An Investigative Model of Marketing Expansion Strategies: PPL Shipyard, Singapore

Patrick Sim MM*
Capital Advisors Partners Asia Pte Ltd, Singapore

Abstract

This research project addresses the issues of marketing expansion strategy and its effectiveness with regards to PPL Shipyard Pte Ltd, Singapore within the backdrop of the oil rig industry in Singapore. The project will focus on the expansion methods of globally expanding the company’s products and services, namely the expansion of its offshore rig design, rig building capabilities, and repair operations. The company was chosen due to the author’s affiliation with the company and that it is a well-known establishment under its parent company, Sembawang Corporation, which is well known in Singapore for its purview of products and services in the shipping and engineering industry. The literature previews Singapore’s oil rig industry and its global growth. The report will primarily focus on the strategic perspective of the marketing department with regards to identify the marketing expansion strategies using the Ansoff matrix framework, being the most popular framework for marketing expansion, as well as other related strategies. The research is based on quantitative analysis based on data collection. Summarized statistical results of the secondary research has shown that marketing expansion had evolved in a dramatic way and has become a strategic notion for most companies in modern society, especially in the oil rig industry. Further analysis through the BCG group matrix and critical success factors of project expansion and tabulated data will provide further insights. Marketing in a global economy has had a major impact on the oil rigs industry, being one of the largest and fastest growing industries in the world. Marketing expansion had a particular impact on the business because it provides unique opportunities for growth and interaction between partners, suppliers and customers no matter how distant they may be.

Keywords: Market expansion; Ansoff; Oil rigs; Offshore drilling; Shipyard management

Introduction

This research project addresses the issues of marketing expansion strategy and its effectiveness with regards to PPL Shipyard Pte Ltd, Singapore within the backdrop of the oil rig industry in Singapore. The project will focus on the expansion methods of globally expanding the company’s products and services, namely the expansion of its offshore rig design, rig building capabilities, and repair operations. The company was chosen due to the author’s affiliation with the company and that it is a well-known establishment under its parent company, Sembawang Corporation, which is well known in Singapore for its purview of products and services in the shipping and engineering industry. The literature previews Singapore’s oil rig industry and its global growth. The report will primarily focus on the strategic perspective of the marketing department with regards to identify the marketing expansion strategies using the Ansoff matrix framework, being the most popular framework for marketing expansion, as well as other related strategies.

This research is based on quantitative analysis based on data collection. Summarized statistical results of the secondary research has shown that marketing expansion had evolved in a dramatic way and has become a strategic notion for most companies in modern society, especially in the oil rig industry. Further analysis through the BCG group matrix and critical success factors of project expansion and tabulated data will provide further insights. Marketing in a global economy has had a major impact on the oil rigs industry, being one of the largest and fastest growing industries in the world. Marketing expansion had a particular impact on the business because it provides unique opportunities for growth and interaction between partners, suppliers and customers no matter how distant they may be. One of the major factors that led to increased growth in the oil rig industry is the growing number of companies and countries that are dependent on oil for survival and business.

Investigating PPL shipyard

To get a wider understanding of the oil rig industry, It was specifically chosen PPL Shipyard Pte Ltd, Singapore as the company for researching suitable marketing expansion strategies for the global context. By investigating the organization and the service, confirm a platform of knowledge for further impetus into the research process that will align the research interests with the goals. PPL Shipyard is situated strategically in the industrial region of the western coast of Singapore. PPL Shipyard specializes in the business of design and construction of offshore jackup rigs as well as providing shipping consultancy services. PPL Shipyard has a strong reliance on building and servicing the operations of jackup rigs and submersible rigs. Up till recent times, PPL shipyard has built a total of 27 jackup rigs, 6 Semi-submersibles and 4 Swamp barges [1].

The global oil industry and Singapore

Against the backdrop of the world’s oil consumption patterns, the global economy may be slowing down but the world’s demand for energy shows no signs of abating. In fact, it is estimated to grow by 71 per cent from 2006 to 2030, and will be led by Asia-Pacific and the Middle East. BBC (2008) reported that the Middle East remains the biggest player in the oil field. This region dwarfs the rest of the world,
when it comes to oil reserves. It elaborates that Saudi Arabia alone possesses 21.9% of the world’s proved reserves with the North Sea and Canada still having substantial reserves. A look at Table 1 will offer a glance of oil production derived from different countries which will related to their reserves. Thus, in addition to the increasing non-stop demand of oil required by the guzzling countries, this is good news for Singapore’s oil and gas (O&G) industry.

Key competitors and their oil rig operations expansion in Singapore

This report will peek into some of the key shipping companies in tandem with the oil rig industry. One of the major key players in Singapore is Keppel Shipping. Some of its major rig operations are found in Dubai and Denmark commenced operations for Dubai Petroleum Establishment. The second rig, Mærsk Resolute, was delivered in August 2008 and has been contracted to Dong Energy for operations in the Danish part of the North Sea over three years [2]. Aban Singapore Pte Ltd, has a total of 21 offshore assets which includes fifteen jack-up offshore drilling rigs, two drill ships, one floating production platform and a jack-up rig and drill ship each on bareboat charter. According to Scandoil [3], the Group is India’s largest offshore drilling entity in the private sector, offering world-class drilling services to large global oil and gas operators.

Interest in the research area

Interested in the marketing expansion features undertaken by the company because, by convincing that the project can serve the company as well as the industry with the information gathered. The oil rigging industry can only grow in the future through global expansion, due to the unending oil consumption patterns. It is important for PPL Shipyard to be an active participator and innovator in the field of oil rigging design and operational technology, and to concentrate on growth and expansion strategies to achieve better consumer value and benefits.

Research aims and objectives

The company is faced with new challenges regarding the increasing use of marketing expansion as a tool for business growth and retention. Based on the premise of the possibilities to develop and improve the awareness and presence of the PPL Shipyard’s activities in a global context, have formulated two research questions. The first research question is:

• Which marketing expansion strategy is the most critical and least risky for PPL Shipyard’s oil rig investments.

The second research question is:

• How useful and effective is the selected marketing expansion strategy with regards to the company’s jackup rig products and design services.

Recommendations of the marketing expansion strategies and the accompanying methods of entry will be provided and justified to achieve the objectives. Based on the appendices the marketing strategies and expansion of the market were explained.

Significance of the proposed research

The proposed framework will emphasize on the Ansoff perspective that promotes the use of advanced methods in the marketing expansion process; i) marketing penetration; ii) marketing development; iii) product development iv) diversification for this research literature [4]. The matrix framework will illustrate the elements of choices of strategies ranging from the existing products and the markets. This choice justify the research objectives because it gives a feel of the macro marketing approach toward the whole department and are far more objective to the research purpose than other generic strategies, which are deemed more internal and subjected to competition.

Research Methodology

To demonstrate the research techniques, ANSOFF model as the research framework was used shown in Figure 1. Thus, the Ansoff matrix framework is only a model in theory that allows for a broad and general review. Some of the limitations of using this framework include a lack of an effective explanation of science in reality, but is nevertheless an effective tool for research, analysis and implementation of a different perspective to the viewers.

Ansoff matrix framework and PPL Shipyard’s application

To demonstrate the research techniques, ANSOFF model was used. The literature will discuss on the use of Ansoff Matrix. By considering ways to grow PPL Shipyard’s existing and new products and existing and new markets, there are four possible product-market combinations. Ansoff’s matrix is shown below:

Ansoff’s matrix provides four different growth strategies:

• Market Penetration – where the firm seeks to achieve growth with existing products such as keel laying services in Singapore and Malaysia, which sees good potential.
• Market Development - the firm seeks growth by targeting its existing design models of jackup rigs into new market niches without offending the bigger players.
• Product Development - the firms develops new metamarke services that relate to the advice and consultancy of the development of the jackup rigs targeted in its existing Shanghai market segments.
• Diversification - the firm grows by diversifying into new businesses by developing new rig designs for the future in untapped rich markets in the Northern hemisphere. PPL’s growth and expansion strategies are geared towards the evolution of the ‘Next Generation’ rig.

<table>
<thead>
<tr>
<th>World oil and production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov-08</td>
</tr>
<tr>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>Iran</td>
</tr>
<tr>
<td>Iraq</td>
</tr>
<tr>
<td>UAE</td>
</tr>
<tr>
<td>Kuwait</td>
</tr>
<tr>
<td>Neutral Zone</td>
</tr>
<tr>
<td>Qatar</td>
</tr>
<tr>
<td>Angola</td>
</tr>
<tr>
<td>Nigeria</td>
</tr>
<tr>
<td>Libya</td>
</tr>
<tr>
<td>Algeria</td>
</tr>
<tr>
<td>Ecuador</td>
</tr>
<tr>
<td>Venezuela</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>NGLSs</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Table 1: International energy agency 2009, Industry at glance.
Choosing the right expansion strategy

The Ansoff framework has proven to be very useful in strategizing business elements to determine global opportunities. To further elaborate the four growth strategies. Based on PPL Shipyard current position, it would be advisable for it to acquire more new clients since it is still not the big player. This could allow it to further penetrate into the local market where new clients and crossover from other competitors such as Keppel by offering incentives. This would involve the least risk taking since costs are negligible. In market development, there is a big effort in inducing more new and existing clients into new markets which have not been tapped. There is less emphasis on the promotion of new products since the focus is on creating niches for PPL. Product development process is often seen as trying to sell more instead of creating markets to increase the revenue. These would give PPL the options of adding other side products to the main oil rigs. However, as often the cost of creating new products will always incur more risk. Based on the theories of diversification, this strategy often involved not only the individual company but other related partners or suppliers. Collaborations could be done through vertical diversification through linking with distributors and suppliers with administered contracts. There are little limits to the Ansoff framework forth research as it remains a valuable model for demonstrating the effectiveness of growth and market expansion processes. The only drawback is that it is virtual and lacks a quantitative approach to measuring risks and accounts that each quadrant is separate on its own, although one strategy chosen can aid the other. The following section below will describe and explain the motives behind the methodology of the interview study and how the research studies had been conducted.

Data Collection

The interview study

The team’s research methods and interpretive techniques were discussed. In so doing, focused on the challenges we encountered and strategies we used to overcome them. In order to find additional information to answer the research questions, we have decided to use an online survey as a source of exclusive information. The survey along with a questionnaire will be conducted online via email using a selected group of people-staff from the shipping industry, which will allow for clarity and efficient information collection without the hassle and cost of using other equipment. According to Research Ltd (2009), an e-mail attachment of the 0020 questionnaire sent as an attachment would suffice.

Group questionnaire surveys-sample method

The questionnaire will be administered to 30 respondents that are selected from various levels of the organization. This will give a broad description and understanding of the marketing expansion strategies from various perspectives besides marketing. The data will be analyzed quantitatively. To reduce the respondents’ confusion and unwillingness to answer our 10 listed questions in the questionnaire, author decided to include a confidential informed consent form which the respondents will sign and the information gathered from them will not be released.

Sampling plan

The sample frame will consider the shipping businesses that are listed in the directory. For simplicity, have chosen the parent company of PPL shipyard, i.e. Keppel Shipping since it is not directly related to PPL shipyard. The sampling site is a list of 5 departments in Keppel shipping that includes the operations, finance, marketing, production and customer service. In designing the study, one should consider potential errors according to Quick MBA [5]. This can include non-sampling errors due to a typo error or fatigue of the respondents. By choosing the 30 respondents for the sample size since this would be representative enough for the purpose as too many would be time consuming and chaotic. A sufficient response rate of 100% would be great, but in a perfect world, some questions might be defaulted. According to Champy [6], best practice programs use effective methods for achieving targeted results, and they set benchmarks for other programs to follow. The sampling method was chosen using the non-probability sampling since it provides a randomness that would suit the conditions in the office. A probability would not help in this case, would require randomness in selection rather than selecting through clusters or stratification. This means going to Keppel Company and requesting for interview chances from anyone that can come across. Most are adept with their jobs and scope of work and were happy to indulge with some time. Each individual question was created to focus on the ways in which participants at a particular role made sense in the department and their specialized designations. Some agreed and some did not due to unmentioned reasons, but almost everyone had an equal chance of being selected. By agreed upon a simple random sample because of the simplicity of the method. Conducting the interview once due to time and effort constraints.

Designing a questionnaire – the interview questions

The interview and the survey questionnaires (in appendix) were conducted in English. Ten questions were formulated in a logical manner beginning with a general feel of the industry to the more specific questions. This would prevent the respondents from going out of track. The questions were focused on retrieving open-ended answers, although some questions were structured in Likert scale format. This would give a balance and allow the respondent a clear explanation of what the interview is about. Questions to with do personal profiling was avoided and unnecessary since this had nothing to do with consumerism but more to do with a business-to-business market.

Limitations of the Research

Some of the limitations used of this study include the lack of true honesty of opinions due to the internet factor. There is little face-to-face interaction and is difficult to apprehend the qualitative facial expressions of the respondents. Respondents may also not be proactive and proficient in such a survey type unless incentives are given. The sample method and size lack a focus on more top directors and chief executive opinions and the selection were focused on ground executives.
and could have included more experts. The research also emphasizes on Likert scale format which allows for a more quantitative aspect rather than qualitative.

**Ethical Issues**

In this research process that adhering ethical issues would be appropriate and a moral thing to do. Every interview done by the participants must be allowed safety, privacy and confidentiality of their full-names and opinions. Throughout this interview the full-names should not be revealed where possible and where informed consent documents had been signed by the participants acknowledging the real purpose of this study.

**Analysis**

Based on the research study done online through a questionnaire, the following findings can be made. There had been approximately 3% response error, and other than that, 97% respondents (29 out of 30 respondents) managed to fulfill the criteria of the survey. Most were designated staff within Keppel were more than delirious to describe their roles within the company. They were able to provide some insights on the company and managed to piece the information given by each individual, and most of the staffs whoare interviewed belonging to the marketing and sales support, administration, finance-accounting, operations and call center departments. The findings and statistics were critically analyzed with relationships between several variables where possible were given, and evaluation was done using the market growth and share matrix.

**Statistical findings**

In providing statistical feedback of the 30 respondents in the survey, here are the following findings. These findings are supplemented with graphs for better visual reporting and can be found in the appendix accordingly: -30% percent of the respondent strongly agreed that marketing expansion is crucial for a shipping company's success. 30% percent agreed with another 25% neutral and 10% disagreed and 5% strong disagreed (Figure 2). The bulk of respondents are in agreement of marketing expansion. This could be due to the fact that there might be new crude oil production and processing facilities which will grow, and a continuous supply of the lighter oil grades are in demand, which will help to stabilize global oil markets and meet future growing consumer needs in the mid- to long term. However, in recent years, the world there is a possibility that in this recession, the investments in production and processing capacities as well as the distribution networks have not kept up with the demands for oil. 30% Singapore shipping companies view such expansion overseas extremely favorably whilst 35% were favorable. 30% were neutral whilst 5% were not favorable on such expansion decisions (Figure 3). Such expansions can bring jobs to the local market as well as for Singaporeans in these bad times. It is not fortunate experiencing a downturn in the oil industry, but any forms of improvements in other industries should also see expansion. These Singapore constructed rigs that are laid up bring economic benefits and costs to the local areas. Alas, there will also be an increase in the requirements for engineering services, shipping services and a huge boost for local shops, hotels and businesses where the jackup rigs will be situated. All these business can mean a great growth for the oil business according to the respondents. 35% felt good about Singapore's shipping companies and their quality and their understanding of the oil markets overseas. 40% of the respondents went the middle path about the quality of Singapore's shipping companies and their companies. 25% believed negatively about the quality and understanding of overseas markets (Figure 4). The significant presence of many Singapore's shipping companies will no doubt boost the quality of the jackup rights. In these production activities, Singapore has a good production and eco-waste system in place, so there is less pollution carried over to other neighboring countries. As well in the recent past, much of the Singapore companies should have invested heavily in additional plant and testing facilities which can be remodeled into other countries, and these countries have a wide selection of choices which include PPL Shipyard's and its sophisticated tools in Singapore. For marketing expansion and its strategies, this was more equally distributed. 30% preferred market penetration; 25% market development; 25% product development and 20% diversification (Figure 5). In these questions, most respondents are divided over their answers. There are local Singapore shipping companies that believe it is better to reap the benefits here. This could be due to the fact that the global economy is not well, the oil prices have dropped, and that Singapore's markets are predictable in most industries and that there are good local contents of shipping and engineering firms. Product development dictates that other areas in demand include state-of-the-art equipment and products like welding gears, protected steel items such as fasteners, bolts and nuts, which oil rigs require should be developed in high-quality production and have these products sold through exports in the regional Asian markets as these markets are relatively new. Diversification is believed by some respondents to be appropriate at this time. It should not be interpreted as a complete change of products, markets and services, but rather by creating different product lines or related products or services that might not be technologically related such as containing and cleaning oil spills constructing other types of vessels. 80% of the respondent thought that their company was expanding its oil operations (oil rigs) overseas through the chosen expansion strategies. 20% chose not to believe (Figure 6). Most of the respondents seem to be more discreet about the answers provided. Much of the answers from these questions were derived through reading of the materials which were provided in Keppel Corporation. Other that chose not to believe did not know or was intent that their company would not expand in these times until the recession was over.

**Figure 2:** Oil consumption November 2008.
The issue here lies with other competitors from other nations such as China and India that has the necessary research capabilities to compete with Singapore's companies in the oil and gas business. Some felt that getting into foreign markets and receiving contracts were not easy due to the different cultural systems of doing business, such as in Saudi Arabia where the natives do not like making appointments until actually having met the Singapore parties. Moreover, they have much better experience in trading oil and gas, so the middle-eastern people could be too much a handful for Singaporeans (Figure 8).

### Analysis of Data Findings

The analysis shows a relationship between two or more variables using the Ansoff Matrix.

**Marketing expansion is directly responsible for the shipping business’s first step to success (PPL Shipyard)**

Choosing the right marketing expansion strategy would be crucial to the success for PPL Shipyard. It seemed this is not limited to one particular choice, but Ansoff matrix and its strategies allow the application of synthesis between partners, suppliers and government people with the company. It is safe to know that if there is no marketing expansion, the company cannot bring forth its growth and innovative competences overseas. Only being proactive and foraging into untapped markets can a company be more successful than it already was locally. Most of the milestones achieved by PPL Shipyard had shown that it had venture overseas and in substantial frequencies. One instance is the Project Milestone Achieved for Strike Steel of Hull No. P2029 jackup rig in collaboration with Sinopec Shanghai Offshore Petroleum Exploration and Development Corporation [7].

**Overseas knowledge and matching with confidence of one’s own company and products is critical**

Knowing the right markets and niches to invest in were not just mere speculation, but marketing expansion for the jackup rig design and production industry means that know-how is a critical success factor and this insists on the right personnel and local people to do the work. But what had been appalling is that a large number of staff in the company did not know much about the products and services and most were not confident about their knowledge or with the company’s expansion plans. This could be due to the secrecy aspect of any ventures made in Singapore. In a report by Keppel [8], it clearly demonstrated that research and development into the jackup rig design and production is important. Reducing capital costs amidst sustained strong freight rates, tight docking space worldwide and an increase in conversion activities could also be important, yet having more capital is essential to completing other projects.

**Market and product development has direct impacts with overseas expansion**

As most respondents were in view of market penetration and development strategies, it would make sense that these strategies would be more preferred and less risky among the conservative Singaporean staff working in the shipping industry. Diversification has the least thumbs up for expansion since this would mean a high risk factor in producing unknown and unheard products and venturing into new markets according to the Ansoff matrix. This could go in tandem with the legal system in other countries which may block the marketing expansion process. A report by Najib, the deputy prime minister of Malaysia, had mentioned about the soundness in foundation of the maritime laws that govern Malaysia’s maritime dealings, which ensures that anticipated rights are recognized and upheld rigorously through...
Market expansion using the BCG growth and share analysis

In analyzing the market expansion, adopted the market growth and share marketing analysis matrix and this has a strong relation with marketing expansion strategies. By analyzing through this Boston Consulting Group model (Figure 2), the report will be able to provide further impetus in to the expansion process. The vertical axis shows an annual market growth rates for each strategic business unit (SBU) in its respective market. The horizontal axis shows the market share of each SBU in their respective sizes. If the market share for an SBU is 1.5, this means that the SBU is 150% times greater than the market leaders, which are Keppel Corporation and Sembawang Corporation of Singapore. A relative market share of .8 would indicate that the SBUs market share was 80% of the market leaders. Such data provide more information about market position. The size of the circle represents the cash investments of each SBU to total company sales. The bigger the circle the larger the SBU’s contribution to total company sales. Given this information, each SBU is placed in one of four quadrants resulting in following 4 classifications of SBUs.

- **Stars** - Stars are those SBUs which have a relative market shares compared to the other competitors in the market but it is in an industry which has a low annual growth rate. These SBUs generate more than enough cash to cover operating expenses. One instance is the BMC Pacific 375 Deep Drilling jackup design that is proven as fetching some of the highest charter rates [10]. The design has been modeled to other projects and is money generating unit to be used to support other SBUs which offer more potential for growth.

- **Question marks** - These SBUs have a low relative market share compared to the other competitors in the market but it is in an industry which has a low annual growth rate. These SBUs could expand its operations through mergers and acquisitions and alliances to compete with the phenomena of global consolidation. A forward integration expands oil rigs processing to servicing with other companies. Backward integration strategies may mean going back to the fundamentals of making simple rigs without any advanced processes at low cost. Diversification methods can also be considered where PPL Shipyard can expand into other non-related or supporting business (e.g. Gas-drilling). There are also increasing substitutions of steel in plastics, metallic composites that meet new fuel efficiencies made for construction. These businesses become a part of concentric diversification, which takes other related companies/industries resources and skills to fit PPL Shipyard’s own functions. Vertical integration between the rigs service centers (internal or outsourced) allow quicker delivery of jackup rigs related products that involve sawing, slitting, blanking. Other international entry strategies include exports of products and services, franchising/licensing options, old fashioned Greenfield operations, production technology transfer, joint ventures, management contracts.

- **Cash cow** - A cash cow is an SBU with a high relative market share compared to the other competitors in the market but it is in an industry which has a low annual growth rate. These SBUs generate more than enough cash to cover operating expenses. One instance is the BMC Pacific 375 Deep Drilling jackup design that is proven as fetching some of the highest charter rates [10]. The design has been modeled to other projects and is money generating unit to be used to support other SBUs which offer more potential for growth.

- **Problem child** - Problem children are those SBUs which have a low relative market share but are in industries which have a high annual rate of growth. The potential problem exists for them to become new investment but their low relative share represents a major challenge to management to create a sustainable growth.
PPL Shipyard has been awarded a $229 million contract to build a PPL Shipyard Singapore for China to be ready in 2011 [12]. This represents a small capture of the Singapore market. If the project is unsuccessful, it represents a dent in the international markets for this design class.

- **Dogs:** Dogs are SBUs which not only have low relative market share but also are in industries which have low growth potential. They may not be operating at a loss but they generate only enough cash to maintain their operations and market share. According to the Straits Times [13], due to the crisis, demand for new-build vessels is unlikely to grow any further in the near term as global freight rates are sharply lower on slowing demand. This would require PPL to reduce construction or design of such vessels and concentrate on jackup rigs [14]. Classifying a company’s SBUs into such a matrix helps define the current position of each SBU and also suggests strategic options for management to improve performance. While in the position of an SBU will change over time because of changes in growth rates or market position, the following 4 strategic actions are implied.

**Possible impacts of the jackup rig analysis**

- **Weakening oil demand – possible cancellation of business contracts due to the need for less oil and oil related products.** Poor global economy would mean decreasing oil prices a dampener to the business and its related components. There are more competitors piling up or cancelling orders which may be detrimental to PPL Shipyard. Suppliers of jackup rigs and metamarket industries may also decrease [15].

- **Jackup rigs are shallower which require shallower waters to drill for.** Certain times are required to make drilling possible. There is always a possibility that the drilling will turn up empty. Additionally, there is the importance of sovereign risk to investment decisions as well that are recognized by petroleum businesses. Some countries may not be so welcoming that investment decisions as well that are recognized by petroleum businesses. Some countries may not be so welcoming that others may be not so welcoming that include Russia, Bolivia, Ecuador, Angola and Venezuela and other socialist nations.

- **Costs money to move internationally and not every project can afford any funding.** This would require certain more credit lines and loans to fund other projects which might not be forthcoming. Research and development may have to be cut back. There is little incentive for PPL Shipyard to increase such funding. Staff recruitment may also be downsized. Potentially much more significant are regulatory costs associated with project expenditures, reduced flexibility to respond to market conditions, inflated capital costs and increased difficulty of financing projects which reduces power of expenditure.

- **There are also possible environmental impacts such as hurricanes and typhoons which have to be taken account.** Other impacts would include natural elements of moving icebergs and organisms in the seas which have to be cleared, otherwise movements of sound from the drilling would affect them. Discharges into the sea environment are also arguable depending on the maritime laws of the countries. Keeping the air green is also another factor.

- **The legal and administrative complexity may also characterize the regulatory framework governing high end petroleum projects and might impose significant burdens on project proponents.** These burdens can include the economics of petroleum supply during the cyclical periods which might delay in the project development and completion.

**Analysis using the critical success factors for marketing expansion**

According to Rockart [16], critical success factor (CSF) is a business term for an element which is necessary for an organization or project to achieve its mission. Critical success factors are elements that are vital for a strategy to be successful. The following shows the CSF as follows:

- **Integrative roles of marketing expansion (critical).** Moving the operations from Singapore to overseas through supply drill bit parts and equipment.

- **Dealing with business changes (critical).** Build more oil jackup rigs and taking risks. Experiment with new submersible rigs that can go into more deep waters [17].

- **Leadership and relations (important).** Having a good focused leader overseas would boost international image.

- **Benchmark style (important).** It is important to have a benchmarking process, benchmarking against other top competitors of the region in order to build and design better control processes and products.

- **Employees (important).** In the overseas expansion, there must be a good balance of employees and staff that have different skills which can contribute to the whole project. This could lead to standardization for other models elsewhere.

- **Technology (important).** Having different technological products and innovation would boost the product and service lines of the company. Much of the materials could use the Just-In-Time systems that can deliver equipment and supplies accordingly. Other technology could also be used to produce cheaper rigs and at a faster pace. Patents and intellectual properties for all the projects are also crucial where innovation is concerned [18].

**Conclusion**

In summary, PPL Shipyard has to struggle in the midst of the recession. It would have to reinvent itself to create better products and value to its clients in order to derive more growth. This would mean that the company must continue to invest in creating new markets and products to sustain itself. This can be done by using appropriate market expansion strategies and the correct measure to enter the market. Findings have shown that it is indeed favourable to venture overseas into untapped markets using the market expansion strategies of marketing and product development as they are less risky and more stable than diversification. It would also mean that PPL should find a good leader to create better networks with the local governments, suppliers and other stakeholders which are necessary for its effectiveness in foreign markets. These can only be done if the company takes the appropriate measures to evaluate their marketing
expansion strategies by understanding their own critical success factors and core competences.

References
7. PPL Shipyard (2009) Significant events. PPL Shipyard Pte Ltd.