zuriana@uum.edu.my

[3]amhafizah@uum.edu.my

***Abstract*— Business strategies are important for any firm, regardless of its size, to help them to stay competitive in the ever-changing business environment. Several popular strategic frameworks for the development of new business models have been proposed in the past decades. However, a new business model, known as the "blue ocean strategy", has been rapidly gaining worldwide publicity and acceptance. The blue ocean strategy (BOS) is different from the traditional red ocean strategy, whereby BOS emphasises the need for firms to think and create innovation in their business to generate sustainable profits. In Malaysia, the government encourages organisations to implement BOS for the achievement of superior performance. This study examines the application of BOS in Malaysian manufacturing firms and its relationship with innovation performance. Data were collected using a questionnaire survey from respondents working in medium-sized manufacturing firms. The results revealed that the companies are applying this strategy to assist them in creating a competitive advantage. Furthermore, the findings indicate that there is a weak association between BOS and innovation performance. These findings contribute to the growing body of literature on BOS as well as assist entrepreneurs and policymakers in understanding the applicability of BOS in real businesses and the influence of business strategies on innovation performance.**

***Keywords*—** *Blue ocean strategy, business strategy, innovation performance, SMEs manufacturing*

1. Introduction

In today's ever-changing business environment, the competitiveness of a company depends on the speed at which new products can be delivered into the marketplace with cost-saving improvements. Innovation is key to competitiveness and this is crucial for both small and medium enterprises (SMEs) as well as big businesses [1]. According to the 2014 Global Innovation Index, Malaysia performed fairly well and ranked in the 33rd position globally but it lags behind its international and regional competitors such as Singapore. The overall trend is not satisfactory, and more effort needs to be performed to be on par with the international level. The Malaysian government has expressed its aspirations over a series of Malaysia Plans to join the world's leading economies by 2020 and recognised the need for continued focus and investment by the national innovation environment to achieve this goal. The Eleventh Malaysian Plan 2016-2020 (RMK 11) has revealed that innovation is a significant driver for the economic growth of a country as it increases productivity through new or improved technologies, processes, and business models [2]. Additionally, innovation creates additional sources of revenue through the development of various products and services that fulfil customers' needs. As Malaysia progresses towards a knowledge-based and high-value economy with a major focus on the services and manufacturing industries, innovation will play a vital role in improving the overall productivity and efficiency of each sector, regardless of the firms' size.

SMEs cultivate a culture of innovation and have emerged as the engines of economic growth in recent years as well as represent the main sources of new employment growth in many countries including Malaysia. According to the Asia-Pacific Economic Cooperation (APEC) report, approximately 97.0% of establishments and 50.0% of employment in the workforce consist of SMEs [3]. In Malaysia, the average annual growth of SMEs was estimated to be 6.5% higher than the average growth of 5.1% for the overall economy. This has led to a higher contribution of SMEs to the

Gross Domestic Product (GDP) growth from 32.2% (2010) to 36.6% in 2016 [3]. Nevertheless, the performance of SMEs is yet to reach its full potential [4]. Enhancing the performance of SMEs requires them to have extensive knowledge networks and better access to the global markets. Additionally, SMEs need to be more innovative and adopt the latest technological advancements to improve their products and services. Accordingly, the Malaysian government introduced the "SME Masterplan" in 2011 with the objective of creating globally competitive SMEs and accelerating their growth through innovation and productivity. Similarly, RMK 11 also highlighted one of the strategies to increase SMEs' growth by enhancing their productivity through automation and innovation. Innovation is important for business survival and achieving superior performance in today's competitive market. However, a few studies have reported that only a small percentage of Malaysian SMEs were aware of the benefits of innovation [5]. Based on these circumstances, it is imperative to understand the level of innovation performance among SMEs in Malaysia and its influential factors.

The business strategy of a company reflects the choices and actions that are taken to understand and adapt to their business environments as well as position themselves in the marketplace to achieve a high level of performance [6]. Originally, studies on business strategies were based on the perception that a firm should compete against its competitors in the existing markets to build a competitive advantage. However, in recent years, the new business strategies proposed indicate that the firms can ignore the existing competition by creating a new market segment in which there are no competitors [7]. This strategy is known as the blue ocean strategy (BOS) and has begun to attract academic attention worldwide.

Business strategies are important, regardless of the size of the firm, to help them stay competitive in the changing business environments. In recent decades, several strategic frameworks for new business models have been proposed, in which a popular business model known as the "Blue Ocean Strategy" was introduced by Kim and Mauborgne [7] and rapidly gained global acceptance and publicity. The new model, BOS, is different from the traditional red ocean strategy, as it emphasises the need for firms to think and create innovation in their business as a means of generating sustainable profits. Additionally, BOS provides a framework for the creation of an uncontested marketplace segment and shifts the focus from the existing marketplace competition to the innovative creation of value-added products that are in demand as opposed to the conventional red ocean strategy that involves competition [8]. The implementation of BOS has been a key focus of the Malaysian government [9] to achieve Vision 2020 and thus, move towards innovative and constructive thinking and cooperation among stakeholders from different sectors including SMEs.

Since BOS is known as the "think-outside-of-the-box" concept, it is interesting to see if this strategy can be a driver or barrier to innovation performance. Some of the important features in BOS include creating value, cost reduction, and product differentiation. One of the obstacles for SMEs is creating new market segments that create value to compete at an international level [10]. By adopting BOS, SMEs can enhance product value with innovative features at an affordable cost. Consequently, this will create an opportunity for SMEs to boost their competitiveness. Recently, the Malaysian Government emphasised the implementation of BOS and encouraged government agencies and business organisations to embrace BOS in their organisations. It is important to explore the extent to which business organisations in Malaysia are currently adopting BOS as their business strategy. Thus, this study examines the implementation of BOS in Malaysian manufacturing firms and its correlation with innovation performance. Despite the increasing amount of literature studies on business strategy, the evidence on BOS practices is relatively limited in the context of the Asian region. It is envisaged that the findings of this study will be useful for managers in medium-sized manufacturing firms to understand the applicability of BOS in their businesses and the role of business strategy in enhancing innovation performance.

2. Literature Review

2.1 Innovation Performance

The concept of innovation in the context of entrepreneurship and economic development was popularised by Josephf Schumpeter [11]. Specifically, innovation relates to the industrial or

commercial application of something new such as a new product or service, method of production or process, a new market segment or supply sources as well as a new type of financial organisation or commercial business. Innovation is described as the process of gaining new sources of wealth or the changes and improvement of existing resources to gain more wealth [12]. In addition, innovation is considered a process of developing a new idea, an invention, and most importantly, the introduction of new products, processes, and services to the marketplace [13]. Innovation performance is important as it is associated with business performance, in which innovation performance could be a key driver for business performance [14]. For SMEs, innovation can help them to improve their competitiveness [15]. However, various internal and external factors can affect innovation performance in SMEs. For instance, a study indicated that the barriers for innovation in Croatian SMEs were inadequate support levels from the top management, work colleagues, and other business entities as well as current business strategies [16].

Organisations are faced with a high level of competition and this situation pressures the organisation to enhance its innovation performance [17]. Furthermore, innovation can also be considered as a crucial resource for the future growth and survival of the organisation due to limited resources faced by the organisation [18]. On the other hand, the capabilities in business and product innovation are vital for a firm to benefit from new opportunities and achieve a competitive advantage [19]. It should be noted that innovation is a multi-dimensional process that is not only derived from research and development (R&D) activities. In many occasions, innovation arises from the complex interactions between the individuals, organisations, and the institutional setting [20], [21].

To date, there is no general consensus on the definition of innovation performance. For example, innovation performance can be categorized into four types, namely input, process, output, or outcome [22]. Input refers to the resources used to create innovation such as personnel, ideas, funding, and equipment. Process, on the other hand, describes how the mechanism between the input and output of innovation occurs. Lastly, output is the direct result of innovation activities [22]. Another study classified innovation performance into two types, namely product and process [23]. Product innovation as the creation of new products from new materials or the improvement of existing products to fulfil customers' demand [24}. Similarly, innovation also refers to the introduction of new products or services to create new market segments or customers or to satisfy the existing market or customers [25]. Product innovation is one of the essential sources of competitive advantage in an organization [26]. Product innovation helps the organisation to create a competitive edge and strengthen its market position by launching products with better quality and lower costs [27] for their development, success, and business survival [18].

Based on OECD Oslo Manual [28] stated that process innovation refers to the implementation of a new process or significantly enhanced production or delivery method which includes significant changes in equipment, techniques, and/or software used. Process innovation aims to reduce the production or delivery costs, increase quality, or deliver or produce new or significantly enhanced products. Process innovation is the creation of enhanced techniques and the development of a process or system [29]. It relates to devices, tools, and knowledge in high-throughput technology that mediate between the inputs and outputs [30]. While product innovations are related to differentiation strategy, process innovations are associated with the low-cost strategy [30]. An empirical study suggested that process and product innovation were positively related to the growth of an organisation in the context of market share [31].

2.2 Business Strategy

Business strategy is classified in several ways, whereby the two prominent business strategy types generally used in accounting studies are those proposed by [32], [6]. A study described four strategic types of organisations according to the evolving state of their products and market segments which include prospector, defender, analyser, and reactor [32]. For the prospector type, there is a continuous development of new products or markets with a core focus on flexible technology and structure. On the other hand, the domain of the product market for the defender type is rather narrow. The technology is cost-effective and it has a specialised structure that is formalised. The analyser strategy lies between the prospector and defender types, and it shares the features of both types of strategy. The last strategy is the reactor type, which lacks consistency in its strategy.

Two strategies commonly studied at the business level include cost leadership and differentiation strategies [6]. In cost leadership, there is an

intensive construction of efficient facilities, consistent cost reductions, tight budget costs and overhead controls, evasion of marginal customer accounts, and effective cost minimisation in areas such as R&D, salesforce, service, advertising, and many more. Differentiation, however, is defined as the creation of unique products or services. Past study stated that a firm can gain its competitive advantage by generating value to its customers through managing the value chain of important activities such as production, marketing, sales, human resource management, and procurement activities [6].

Otley introduced a contingency theory stating that there is no universal accounting system that can be applied equally to all organisations in every circumstance [33]. Based on Otley's contingency theory [33], Chenhall assumed that management control systems were either adopted or developed to facilitate the achievement of desired organisational outcomes and goals [34]. He stated that the effectiveness of management control systems is dependent on the external environment, structure, technology, strategy, size, and national culture. Meanwhile, Simons explained that it is important to align business strategy with performance measurement as business strategies are only a form of hypotheses that refer to written assumptions and expectations of the cause and effect [35]. Therefore, to translate strategy into action, managers must utilise specific performance goals to communicate their business direction to employees. Based on the literature, it can be observed that business strategy is a key factor that requires serious attention from business organisations. Overall, business strategy is a part of strategic management accounting which contains important contingency factors to guide business organisations in designing control and measurement systems.

2.3 Blue Ocean Strategy

The main focus of BOS is the creation of new industries or distinctive market segments that render existing business competitors irrelevant, thus obtaining a durable and unique competitive advantage [36]. Owing to the greater competitive convergence among companies within most industry segments, a more sustainable strategy is needed for firms to shift their focus from benchmarking themselves with the competition to developing and creating new untested market spaces [7]. The main characteristic of BOS lies in value innovation which is a systematic approach of creating significant value for both buyers and the company to the extent that existing business competition becomes irrelevant.

In defining BOS, Kim and Mauborgne postulated that organisations can develop or create new growth opportunities by shifting their focus from strategies that aim to outperform or beat the existing market competition to strategic moves that create new uncontested market segments with extensive boundaries and potential [7]. Moreover, companies are thought to operate in a market universe that can be viewed as two oceans, namely the red ocean which represents all the existing industries and the blue ocean representing all the non-existent industries in unknown market segments [7].

The main feature of BOS is value innovation which focuses on increasing customer value while simultaneously reducing costs, thus creating significant value for the company and its customers. Cost savings can be achieved by eliminating and reducing factors that industries compete for, whereas customer value is increased by creating new elements that have never been offered by the industry [7]. This sequence of events, as encapsulated in BOS, provides a quantum leap in value for a company and its customers, thus achieving superior organisational performance.

Since the introduction of BOS in 2005, numerous empirical studies have been performed to examine the characteristics of BOS [37]. These studies focus on the practical implementation and reorganisation of a company's resources towards the simultaneous pursuit of low costs and differentiation. Some researchers have identified a mutually dependent relationship between BOS and innovation. For instance, Kim and Mauborgne revealed that BOS helps organisations to innovate and develop new products in the market [7]. Additionally, a study showed that there is a correlation between BOS and innovation performance [38].

2.4 Blue Ocean Strategy and Innovation Performance

The blue ocean strategy (BOS) refutes Porter's discussion on the trade-off between both cost and differentiation [39]. In contrast, BOS focuses on value innovation in which there is no indication of technical improvement, but rather a focus on brand development [39]. Previous studies have been performed on the implementation of BOS which includes the four actions framework that aims to eliminate, reduce, raise, and create. Besides, the six

paths framework of the blue ocean strategy includes (a) looking across alternative industries, (b) looking across strategic groups within the industry, (c) looking across buyer groups, (d) looking across complementary services and products, (e) looking across the emotional or functional appeal, and (f) looking across time [40], [41].

According to Kim and Mauborgne, BOS is able to create uncontested market segments through value innovation [7]. Specifically, value innovation explores new market opportunities and creates values for customers and the organisation. Despite product and process innovation having a positive effect on business performance, a study indicated that the evaluation of either the external market conditions or characteristics on the usefulness of these different forms of innovation is rather limited [42]. Moreover, competitors are able to duplicate these innovations. Therefore, companies should adopt the innovation business model to build a sustainable competitive advantage [43]. Past literature showed that the adoption of BOS in the Russian steel market enhanced the firms' profitability as opposed to the red ocean strategy implementation as BOS facilitated the creation of innovative value, minimised social losses in the market, and established a higher market value for the product while reducing production costs [44]. An empirical study in Malaysian manufacturing industries revealed that three of the BOS constructs led to the creation of new uncontested market segments, made business competition irrelevant, and created new demand, thus demonstrating a significant and positive relationship with innovation performance [45]. Accordingly, it is hypothesised in this study that BOS has a positive association with innovation performance [45].

3 Research Methodology

In this study, the survey method was employed for data collection as it is suitable for collecting data from a large sample size, thus allowing the researcher to generalise the results for the entire population [46]. The sample selection in this study consisted of SME manufacturing firms with sales turnover ranging from RM15 million to RM50 million or having a total number of employees ranging from 75 to 200 (www.smecorp.gov.my). The research instrument used in this study was a survey questionnaire as it is regarded as the most preferred research instrument by the academic community for survey methods [47]. The structured survey questionnaires were e-mailed to the managers of the selected firms. The data used in the study was obtained from a preliminary study consisting of 20 respondents.

The structured questionnaire employed in this study consists of four sections. The first section consists of 24 items that relate to BOS. The second section is based on the capabilities of BOS and it contains 29 items. The third section relates to innovation performance and consists of nine items. The last section, section four, comprises general information regarding the respondents' background. In section one, they were asked to indicate the extent to which they adopted BOS practices in their organisation based on the following five-point scale: (a) not at all, (b) to a little extent, (c) to some extent, (d) to a considerable extent, and (e) to a great extent. The items for BOS were adapted from [7] and [48] covering five dimensions which included the following: (a) creating uncontested market segments, (b) making competition irrelevant, (c) creating and capturing new demand for products or services, and (d) achieving differentiation and low cost. For innovation performance in section three, the respondents rated their firms' innovation performance on a five-point scale as follows: (a) strongly disagree, (b) disagree, (c) somewhat agree, (d) agree, and (e) strongly agree. The construct items for both product and process innovation performances were adapted from past literature [49]. The product innovation scale measures the newness of a product and how early it enters the market, number of new products created, use of modern technologies, and speed of product development. In addition, the process innovation scale assesses the technological competitiveness level, use of technology, speed of adopting the latest technology, and how frequently the technologies are replaced in the organisations.

Table 1 displays the demographic profiles of the participants in this study. From a total of 20 respondents surveyed, 14 (70.0%) were managers and the remaining had other positions in the company (assistant manager, human resource executive, and administrative staff). The majority of respondents (65.0%) were in the current position for four to nine years. Based on the types of industry, 20.0% of the respondents were from the food industry, 5.0% were from the automotive, medical devices, chemical, and furniture industry, respectively, 10.0% were from the plastic/rubber industry, and the remaining 10.0% were from other industries such as electrical, metal, paper, and equipment.

Table 1. Demographic Profile of the Respondents

Demography	Information	Frequency	Percentage
Position	Manager	14	70.0
	Others	6	30.0
Years in the current position	1-3 years	7	35.0
	4-6 years	10	50.0
	7-9 years	3	15.0
Types of industries	Food	4	20.0
	Automotive	1	5.0
	Medical devices	1	5.0
	Plastic/rubber	2	10.0
	Chemical	1	5.0
	Furniture	1	5.0
	Others	10	50.0

4 Results

The descriptive statistics of BOS in terms of the minimum and maximum value, mean score, and standard deviation are listed in Table 2. Overall, the mean scores for BOS ranged from 3.70 to 4.55, thus indicating that the respondents surveyed in this study adopted BOS to a considerable extent. For the dimension "creating uncontested marketplace", the item "looking across other industries to explore alternative market segments" received the highest mean score of 4.45, while the item "create new markets by enhancing existing product lines" received the lowest mean score of 3.80. For the dimension "making competition irrelevant", all four items in this dimension received a mean score of above 4.0, with the item "invests in areas that have very few competitors" having the highest mean score of 4.40. For the dimension "creating and capturing new demand", the item "focuses on attracting non-customers and making them customers by offering new products/services" obtained the lowest mean score of 3.70, while the item "the prices of products/services are easily affordable for most of the customers" received the highest mean score of 4.55. The mean scores for items under the "breaking the value-cost trade-off" dimension ranged from 3.80 to 4.10. The item "focuses on creating new elements that add value to the products/services that have never been offered in the industry" had the lowest mean (3.80), while the item "uses exceptional ways to fulfil buyer's needs (buyer utility)" had the highest mean (4.10). For the final dimension of "achieving differentiation and low costs", the mean scores ranged from 3.80 to 4.25, in which the item "aligns the whole activity system to pursue differentiation" had the lowest mean score (3.80), while the item "focuses on cost reduction to attract new or potential customers" had the highest mean score (4.25).

The Pearson product-moment correlation analysis was performed to assess the relationship between BOS and innovation performance (InovPerf). Pearson's correlation coefficient (r) measures the strength of the linear associations between the variables. Table 4 highlights the bivariate correlations between the dependent variable (innovation performance) and the independent variables (each BOS dimension), namely creating uncontested marketplace (CUMP), making competition irrelevant (MCIR), creating and capturing new demand (CCND), breaking the value-cost trade-off (BVCT), and achieving differentiation and low costs (ADLC). The correlation coefficients (r) ranged between -1.00 and +1.00, whereby positive values indicate a positive relationship and negative values indicate a negative relationship. Moreover, the closer a Pearson's r value is to 1, the stronger the relationship between the two variables. Based on Table 4, the results showed that there was a weak correlation between each dimension of BOS and innovation performance.

Table 2. Descriptive Statistics – Blue Ocean Strategy

Dimension	Items	Min	Max	Mean	Std. Deviation
Creating uncontested marketplace	Looking across other industries to explore alternative market segments	3	5	4.45	.686
	Looking across complementary products/services offering to explore new markets	3	5	4.40	.681
	Creates new uncontested markets	3	5	4.25	.716
	Looking across different strategic groups within the industry to explore new markets	3	5	4.20	.834
	Evaluates the emotional orientation of the industry	3	5	4.15	.813
	Evaluates the functional orientation of the industry	3	5	3.95	.826
	Create new markets by enhancing existing product lines	3	5	3.80	.768
Making competition irrelevant	Invests in areas that have very few competitors	4	5	4.40	.503
	Enjoys profits by increasing sales	3	5	4.30	.657
	Provides innovative products/services to exclude competitors	3	5	4.20	.768
	Renders competition irrelevant with other organisations	3	5	4.05	.686
Creating and capturing new demand for products or services	The prices of products/services are easily affordable for most of the customers	4	5	4.55	.510
	Uses a good tagline to entice new customers	3	5	4.05	.759
	Actively involved in shaping future trends over time to create new demand	3	5	3.90	.788
	Focuses on attracting non-customers and making them customers by offering new products/services	2	5	3.70	.865
Breaking the value-cost trade-off	Uses exceptional ways to fulfil buyer's needs (buyer utility)	3	5	4.10	.718
	Removes all elements in the production line that do not create any value to the products/services	3	5	4.00	.858
	Reduces all elements in the production line that do not create much value to the products/services	3	5	3.90	.852
	Improves the processes that create innovation for the products/services	3	5	3.95	.510
	Focuses on creating new elements that add value to the products/services that have never been offered in the industry	3	5	3.80	.696
Achieving differentiation and low costs	Focuses on cost reduction to attract new or potential customers	3	5	4.25	.716
	Focuses on creating differentiation to attract customers	3	5	4.15	.587
	Aligns the whole activity system to pursue differentiation	3	5	3.80	.768
	Aligns the whole activity system to pursue cost-effectiveness	3	5	3.85	.745

Table 3. Descriptive Statistics – Innovation Performance

Dimension	Items	Min	Max	Mean	Std. Deviation
Process Innovation	The novelty of the technology used	3	5	4.30	.657
	Rate of changes in technology	3	5	4.10	.788
	Speed of adopting the latest technology	3	5	4.05	.826
	Technological competitiveness	3	5	4.05	.605
Product Innovation	Number of new products	3	5	4.10	.553
	Use of the latest technology	3	5	4.10	.718
	Early market entrants	3	5	4.05	.686
	Level of newness (novelty)	3	5	4.00	.795
	Speed of product development	3	5	3.95	.510

Table 4. Correlations between BOS dimensions and innovation performance

		CUMP	MCIR	CCND	BVCT	ADLC	InnovPerf
InnovPerf	Pearson Correlation	-.300	.238	-.276	.304	.305	1
	Sig. (1-tailed)	.100	.157	.120	.096	.095	
	N	20	20	20	20	20	20

**Correlation is statistically significant at the 0.01 level (1-tailed)

5 Conclusion

In this study, the extent of BOS practices in Malaysian manufacturing firms, particularly in the SMEs, and its association with innovation performance were evaluated. The concept of BOS is a new development in strategic management literature studies and therefore, requires empirical evidence to establish its measurement and understand the applicability of BOS in real-time business practices.

Many studies have cited that the concept of BOS is "a consistent trend of strategic thinking underlying the creation of new market segments, whereby the demand is created as opposed to being fought for and the rule of competition is deemed irrelevant" [7]. Moreover, the BOS concept rejects the well-defined concept of business trade-off between both cost and differentiation previously proposed by [6]. The BOS concept, however, stresses on value innovation [48], whereby its objective is not to defeat competitors, but to break away from the boundaries that define competition among companies [50]. The implementation of BOS seeks to create a competitive advantage by competing in a unique market that is not related to competitors. With its unique market segment, companies will have the ability to maximise their sales potential and profitability when benefits are created for customers [50].

The outcomes of this study contribute to the growing body of empirical evidence related to BOS. The results revealed that managers in Malaysian manufacturing SMEs were aware of BOS and have adopted this strategy at a considerable level. The findings also imply that manufacturing SMEs are trying to compete in an uncontested market segment, break away from competitors, create new demand, break value-cost trade-off, and focus on achieving differentiation or low cost, thus creating an initiative for innovation. The findings of this study also suggest that BOS is considered suitable for SME firms since it allows for the development of new solutions based on the ones that currently exist in the marketplace, thus requiring minimal additional investments. Additionally, the results indicate that the correlation between each dimension of BOS and innovation performance is not significant. This observation could be due to the small number of respondents sampled in this study and the possibility that other factors can also affect the relationship between BOS and innovation performance. Nevertheless, the results create an agenda for future research to investigate the role of BOS in enhancing innovation performance.

Acknowledgements

The authors are grateful for the administrative assistance provided by the Research and Innovation Management Centre (RIMC), Universiti Utara Malaysia, and financial support awarded by the Malaysian Ministry of Education under the Fundamental Research Grant Scheme (FRGS). (S/O Code: 14173).

References

[1] Brassell, M., Reid B, "*Innovation, intangibles and integrated reporting: A pilot study of Malaysian SMEs",* 2015 ACCA Global. www.accaglobal.com. Last access 18 January 2018.

[2] Eleventh Malaysia Plan: 2016 -2020. Retrieved from www.epu.gov.my/en/rmk/eleventh-malaysia-plan-2016-2020 Last access 20 June 2018.

[3] SMEs Annual Report 2017 http://www.smecorp.gov.my/images/SMEAR/latest/Chapter2.pdf. Last access 10 June 2018.

[4] Zakaria, N., Abdullah N.A.C,, Yusoff, R. Z, "*The innovation - performance linkage: Empirical evidence of Malaysian Manugacturing SMEs",* The European Proceedings of Social and Behavioural Sciences. 2016 Retrieved from http://dx.doi.org/10.15405/epsbs.2016.08.59

[5] Bhuiyan, A.B., Said, J., Ismail, M.D., Mohd Jani, M.F., Gun Fie, D. Y., *"The innovation drivers, strategies and performance of food processing SMEs in Malaysia",* Malaysian Journal of Society and Space, Vol 12, No.2, pp.154–156, 2016

[6] Porter, M, *Competitive Strategy*. New York: The Free Press. 1980

[7] Kim, W, C., Mauborgne, R., *Blue ocean strategy: How to create uncontested market space and make the competition irrelevant*, Boston: Harvard Business School Press*, 2005*

[8] Alam, S., Islam M, T., *"Impact of blue ocean strategy on organizational performance: A literature review toward implementation logic",* IOSR Journal of Business and Management (IOSR-JBM), Vol. 19. No.1, pp. 01-19, 2017

[9] Malaysia's National Blue Ocean Shift (NBOS). Retrieved from https://www.blueoceanstrategy.com/malaysia-nbos/. Last access 27 July 2018

[10] Too, D., *"Blue ocean strategy helps SMEs think outside the box",* The Brunei Times. Retrieved from http://bt.com.bn/business-national/2012/07/07/blue-ocean-strategy-helps-smes-think-outside-box. 2012

[11] Schumpeter, J, A., Opie, R., *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. New Brunswick, N.J. Transaction Book, 1983

[12] Kuratko, D. F., Hodgetts R. M., *Entrepreneurship: Theory, Process and Practices* (6th edition). Smith western, USA. 2004

[13] Thornhill, S., *"Knowledge, innovation and firm performance in high- and low-technology regimes",* Journal of Business Venturing, Vol. *21*, pp. 687–703, 2006

[14] Nielsen, C., *"From innovation performance to business performance: Conceptualising a framework and research agenda".* Meditari Accountancy Research, Vol. 27, No.1, pp. 2-16, 2019: https://doi.org/10.1108/medar-03-2018-0318

[15] Saunila, M., *"Understanding innovation performance measurement in SMEs",* Measuring Business Excellence, Vol. 21, No. 1, pp. 1-16, 2017

[16] Ljiljana, Božić., Edo, Rajh., "*The factors constraining innovation performance of SMEs in Croatia",* Economic Research-Ekonomska Istraživanja, Vol. 29, No. 1, pp. 314-324, 2016: DOI: 10.1080/1331677X.2016.1168040

[17] Ondrej, Zizlavsky., *"Innovation performance measurement: research into Czech business practice",* Economic Research-Ekonomska Istraživanja, Vol. 29, No.1, pp.816-838, 2016

[18] Medase, S,K., *"Product innovation and employee's slack time. The moderating role of firm age & size",* Journal of Innovation & Knowledge, 2019 (Article in Press): https://doi.org/10.1016/j.jik.2019.11.001

[19] Bakar, L. J. A., Ahmad, H., *"Assessing the relationship between firm resources and product innovation performance",* Business Process Management Journal, Vol.16*,* No.3, pp. 420–435, 2010

[20] Bon, A,T., Mustafa, E,M.A, *"Impact of total quality management on innovation in service organizations: Literature review and new conceptual framework",* Procedia Engineering, Vol. 53, pp. 516-529, 2013

[21] Suroso, E., Azis, Y., "*Defining mainstreams of innovation: A literature review".* First International Conference on Economics and Banking (ICEB-15), Published by Atlantis Press, 2015 https://www.atlantis-press.com/proceedings/iceb-15/25405

[22] Janssen, S., Moeller. K., Schlaefke, M. (2011). *"Using performance measures conceptually in innovation control",* Journal of Management Control, Vol. 22, No. 1, pp. 107-128, 2011

[23] Prajogo, D.I., Power, D.J., Sohal, A.S., *"The role of trading partner relationships in determining innovation performance: An empirical examination",* European Journal of Innovation Management, Vol, 7, No.3, pp. 178–186, 2004

[24] Gopalakrishnan, S., Damanpour, F., *"A review economics of innovation research in*

sociology and technology management", Omega*,* Vol. 25, No.1, pp. 15–28, 1997

[25] Wang, C. L., Ahmed, P. K., "The development and validation of the organizational innovativeness construct using confirmatory factor analysis", European Journal of Innovation Management, Vol.7, No.4, pp. 303–313, 2004

[26] Camison, C., Lopez, A. V., *"An examination of the relationship between manufacturing flexibility and firm performance: The mediating role of innovation",* International Journal of Operations & Production Management, Vol. 30, No.8, pp. 853–878, 2010

[27] Galindo, M. Á., Méndez, M. T., *"Entrepreneurship, economic growth, and innovation: Are feedback effects at work?",* Journal of Business Research, Vol. 67, No. 5, pp. 825–829, 2014

[28] OECD, *Oslo Manual: Proposed Guidelines for Collecting and Interpreting Technological Innovation Data*. Paris, 2005

[29] Oke, A., Burke, G., Myers, A., "Innovation types and performance in growing UK SMEs", International Journal of Operations and Production Management, Vol. *27,* No.7, pp. 735–753, 2007

[30] Richard Yu-Yuan Hung., Bella Ya-Hui Lien., Shih-Chieh Fang., Gary N. McLean., *"Knowledge as a facilitator for enhancing innovation performance through total quality management",* Total Quality Management & Business Excellence, Vol. 21, No. 4, pp. 425-438, 2010 DOI: 10.1080/14783361003606795

[31] Nguyen, Thi, Canh., Nguyen, Thanh, Liem., Phung, Anh, Thu., Nguyen, Vinh, Khuong., *"The impact of innovation on the firm performance and corporate social responsibility of Vietnamese manufacturing firms",* Sustainability, MDPI, Open Access Journal, Vol. 11, No. 13, pp. 1-14, 2019

[32] Miles, R. E., Snow, C. C., Meyer, A. D., Coleman, H. J., *"Organisational strategy, structure, and process",* Academy of Management Review, Vol. 3, No. 3, pp. 546-562, 1978

[33] Otley, D.T.. (1980), *"The contingency theory of management accounting: achievement and prognosis",* Accounting Organizations and Society, Vol. 5, No. 4, pp. 413-428, 1980

[34] Chenhall, R. H., *"Management control system design within its organisational context: findings from contingency-based research and directions for the future",* Accounting, Organisations and Society, Vol. 28, No. 2/3, pp. 127-168, 2003

[35] Simons, R., *Performance measurement and control system for implementing strategy*. Prentice Hall: Upper Saddle River, 2001

[36] Thompson, A., Peteraf, M., Gamble, J., Stirickland, A., *Crafting and executing strategy: Concepts and readings (18th ed.)*. New York, NY: MC Graw-Hill, 2012

[37] Čirjevskis, A., Homenko, G., Lačinova, V., *"How to implement blue ocean strategy (BOS) in B2B sector",* Business Management and Education, Vol. 9, No. 2, pp. 201–215. 2011 Retrieved from http://dx.doi.org/10.3846/bme.2011.14

[38] Muhammad, S., Tasmin, R., Takala, J., Qureshi, M.I., Rashid, M., *"Relationship of blue ocean strategy and innovation performance, an empirical study",* City University Research Journal, (Special issue: AIC, Malaysia,), pp. 74–80, 2017

[39] Vinayan, G., Jayashree, S, M. G., *"Critical success factors of sustainable competitive advantage: A study in Malaysian manufacturing industries",* International Journal of Business and Management, Vol. 7*,* No. 2, pp. 29-45, 2012

[40] Kim, WC., Mauborgne, R., *Blue ocean strategy, expanded edition: How to create uncontested market space and make the competition irrelevant.* Harvard Business Review Press, 2014

[41] Butle, R C., "*Planning with blue ocean strategy in the United Arab Emirates",* Strategic Change, Vol. 17, No. 5–6, pp. 169–178, 2008

[42] Prajogo, D.I., Ahmed P., *"The relationships between quality, innovation and business performance: An empirical study", International Journal of Business Performance Management",* Vol. 9, No.4, pp. 380–405, 2007

[43] Casadesus-Masanell, R., Ricart, J., *"From strategy to business models and onto tactics",* Long Range Planning, Vol. 43, No. 2–3, pp. 195–215, 2010

[44] Vasiljeva, Marina.V., Ponkratov ,Vadim V.,Kuznetsov, Nikolay V., Maramygin ,Maksim S., Osinovskaya**,** Irina V., *"Implementation of the blue ocean strategy using simulation: Firm-level evidence from Russian steel market",* Industrial Engineering & Management Systems, Vol.18, No. 4, pp. 859-871, 2019: https://doi.org/10.7232/iems.2019.18.4.859

[45] Muhammad, S., Tasmin, R., Qureshi, M.I., Takala, J., "A new framework of blue ocean strategy for innovation performance in manufacturing sector", International Journal

of Engineering and Advanced Technology (IJEAT), Vol. 8, No. 5C, pp. 1382-1389, 2019

[46] Sekaran, U., Bougie, R., *Research methods for business: A skill building approach* (5th ed.). Chichester, United Kingdom: John Wiley & Sons, 2010

[47] Altinay, L., Paraskevas, A., *Planning Research in Hospitality and Tourism*. Butterworth-Heinemann, Oxford, 2008

[48] Muhammad, S., Tasmin, R., Takala, J., Qureshi, M. I., Rashid, M., *"Mediating role of open innovation between the relationship of Blue ocean strategy and innovation performance, a study of Malaysian industry",* International Journal of Engineering and Technology(UAE), Vol. 7, No. 2.29 Special Issue 29, pp. 1076–1081, 2018 https://doi.org/10.14419/ijet.v7i2.29.14316

[49] Laosirihongthong, T., Prajogo, D. I., Adebanjo, D., *"The relationships between firms strategy, resources and innovation performance: Resources-based view perspective",* Production Planning and Control, Vol. 25, No. 15, pp. 1231–1246, 2014

[50] Odinachi, Catherine. Ebele., Mbah. Paulinus Chigozie., Ozoko, Emmanuel Eberechukwu., *"Applicability of blue ocean strategy among selected manufacturing firms in South-East Nigeria",* Scholars Journal of Economics, Business and. Management, Vol. 5, No. 10, pp. 916-927, 2018