

Innovation Risk and Sustainable Competitive Advantages: Empirical Assessment of Government-Linked Companies in Malaysia

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ABSTRACT

This study attempts to assess the present level of innovation status among Malaysian Government-Linked Companies (GLCs). A set of questionnaire was distributed among 134 managers and executives from these GLCs to collect the primary data for this study. The perspectives of executives were collected based on ten factors of innovation practices utilizing the five-point Likert scales. Descriptive statistics was used to analyze the data while the reliability and validity were tested using the Cronbach's alpha test and the Skewness and Kurtosis test, respectively. Factor analysis was used to test the data consistency. The findings revealed the 82.8% of the respondents were agreeable to their firms' emphasis on the factors of innovation. However, it was found that GLCs that were owned by the federal government placed more focus on innovation compared to the GLCs that were state-owned. This study reveals that overall the Malaysian GLCs should enhance their innovation practices by placing more focus on being engaged in the adoption of innovative designs at work, the reengineering of business processes, innovative pricing, market distribution and promotional methods, enhancing customer satisfaction by importing innovative warranty and maintenance systems, as well as

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by importing innovative claim clearing processes and methods, and the adoption of innovative order management and follow-up systems.

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INTRODUCTION

The theory of resource-based view (RBV) emphasizes on the transformation of an organization's resources that are valuable in order to achieve its objectives (Barney, 1991). The RBV suggests that firms that totally make use of their valuable resources including skills, raw materials, and so on would be able to create competitive advantages compared to their rivals (Grant, 1991), in addition to creating a competitive advantage that is sustainable for their firms as well (Macfarlane, 2014). Competitive advantage can be defined as a condition whereby a firm creates or improves on its own products while making it better than the other similar products in the market, which belong to its competitors. According to Ketchen and Short (2014), a sustainable competitive advantage would allow a firm to sustain itself amidst environmental changes and to remain effective in the coming years through the achievement of a competitive advantage that is long term, which would be costly and not easily copied by its rivals (Papulova & Papulova, 2006).

Having a sustainable competitive advantage has many benefits since it is a strong source for a firm to gain successful performance and to create value (Gupta & Benson, 2011). The study by Barney (1991) claims that firms are able to develop a competitive advantage by gaining rare, valuable, and inimitable capabilities and resources. Firms would be able to create value and sustainability by gaining such resources. According to Kraaijenbrink and Spender (2011), without the creation of value, firms would have no reason to be present in the market as they would not be adding any value. The performance of firms can be enhanced through value creation by maximizing per share earnings, ensuring high standards of operational efficacy, remaining competitive (Gholami, 2011). These measures will in turn assist the firm to execute strategies that enhance its competitiveness and efficacy (Porter, 1997).

Nevertheless, having resources alone will not guarantee value creation or gaining a competitive advantage. The reason for this is that people conceive value in a very different manner (Kraaijenbrink & Spender, 2011). Two people may not attach the same perception of value to something. In addition, given the scale of globalization and the growth in competition, it is difficult for firms to sustain and keep up with the rapid environmental changes. Thus, firms should be able to provide or develop new products to distinguish themselves in the market. The study by Prieto and Revilla (2006) reveals that firms with differentiating products in the market would have the potential to reach greater heights and also create value at the same time for their firms.

Thus, to preserve the sustainability feature in certain government agencies, the Malaysian government privatized some of the organizations led by the establishment of Government-

Linked Companies or GLCs. GLCs refer to firms which have achieved the fundamental commercial aim of the government (Khazanah, 2014) with the government having a direct control and stake in the firms (OECD, 2013). A controlling stake includes a percentage in the ownership of the firm as well as a direct or indirect influence in appointing the senior management and directors. It also means that the government is involved in granting contracts, planning strategies, restructuring, finance, and the acquisitions and divestment via its Government-Linked Investment Companies (GLICs). The Malaysian government controls the GLCs through agencies such as the Khazanah, the Ministry of Finance, GLICs, Bank Negara Malaysia, and the Employees Provident Fund.¹

GLCs include a wide range of activities dealing with the economy such as telecommunications, infrastructure, financial services, as well as agriculture. Therefore, the GLCs have a pivotal role in the operations of each commercial issue in the country and contribute in the improvement of the public's quality of life in a significant manner (Abdullah, 2007; Razak, 2012). GLCs are part of the corporate enterprise, which may include a public listed or private organization. Nevertheless, the GLCs only represent 5% of the total organizations in the Bursa Malaysia or previously called the Kuala Lumpur Stock Exchange. However, the market capitalization of the market by the GLCs account for RM 232 billion, which consists of higher than half of the GDP of Malaysia (Md Zin & Sulaiman, 2011).

Given this situation, this study aims to examine the practices of having strategies on sustainable competitive advantage among various categories of Malaysian GLCs. Innovation is among the most critical component of a firm, that aims to be sustainable in the market place (Rosli & Sidek, 2013; Shanker & Bhanugopan, 2014). It is able to aid GLCs in enhancing the creation of value since the organizations would be able to develop some new product or service (Munshi, 2010). Therefore, innovation is regarded as being critical since it among the factors, which enable the firm to be sustainable and survive in the present challenging business environment. Innovation contains important functions in the progress and growth of the firm (Ishak & Ahmad, 2011).

The remainder of this paper is organized as follows. Next section elaborates on the literature review; the third section explains the methodology; the fourth section provides the analysis; the fifth section discusses the findings and discussion: and the final section concludes and recommends.

LITERATURE REVIEW

The key aim of a firm is to enhance its performance and its business processes in order to remain competitive just like other firms in the market (Aivazian, Ge, & Qiu, 2005). The study by Phua (2001) found out that the economic planners in the government expect the privatization of the public services would be quite beneficial to the nation. This is in alignment with prior proof, which concurs that the privatization could develop the efficacy of firms, create further development opportunities, lower the financial and administrative concerns of the government of Malaysia while increasing the participation of Bumiputeras in the corporate sector (Nambiar,

¹ Retrieved from <http://www.khazanah.com.my>

2009). However, in many instances the GLCs are mentioned to be underperforming since they have to contend with two objective namely to address their social duties as well as to be profitable. This concern has given an adverse image to the GLCs.

As such, in May 2004, in order to solve this issue of underperformance, the government developed the GLC Transformation Programme. The major aim for this programme is to enhance the GLCs' performance and the entire corporate division to perform in a successful manner.

The transformation programme is a critical program because it is in alignment with the nation's aim to reach Vision 2020. Many GLCs have been effective in the implementation of this programme including organizations like Telekom Malaysia, United Engineering Malaysia Group Berhad as well as the Malaysian Airport Holding Berhad. These organizations have become more successful in making more profits and to be recognized internationally (Md Zin & Sulaiman, 2011).

Nevertheless, prior researches still reveal that the GLCs are lacking in the area of value creation in comparison to non-GLCs (Feng, Sun, & Tong, 2004; Lau & Tong, 2008; Entebang, 2010; Razak *et al.*, 2011; Mohamad & Said, 2011). According to Muslim, Hafiz, and Fekri Ali (2012), GLCs have been experiencing poor organizational performance because of the lack in creating value in their firms which has caused the government to closely monitor them. The study by Razak *et al.* (2011) discovered that the performances without monitoring of the non-GLCs outperform the GLCs based on corporate governance as well as other types of particular characteristics, that cause them to create more value compared to the GLCs. The reason for this is due to the fact that the GLCs are not focused on maximising profits too much since they are more concerned with nation building (Lau & Tong, 2008).

Some GLCs have not been able to create any value and have been experiencing poor performance namely companies like the Proton Holding Berhad and the Malaysian Airline System. Thus, the GLCs have to try harder with new initiative to create value in order to address the government's needs and expectations while increasing and adding value to their services, products, and enterprise performance (Aziz *et al.*, 2015a,b,c; Said *et al.*, 2015, 2016a,b,c; Lawler & Mohrman, 2013; Zulkarnain *et al.* 2016). According to Khazanah (2014), starting from 2015, GLCs must improve and work on their creation of value by concentrating on sustainability practices and the execution. At present, GLCs, in particular the G20² organizations have begun to emphasize on the sustainability practices in order to reach value creation in the long term. Unfortunately, certain GLCs have the tendency to disregard the significance of the sustainability practices since they have other objectives to achieve as well. Additionally, at present, the number of researches on the area value creation is also limited among GLCs Malaysia (Lau & Tong, 2008).

In the Tenth Malaysia Plan which was set from 2011 to 2015, Dato' Sri Mohd. Najib Tun Abdul Razak, who is the Prime Minister of Malaysia, claimed that the government would concentrate on improving the infrastructure in the country including the development of skills and becoming equipped with innovation abilities. It shows that the government takes the activities of R&D very seriously by providing venture capital funds to increase the level of

² G20 is the selection of large GLCs, which are controlled by GLICs under the GLCT Programme and is used as a proxy for performance of the GLCs. However, the G20 currently consists of only 17GLCs due to mergers, demergers, divestments, and other corporate exercises over the years.

innovation in the country (Malaysia, 2010). The study by Ishak and Ahmad (2011) suggests that GLCs must be able to strategize regarding the ways in which to optimize the firms' innovation capabilities to be sustainable and be capable of improving their competencies. The research by Jaskyte (2012) claims the board of directors is the main significant party in ensuring an organization's innovation success. Nevertheless, they at times appear to ignore the significance of innovation and do not consider it in a serious manner (Wu & Cavusgil, 2006). Thus, this study examines the innovation practices for a sustainable competitive advantage strategy among various categories of Malaysian GLCs.

METHODOLOGY

Sampling of Data and Data Collection

This study gathered its data from the responses given in a questionnaire survey participated by 134 managers and executives in Malaysian GLCs. The questionnaires were distributed and collected from February to April, 2015.

Measurements of Variables

This study aims to utilize ten parameters for the measurement of innovation practices taken from Lin, Chen, and Shun Chiu (2010). The participants of the survey were asked about their product, marketing, and service innovation. The factors are listed in the following:

- I1 My firm experiences the continued enhancement of current products, processes, and services;
- I2 My firm has given its employees the opportunity to undertake innovation training/education;
- I3 My firm regularly produces novel methods of managing the business;
- I4 My firm utilizes business process reengineering;
- I5 My firm adopts work designs that are innovative;
- I6 My firm is a leader in innovative pricing, distribution, and promotional methods in the market;
- I7 My firm continuously widens its potential target market;
- I8 My firm enhances customer satisfaction by importing innovative warranties and maintenance methods;
- I9 My firm enhances customer satisfaction by importing innovative claim clearing processes and approaches; and
- I10 My firm adopts innovative follow-up and order management processes.

The respondents had to make comparisons with their rivals in similar industries over a period of three years based on the innovation practices in their firms. The five-point Likert scale was used in the questionnaire, which ranged from 1 to 5 or from strongly disagree to strongly agree.

2.3 Data Analysis

Descriptive statistics was utilized to analyze the data. The data consistency was measured using factor analysis while the Cronbach's alpha test was utilized for the reliability testing of the data. Additionally, the Skewness and Kurtosis testing was carried out to test the validity of the data by testing the data normality.

FINDINGS AND DISCUSSION

Information on Demographic Data

Demographic information was gathered from the respondents for this study according to gender, age, educational level, job position, number of year working at the GLC, industry type, as well as the total number of employees in the firm. Table 1 denotes the summary of the derived information.

Table 1: Demographic information of the respondents

Demographic Profile		Frequency	Percentage (%)
Gender:	Male	55	41.0
	Female	79	59.0
Age Group:	Under 30 years	32	23.9
	30 to 40 years	51	38.1
	41 to 50 years	33	24.6
	51 years and above	18	13.4
Level of education:	SPM/MCE/Certificate	1	0.7
	Diploma	19	14.2
	University degree	104	77.6
	Professional qualification	10	7.5
Job Position:	Top management	7	5.2
	Middle management	68	50.7
	Lower management	59	44.0
Type of industry:	Service	53	39.6
	Manufacturing	13	9.7
	Others	68	50.7
Owner Type of GLCs:	State	40	30
	Federal	86	64
	Other	8	6

Table 1 : (Cont.)

Number of years working in GLCs:	Less than 1 year	12	9.0
	1 to 3 years	26	19.4
	4 to 5 years	16	11.9
	More than 5 years	80	59.7
No. of employees:	Less than 100	17	12.7
	100 to 500	26	19.4
	501 to 1000	9	6.7
	More than 1000	82	61.2

Based on the responses from the questionnaire, 41% of the respondents are male while the rest (59%) are female. A majority of the respondents are in the age group of 30-40 years with 38% while most of the respondents had a degree at 77.6%.

50.7% of the respondents are in the middle management job position with 39.6% coming from the service industry and 9% from the manufacturing sector. Most of the respondents were found in other sectors including broadcasting. Out of the GLCs analyzed in this study, 30% are state-owned and 64% are federal owned GLCs.

Slightly more than half (59.7%) of the respondents have been attached to their organization for more than 5 years. Most of the respondents (61.2%) work in GLCs, which had more than 1000 employees in terms of number of employees.

Analysis

Ten variables were used to measure the innovation practices of the GLCs in this study. According to the respondents, 82.8% were agreeable that their organizations practice these innovation factors while 0.7% claimed that these were not practiced in their firms (Table 2).

Table 2: Score of the factors of innovation among the GLCs in Malaysia

Score	I 1	I 2	I 3	I 4	I 5	I 6	I 7	I 8	I 9	I 10	All Average
1	0	0	0	1	0	2	2	2	1	0	0
2	1	1	4	7	6	7	5	6	3	8	1
3	16	20	26	35	40	35	23	40	49	37	22
4	69	66	73	59	64	68	69	63	63	66	92
5	48	47	31	32	24	22	35	23	18	23	19
Disagree (1-2)	1	1	4	8	6	9	7	8	4	8	1
Agree (4-5)	117	113	104	91	88	90	104	86	81	89	111
Disagree% (1-2)	0.7%	0.7%	3.0%	6.0%	4.5%	6.7%	5.2%	6.0%	3.0%	6.0%	0.7%
Agree% (4-5)	87.3%	84.3%	77.6%	67.9%	65.7%	67.2%	77.6%	64.2%	60.4%	66.4%	82.8%

Table 2 : (Cont.)

Average	4.22	4.19	3.98	3.85	3.79	3.75	3.97	3.74	3.70	3.78	3.96
Maximum	2	2	2	1	2	1	1	1	1	2	2
Minimum	5	5	5	5	5	5	5	5	5	5	5
Std. Dev.	0.68	0.71	0.74	0.87	0.79	0.84	0.85	0.85	0.76	0.80	0.58
Factor Loading	0.80	0.76	0.76	0.75	0.72	0.71	0.69	0.68	0.62	0.57	

Based on the innovation factors, the factor on continuous improvement received the highest mean with 4.22 (I1), while importing claim-clearing processes and methods gained the lowest mean at 3.7 (I9) (Table 2). Average mean value is at 3.96 for the entire study. There is potential to enhance the overall innovative practices in these organizations by focusing on the factors that received a below average mean score such as reengineering of business process (I4), adopting innovative designs at work (I5), being a leader in innovative pricing, distribution, and promotional approaches in the market (I6), enhancing customer satisfaction by importing innovative warranties and maintenance methods (I8), enhancing customer satisfaction by importing innovative claim clearing processes and approaches (I9), and adopting innovative follow-up and order management processes (I10).

In general, the GLCs owned by the federal government focused more on innovation practices compared to those owned by the state (Table 3). Based on the variables of innovation practices in the study, it was found that GLCs owned by the state emphasized more on offering training/education on innovation for their employees (I2) while placing the least focus on enhancing customer satisfaction by importing innovative warranties and maintenance methods (I8). However, the GLCs owned by the federal government emphasized more on continued enhancement of current products, processes, and services (I1) and not as much focus on enhancing customer satisfaction by importing innovative claim clearing processes and approaches (I9).

Table 3: Score of the factors of innovation according to the types of GLCs in Malaysia

Category		I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	Total
GLC	State	3.95	4.13	3.68	3.45	3.50	3.45	3.63	3.43	3.45	3.60	3.63
Type	Federal	4.35	4.17	4.12	4.05	3.94	3.90	4.14	3.92	3.83	3.88	4.03
	Other	4.25	4.63	4.00	3.75	3.63	3.75	3.88	3.38	3.63	3.50	3.84
Industry	Service	4.42	4.34	3.98	3.87	3.89	3.81	3.91	3.64	3.81	3.89	3.95
Type	Manufacturing	4.00	3.85	4.15	4.38	3.85	3.54	4.23	4.31	3.77	3.77	3.98
	Other	4.12	4.13	3.94	3.74	3.71	3.75	3.97	3.71	3.60	3.69	3.84

Table 3 shows that GLCs from the manufacturing industry placed more emphasis on innovation compared to all the other sectors particular on the area being engaged in reengineering of business processes (I4) while placing the least focus on being the leader in innovative pricing, distribution, and promotional methods in the market (I6). GLCs from the service industry emphasized the most on continued enhancement of current products, processes, and services (I1) while placing the least focus on enhancing customer satisfaction by importing innovative warranties and maintenance methods (I8).

Diagnostic Testing

a) Consistency Test

Factor analysis is carried out to test the consistency of the data on the variables in the measurement of innovation. Table 2 reveals that all the variables' factor loading are higher than 0.6 ranging from 0.67 (V10) to 0.84 (V1 & V2). It shows that all the ten variables are good for measuring the innovation practices of the Malaysian GLCs.

b) Normality Test

Data distribution is tested by performing the normality test. Pallant (2013) suggests that data normality can be tested by utilizing the skewness and kurtosis tests whereby the results of data that is distributed normally should have a kurtosis value of within -3 to 3 while the skewness value should be less than zero. In this study, based on the variables of innovation, the value for kurtosis is 0.497 while the value for skewness is -0.283, which means the data is in the acceptable spectrum. Thus, the data can be accepted as being distributed normally.

c) Reliability Test

Table 4 denotes the Cronbach's alpha value for innovation as 0.92, which means the questions' reliability is excellent as per the suggestion of George and Mallery (2003). The eigenvalue testing shows that the factors utilized in the innovation practices explain 50.3% of the variance. The test known as the Kaiser-Meyer Olkin reveals a value of more than 0.6 at 0.858 with Chi-Square being equivalent to 647 and $p < 0.000$. Thus, the data is adequate for further testing using the factor analysis. In general, the test is supportive of the innovation variables in this research.

Table 4: Reliability test for the factors of innovation

Cronbach's Alpha	0.889
Eigen % variance	50.307
% of variance	50.307
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.858
Bartlett's Test of Sphericity Approx. Chi-Square	647.086
Bartlett's Test of Sphericity Sig.	0.000

CONCLUSION AND RECOMMENDATIONS

Malaysia aims to become a developed country in line with its Vision 2020; however, there are many steps that need to be taken by the GLCs in the area of value creation. Ten related factors were assessed in this study to measure the current level of innovation practices of various Malaysian GLCs from various industries. The consistency of the ten variables in this measurement of innovation was given by the factor analysis. Among the respondents, 82.8% agreed that these innovation practices were carried out in their organizations with an average score of 3.96 out of a scale of 5.

Thus, there is potential for improvement in the innovation practices among the GLCs, The GLCs should place additional emphasis in creating value in order to meet the government's needs and expectation while being able to develop and add value to their products and services and performance in business at the same time (Lawler & Mohrman, 2013). In general, the GLCs must focus on reengineering of business processes, adopting work designs that are innovative, being a leader in innovative pricing, distribution, and promotional methods in the market, enhancing customer satisfaction by importing innovative warranties and maintenance methods, enhancing customer satisfaction by importing innovative claim clearing processes and approaches, and adopting innovative follow-up and order management processes. Furthermore, GLCs that are owned by both the federal and state governments found in the service and manufacturing industries should concentrate more on particular areas in improving their practices in the innovation movement.

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