RELATIONSHIP OF BLUE OCEAN STRATEGY AND INNOVATION PERFORMANCE, AN EMPIRICAL STUDY

Muhammad Shafiq

Faculty of Technology Management and Business, Universti Tun Hussein Onn Malaysia, Johor Malaysia consult.shafiq@gmail.com, hp150039@siswa.uthm.edu.my

Rosmaini Tasmin

Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Johor Malaysia rosmaini@uthm.edu.my

> Josu Takala University of Vaasa, Finland Josu.takala@uwasa.fi

Muhammad Imran Qureshi Malaysian Institute of Industrial Technology, Universiti Kuala Lumpur, Malaysia miqureshi80@gmail.com

Mehwish Rashid

Faculty of Technology Management and Business, Universti Tun Hussein Onn Malaysia, Johor Malaysia mehwishrashid.uthm@gmail.com, gp160017@siswa.uthm.edu.my

Abstract

This paper presents the relationship between Blue ocean strategy and innovation performance. There have been many researches about different business strategies and innovation performance but Blue Ocean Strategy which though always advocates the concept of value innovation, but its impact has not been quantitatively checked on innovation performance. The introduction of problem of innovation performance of Malaysia is discussed, then variables of BOS and innovation performance are briefly explained. Then relationship of these variables is presented. Previous literature have some solid foundations which establishes the link of these variables. Theoretical framework is shown and hypothesis are presented for this paper. Methodology and conclusion are also presented before end, where future work of the study is elaborated.

Keywords: Blue Ocean Strategy, Innovation Performance, Innovation

1. Introduction

Global Innovation Index 2017 display Malaysia's continuous slide from 32nd rank in 2012 to 37th in 2017 in the world: some distance behind its international and regional competitors e.g. Singapore (Dutta; *et al*, 2016). Over a series of Malaysia Plans, the country's government has set out its aspirations to join the world's leading economic nations by 2020, and recognizes at the highest levels that the national innovation environment will need continued focus and investment in order to achieve this goal (FRSA, M. B., & Reid, 2015). To be effective, strategies to promote innovation must reflect the ways in which innovation takes place today.

Manufacturing industry is very important in Malaysian economy because of workforce and market share. This research will focus on the Malaysian manufacturing industry which contribute 25% to Malaysian economy (FMM, 2017). Manufacturing industry is growing in competitive and dynamic market. This research will focus on all of the organizations mentioned in (FMM, 2017) of Malaysia. Though researcher may extend the research in future to all organizations which will include also the service industry. It is expected that this research will contribute to Malaysian economy.

Complexities for organizations have enhanced due to upcoming complex and diverse strategies for business as stated by, (Casadesus & Ricart, 2010) as competitive strategy of porter, and uncontested markets of blue oceans. Organizational performance have been greatly discussed in literature with Blue ocean strategy (Kim, & Mauborgne, 2005), though being an important dimension of BOS, it makes it interesting to study innovation performance with relation to Blue ocean strategy as the modern business strategy.

Recently, (Randall, 2015), stressed to investigate his claim of non-destructive creation in blue ocean strategy (Kim, & Mauborgne, 1997) as sustainability of economy is necessary by having non-destructive innovation. Incremental innovation not innovation but copying (Kim & Mauborgne, 2005) or enhancement. While 14% Blue ocean launces provided 38% revenue while 61% profit impact, in comparison to 86% Red ocean launches provided 62% revenue and 39% profit impact (Kim & Mauborgne, 2005). So, it is necessary to find out innovation performance in Malaysian industries, and investigate impact of Blue Ocean strategy on innovation performance.

The objective of the research is to investigate and analyze the relationship of blue ocean strategy and innovation performance in Malaysia.

2. Literature Review

2.1. Blue Ocean Strategy

Blue ocean strategy desribes the success factor for pattern of organization is 'making the competion irrelevant'. It is a reconstructionist view from traditional competitive theories (Vinayan *et al*, 2012). It is said that BOS creates demands and competition is avoided by following specific pattern for success of organizations (Kim & Mauborgne, 2005). Fighting among organization should be avoided when making strategies. When opponents also involve in 'bloody' competitive strategies, innovation goes back because of waste of energies (Kim & Mauborgne, 2005), as competition among players lowers profits in 'differentiation or cost of competition.

BOS emphasize on value innovation. It focus on brand development as described (Vinayan *et al*, 2012). There have been use and studies on BOS, it has attracted interest of researchers all over the world, (Butler, 2008), Kim *et al*, 2008), & Rebon *et al*, 2015). Implementation of BOS is in focus by Malaysian government in Malaysia (ICBoS, 2016). Oorganizations' must see ahead of dwindling resources and vicious competition for profitability (Morrish, 2011, Kim & Mauborgne, 2005).

Red Ocean Strategy	Blue Ocean Strategy				
Compete in existing market space.	Create uncontested market space.				
Beat the competition.	Make the competition irrelevant.				
Exploit existing demand.	Create and capture new demand.				
Make the value-cost trade-off.	Break the value-cost trade-off.				
Align the whole system of a firm's activities with	Align the whole system of a firm's activities in				
its strategic choice of differentiation or low cost	pursuit of differentiation and low cost.				
Sources King & March evens (2005)					

Table 1. Red Ocean versus Blue Ocean Strategy

Source: Kim & Mauborgne (2005)

Blue Ocean creates the uncontested market space by value innovation. Value Innovation does not go for fighting with other organizations for market share but actually explores new markets and innovates values both for customers and the organization itself (Kim & Mauborgne, 2005, Randall, 2015).

Kim & Mauborgne (2005) present four action framework to develop value innovation for both customers and organization, these four actions are Eliminate, Reduce, Create and Raise (Borgianni *et al*, 2012). Comparatively, competition is focused in existing market in red ocean strategy (Leavy, 2005). Blue ocean strategy has six main principles, to formulate and implement in any firm. Four of these are formulation principles; 1. Reconstruct market boundaries, 2. Focus on the big picture not numbers, 3. Reach beyond existing demand, 4. Get the strategic sequence right, while two are execution principles. 5. Overcome key organizational hurdles, 6. Build execution into strategy.

Organizations compete and leave their competitors behind to get greater pie of market demand (Kim & Mauborgne, 2005). Profits and growth reduce because of crowded market. Untouched market space are accessed, new demands are explored, and new opportunities are created in Blue Ocean strategy (Kim & Mauborgne, 2005). According to (Kim & Mauborgne, 2005), Red oceans will always exist, and matter but Blue oceans have got to be created to get high performance (Hollensen, 2013). There have been many recent studies on empirical research, measurement tools and other aspects of Blue ocean strategies (Borgianni *et al*, 2012) which signifies the importance of this strategy. Five basic pillars or dimensions of Blue ocean strategy as mentioned by (Omar & Tasmin, 2015) and adapted from (Kim & Mauborgne, 2005), can be summarized as;

- 1. Creating uncontested market space
- 2. Making the competition irrelevant
- 3. Creating and capturing new demand
- 4. Breaking the value-cost trade-offs.

5. Achieving differentiation & low cost.

2.2. Innovation Performance

Innovation is important for competitive advantage and success of organization. All organizations need innovation to enhance market share (Johannessen *et al*, 2001). Organizations get motivation because of internationalization and competition for increase of innovation for competitive edge as stated by (Harris *et al*, 2013). Firms have to innovate systematically with multiple strategies to have competitive edge (Shafiq & Tasmin, 2016).

Organizational innovation performance is found by its activities of innovation, such as new services, new products, and number of patents as stated by (Jiang, & Li, 2009). Innovation performance captures unwarranted domains of organization's competitive advantage. Product innovation is seen an important way to give competitive advantage, and sustainability of organizations. The capability of an organization to develop new products and services is known as vibrant ability (Lokshin *et al*, 2009). According to (Teece, 1997), management researchers have recognized that companies gain and sustain competitive advantage due to the ability to renew, integrate and expand their existing competencies and continuously develop new capabilities. Product innovation has been viewed in this context as an important mechanism through which organizations modify and establish competencies that are central for staying competitive within the fast-changing business environment (Teece, 1997). Innovation performance in this study will be measured by using, (Johannessen *et al*, 2001) scale, who use six questions to measure innovation performance in this study will be measured by using. New sources of supply 6. New ways of organizing.

3. Relationship Between Blue Ocean Strategy and Innovation Performance

The relationship of strategy with innovation is discussed by (Teece, 1997). Organizations having, high risktaking trend to innovations, increase their competitive advantage is claimed by (Lokshin *et al*, 2009). It is highlighted that there are differences between innovative and non-innovative firms as riskiness influence innovative capability

positively (Forrester, 2000). The need of organizations in hypercompetitive markets to innovate and communicate require to adopt specialized generic strategies to reach out to customers differently and to gain competitive advantage (Karabulut, 2015). Supportively, the primary purpose of an organization's existence is not only to exist but also to thrive.

Despite the fact that both product and process innovation have a positive effect on business performance (Iansiti, & Levien, 2004), the understanding of the external market conditions or characteristics under which these two different forms of innovation more or less beneficial is limited. Product innovation no longer offers sufficient competitive advantage in differentiating successful companies (McGrath, 2011). Competitors are quickly able to copy innovations, product life cycles are becoming shorter and competitors from low wage countries have considerable cost and price advantages. Hence, companies consider business model innovation as an opportunity to build sustainable competitive advantage (Ezzia & Jarbouib, 2016). It is necessary to evaluate and compare the impact of different strategies on innovation performance (Enkel *et al*, 2009). Successful innovation strategies could deliver superior performance as innovation performance. In light of all above discussions in introduction and literature review, below is research framework.

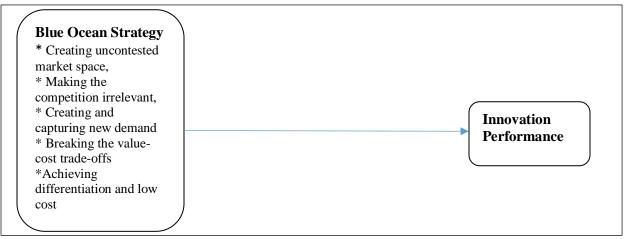


Figure 1. Model of the Study

3.1. Hypotheses of the Study

Following hypothesis are formulated on the basis of theoretical framework of the study;

- 1. Blue Ocean Strategy has a positive relationship with innovation performance.
 - i. 'Creating Uncontested Marketspace' has a positive relationship with innovation performance.
 - ii. 'Making the Competition Irrelevant' has a positive relationship with innovation performance.
 - iii. 'Creating and Capturing New Demand' has a positive relationship with innovation performance.
 - iv. 'Breaking the Value-cost trade-offs' has a positive relationship with innovation performance.
 - v. 'Achieving Differentiation and Low Cost' has a positive relationship with innovation performance'.

4. Methodology

Previous literature confirms that Blue ocean strategy is being implemented in Malaysia. This research is a quantitative study as data will be collected through established scale of (Johannessen *et al*, 2001) for innovation performance. While a scale is developed for BOS based on working of (Kim & Mauborgne, 2005). Pre-testing of questionnaire has been performed by academics and industrial experts. While English testing is separately performed.

5. **Results**

Pilot testing of the instrument was successful and all Cronbach Alpha values of Blue ocean strategy dimensions (BCUM, BMCI, BCND, BVCT and BDLC) were above or around 0.80, while items with low loadings were deleted, a separate paper is in publication process of that effort.

Table 2. Cronbach Alpha values for blue Ocean Strategy Dimensions					
Dimension	Reliability	No of Items			
BOS-CUM	0.911	8			
BOS-MCI	0.858	5			
BOS-CND	0.868	6			
BOS-VCT	0.897	9			
BOS-DLC	0.800	4			

Table 2.	Cronbach Alpha	values for Blue ()cean Strategy	Dimensions

The below table also mentions the significant (2-tailed) correlation between Innovation performance and all the five dimensions of Blue ocean strategy for the pilot testing of the study.

The detailed analysis of this research is being conducted with a population of 3500 manufacturing industries (FMM, 2017) with sample size of 351 according to (Krejcie, & Morgan, 1970). SPSS and Smart PLS are being used for Structural equation modeling implementation in this research for factor loadings of different dimensions of each variable of Blue ocean strategy.

		BCUMMeans	BMCIMeans	BCNDMeans	BVCTMeans	BDLCMeans
IPMeans	Pearson Correlation	.714**	.643**	.570**	.511**	.434**
	Sig. (2-tailed)	.000	.000	.000	.000	.001
	Ν	58	58	58	58	58

6. **Conclusion and Future Work**

It is very important to empirically investigate the relationship of above developed and discussed model. Literature supports a positive relationship for Blue ocean business strategy and organizational performance and innovation. It will be interesting to find impact of Blue Ocean Strategy on innovation performance. This study explores the relationship of BOS and Innovation performance, a dimension of organizational performance. It is important to empirically prove this relationship which will be analyzed and presented in future research by same author.

It will also be very interesting in future to investigate the relationships of Blue ocean strategy with innovation types of radical innovation and incremental innovation. Innovation nature i.e. nondestructive innovation and destructive innovation is another very interesting aspect of this research as mentioned by (Kim & Mauborgne, 2005), which will further cement the possibilities and miracles of Blue ocean strategy.

References

Dutta, S., Lanvin, B., & Wunsch-Vincent, S. (Eds.). (2016). The global innovation index 2016: Winning with global innovation. Johnson Cornell University.

FRSA, M. B., & Reid, B. (2015). Innovation, intangibles and integrated reporting: a pilot study of Malaysian SMEs. FMM Directory 2017, 48th Edition

Casadesus-Masanell, R., & Ricart, J. E. (2010). From strategy to business models and onto tactics. Long range planning, 43(2), 195-215.

Chan Kim, W., & Mauborgne, R. (2005). Value innovation: a leap into the blue ocean. Journal of business strategy, 26(4), 22-28.

- Randall, R. M. (2015). W. Chan Kim and Renée Mauborgne dispel blue ocean myths. *Strategy & Leadership*, 43(2), 11-14.
- Kim, W. C., & Mauborgne, R. (1997). Value innovation: The strategic logic of high growth. Harvard Business School Pub.

Chan Kim, W., & Mauborgne, R. (2005). Blue Ocean Strategy: How to create uncontested market space and make the competition irrelevant. *Harvard Business School Press, Boston, MA*.

Vinayan, G., Jayashree, S., & Marthandan, G. (2012). Critical success factors of sustainable competitive advantage: A study in Malaysian manufacturing industries. *international journal of business and management*, 7(22), 29.

Butler, C. (2008). Planning with blue ocean strategy in the United Arab Emirates. *Strategic Change*, 17(5-6), 169-178.

- Kim, C., Yang, K. H., & Kim, J. (2008). A strategy for third-party logistics systems: A case analysis using the blue ocean strategy. *Omega*, 36(4), 522-534.
- Rebón, F., Ocariz, G., Gerrikagoitia, J. K., & Alzua-Sorzabal, A. (2015). Discovering insights within a blue ocean based on business intelligence. *Procedia-Social and Behavioral Sciences*, 175, 66-74.
- International Conference On Blue Ocean Strategy, Kualampur, Malaysia 2016
- Morrish, (2011), 'Entrepreneurial marketing: a strategy for the twenty-first century?' Journal of Research in Marketing and Entrepreneurship, 13(2) pp. 110 119

Borgianni, Y., Cascini, G., & Rotini, F. (2012). Investigating the patterns of value-oriented innovations in blue ocean strategy. *International Journal of Innovation Science*, 4(3), 123-142.

Leavy, B. (2005). Value pioneering-how to discover your own "blue ocean": interview with W. Chan Kim and Renee Mauborgne. *Strategy & Leadership*, *33*(6), 13-20.

Hollensen, S. (2013). The Blue Ocean that disappeared-the case of Nintendo Wii. *Journal of business strategy*, 34(5), 25-35.

Omar, A. R., & Tasmin, R. (2015). Society Transformation and Social Development through University-Community Transformation Centre (UCTC) Via Universiti Tun Hussein Onn Malaysia Experience. *Journal of Techno Social*, 7(2).

Johannessen, J. A., Olsen, B., & Lumpkin, G. T. (2001). Innovation as newness: what is new, how new, and new to whom?. *European Journal of innovation management*, 4(1), 20-31.

Harris, R., McAdam, R., McCausland, I., & Reid, R. (2013). Levels of innovation within SMEs in peripheral regions: the role of business improvement initiatives. *Journal of Small Business and Enterprise Development*, 20(1), 102-124.

Shafiq, M., & Tasmin, R. (2016). Linking Business Strategy with Organizational Innovation. *Innovation and Management*.

Jiang, X., & Li, Y. (2009). An empirical investigation of knowledge management and innovative performance: The case of alliances. *Research Policy*, 38(2), 358-368.

- Lokshin, B., Van Gils, A., & Bauer, E. (2009). Crafting firm competencies to improve innovative performance. *European Management Journal*, 27(3), 187-196.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 509-533.
- Forrester, R. H. (2000). Capturing learning and applying knowledge: an investigation of the use of innovation teams in Japanese and American automotive firms. *Journal of Business Research*, 47(1), 35-45.
- Karabulut, A. T. (2015). Effects of innovation types on performance of manufacturing firms in Turkey. *Procedia-Social and Behavioral Sciences*, 195, 1355-1364.

Iansiti, M., & Levien, R. (2004). The keystone advantage: what the new dynamics of business ecosystems mean for strategy, innovation, and sustainability. Harvard Business Press.

McGrath, A. E. (2011). The open secret: A new vision for natural theology. John Wiley & Sons.

Ezzia, F., & Jarbouib, A. (2016). ¿ Afecta la estrategia de innovación al rendimiento financiero, social y ambiental?. *Journal of Economics, Finance and Administrative Science*, 21(40), 14-24.

Enkel, E., Gassmann, O., & Chesbrough, H. (2009). Open R&D and open innovation: exploring the phenomenon. *R&d Management*, *39*(4), 311-316.

Prajogo, D. I. (2016). The strategic fit between innovation strategies and business environment in delivering business performance. *International Journal of Production Economics*, *171*, 241-249.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and* psychological measurement, 30(3), 607-610.