e-ISSN :2550-1429 Volume 2, (2) Dec 2017

Assessing the Business Development Strategy: A Case Study at an Oil and Gas Company in Malaysia

Syed Jamal Abdul Nasir Syed Mohamad, Muhamad Zulkiflee Osman, Asmawati Kamarudin, Arlina Nadia Mohd Arshad and Norliana Rahim

Arshad Ayub Graduate Business School, Universiti Teknologi MARA, Shah Alam, Selangor

Abstract — **This paper discusses the greatest challenge facing a pipeline inspection company, SEGA (not the real name) in Malaysia in providing its services to the oil and gas operators based on current practices, protocols and standards. However, the most important issue for SEGA as "new kid on the block" is how it must adopt new business development strategic directions to remain relevant, viable and profitable in the future. This further argues for greater investment in technology, people development and probably going outside of its territory that will enable a long-term drift towards zero tolerance on quality and greater extraction of local skilled field crew. Now, its strategic partners with GE on IP technology and TPS as the marketing arms thriving them to the next level of growth in order to sustain its business continuity and to become a prominent pipeline inspection company in Malaysia as well as in international markets in future.**

Keywords *- Business Development, Strategy, Oil and Gas, Porter's, SWOT*

ARTICLE INFO

Received 1 November 2017
Received in revised form 5 December 2017
Accepted 20 December 2017
Published 31 December 2017

I. Introduction

Malaysia's oil reserves are the fourth highest in the Asia-Pacific region. Malaysia is also the second largest producer of liquefied natural gas in the world and strategically located in the middle of seaborne energy trade routes (EIA, 2017). According to the Oil & Gas Journal (2017), Malaysia held proved oil reserves of 3.6 billion barrels as of January 2017, the fourth highest reserves in Asia-Pacific after China, India and Vietnam. Nearly all of Malaysia's oil comes from offshore fields. Malaysia's national oil company, Petroleum Nasional Berhad (Petronas), dominates upstream and downstream activities in the country's oil sector. Petronas is the only remaining wholly state-owned enterprise in Malaysia and is the single largest contributor of government revenues. Petronas holds exclusive ownership rights to all exploration and production projects in Malaysia, and all foreign and private companies must operate through production sharing contracts (PSCs) with Petronas. ExxonMobil (through its local subsidiary, Esso Production Malaysia Inc.) is the largest foreign oil company by production volume, and there are numerous other foreign companies operating in Malaysia via PSCs, including Shell, Caltex, and Conoco Phillips (PWC, 2015). All energy polices in Malaysia are crafted and overseen by the Economic Planning Unit (EPU) and the Implementation and Coordination Unit (ICU), which report directly to the Prime Minister. The Ministry of Energy, Water and Communications regulates the hydrocarbon and electricity sectors, although it does not have the policymaking power.

Malaysia has one of the most extensive natural gas pipeline networks in Asia. The Peninsular Gas Utilization (PGU) project, completed in 1998, expanded the natural gas transmission infrastructure on Peninsular Malaysia. The PGU system spans more than 880 miles and has the capacity to transport 2 billion cubic feet per day (Bcf/d) of natural gas. Pipelines now connect Malaysia with Singapore and Indonesia, and the Trans-Thailand-Malaysia Gas Pipeline System allows Malaysia to pipe natural gas from the Malaysia-Thailand line to its domestic pipeline system. This linkage marks a significant step toward the realization of the proposed “Trans-ASEAN Gas Pipeline” (TAGP) system, a transnational pipeline network linking the major natural gas producers and consumers in Southeast Asia. Because of Malaysia’s extensive natural gas infrastructure and its location, the country is a natural candidate to serve as a hub in the proposed TAGP project. The total market size for Oil & Gas pipelines in the Asia Pacific region is 37,330km. The highest pipelines belong to Indonesia followed by Malaysia and Thailand. Countries like Brunei, Philippines, Vietnam and Singapore are amongst the lowest but still contribute business into the industry. Therefore, for pipeline inspection businesses, such information is important in identifying the market potential and opportunities.

SEGA Oil & Gas Sdn. Bhd. (SEGA, not the real name)) has been incorporated on 24th February 2005 which previously known as Bernas Masyhur Sdn. Bhd. It is a wholly owned subsidiary company of SEGAGROUP. SEGA started its operations since 2008 after entering an agreement with GE Oil & Gas PII (GE) and Tractor Petroleum Services (TPS). SEGA became the operational arm of lease partner for GE and TPS. SEGA is a company that provides world class services in line cleaning, inspection and repairs by utilizing the technology of GE Oil & Gas PII Pipeline Solutions business. SEGA also delivers these services through local personnel, educated and trained by “PII” to adhere to all International Codes of Practices governing the oil and gas industry.

The primary business strategy for SEGA Oil and Gas Sdn. Bhd. is by entering the three-way agreement with GE Oil & Gas PII (GE) and Tractor Petroleum Services (TPS). Currently, SEGA is capitalising on GE technology and up-to-date equipment. Besides, TPS is the marketing agent for SEGA in securing jobs within the five countries- Malaysia, Singapore, Brunei, Vietnam and Thailand. According to the agreement between SEGA and TPS, the business development and marketing is done by TPS with a commission of percent out of the total contract value. However, for the past two years, TPS has not effectively marketed for SEGA. Job contracts received from TPS were insufficient compared to potential job availability in the market within the South East Asia region. Initially, SEGA’s strategy was to engage TPS to provide them the information on participating tender bidding companies. However, when this collaboration has not been fruitful, SEGA has then developed its business development strategies and have its personnel market its services. These strategies have been included in the Balance Score Card of SEGA which are related to its Financial, Internal Process, Customers and Learning and Growth and being assessed on quarterly basis on its performance in achieving its objectives.

Being the new company in the oil and gas industry, SEGA is facing difficulty in securing projects especially in Malaysia and Asia Pacific region generally. Since this type of industry has high barriers to entry, SEGA only face a few competitors such as ROSEN and ROMSTAR within Malaysia. Its presence in this industry has been years and prominent in countries in the Asia Pacific region. Therefore, the big question is whether SEGA has the capability and the capacity to sustain its business as the Total Integrity Pipeline Management service provider.

It is SEGA’s objectives to establish its business development strategy in market positioning as the preferred pipeline management service provider. The key strategic business decision for SEGA is to ensure the long-term business sustainability. This will provide SEGA a good headway in pursuing the commercialisation of its technologies and services. There are several issues and challenges faced by SEGA in the quest to become the preferred pipeline management service provider. To address its sustainable business growth strategy,it is vital to assess SEGA’s business strategies in order to ensure that SEGA can increase its revenue, improve its cash flow problem, and secure its future growth in achieving its vision and missions as a whole. This leads to the following research questions to be answered in this study such as:

1. What are the current business strategies adopted by SEGA?,
2. “What are the strengths, weaknesses, opportunities and threats for SEGA in the oil and gas industry?, and;
3. What will be the best business development strategy for SEGA’s sustainability in the pipeline inspection business?

This study focuses on the business development strategy for SEGA in the oil and gas industry which has many challenges to continue a thriving business. Firstly, this study determines the business development strategy adopted by SEGA. During this process, several key personnel of SEGA including the COO, GMO and their field crews were interviewed. A set of generic questionnaires was designed for them to answer. The questions ask about the company’s internal and external environment. This study also assesses the level of

e-ISSN :2550-1429 Volume 2, (2) Dec 2017

understanding and knowledge of business development strategies by the respective personnel of SEGA based on their feedback. From the company's internal and external environment analysis, this study discusses SEGA's internal strength and weaknesses, as well as external opportunities and threats. This SWOT analysis provides an insight into how SEGA positions itself in the oil and gas industry specialising in the pipeline management.

II. Literature Review

Strategy is the direction and scope of an organization over the long-term which achieves advantage for the organization through its configuration of resources within a challenging environment, to meet the needs of markets and to fulfill stakeholder expectations (Johnson and Scholes, 1998).

In other words, strategy is about:

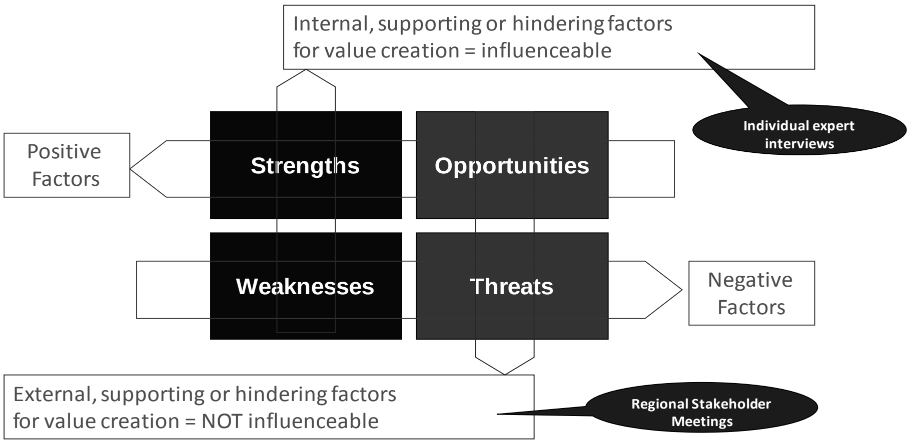
1. Where is the business trying to get to in the long-term (direction)
2. Which markets should a business compete in and what kind of activities are involved in such markets (markets; scope)
3. How can the business perform better than the competition in those markets (advantage)
4. What resources (skills, assets, finance, relationships, technical competence, facilities) are required in order to be able to compete (resources)
5. What external- environmental factors affect the businessability to compete (environment)
6. What are the values and expectations of those who have power in and around the business (stakeholders)

An organization's overall performance depends on, among other things, the net effect of its business strategies and decision making (Porter, 1980, 1985 and Anderson and Narus, 1995). The effect of business strategies or its business development strategies among other things encompass organization's profitability, whether the organization is able to achieve a competitive advantage in order to sustain it.

Organizations that fail to efficiently and effectively translate their resources and capabilities into business processes cannot expect to realize the competitive advantage potential of these resources (Peteraf, 1993;- Barney, 1986; 1991; Wernerfelt, 1984). While these resources may retain the potential for generating competitive advantage for some period of time, that potential can be realized only if used in business processes, for it is through business processes (Stalk, Evans and Schulman, 1992) that a firm's resources and capabilities get exposed to the market, where their value can be recognized. In the long run, the failure to exploit resources and capabilities through business processes may result in the deterioration of their ability to generate competitive advantage.

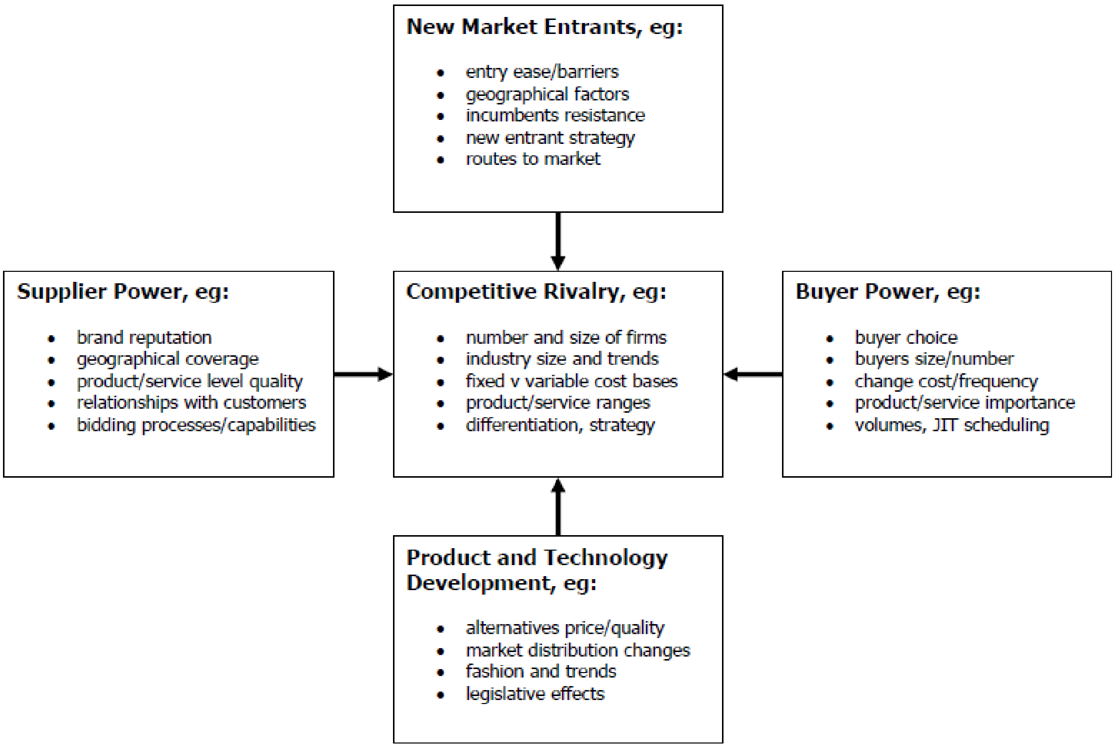
In sum, research on factors impacting organization performance such as the business strategies, the deployment of resources and organization's capabilities and the strategic decision-making process and factors affecting the process have shown progress in recent years. However, empirical studies in terms of factors influencing the business strategies and overall organization's performance in oil and gas industry are limited. Thus m more empirical research is required before any definitive conclusion can be reached.

A SSWOT analysis (see Fig. 1) presents both internal and external factors that can affect the ability of the organisation to be successful. Internal factors are those that can be addressed in the organisation. This would include conditions that might be addressed by operating procedures and/or management decisions of the organisation (David, 2011). SWOT analysis can identify the strategies that will create a firm specific business model that will best align an organisation's resources and capabilities to the requirements of the environment in which the organisation operates. In other words, it is the foundation for evaluating the internal potential and limitations and the probable/likely opportunities and threats from the external environment (Ifediora, Idoko and Nzekwe, 2014).



Source: David, 2011
Figure 1 : SWOT Analysis

The model of pure competition implies that risk-adjusted rates of return should be constant across firms and industries. However, numerous economic studies have affirmed that different industries can sustain different levels of profitability; part of this difference is explained by industry structure (David, 2011 and Porter, 1991). Michael Porter provided a framework that models an industry as being influenced by five forces (see Fig. 2) which are competitive rivalry, product and technology development, new market entrants, buyer power and supplier power. . The strategic business manager seeking to develop an edge over rival firms can use this model to better understand the industry context in which the firm operates.



Source: Porter, 1991
Figure 2: Porter's Five Forces of Competitive Position

e-ISSN :2550-1429 Volume 2, (2) Dec 2017

To portray alternative corporate growth strategies, Igor Ansoff presented a matrix (see Fig. 3) that focused on the firm's present and potential products and markets (customers). By considering ways to grow via existing products and new products, and in existing markets and new markets, there are four possible product-market combinations. Ansoff's matrix is shown below:

Source: Ansoff, 1957
Figure 3: Ansoff Matrix

III. Methodology

a. Research Design

Choosing the right research approach is essential to determine the success of a research. The research approach depends on the nature of the investigation and the type of information that is available or required (Naoum, 1998). The research undertaken was exploratory in nature that aimed to discover something of interest and to give directions for future research. Data was collected and triangulated using interviews and secondary sources. Interviews allow for instant feedback from respondents, follow-up questions to be posed and direct observations to be made (Cooper and Schindler, 2003). Each interview was based on the responses contained in the returned questionnaires. The interviews took between 20 and 75 minutes, depending on the length of the responses. All respondents permitted the discussion to be tape-recorded which was later transcribed into a Microsoft Word document and verified from the notes taken during the interview.

The question on how to access current business development strategies in SEGA is crucial, but it is also a multi-faceted issue with the company internal and external evaluations on the environment. This research focuses on the how the company sees the threats and turns them into possibilities, and the scope is limited to the local pipeline inspection sector, specifically on the competitive dynamics between the players in the sector. An exploratory study was conducted to look into whether SEGA has systematically managed its business development strategy, and if so in what manner. The qualitative research questions in this study arefocused on the local operations and strategic issues facing SEGA as well as suggestions for a new business development strategy in its business operations.

b. Research Instrumentation

The main objective of this research is to identify ways in which SEGA can stay relevant in the industry in the light of the challenges posed by the changing business environment. The main challenge to SEGA’s business development strategy is their lack of access and exposure to project database since it has been taken care by its partner, TPS. Midstream operations typically have the greatest added value in the value chain and are the most profitable. This calls for questions regarding the long-term profitability, in addition to the position of SEGA in the industry. Questions to be answered to achieve these objectives areframed as the following:

1. What are the success stories of SEGA so far, locally and internationally?
2. Is SEGA making good headway in its pursuit for commercialisation of its technologies and services?
3. How do you differentiate SEGA with your major competitors? So far, is your company able to compete in the market or at par with competitors?
4. What are the challenges that SEGA is facing as a new company in the market? How would you overcome the problems?

5. What are the major concerns of SEGA in terms of being competitive in the market?
6. What are the main areas of problem faced by SEGA, are the major problems from internal or external environment?
7. What are the steps taken to overcome the problems/difficulties, is there any specific managerial decision process involved?
8. What are the current business development strategies for SEGA to stay competitive in the market?
9. How is SEGA going to penetrate into international market?
10. Is SEGA fully equipped with the current tools and equipment for the right market to secure future businesses?
11. How does SEGA strategise its current resources in sustaining its position in the market while minimising its weaknesses or to even move to the next level?
12. What are your expectations on the future growth of SEGA in the next 5 years?
13. Any plan/ strategy adopted which is not in favor of the current economic situation?
14. Is SEGA current expertise matched with the core research area?
15. Who are the SEGA competitors within Malaysia/International and how is SEGA positioning itself in the market?
16. Does the company face any effects from any government regulations/intervention?
17. Is there any specific issues on the market demand (since now researcher are assessing the company's business development), the rising operation or input costs or competition or any other decisions made or strategies adopted that led to any positive/negative effects such as efficiency, costing, risks etc?
18. Corporate Social Responsibilities (CSR) had become an in-thing used by the Public Relations to reach out to the public/community. How does SEGA approach this to reach the community and market CSR to gain its clientele?

IV. Findings and Analysis

a. SWOT Analysis for SEGA

Strengths

SEGA’s main strengths lie in the bundle of its resources such as the equipment and tools used for pipeline inspection and its manpower which are the main source for SEGA to perform its business activities as well as to have an effective business process. Resources are not valuable in and of themselves, but they are valuable because they allow organizations to perform activities (Porter, 1991). SEGA is very new in the pipeline business in the oil and gas industry and not well known by the oil operators. Thus, the strategic partnership with GE that is legally binding for 5 years really gives a platform to SEGA to capitalise the GE’s reputable name. This strategic partnership is a strength for SEGA in making its business known to potential clients. Besides, SEGA is able to concentrate on its operational side as there is another company that is appointed as the marketing arm of SEGA in getting business or handling the company’s marketing activities. Therefore, SEGA can focus on its business operations.

Weaknesses

SEGA is very new in the intelligent pigging pipeline services and is considered at the infant stage of its business life cycle. Thus, the main weakness is that they are not a major player in the pipeline inspection service as it is new in the oil and gas industry. Furthermore, it is not registered under the Vendor Development Programme (VDP) for PETRONAS and thus, this gives SEGA a shortcoming in getting major jobs from PETRONAS.

Despite its valuable resources such as skilled manpower and accuracy in its report, nonetheless the company is facing a critical weakness where it is highly dependent on the intelligent pigging (IP) technology from GE including the limited size of tools supplied by GE that could lower the chance of getting more jobs for SEGA. SEGA does not have the technology required in producing the report or the IP technology. The limitation in tool sizes has lead the company to only receive or run for the jobs that match its equipment and tool size availability.

Having TPS as the marketing arm to handle marketing and to get more business for SEGA gives SEGA the advantage to concentrate on business operations. However, the TPS team has not been aggressive enough in bringing business for SEGA that obviously affected its financial performance and eventually its market share i.e. SEGA has a very little market share. It is now the management’s role to ensure that SEGA fully capitalise its employees and to direct the sales personnel in cooperation with TPS in securing more job contracts. There are numerous approaches to the decision-making process, and the best depends on the nature of the problem, the availability of resources, the cost, decision-maker characteristics, time pressure and other factors (Donnelly et al., 1998).

Opportunities

SEGA should tap on or take advantage of the availability of new or advanced technology in the market if the company is able to overcome its weaknesses amidst the scarce resources and capabilities especially when it comes to technology i.e. more handy and lighter equipment and tools. High barrier to entry in terms of capital requirement that prevents the potential of new entrants is now an opportunity for SEGA to concentrate on its business than being threatened of having frequent new comers to the pipeline inspection business.

Threats

SEGA's main threats come from its existing competitors that are ROSEN and ROMSTAR. With current competitors standing in the market place, SEGA needs to be alert on any competitors' intentions. Besides, clients' preferences is also a threat for SEGA as it is new and not under VDP to perform the service for example, PETRONAS would give priority to its VDP companies. SEGA collaborates with GE and TPS with a contract agreement of 5 years makes SEGA vulnerable to any circumstances after the 5-year contract expires. If the company does not have what it takes to remain in the business or industry, such as relevant resources and competencies for example, the IP technology in production of the reports or to increase the size of its tools, it would make the company more vulnerable. The uncertainty in the oil and gas prices in the last 2 years could also pose the risk of not having enough jobs for SEGA to sustain in the industry.

b. PORTER'S Five Forces Analysis for SEGA

Buyer Power

It is important to consider that the cost of bringing oil out of the ground is going to increase as more challenging fields are being tapped, while cost of alternative energy is decreasing as technology improves. In addition, oil companies compete with each other when bidding for licenses to operate. Among operators in Malaysia (i.e. Petronas, Shell and Exxon Mobile), it is commonly thought that only the biggest will survive because they can absorb risk better and have lower relative operating costs. The result is being felt at the top end of the supply chain – 'bigger' means stronger buying power. With increased buying power, long-term supply chain strategy such as 'win-win', in theory, the rate of main contractors and suppliers being taken over or going under should increase as a function of increasing operator buying power. This, in itself, could be a supply chain strategy, since 'survival of the fittest' is a legitimate concept in today's economy. Buying power induces efficiency since, when a supplier collapses, a new, better one soon appears.

Supplier Power

Suppliers, which in this case is GE, are manufacturers and service companies with added value in the form of engineering. Expertise is the common factor that binds this supply chain network together with the assumption that requirements for safety and uninterrupted operation are never compromised. For the operation operators, like SEGA, taking over control of the supply chain comes at a price: increased risk. With profit margins already down to a minimum, the way around this is to compete on shorter execution time. This is exactly what main contractors like GE are attempting to do. Meeting close milestones is the name of the game. The focus on logistics and cross-functional knowledge is growing in supply chain management.

Product and Technology Development

Thirdly, the threat of substitutes to the SEGA operations are analysed. This refers to international oil companies that provide the world with mainly oil and gas products, and other sources of energy production, such as BP (British Petroleum), which has investments in wind power. However, it is worth noting that these investments are rather limited in size and scope. In essence, there are three types of substitution that could conceivably take place: substitution of need, generic substitution and product-for-product substitution. One may eliminate the substitution of need out of hand, as the world and Malaysia particularly, will always need some form of energy, unless the peoples decide to revert back to the pre-industrial evolution period by drastically reducing their living standards, something that is quite unlikely to happen. The need for energy is unlikely to be rendered redundant.

New Market Entrants

Next the threat of potential entrants to the market is examined. The oil and gas company like Petronas almost certainly favors those pipeline inspection companies with economies of scale, because oil and gas companies need access to reserves and production streams while exploring for new reserves. The capital requirements for entry are significant, as most exploration efforts for oil do not result in worthwhile finds and the capital costs of setting up a production facility are tremendous. A different dynamic is at work in oil and gas production, as the storage and transportation, as well as production, involve high capital costs. Government action or legislation certainly promotes the threat of entry towards the pipeline inspection company, as 'landlord' states will typically move to exploit their natural resources through the state-owned national oil company, like Petronas. Experience constitutes a barrier to entry for potential entrants, as the capabilities for pipeline inspection are built up over time and require specific technological resources.

Competitive Rivalry

Lastly, how these forces affect the competitive rivalry within the industry by turning towards the intra-industry dynamics are examined. Three dimensions will be considered, fixed cost, the competitive strategy and differentiation. With regards to competitive strategy, it is important to define the borders of the comparison. If ROSEN and ROMSTAR are compared to SEGA, then certainly their only sizeable competitors are each other, as the two players account, approximately, for 70% of pipeline inspection that locally covers Petronas and the private sector like Shell and Exxon Mobile. High fixed costs continue to be a feature of the global oil and gas industry, as both exploration, production and maintenance activities have high fixed costs. Overall, the competitive rivalry in the industry is high, due to the competitive strategy, high fixed costs, and lack of product differentiation. High supplier power of the Pipeline Solutions Provider, GE, and threat of existing competitors represent additional difficulties for SEGA, while having little bargaining power and few substitutes. This analysis suggests that midstream operations of the firm are affected more than the downstream and upstream ones.

V. Conclusion

The business development strategy for SEGA is to ensure business sustainability to strive further from the introduction stage to the growth stage. At this stage, SEGA should be able to increase its performance and profitability. In five years' time, SEGA will be able to position its company well in the oil and gas industry specializing in in-line inspections (intelligent pigging). This will positively move SEGA towards achieving its vision as the preferred service provider in Total Pipeline Integrity Management. Revenues and projects are expected tp increase at this stage with many new job opportunities. This will create more opportunities for SEGA to expand its business into new markets in this region.

Like most living things, SEGA tends to change, adapt and evolve overtime to sustain its business. In adapting to all this SEGA will use all the information and experience to make better decision on daily basis and also to cope with the changes that might be happening in this industry. SEGA must also prepare to face any challenges ahead in the growing stage as not to only focus on the day-to-day challenges because the market and competitors have influences on SEGA. It is also an increasingly competitive environment that requires SEGA to gain deeper understanding of the market in order to grow. With clear understanding of the market drivers and increased competition, SEGA will then be more specific in the market opportunities. As SEGA's business grows, more skilled and knowledge workers are required for new specialised projects.

Understanding the business requirements and changes that are evolving, learning from the past experiences and analysing business projects will help SEGA to make better decisions and sustain its position in the grow stage. In order to survive and gain more profit, SEGA must be receptive of this study's recommendations and be prepared to succeed.

VI. Recommendation

In surviving and sustaining the business of pipeline servicing and to remain in the industry, SEGA needs to capitalize on its strategic resources efficiently and effectively to overcome its weaknesses whilst reducing or mitigating the threats from external environment and take the opportunities to strengthen the company's position in the market and industry.

The technical personnel and the field crews are skilled manpower and highly trained by GE. They are very much expert in doing their jobs in pipeline inspection. But all of these people will become idle if no jobs or business. SEGA should aggressively push for sales and the business development personnel must work hand in hand with TPS in generating more business. Motivation and leadership here is very important to get the respective employees to understand their job function without putting the entire fault on the company's limitations in the equipment to undertake the jobs available. At the current business position, the relevant employees specifically from the sales and business development should strive harder to increase sales. If they are able to meet the company's target on a monthly basis, and generate more businesses, it would help the company in improving the financial standing as more revenues will be generated and the company can make use of its financial stability to invest in related areas such as technology advancement. It is then possible for the company to have its core competencies (when its strategic resources combined with capabilities) which is important in achieving competitive advantage.

It is recommended that SEGA expands its market outside Malaysia within the Southeast Asia (SEA) region. Even though the international environment is very competitive, SEGA should strategise its prices by way of tender bidding in Indonesia or Brunei markets. SEGA should take the cost advantage in these neighbouring countries as mobilization cost can be minimized. In addition, a joint venture with local companies can be a good move if SEGA expands into international markets. Having the technology and credibility in reporting, SEGA can expand its business in the SEA region. Intelligent pigging is becoming a need to oil operators in this region as part of their risk management.

VII. Limitations of the Study

This study is limited to secondary data research only sourced mainly from previous research and published journals. The primary data collected is based on interviews conducted with SEGA employees on a voluntary basis to give honest responses to all the questions posed to them. The interviews were conducted on a limited number of employees as their nature of jobs required them to travel overseas and their availability was not convenient within the time allocation. With respect to analytical part of this study and reviewing the existing studies, the limitations of this study are the reliability and the conceptual strategy in conducting the research.

References

Ansoff, I. (1957). Strategies for Diversification. *Harvard Business Review*, Vol. 35 Issue 5,Sep-Oct 1957, pp. 113-124

Barney JB. (1986). "Strategic factor markets: expectation, luck, and business strategy". *Management Science,* Vol.32 (10): pp. 1231–1241.

Barney J.B. (1991). "Firm resources and sustained competitive advantage". *Journal of Management,* Vol. 17(l): 99–120.

Barney J.B., and Arikan A.M. (2001). *The resource-based view: origins and implications*. In Handbook of Strategic Management, Hitt MA, Freeman RE, Harrison JS (eds). Blackwell: Oxford, U.K.; 124–188.

Cooper, D.R. and Schindler, P.S. (2003), *Business Research Methods*, 8th ed., McGraw-Hill, New York, NY.

David, F.R. (2011) *Strategic Management Concept and Cases*. 3rd Edition, New Jersey: Pearson

Donnelly, J.H., Gibson, J.L. and Ivancevich, J.M., (1998). *Fundamentals of Management*, 10th ed. NY: Irwin, Inc.

GE Oil & Gas Official Website. Retrieved from http://www.geoilandgas.com

Ifediora C.O., Idoko O. R. and Nzekwe J. (2014). "Organization's stability and productivity: the role of SWOT analysis an acronym for strength, weakness, opportunities and threat". *International Journal of Innovative and Applied Research*, Volume 2, Issue (9): pp. 23- 32

Malaysia Energy Data, Statistics and Analysis (September 2009). *Oil, Gas, Electricity, Coal*. Retrieved from: http://www.eia.doe.gov

Naoum, S.G. (1998), *Dissertation Research and Writing* – For Construction Student, Butterworth-Heinemann, Oxford.

Oil & Gas Journal. "Worldwide look at reserves and production" January, 2017.

Peteraf M.A. (1993). "The cornerstones of competitive advantage: a resource-based view". *Strategic Management Journal, Vol.* 14(3): pp. 179–192.

Porter M.E. (1985). *Competitive Advantage*. Free Press: New York.

Porter M.E. (1991). "Towards a dynamic theory of strategy". *Strategic Management Journal*, *Vol.* 12(1): pp. 95–117.

Porter M.E. (1998), Competitive Strategy – Techniques for Analysing Industries and Competitors. *Free Press*.

PWC (2015). Oil and Gas in Malaysia: Exploring Growth in a Dynamic Marketplace. April, 2015

Rajagopolan, N., Rasheed, A.M.A and Datta, D.K., (1993). "Strategic decision processes: critical review and future directions". *Journal of Management*, *Vol.* 2, pp. 349-84.

Rasmussen, J., Brehmer, B. and Leplat, J., (1991). *Distributed Decision-making Cognitive Models for Cooprative Work.* England: John Wiley and Sons.

Rosen Malaysia Sdn Bhd, Official website. Retrieved from: http:// www.roseninspection.net

Romstar Sdn Bhd Official website. Retrieved from: http:// www.romstargroup.com

Sekaran, Uma (2003). *Research Methods for Business: A Skill Building Approach*, Fourth edition. Illinois: John Wiley & Sons

Stalk G, Evans P, Shulman LE. (1992). Competing on capabilities: the new rules of corporate strategy. *Harvard Business Review*, Vol. 70(2): 57–69.

Tan M.L. (2010). Is Malaysia The Next Saudi? *Global Energy Magazine*, July 9, 2010.

Thompson, Strickland, Gamble (2008). *Crafting & Executing Strategy – The Quest for Competitive Advantage*, Sixteenth Edition, McGraw Hill International Edition.

U.S. Energy Information Administration. (2017, April 26). Country Analysis Brief: Malaysia. Retrieved from: http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/.../2017/EIA_Malasya_26abr2017.pdf