The Emergence of a new Chaebol:
Corporate strategy and leadership in successful M&A of STX in Korea—a case study

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ABSTRACT

South Korea has experienced an extraordinary reconstruction for decades. This remarkable turnaround derived by Chaebols gave people two biases. Firstly, Korean big conglomerates were made by State. Secondly, it will not appear a new Chaebol since existing big businesses already occupied almost whole market share. STX, however, tears down the stereotypes since its firm was new born and a medium sized business in an early stage.

This paper, therefore, examines the successful M&A of STX which have used acquisitions as a main driver of its overall growth strategies, converting its firm achieve one of the world’s best performing acquisitive corporations. So this study shows an active M&A strategy for corporate growth is presented, along with a case study of STX. Besides, this study reviewed literatures to identify and discuss between the related studies and findings. Also this article has provided recommendations on what rivals should do to increase their chances of success through lessons from the STX’s case study.

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I. Research Motivation

1.1 Motivation

South Korea has witnessed an incredible transformation in the three decades spanning from the 1960s to 1990s, evolving from an impoverished country to a developed high-income economy today. This remarkable turnaround was achieved through an aggressive, outward-oriented strategy, focusing on developing large-scale industrial conglomerates or chaebols. The incredible economic change gave naturally people stereotypes. The widespread biases in terms of businesses in South Korea have two things: 1) Korean big business was portrayed as being created and managed by the state, 2) The appearance of a new Chaebol will be no further.

Firstly, many statist analysts have attempted to demonstrate that economic performance for national development has been led by the "autonomous state (Jones and Sakong, 1980)." In these statist analyses, the Korean state is conceived as being a unitary and internally cohesive actor driven by insulated bureaucratic competence, and the bureaucratic state has maintained close ties with big business (Kim, Y T, 1999). A number of social scientists have paid attention to centralized state power in industrial capitalist societies. The statist perspective attributed Korea’s remarkable economic growth to the strong state’s role in the economy, focusing on the industrial and financial policies carried out by the state. This explains the
crucial role of the state in the making of large business conglomerates under the Chung-hee Park regime since the early 1960s (Stephen Krasner, 1979). The statist analysts also demonstrate that it is a mistake to interpret the advent of the Korean business conglomerates as the only critical breakthrough in the expansion of the free market as a whole. They explain that Korea’s state officials sought to harness the capability of private corporations by assisting them and inducing them to invest in prioritized industries (Amsden, 1989). Thus Korean big businesses were portrayed as being created, managed, and regulated by the state, and were regarded as having limited autonomy. These views are closely connected with a political logic for nationalist economic strategies as well as greater state intervention in the economy (Stephen Krasner, 1979). They argue that a high degree of state supports was a key factor for big businesses growth since many social scientists tend toward highlighted advantages of dictatorship under the pretense of the so-called developmental dictatorship.

Secondly, Chaebol are Korea's vertically integrated industrial conglomerate controlled by a founding family. While the chaebol have hired an increasing number of professional managers in recent years, family members continue to dominate the top executive positions (Kim, 1991). Dozens of chaebol were formed during the rapid growth period through highly preferential treatment extended by the government to industry champions (Woo, 1991). By the mid-1980s, the chaebol, with 20 to 40 companies in each group, had become domestic powerhouses that
had transformed into fully-fledged multinational corporations with billions of dollars in annual revenue (Kim, 2000). The pace of their growth was such that by the mid-1980s, the top 50 chaebol accounted for almost a fifth of Korea's gross domestic product and some 45% of mining and manufacturing sales. This was achieved by aggressive diversification and expansion into new industries, while forming oligopolist positions in major industries (Zeile, 1991: 306). Therefore, there will be no further the appearance of a new giant in Korea since big businesses occupy whole market shares in the different segments. For example, Samsung group has many subsidiaries in various different segments such as electronically parts (semiconductor, LCD etc), electronics goods (TV, Camera etc), machinery (shipbuilding etc), constructions, Life insurance, others (Theme park, Hotel, Economic Research Institute) and so on.

The STX (System Technology eXcellence), however, had destroyed two biases in terms of businesses in Korea because a just medium-size business became one of the biggest companies without any privileges from the state within very short period. In South Korean history, its company is the only one which transformed a medium size firm into one of the biggest businesses without the state support in the space of just 10 years. In 2009, another bigger Chaebol, Gumho-Asiana group (ranked 9th, Korea) had tried to do M&A as their growth strategy but their experience was added to the statistic data as a failure example.
Besides the owner of STX was one of ordinary salaried workers for 27 years and then became one of richest men in Korea. Thus, this study not only breaks up the prejudices in terms of business in the Korean Peninsula, but also shows a possibility as a good exemplar that Chaebols may be not necessarily fully correlated with the dictatorial government.

Now questions have surfaced over how STX became a Chaebol in Korea. After observations by author for years, one of secrets was M&A since STX have used acquisitions as a central post of its overall growth strategies, transforming its firm achieve one of the biggest businesses in Korea. However academic research has consistently shown that 50 percent to 75 percent of all M&A activity destroys value for the acquirer’s shareholders (Langford and Brown, 2004).

Therefore this study focuses on STX as a case study and its growth strategies, which were driven by serial acquisitions rather than examine other strategies. The study set out to answer two questions: **How STX became a Chaebol in Korea** though the owner of its firm was not a rich guy, and **What are the key success factors for merger and acquisition in the view of STX?** Also this study provides a good understanding of the key factors in M&A through the case study of STX.
1.2 Background of STX

STX Corporation is a South Korean holding company engaged in the provision of trading services. Headquartered in Gyeongsangnam-do, South Korea, the company operates its business through four divisions: Shipbuilding & Machinery, Shipping & Trading, Energy and Plant & Construction. Its shipbuilding machinery sector provides a complete vertical systemization system encompassing the production of shipbuilding equipment and material, blocks, engine parts and marine diesel engines, as well as the construction of ships. Its Shipping Trading business division provides shipping and energy materials, coal, oil, steel and others. Its plant & construction sector business provides shipyards, power plants (combined cycle plant, gas fired power generation plants) and environmental plants (desulfurization systems, water and wastewater treatment plants).

Its Energy business sector operates not only operating Korea largest combined heat and power (cogeneration) plant but also provides a total solution to energy needs, from energy resource development to transport, processing and sales.
STX was never born, once a mighty South Korean conglomerate before the Asian financial crisis forced the group to the edge of collapse. The investment fund Hannuri, which bought the Ssangyong Heavy unit in 2000 when its firm was under legal management, promoted Mr Kang Duk-su, then the company's chief financial officer, to chief executive. He was predetermined to revive the company because he could get free only when the company normalized. He already owed Ssangyong’s creditors more than Won 40bn ($33m, pound(s) 21m, EUR26m) at that time as he personally guaranteed the debts to pay for wages and other company expenses.
Table 1 The chronicle of STX

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>October</td>
<td>Established STX OSV</td>
</tr>
<tr>
<td>2009</td>
<td>July</td>
<td>Established STX Windpower</td>
</tr>
<tr>
<td>2007</td>
<td>March</td>
<td>Commenced construction of STX Dalian Shipbuilding Complex</td>
</tr>
<tr>
<td></td>
<td>October</td>
<td>Established STX Windpower STX Europe</td>
</tr>
<tr>
<td></td>
<td>November</td>
<td>Established STX Solar</td>
</tr>
<tr>
<td>2005</td>
<td>February</td>
<td>Established STX Construction</td>
</tr>
<tr>
<td>2004</td>
<td>February</td>
<td>Established STX Heavy Industries</td>
</tr>
<tr>
<td></td>
<td>April</td>
<td>Introduced holding company system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Established STX Engine</td>
</tr>
<tr>
<td></td>
<td>November</td>
<td>Established STX Pan Ocean</td>
</tr>
<tr>
<td>2002</td>
<td>November</td>
<td>Established STX Energy</td>
</tr>
<tr>
<td>2001</td>
<td>May</td>
<td>Established STX Corporation (Changed the company name of formerly Ssangyong Heavy Industries)</td>
</tr>
<tr>
<td></td>
<td>June</td>
<td>Established STX Metal</td>
</tr>
<tr>
<td></td>
<td>October</td>
<td>Established STX Offshore and shipbuilding</td>
</tr>
</tbody>
</table>

Source: website of STX

For decades, Mr Kang was an ordinary salaried worker at Ssangyong Group. Although he never intended to buy the group's embattled engine making unit, the circumstances he found himself in persuaded him to do so. He had made a decision for a man nearing retirement to put up all his personal wealth to buy a troubled company since he was confident of its
fundamentals in order to turn it around.

Table 2 Orderbook by shipyard in Korea, end of 1990

<table>
<thead>
<tr>
<th>Domestic #</th>
<th>Domestic grt</th>
<th>Export #</th>
<th>Export grt</th>
<th>Export share</th>
<th>Avg. Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyundai</td>
<td>0</td>
<td>0</td>
<td>45</td>
<td>3003.5</td>
<td>100</td>
</tr>
<tr>
<td>Daewoo</td>
<td>2</td>
<td>72</td>
<td>21</td>
<td>2753.9</td>
<td>97.45</td>
</tr>
<tr>
<td>Hanjin</td>
<td>4</td>
<td>155</td>
<td>4</td>
<td>208.9</td>
<td>57.41</td>
</tr>
<tr>
<td>Samsung</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>802.6</td>
<td>100</td>
</tr>
<tr>
<td>Tacoma</td>
<td>1</td>
<td>0.4</td>
<td>1</td>
<td>0.1</td>
<td>20</td>
</tr>
<tr>
<td>Donghae</td>
<td>1</td>
<td>5.7</td>
<td>6</td>
<td>18.9</td>
<td>76.83</td>
</tr>
<tr>
<td><strong>Dae Dong</strong></td>
<td><strong>2</strong></td>
<td><strong>2.5</strong></td>
<td><strong>3</strong></td>
<td><strong>7.5</strong></td>
<td><strong>75</strong></td>
</tr>
<tr>
<td>Daesun</td>
<td>6</td>
<td>8.4</td>
<td>2</td>
<td>0.8</td>
<td>8.7</td>
</tr>
<tr>
<td>Shin-A</td>
<td>4</td>
<td>5.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Halla</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>216</td>
<td>100</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>3.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td><strong>20</strong></td>
<td><strong>249.4</strong></td>
<td><strong>124</strong></td>
<td><strong>7015.8</strong></td>
<td><strong>96.6</strong></td>
</tr>
</tbody>
</table>

Source: Data from Institute of Shipping Economics (1991:75). Tonnage refers to 1000 grt.

Many company workers bought shares in Ssangyong Heavy after he began to run the company and he managed to turn it round by working with clients and suppliers and by winning big orders from China and Japan. He became the company's single largest and controlling shareholder in 2001 after buying an 11 percent stake from the Hannuri fund for Won 2bn out of his own pocket. Then, he renamed the company STX. Since Mr. Kang took control of the company, STX's expansion has appeared to be unstoppable. It embarked on a
Within three years, it bought Daedong Shipbuilding, which is one of small-size shipbuilders in Korea as shown in Table 2, and Sandan Energy, Pan Ocean Shipping and renamed them STX Offshore & Shipbuilding, STX Energy and STX Pan Ocean as illustrated in Table 3. Then, the group expanded its horizon abroad, making its first overseas acquisition in 2007, buying a 39.2 percent stake in Norway's Aker Yards, Europe's largest shipbuilder specialized in cruise vessels. It is now renamed STX Europe. The group also bought Harakosan Europe B.V, the Dutch wind generator maker, renamed it STX Wind power. But the acquisition of Aker Yards required long and tough negotiations. STX faced strong resistance from European workers and an antitrust investigation from the European Commission before it took full

Table 3 M&A history of STX

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Rename</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Ssangyong Heavy Industries</td>
<td>STX Engine</td>
</tr>
<tr>
<td>2001</td>
<td>Daedong Shipbuilding</td>
<td>STX Offshore &amp; Shipbuilding</td>
</tr>
<tr>
<td>2002</td>
<td>Sandan Energy</td>
<td>STX Energy</td>
</tr>
<tr>
<td>2004</td>
<td>Pan Ocean Shipping</td>
<td>STX Pan Ocean</td>
</tr>
<tr>
<td>2007</td>
<td>Norway’s Aker Yards</td>
<td>STX Europe</td>
</tr>
<tr>
<td>2009</td>
<td>Harakosan Europe B.V</td>
<td>STX Wind power</td>
</tr>
</tbody>
</table>
control of Aker Yards in 2008 - becoming the first Asian shipbuilder to construct a cruise ship for the international market

![Total sales of STX](image)

Source: Annual Report of STX, 2010

**Figure 2 Total sales of STX**

Such acquisitions as shown in Table 3 have helped him transform STX into the world's fourth-largest shipbuilder in the space of just 10 years. Now, the group has 21 units\(^2\) with combined revenues of $25bn, compared with only $727m in 2001 as shown in Figure 2 and Table 4. It has 18 shipyards in eight countries with more than 90 per cent of its sales generated abroad and nearly 60 per cent of the group's 57,000 workers from outside of the country.

\(^2\) Subsidiary's current state of affairs from the Citizens Coalition of Economic Justice, 2011
Table 4 M&A activity and sales of STX

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales ( $ million)</th>
<th>Target</th>
<th>Deal Value ( $ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>$727</td>
<td>Daedong Shipbuilding</td>
<td>$91</td>
</tr>
<tr>
<td>2002</td>
<td>$1,182</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>$1,364</td>
<td>Sandan Energy</td>
<td>$45</td>
</tr>
<tr>
<td>2004</td>
<td>$4,455</td>
<td>Pan Ocean Shipping</td>
<td>$391</td>
</tr>
<tr>
<td>2005</td>
<td>$5,909</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>$7,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>$16,273</td>
<td>Norway's Aker Yards</td>
<td>$667</td>
</tr>
<tr>
<td>2008</td>
<td>$25,636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>$22,364</td>
<td>Harakosan Europe B.V</td>
<td>$22</td>
</tr>
<tr>
<td>2010</td>
<td>$24,091</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.3 Overview of International shipbuilding Market

The modern shipbuilding industry that is described by iron structures and steam engines started approximately in the 1860s. Britain firmly established its strong presence in the late 19th century, and it captured 80% of the world's shipbuilding market in 1882 (Porter Competition in Global industries 1986). This could be easily inferred by the seaborne trade volume of Britain and the fleets they owned at the same period. Well developed shipping industry is a precondition for the growth of shipbuilding industry.

### Table 5 Shipbuilding market share in the 1900s

<table>
<thead>
<tr>
<th>Merchant Vessels</th>
<th>1892-1896</th>
<th>1901-1905</th>
<th>1910-1914</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>1,021</td>
<td>1,394</td>
<td>1,660</td>
</tr>
<tr>
<td>Germany</td>
<td>87</td>
<td>215</td>
<td>328</td>
</tr>
<tr>
<td>U.S.</td>
<td>85</td>
<td>347</td>
<td>253</td>
</tr>
<tr>
<td>France</td>
<td>26</td>
<td>123</td>
<td>15</td>
</tr>
<tr>
<td>Holland</td>
<td>10</td>
<td>52</td>
<td>97</td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td>33</td>
<td>57</td>
</tr>
<tr>
<td>Others</td>
<td>67</td>
<td>190</td>
<td>329</td>
</tr>
<tr>
<td>World Total</td>
<td>1,299</td>
<td>2,354</td>
<td>2,739</td>
</tr>
</tbody>
</table>

Source: "Annual Returns," Lloyds Register (London)
British merchant fleets accounted for 33% of the total world fleets in 1914, and therefore Britain became a world leader both in the shipping market and the shipbuilding market in the 1900s as shown in Table 5.

The present shipbuilding industry, however, is dominated by Asian countries as the industry dominance shifted from Europe towards East since the past four decades. Of the Asian nations, Korea, China and Japan hold a majority share in terms of orderbook and volume. During the 1990’s there was intense competition in the shipbuilding market. Japan and Korea were locked in a battle for market share which, by the end of the decade, it looked as though South Korea was beginning to win. In addition, China started to become a significant force in the shipbuilding market, whilst Western Europe has now retreated into the “high tech” of cruise, LNG and a last foothold in the containership market. The battle between Korea and Japan produced one of the major surprises during the decade.

Early in the 1990’s it was clear that Korea was targeting Japan’s market share and it looked as though they had a very good chance of success. The Japanese shipyards were suffering from a strong yen and Korea was pricing its ships very aggressively. So this particular battle is now over with Korea set to take the shipbuilding crown in 2002. The largest shipbuilding companies in terms of capacity are Hyundai Heavy Industries, Daewoo Shipbuilding & Marine Engineering (DSME) and Samsung Heavy Industries (all Korean). Besides, STX is
the world's fourth-largest shipbuilder in terms of both capacity and orderbook in 2010.

In the other hands, the shipping industry is defined to a large industry because this industry involves huge capital, wide workforce and technology. The industry may need to get a balance between all the three. The process of shipbuilding has been gone through a lengthy in terms of time taken and there are many other ancillary industries associated with shipbuilding as suppliers since it has very good effects and repercussions on industry in this country. As most of the global trade is through sea the shipping industry is mainly driven by the global economic growth. So GDP growth is the main driving factor for this industry. Over the years the industry has shifted its base from the earlier dominating region Europe to Asia. Even within Asia there has been a tussle to gain the top position where South Korea claimed the top
position leaving Japan behind until 2008, while China has also leaped ahead of Japan to become the second player. But Figure 3 shows China has got the top position from 2009 to 2010. Moreover, the positions these countries have gained are not just within the Asian region but are on a global level.

The traditional view of shipbuilding prices, especially gas carriers, was that they behaved much like a commodity, with prices rising and falling along with demand as illustrated in Figure 4.

![Figure 4 Newbuilding Prices trend by Gas Carriers](source.png)
1.3.1 Key Features of the Shipbuilding Industry

The shipbuilding industry has predominant traits such as massive investment, competitive market and long term project.

1) Massive Investment

This industry involves huge capital because infrastructure and manufacturing facilities are essential to do business. Beyond upfront investments, constant annual capital expenditure is required to increase shipbuilding capacity and to enhance productivity. As illustrated in Table 6, over a period of five year from 2005 to 2009, Korean shipbuilders invested to catch up with the substantial increase in shipbuilding. In 2008, the percentage of investment reached up to 10% of total exports. Even though the shipbuilders put aggressively money into their investment, they couldn’t keep their top position in the world from 2009 to 2010.

<table>
<thead>
<tr>
<th>Table 6 Investment in Korean shipbuilding industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit: Billion $</strong></td>
</tr>
<tr>
<td><strong>Item</strong></td>
</tr>
<tr>
<td>Investment (percentage)</td>
</tr>
<tr>
<td>Investment (percentage)</td>
</tr>
<tr>
<td>Exports</td>
</tr>
</tbody>
</table>

Source: Korea International Trade Association, Korea Development Bank (1,100won/1$)
2) Extremely Competitive Market

The shipbuilding market is described as a highly competitive market since shipbuilding industry is considering as a cornerstone industry that could generate huge positive effects on downstream and upstream industries such as shipping, steel, non-metal, electric, and machinery industries. It is a relatively high entry and exit barrier because of huge initial investment but has no residual value of fixed assets. In addition shipbuilders can offer distinguishable ships in terms of quality and performance even though ship buyers have similar needs for certain type of ships. In other words, the shipbuilding market has a characteristic of perfectly competitive market such as numerous sellers and buyers who are price takers. Bulk carriers and tankers, for instance, are so standardized that shipbuilders can’t be price makers.

Also, shipbuilding market is single global market with information symmetry. The single global market was due in part to high ship prices compared to relatively low transportation costs. For instance, prospective ship owners can generally place a new order with a shipbuilder who offers the best deal from anywhere in the world, and therefore the price of ships eventually converged on a certain level. As a result, when a shipbuilder offers the bidding price that is noticeably out of alignment, the shipbuilder will be squeezed out from the shipbuilding market.
3) Long term project

A shipbuilding contract is a rather long-term contract that needs more than two years from a signed contract to a delivery. Because of this long-term characteristic, there are several risks that shipbuilders are face with. Shipbuilders are exposed to risks such as price fluctuation of steel plates and equipments that are more than 15% and 50% of total COGS, respectively. Generally, it takes more than one year from the date of contract signing to the date of steel cutting. In addition, the shipbuilding contract is usually depended on foreign currency, mainly U.S. dollars. Without hedging the foreign currency by derivatives, the profit of shipbuilders may be volatile as a result of the fluctuation of foreign currencies.

1.3.2 The shipbuilding market: Key customers

The shipbuilding industry has gone through the drastic change. Over the past half century it has put on great performances in Europe, but since the mid-1980s it has been an almost entirely Asian show. European predominance was challenged in the late 1950s by Japanese builders, and by the mid-60s Japan had become the dominant player on the shipbuilding scene. Korea started making its presence felt in the 1980s and has been increasing its market share ever since. In 2002 South Korean yards delivered more tonnage (DWT) than the Japanese and has been keeping Top one position in the world until 2008. China has been present as a shipbuilding nation all the time, but did not really offer a commercial alternative until the
mid-90s. Before then most vessels were built for Chinese interests. However China had become Top one player in 2009. China has dominated 42 percentage of market share in terms of volume in 2010.

The 10 economies with the largest fleets owned by nationals are shown in Figure 5 according to deadweight tonnage. Nationals of these countries control about 70 percent of the world fleet.

In terms of ownership, the EU 27 share of the World fleet is at 32% which is exactly the same as 30 years ago. Thus European owners still manage to maintain the share of control of the World fleet.
In case of domestic portion in the order book, Chinese government subsidizes 17% of ship price to two state-owned shipbuilders such as CSSC and CSIC. Also, in 2010, 43% of Japanese shipbuilders' orders booked came from the domestic shipping companies and this portion is expected to increase as illustrated in Table 7. Domestic shipping companies can award contracts to their local shipbuilders under government supports.

**Table 7 Orderbook by major ship owner's nationality (Japan Korea China)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Japan Owner's Nationality</th>
<th>Japan CGT Owner %</th>
<th>China Owner's Nationality</th>
<th>China CGT Owner %</th>
<th>Korea Owner's Nationality</th>
<th>Korea CGT Owner %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Japan</td>
<td>43%</td>
<td>China</td>
<td>24%</td>
<td>Greece</td>
<td>20%</td>
</tr>
<tr>
<td>2</td>
<td>Hong Kong</td>
<td>5%</td>
<td>Germany</td>
<td>17%</td>
<td>Germany</td>
<td>15%</td>
</tr>
<tr>
<td>3</td>
<td>Taiwan</td>
<td>4%</td>
<td>Greece</td>
<td>12%</td>
<td>Korea</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: The shipbuilders' association of Japan, 2010
1.3.3 Major competitors

South Korea’s Biggest three producers, Hyundai Heavy Industries (HHI), Samsung Heavy Industries (SHI) and Daewoo Shipbuilding & Marine Engineering (DSME) dominate the global market in terms of output and orderbook. They offer cost effective and high quality vessels based on their advanced production technologies, good management and process control which helps them utilize their economies of scale and learning effect. Korean shipbuilders have topped the industry with highest market share for a greater part of the last decade. Besides, Chinese shipbuilding players are a powerful rival with the low labor cost and huge amount of domestic demand. Chinese shipyards are rapidly closing the gap with Korean companies and currently hold the largest market share in terms of shipbuilding orders.

In addition, out of a total of 522 shipyard groups in the world, big four shipyard companies represent 25% and 18 players represent 50% of the total orderbook. Table 8 shows the top 15 shipyard companies in the world, which again confirm the Asian dominance in terms of market volumes. The 15 largest companies are all located in Asia: seven in Korea, five in China and two in Japan. The largest European ship construction company, Meyer Werft in Germany, comes at a mere 38th place. In the Table 8, STX is the world's fourth-largest shipbuilder in terms of both capacity and orderbook and acquired 3.1 percentage of market
share in the world.

Table 8 Order book by shipbuilders as of 2010

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Country</th>
<th>No. ship</th>
<th>Mil.CGT</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hyundai H.I</td>
<td>Korea</td>
<td>211</td>
<td>8.4</td>
<td>5.5</td>
</tr>
<tr>
<td>2</td>
<td>Samsung H.I</td>
<td>Korea</td>
<td>181</td>
<td>8.4</td>
<td>5.5</td>
</tr>
<tr>
<td>3</td>
<td>Daewoo SB</td>
<td>Korea</td>
<td>180</td>
<td>8.2</td>
<td>5.4</td>
</tr>
<tr>
<td>4</td>
<td>STX SB</td>
<td>Korea</td>
<td>166</td>
<td>4.7</td>
<td>3.1</td>
</tr>
<tr>
<td>5</td>
<td>Hyundai Mipo</td>
<td>Korea</td>
<td>200</td>
<td>4.2</td>
<td>2.8</td>
</tr>
<tr>
<td>6</td>
<td>Hyundai Samho</td>
<td>Korea</td>
<td>109</td>
<td>4.1</td>
<td>2.7</td>
</tr>
<tr>
<td>7</td>
<td>Dalian</td>
<td>China</td>
<td>99</td>
<td>3.2</td>
<td>2.1</td>
</tr>
<tr>
<td>8</td>
<td>Jiangnan Changxing</td>
<td>China</td>
<td>107</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>9</td>
<td>Jiangsu Rongsheng</td>
<td>China</td>
<td>86</td>
<td>2.8</td>
<td>1.8</td>
</tr>
<tr>
<td>10</td>
<td>Sung Dong S.B</td>
<td>Korea</td>
<td>83</td>
<td>2.3</td>
<td>1.5</td>
</tr>
<tr>
<td>11</td>
<td>Waigaoqiao S/Y</td>
<td>China</td>
<td>59</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>12</td>
<td>Oshima S.B. Co.</td>
<td>Japan</td>
<td>111</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>13</td>
<td>Jiangsu New YZJ</td>
<td>China</td>
<td>75</td>
<td>1.8</td>
<td>1.2</td>
</tr>
<tr>
<td>14</td>
<td>Tsuneishi Zosen</td>
<td>Japan</td>
<td>87</td>
<td>1.8</td>
<td>1.2</td>
</tr>
<tr>
<td>15</td>
<td>Zhoushan Jinhaiwan</td>
<td>China</td>
<td>63</td>
<td>1.7</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
<td>6137</td>
<td>93.8</td>
<td>61.5</td>
</tr>
<tr>
<td></td>
<td>Global Total</td>
<td></td>
<td>7,954</td>
<td>152.5</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Clarkson 2010
1.4 Thesis outline

Chapter one described this study’s motivations including most Korean’s two biases such as 1) Korean big businesses were built by the state and 2) a new Chaebol will be not appeared more, and research questions, also this chapter for the research mythology that leads to suitable research processes in a case study. Chapter two described analyses of STX group in terms of SWOT analysis, competitive advantages and financial performance. Chapter three reviewed eight theories, leadership, post-acquisition, and success factors of literature on M&A. Chapter four described the key principles to successful M&A of STX. And this chapter provided STX’s secrets relevant M&A for a synergetic strategy. Lastly, chapter five and six concludes this thesis by key findings & discussions, besides shows a knowledge gap between literature and findings, and provides recommendations to rival in emerging market through this study.
Figure 7 Overview of the research
1.5 Research Methodology

The research process plays a critical role in research. To support researches and researchers, it is essential to understand the research process and its phases. Although the literature provides different research processes, these are often concentrated on specific research paradigms and methods. This study has applied research process by Graziano and Raulin (2009) since the method acquired its knowledge through observation (empiricism), but also through reasoning (rationalism) (Graziano & Raulin, 2009).

![Figure 8 Research process](image)

In adopting the adjacent model to this study, the process starts with the generation of an initial idea and the literature review in M&A since personal experience and existing research have served as an inspiration for a new research process. Since most academic studies have
conducted almost every aspect of M&A, this study focuses on: 1) Theories of M&A, 2) Leadership, 3) Post-M&A, and 4) Success factors. In the next step, therefore, the research definition to be addressed is described in the form of research questions. The research procedure that should lead to the solution of the research question is defined in the procedure-design phase. The resulting research design determines the study participants and conditions as well as the data-collection and data analysis methods. After the observation has been carried out, the data is analyzed and interpreted (Graziano & Raulin, 2009).

In addition, the emphasis of a case is upon a deeper examination of the issue (Bryman and Bell, 2003) and the case study has been very popular in social science as time-honored approach for studying topics in organization science and management (Jensen and Rodgers, 2001). So this case study is conducted mainly based on explorative data obtained from their publications and press releases, local newspapers, magazines and annual reports and so on.
II. Analysis of STX Group

2.1 Businesses of STX

Since the establishment in 2001, STX has improved at an unprecedented pace including both sales and asset for a last decade as shown in Figure 9. The driving forces of such achievements were seizing new opportunities with M&A.

![Figure 9 Total sales and assets of STX over time](image)

STX continued with its M&A spree under a method in which it bought companies at low prices and listed them through initial public offering to recoup investment capital. Through these efforts, the group established a portfolio of four major business areas: shipbuilding and machinery, shipping and trade, plant engineering and construction, and energy. As a result, STX Group has ranked 12th in 2010 among Korean conglomerates excluding state-run
corporations as shown in Table 9.

Table 9 Company ranking in Korea

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>$ billion</th>
<th>KRW billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Samsung</td>
<td>173</td>
<td>192,850</td>
</tr>
<tr>
<td>2</td>
<td>Hyundai Motors</td>
<td>90</td>
<td>100,775</td>
</tr>
<tr>
<td>3</td>
<td>SK</td>
<td>78</td>
<td>87,522</td>
</tr>
<tr>
<td>4</td>
<td>LG</td>
<td>71</td>
<td>78,918</td>
</tr>
<tr>
<td>5</td>
<td>Lotte</td>
<td>60</td>
<td>67,265</td>
</tr>
<tr>
<td>6</td>
<td>POSCO*</td>
<td>47</td>
<td>52,877</td>
</tr>
<tr>
<td>7</td>
<td>GS</td>
<td>38</td>
<td>43,084</td>
</tr>
<tr>
<td>8</td>
<td>HHI</td>
<td>36</td>
<td>40,189</td>
</tr>
<tr>
<td>9</td>
<td>Gumho</td>
<td>31</td>
<td>34,942</td>
</tr>
<tr>
<td>10</td>
<td>Hanjin</td>
<td>27</td>
<td>30,387</td>
</tr>
<tr>
<td>11</td>
<td>KT**</td>
<td>24</td>
<td>27,099</td>
</tr>
<tr>
<td>12</td>
<td>Doosan</td>
<td>24</td>
<td>26,788</td>
</tr>
<tr>
<td>13</td>
<td>Hanhwa</td>
<td>23</td>
<td>26,391</td>
</tr>
<tr>
<td>14</td>
<td>STX</td>
<td><strong>18</strong></td>
<td><strong>20,901</strong></td>
</tr>
<tr>
<td>15</td>
<td>LS</td>
<td>14</td>
<td>16,179</td>
</tr>
</tbody>
</table>

Source: Korea Fair Trade Commission (April. 2010)

Its STX Group has been preparing for a new leap through enhancing the plant, construction
and energy segments. The group plans to secure future energy sources through overseas
construction projects, various kinds of plants and resource development as well as planting
itself as one of global biggest companies in the shipbuilding and shipping segments, which

---

* * **: The state-owned companies
has led to the growth of the group over the last decade. Its company has successfully advanced into Africa, the Middle East, North America and Australia to carve out new markets. The Figure 10 illustrates the biggest sale is from Shipbuilding & machinery as one of sales portion by STX Group business sectors.

Source: Annual report of STX, 2010

**Figure 10 Sales Portions by STX Group Business Sector in 2010**

STX Group, however, will focuses on the percentage of the sales of non-shipbuilding and shipping segments to 25% for 2012, and add the green energy business sector into its four core business segments - shipbuilding & machinery, shipping & trade, construction & plant and energy - to attain $5.4bn (KRW 6trn) of sales in the green energy sector by 2015. Besides, it will enhance the competitiveness of wind & solar power sector, which is coming to the front, actively fostering the energy business.
2.2 STX’s M&A process

This study has improved STX’s M&A steps based on ‘Five steps in evaluation M&A studies’ of Langford and Brown, 2004. The following process in the case of STX is illustrated specifically for M&A with different strategies such as IPO and new entry segment strategies as shown in Figure 11.

![Figure 11 Six steps of STX’s M&A process](image)

Step 1: Planning

In the first step, STX has planned to identify targets and goals with their organizational strategy. For example, STX pursue to achieve synergies with its existing business so that the firm could find the target, Dae-dong shipbuilding which was under legal management; most managers might not see its value in terms of market power and vertical value chain. Thus, STX made a good deal because Dae-dong shipbuilding at the time had changed hands five times then nobody was having any of it.
Step 2: Strategy

STX strategies could be roughly divided into two things such as IPO as a sound conservation strategy and new entry market segment based on vertical value chain. Firstly, being a public company comes with certain benefits, which can allow STX dramatic solid growth and redeem a huge capital invested. Secondly, the firm tried to build a new strong resource of growth through acquired Aker yard and gives STX a strong trace in the cruise ship and offshore service market.

Step 3: Screening

The third phase within the M&A Process is to search for possible takeover candidates which are thousands of businesses that could be potential candidates, but only a few that will ultimately meet its desired criteria. Finding them from the thousands of candidates is one of the important processes. The target companies must fulfill a set of criteria so that the target company is a good strategic fit with the acquiring company.

Step 4: Valuation

During this stage STX had conducted a study about the potential target company in terms of its assets, liabilities, equity, organizational structure, and market. The advising team analyses and assesses the optimum value of the company and how the value is realized in terms of cash, share exchange, etc. This phase of M&A is to perform a more detail analysis of the target company.
Step 5: Negotiation

The most common approach to acquiring another company is for both companies to reach agreement concerning the M & A. In this step, resistance might be expected from the target. For example, STX had experienced long and tough negotiations when acquired Aker yard in Europe because of strong resistance from European workers and an antitrust investigation from the European Commission before it took full control of Aker Yards in 2008.

Step 6: Integration and Tracking

In the integration phase, STX could formulate an integration plan, implement the integration process following the plan, and facilitate the integration process regarding the organizational structure, procedures and processes, and human resource concerns. Also the firm have cumulated amount of valuable data through M&A in order to avoid further fail activities.
2.3 Financial performance of STX over time

2.3.1 Sales Revenue

Over the previous five year, major Korean competitors' sales have positive CAGR such as 13%, 17%, and 21% in dollar bases, a feat that is very rare in large companies.

HHI, the world's number one shipbuilder, grew only at 13% CAGR which is less than that of other competitors including STX. This means that, for instance, STX invested more aggressively than HHI to catch up with the recent peak.

Table 10 Sales Revenue by major competitors

<table>
<thead>
<tr>
<th>Sales</th>
<th>2005</th>
<th>2006</th>
<th>%</th>
<th>2007</th>
<th>%</th>
<th>2008</th>
<th>%</th>
<th>2009</th>
<th>%</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHI</td>
<td>10,111</td>
<td>13,139</td>
<td>30</td>
<td>16,717</td>
<td>27</td>
<td>18,100</td>
<td>8</td>
<td>16,564</td>
<td>(8)</td>
<td>13</td>
</tr>
<tr>
<td>SHI</td>
<td>5,416</td>
<td>6,647</td>
<td>23</td>
<td>9,168</td>
<td>38</td>
<td>9,672</td>
<td>5</td>
<td>10,259</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>DSME</td>
<td>4,603</td>
<td>5,652</td>
<td>23</td>
<td>7,646</td>
<td>35</td>
<td>10,044</td>
<td>31</td>
<td>9,748</td>
<td>(3)</td>
<td>21</td>
</tr>
<tr>
<td>STX OS</td>
<td>1,121</td>
<td>1,716</td>
<td>53</td>
<td>2,291</td>
<td>34</td>
<td>2,726</td>
<td>19</td>
<td>3,284</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>21,251</td>
<td>27,154</td>
<td>28</td>
<td>35,822</td>
<td>32</td>
<td>40,542</td>
<td>13</td>
<td>39,855</td>
<td>(2)</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: Annual reports of four companies from 2005 to 2009
2.3.2 Net cash positions expected in 2012

STX O&S is expected to show the fastest improvement of financials among all top-tier shipyards. In the middle of 2012, and expected to show net cash positions since currently (as of end of year 2010), the company has a net debt position of only $1.22 bn, with several cash drivers, as follows:

**Table 11 Actual net debt trends of STX O&S**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total debt</td>
<td>4.92</td>
<td>3.88</td>
<td>3.03</td>
<td>2.55</td>
<td>2.14</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>1.27</td>
<td>1.48</td>
<td>1.20</td>
<td>1.62</td>
<td>1.86</td>
</tr>
<tr>
<td>Net debt reported</td>
<td>3.64</td>
<td>2.40</td>
<td>1.83</td>
<td>0.94</td>
<td>0.28</td>
</tr>
<tr>
<td>Construction loan</td>
<td>2.40</td>
<td>1.18</td>
<td>1.18</td>
<td>1.18</td>
<td>1.18</td>
</tr>
<tr>
<td>Actual net debt</td>
<td>1.25</td>
<td>1.22</td>
<td>0.66</td>
<td>-0.24</td>
<td>-0.90</td>
</tr>
</tbody>
</table>

Source: Mirea asset, 2010

2.3.3 Upside seen from price-to-sales & price-to-order book ratio

The appropriate valuation tools for STX O&S are price-to-sales ratio and price-to-order book ratio. Due to restructuring and the turn around of its subsidiaries, STX O&S is not yet providing earnings comparable with its peers. Also, considering its fast growth potential, profit-based multiples can distort its upside potential.

Base on price-to-sales ratio (based on 2010 consolidated figures), STX O&S is currently
trading at 0.21x; less than half of DSME, and 1/3-1/4 of other major Korean yards. Based on price-to-order book, the company is further discounted. STX O&S is trading at only 0.10x, while others are trading at 0.25-0.75x. As STX O&S is expected to show 16-17% sales growth per annum, bigger discounts are found from price-to-order book ratio comparisons.

Table 12 Comparison with other major competitors yards (2010 consolidated basis, $bn)

<table>
<thead>
<tr>
<th></th>
<th>HHI</th>
<th>DSME</th>
<th>SHI</th>
<th>STX O&amp;S</th>
<th>Mipo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated revenue in '10</td>
<td>40.98</td>
<td>11.84</td>
<td>11.96</td>
<td>8.10</td>
<td>3.74</td>
</tr>
<tr>
<td>Consolidated net debt in '10</td>
<td>4.88</td>
<td>2.10</td>
<td>1.16</td>
<td>1.53</td>
<td>-1.54</td>
</tr>
<tr>
<td>Shareholders' equity as of 2010</td>
<td>14.05</td>
<td>3.54</td>
<td>3.16</td>
<td>1.22</td>
<td>4.02</td>
</tr>
<tr>
<td>Market cap (5 April 2011)</td>
<td>35.51</td>
<td>5.99</td>
<td>8.64</td>
<td>1.67</td>
<td>3.55</td>
</tr>
<tr>
<td>Enterprise value</td>
<td>40.39</td>
<td>8.10</td>
<td>9.80</td>
<td>3.20</td>
<td>2.01</td>
</tr>
<tr>
<td>Net debt to equity</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>Net value</td>
</tr>
<tr>
<td>Contract advances</td>
<td>8.92</td>
<td>4.07</td>
<td>4.52</td>
<td>2.00</td>
<td>1.63</td>
</tr>
<tr>
<td>Order book</td>
<td>47.62</td>
<td>24.36</td>
<td>26.77</td>
<td>16.76</td>
<td>7.96</td>
</tr>
<tr>
<td>2010 EBITDA</td>
<td>5.70</td>
<td>1.27</td>
<td>1.28</td>
<td>0.34</td>
<td>0.66</td>
</tr>
<tr>
<td>Price to book</td>
<td>2.53</td>
<td>1.7</td>
<td>2.73</td>
<td>1.36</td>
<td>0.88</td>
</tr>
<tr>
<td>Price to sales</td>
<td>0.87</td>
<td>0.51</td>
<td>0.72</td>
<td>0.21</td>
<td>0.95</td>
</tr>
<tr>
<td>Market cap/order book</td>
<td>0.75</td>
<td>0.25</td>
<td>0.32</td>
<td>0.1</td>
<td>0.45</td>
</tr>
<tr>
<td>Advances/order book</td>
<td>19%</td>
<td>17%</td>
<td>17%</td>
<td>12%</td>
<td>21%</td>
</tr>
<tr>
<td>EV/EBITDA</td>
<td>7.1</td>
<td>6.4</td>
<td>7.7</td>
<td>9.3</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Source: Mirea asset, 2010
2.4 SWOT analysis of STX

The major strength of STX is its vertically integrated value chain. Besides, on-time delivery, economies of scale, quality, and highly skilled labor are also the strong points of STX. The weakness of the industry is basically its high labor costs as compared with China. Also, the firm has excess capacity due to the economic recession in the country so that its firm is highly vulnerable to the business fluctuations due to a portfolio of business concentrated on shipbuilding and shipping.

Table 13 SWOT of STX

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Vertically integrated value chain</td>
<td>• A portfolio of business concentrated on shipbuilding and shipping</td>
</tr>
<tr>
<td>• Access to skilled labors</td>
<td>• High labor costs relative to competitors as labor cost leaders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Specialization in Cruise market as a new segment</td>
<td>• Competitors moving up the ladder</td>
</tr>
<tr>
<td>• Greening of shipbuilding industry</td>
<td>• Demand shift from Korean to Chinese buyers</td>
</tr>
<tr>
<td>• Increasing demand of High valued ships</td>
<td>• Flexible and swift competitor’s governments to support their industry</td>
</tr>
</tbody>
</table>

The opportunities afforded to STX are investment in Research & Development for green energy using its subsidiaries such as STX wind power and solar, and entry into both emerging markets and new segments. After acquiring Aker yards specialized in cruise fleet, STX is the first Korean shipbuilder to ever reach the cruise market. The sources of threat to STX are mainly China, India, and Vietnam who compete with Korea on price. Another major threat is
decrease in shipbuilding orders in recent years due to the economic recession and the big three ship players’ announcement to enter into the cruise market and green energy segment.

2.5 Analysis of Competitive advantages

STX group pursues an ambidextrous strategy. Ambidexterity means on the one hand seeking for more efficient (low cost) operations with Dalian Shipyards, while on the other hand seeking more diversification through both innovation and specialization in Cruise market.

2.5.1 The greatest vertical integration

STX has built a vertically-integrated business structure, covering the areas of ship component, ship engine, shipbuilding, shipping and even energy and power plant since STX pursues a rather different strategy than Chinese, Japan and European shipbuilders. The vertical integration will give STX various advantages such as timely supply of components, consistent quality control, stability of cash flow and faster growth opportunities.

Advantages of vertical integration can be found in:

1) **Timely supply of components**: Shipyards can sustain timely deliveries of ships and expand capacity faster, to follow plenty market demand due to having ship component makers as affiliates.
2) **Consistent quality control:** Quality of ships could be secured by having ship component makers, as they can control the quality of the assembled.

3) **Stability of cash flow:** Proper cash flow control can be achieved by having shipping company and shipbuilder together, offsetting the highly volatile cash flows of both. Shipyards’ cash inflows tend to lag behind those of shipping companies.

4) **Faster growth opportunities:** Having secured supplies, STX can expand capacity faster than peers, whenever required. Also, through its affiliates, STX Pan Ocean can secure shipbuilding slots ahead of competitors.

Moreover the company has the ability to build every type of vessels ranging from LNG carriers, containerships, tankers and bulk carriers to drill ships, cruise ships, offshore service vessels and ice breakers.

![Vertical Chain Structure of STX](source)

*Source: Clarksons*

**Figure 12 Vertically valued chain structure of STX**

The scope of the STX shipbuilders is also much larger since vertically integrated value chain
allows the firm to run in different businesses. For instance STX entered the wind turbine market after buying Harakosan Europe B.V in 2009. Thus, losses in the shipbuilding units can be compensated by other business units. Furthermore the firm avails of much more equity than the smaller sized Chinese and European firms.

2.5.2 Business Diversification: High valued ship building

Given their structure, size and value chain, STX can diversify more easily than other competitors; it has equity to acquire businesses in new shipbuilding market segments for instance the acquisition of Aker Yards by STX and technology to innovate with the changing demands of their customers. Already from the 2007, STX is moving more and more from the low end to higher market segments as shown in Figure 12. STX Shipbuilding Company now incorporates an offshore business. Its company all endeavor to be specialist of both offshore and general shipbuilding. For instance, STX Shipbuilding recently changed its name to STX Offshore and Shipbuilding (STX O&S). This focus will clearly result in heavier competition for the European (mainly Norway) shipbuilders that are specialized in this segment.

STX is stepping up efforts on Cruise ships as one of the High Value ship segment, with STX Offshore & Shipbuilding acquiring a stake in Aker Yards (of Norway) to penetrate this segment, while only SHI among Korean’s competitors has announced plans to develop cruise ships.
### Standard ships

<table>
<thead>
<tr>
<th>Ship Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oil Tanker</strong></td>
<td>Designed to carry crude oil in bulk.</td>
</tr>
<tr>
<td><strong>Bulk Carrier</strong></td>
<td>Designed to carry dry cargo in bulk.</td>
</tr>
<tr>
<td><strong>Container Ship</strong></td>
<td>Load carried in truck-size intermodal containers (containerization technique).</td>
</tr>
<tr>
<td><strong>Roll on/Roll off (Ro-Ro)</strong></td>
<td>Designed to carry wheeled cargo such as automobiles or railroad cars.</td>
</tr>
<tr>
<td><strong>Chemical Tanker</strong></td>
<td>Designed to carry relatively small parcels of higher value chemicals, such as acids or polymers.</td>
</tr>
<tr>
<td><strong>Ferry</strong></td>
<td>Designed to carry primarily passengers, and sometimes vehicles and cargo.</td>
</tr>
</tbody>
</table>

### High Value Ships

<table>
<thead>
<tr>
<th>Ship Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LNG Carrier</strong></td>
<td>Designed to carry liquid natural gas at temperatures of around -160°C.</td>
</tr>
<tr>
<td><strong>LPG Carrier</strong></td>
<td>A tank ship designed to carry liquefied propane or butane in a pressurized environment.</td>
</tr>
<tr>
<td><strong>Cruise Ship</strong></td>
<td>Designed for holiday voyages, where the voyage itself and the ship’s amenities are part of the experience.</td>
</tr>
<tr>
<td><strong>FPSO (FLOATING Production Storage offloading)</strong></td>
<td>Vessel fitted with drilling apparatus. Used for exploratory offshore Oil &amp; Gas drilling or scientific purposes.</td>
</tr>
</tbody>
</table>

Source: Korea Shipbuilder’s Association and STX website

**Figure 13 Shipbuilding diversification of STX**
2.5.3 In strategic alliance with a LNG Firm of transportation and Regasification Solutions

STX Offshore & Shipbuilding ties with Norway's TORP (Terminal Offshore Regas Plant) LNG AS to cooperate in LNG transportation and regasification. TORP LNG holds proprietary technology in the sector and is actively carrying out many related projects on back of the advanced technology. Both strengthen their partnership through exchanging information, attending bids together and jointly conducting construction projects to respond to the fast growing LNG market.

In particular, STX is responsible for designing construction, purchasing equipment and building: EPC (Engineering, Procurement & Construction). The biggest synergy effect expects to be seen in the LNG project market through the latest strategically agreement since TORP's advanced and proprietary technology makes a harmony with STX's shipbuilding capacity. STX takes advantage of a dominant position in the LNG market supposed to grow dramatically in the near future through the recent cooperative agreement.

2.5.4 Cost leadership: STX Dalian Shipyard

STX shipbuilder is also faced with increasing labor costs. This has already resulted in a shift to a low cost country in the region. For instance, STX established Dalian Shipyard in China. Dalian shipyard, in operation from 2008, is the first shipyard that STX constructed at abroad
site. STX expects this shipyard will play a role as a center for 'global STX'. Dalian shipyard started to construct at the site of 5.5million ㎡ in March 2009 as a offshore & shipbuilding total production base. So STX Dalian in China allows its company to be a labor cost leader.

2.6 du Pont Analysis

The DuPont identity is generally accepted as a strategy assessment tool with which to evaluate a company’s capital efficiency and management capability (Firer, 1999; Grant, 2008). The ROIC, which stands for management’s ability to advance and sustain shareholder value (Cao et al., 2006), is an appropriate measure of profitability for strategy formulation (Porter, 2008: p. 83). The ROIC is the return the company earns on each dollar invested in the business (Koller et al., 2005:61) and can be segregated into two parts: (1) how efficiently the resources are allocated and utilized (measured by NOPM, Net Operating Profit Margin), and (2) how effectively the resources are leveraged and managed (measured by Capital Turnover):

\[
ROIC = \frac{NOPLAT}{IC} = \frac{NOPLAT}{S} \times \frac{S}{IC} = NOPM \times \frac{Capital\ Turnover}{IC}, \tag{1}
\]

Where, ROIC (Return On Invested Capital), NOPLAT (Net Operating Profit Less Adjusted Taxes) = EBIT × (1 – tax rate), and IC (Invested Capital) = (Fixed Assets + Current Assets) – Non-Interest-Bearing Liabilities. EBIT refers to Earnings before Interest and Tax, and S to Sales. The NOPM can be further decomposed into a function of selling price and unit cost:
\[ NOPM = \frac{(p \times Q - c \times Q)}{p \times Q} = \frac{(p - c)}{p} = 1 - \left( \frac{c}{p} \right), \]  

(2)

where \( p = \) selling price, \( c = \) the firm’s cost of producing the product, and \( Q = \) sales volume.

Equations (2) shows that the sustainable competitive advantage of firm \( i \) can be obtained by pursuing either Porter’s (1991) two generic strategies or by a blue ocean strategy (Kim and Mauborgne, 2004; Leavy, 2005: 14) that is by; (1) setting a high price level, such as by product differentiation, to yield high resource-produced value, given appropriate cost (Porter, 1991); (2) setting a relatively low unit cost, such as by efficient use of machines, human resources and other resources—to create economics of scale, given appropriate price (Porter, 1991); and (3) the blue ocean strategy, the simultaneous pursuit of differentiation and low cost (Leavy, 2005: 14) by enlarging profit margin through a high price from customers while maintaining a low cost of supply.

Equation (1) indicates that, outside of cost-leading and differentiation strategies, the value of the sustainable competitive advantage can be magnified by the effective use of a firm’s infrastructure and tangible assets (Ichniowski, Shaw and Prennushi, 1997, Peteraf and Reed, 2007). For example, Dell’s “direct” business model brings the firm a higher price and a lower cost structure than those of its rivals. The competitiveness of Dell’s cost advantage is revealed in its high inventory turnover rate, which results in a low cost-of-goods-sold and inventory cost (Rivkin and Porter 2001). Zara, another example, generates competitive advantage from an extremely quick response system. The high profit margin \( (p - c) \), the low working capital
to sales ratio, and the high asset turnover contribute to its high return on equity (Ghemawat, 2004; Ghemawat and Nueno, 2006). From equation (2), we know that, if the firm has a positive profit margin, the invested resource bundles in which it invests are efficaciously consolidated to stimulate revenue.

**Table 14 du Pont identity**

<table>
<thead>
<tr>
<th>Company</th>
<th>Profit margin</th>
<th>Total assets turnover</th>
<th>Equity multiplier</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>STX</td>
<td>0.01 -0.08 0.01</td>
<td>1.1 0.9 1.1</td>
<td>3.2 3.0 2.3</td>
<td>0.03 -0.20 0.02</td>
</tr>
<tr>
<td>HHI</td>
<td>0.17 0.10 0.11</td>
<td>0.8 0.9 0.8</td>
<td>2.1 2.5 4.5</td>
<td>0.27 0.22 0.40</td>
</tr>
<tr>
<td>SHI</td>
<td>0.07 0.05 0.06</td>
<td>0.7 0.6 0.4</td>
<td>4.7 7.1 11.2</td>
<td>0.23 0.24 0.27</td>
</tr>
<tr>
<td>DSME</td>
<td>0.06 0.05 0.04</td>
<td>0.9 0.8 0.7</td>
<td>3.5 4.6 7.7</td>
<td>0.19 0.18 0.19</td>
</tr>
</tbody>
</table>

Source: Annual report of four companies from 2008 to 2010

In Table 14, the profit margins of STX are lower than numbers of other competitors though those of its company increased from 2009 to 2010. HHI, the biggest competitor in the world, has the highest profit margin compared to other players. In terms of total assets turnover, those of STX are slightly higher than others, which mean STX’s efficiency using assets to increase sales is better than other shipbuilding giants. Lastly, numbers shows financial leverage measured by equity multiplier, which means how much companies rely on debt to finance its assets. The equity multiplier of SHI is higher than other shipbuilders; those of STX are stable in comparison with peers, but slightly increased.
III. Literature review

In simple describes literature review can be explained as an account of what has been published by various accredited researchers and scholars on a particular subject or topic (Taylor and Procter, 2008). Thus in this chapter, this paper will review the various findings that have been done on the subject of Mergers and acquisitions. Before I begin with my own investigation and research, it is very important to know what are the diverse findings done till date by various researchers.

3.1. Mergers and acquisitions

The terms “merger” and “acquisition” are often used interchangeably in many studies. The topic of mergers & acquisitions has been increasingly researched in the literature in the last two decades (Appelbaum et al., 2007) in response to the rise in M&A activities as well as the increasing complexity of such transactions themselves (Gaughan, 2002). The advantages of having this kind of business combinations include achieving economies of scale, combining complementary resources, garnering tax advantages and eliminating inefficiencies (Coffee, Louis & Susan, 1988). M&A have been seen as a corporate strategy that receives wide acceptance. The distinction (between merger and acquisition) may not actually matter, since the net result is often the same: two (or more) companies that previously had separate
ownership operate as one firm after the M&A deal takes place, usually in order to attain some strategic or financial objectives (Sherman and Hart, 2006). However, the objective of this section is to define what is meant by mergers and acquisitions (researched by Stephen R. Foerster, & Dominique Fortier, 2000) to be classified into small groups below.

![Figure 14 Classification of M&A’s definition](image)

1) **Merger** means any transaction that forms one economic unit from two or more previous ones. There are several different types of mergers.

   - *Horizontal mergers* involve two firms operating in the same kind of business.

   - *Vertical mergers* involve different stages of production and operations.
Conglomerate mergers involve firms engaged in unrelated business activity.

2) Acquisition means that company X buys company Y and acquires control. When discussing M&A activity, there a number of other terms that are often used.

Leveraged buy-outs (LBOs) involve the purchase of the entire public stock interest of a firm, or division of a firm, financed primarily with debt.

Management buy-out (MBO) refers the transaction is by management. If the shares are owned exclusively by the acquiring party (e.g., management), rather than third-party investors, the transaction is called going private, and there is no market for trading its shares.

Joint ventures involve the joining together of two or more firms in a project or enterprise. In these cases, equity participation and control are decided by mutual agreement.

3) Sell-offs are considered the opposite of mergers and acquisitions. The two major types of sell-offs are spin-offs and divestitures.

Spin-off involves a separate new legal entity is formed with its shares distributed to existing shareholders of the parent company in the same proportions as in the parent company.

Divestitures involve the sale of a portion of the firm to an outside party wit cash or equivalent consideration received by the divesting firm.
The volume of mergers and acquisitions (M&A) has greatly expanded over the past quarter century, particularly in developed markets. Once a U.S. business phenomenon, M&A deals are now commonly used by corporations throughout the world to pursue their goals and objectives related to strategic growth (Gaughan, 2005). M&A have long played a critical role in the growth of firms: Growth is generally viewed as vital to the well-being of a firm (Stephen R. Foerster, & Dominique Fortier, 2000).

All U.S industries have been impacted by mergers and acquisitions deals, with most large firms in the U.S. economy being to some extent products of past M&A (Mueller, 1997). At the same time, academics have developed a series of theories and hypotheses to explain and predict the M&A phenomenon. These theories and hypotheses cover many issues related to mergers and acquisitions, from motives, attitudes, and approaches to the consequences of the transactions, from short-term to long-term performance, and from corporate governance to joint ventures and strategic alliances, which are alternatives to mergers and acquisitions deals. These ideas, derived from theoretical and/or empirical studies based on U.S. data, have been shown to be valid in explaining M&A deals in continental European markets (Tichy, 2001).
3.2. Overview of Theories in M&A

Merger and acquisition has brought forth a total of seven different theories (Lubatkin, 1983). Gort’s (1969) disturbance theory and those approaches that view mergers as process outcomes belong in the second category. Firstly, the category most theories focus on shareholders’ interests while one group focuses on managers’ interests and their deviations from shareholder value maximization as showed in Figure 15.

<table>
<thead>
<tr>
<th>Merger as rational choice</th>
<th>Merger benefits bidder’s shareholders</th>
<th>Net gains through synergies</th>
<th>Efficiency theory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merger benefits managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wealth transfers from customers</td>
<td>Monopoly theory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wealth transfers from target’s shareholders</td>
<td>Raider theory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net gains through private information</td>
<td>Valuation theory</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Merger as process outcome</th>
<th>Process theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merger as macroeconomic phenomenon</td>
<td>Disturbance theory</td>
</tr>
</tbody>
</table>

Source: Trautwein, 1990

**Figure 15 Theories of M&A motives**

Lubatkin lists M&A motivation into seven main theoretical areas such as *Monopoly,*
Efficiency, Valuation, Empire Building, Process, Raider and Disturbance theory. Later a systematic summary of the motives was provided by Trautwein (1990) and Cox (2006). Besides, Foerster and Fortier describes information theory as one of M&A theories. The motivations for merger and acquisition activity seem reasonable of study as has been the case in the past (Berkovitch and Narayanan, 1993, Markides & Oyon, 1998 & Trautwein, 1990).

3.2.1 Efficiency theories

Efficiency Theories are the most optimistic views about the potential of mergers for social benefits. This theory argues that there are indifferences in the effectiveness of managements between companies. This theory also involves the possibility of achieving three forms of synergy such as financial synergies result in lower costs of capital, operational synergies can stem from combining operations of hitherto separate units for example a joint sales force or from knowledge transfers (Porter 1985), Managerial synergies are realized when the bidder’s managers possess superior planning and monitoring abilities that benefit the target’s performance. This theory makes the assumption that economies of scale do exist in the industry and that prior to the merger, the firms were operating at a level of activity that fell short of achieving the potentials for economies of scale in accordance with three types of synergies.
3.2.2 Monopoly theory

This theory describes mergers as being planned and executed to achieve market power. Conglomerate acquisitions may allow a firm to embark on three types of advantages. Firstly, the firm could cross-subsidizes products. For example, STX have set up the greatest vertical integration in order to sustain a fight for market share in another market ranging from ship components, engine, shipbuilding, sipping and energy & power plant. STX allegedly did this after M&A. Secondly, the firm could target at simultaneously limiting competition in more than one market. One way to do so is tacit collusion with competitors it meets in more than one market (Edwards, 1955). A practical example is building a foothold in a competitor’s main market who in turn possesses such a foothold position in the firm’s main market (Porter, 1985). Lastly, the firm could aim at deterring potential entrants from its markets. One possible way of achieving this is concentric acquisition by a market leader (Steiner, 1975). These kinds of advantages have been referred to as competitor interrelationships (Porter, 1985) or collusive synergies (Chatterjee, 1986).

3.2.3 Valuation theory

This approach argues that mergers are planned and executed by manages who have better information about the target’s value than the stock market (Steiner, 1975; Holderness and Sheehan, 1985; Ravenscraft and Scherer, 1987). Bidder’s managers may catch an undervalued company, or they have unique information about possible advantages to be obtained from
combining the targets with their own. Like the financial synergy argument this hypothesis conflicts with that of an efficient capital market. In the common sense an efficient market does not preclude the existence of undervalued target firms, but only the possibility of capitalizing on revealed private information (Wensley, 1982).

3.2.4 Empire-building theory
In this theory, mergers are planned and executed by managers who maximize their own utility instead of shareholders’ value (Berle and Means, 1933). Recently, Rhoades (1983) and Black (1989) have developed related merger explanations. In Baumol’s model (1933) managers maximize revenues subject to a minimum profit requirement. Marris’ model (1964) overcome this static perspective and instead postulates the financially sustainable growth rate of assets as the goal pursued by managers. An empire-building argument is not necessarily confined to the motive of growth maximization (Rhoades, 1983). Rhoades connects the profit motive and the power motive as possible explanation of business behavior.

3.2.5 Process theory
This theory describes strategic decisions not as comprehensively rational choices but as outcomes of process governed by one or more of the following influences: firstly organizational routines, secondly political games played between an organization's sub-units and outsiders, and lastly individuals' limited information processing capabilities. The evidence
on the process theory can best be described as ambiguous. The available evidence is largely supportive (Trautwein, 1990).

3.2.6 Raider theory
A raider is a person who causes wealth transfers from the stockholders of the companies he bids for in the form of greenmail or excessive compensation after a successful takeover. This theory, however, has two problems such illogic and the completely unfavorable evidence. Firstly, any extortion scheme would hurt him disproportionately after controlling stockholder of the company, while partially bought-out stockholders might still enjoy a net gain from his activities. Secondly, in many studies initiated by some of the most prominent so-called raiders, Holderness and Sheehan (1985) found target’s shareholder’s to gain in all cases.

3.2.7 Disturbance theory
M&A waves are caused by economic disturbances: Economic disturbances cause changes in individual expectations and increase the general level of uncertainty, thereby changing the ordering of individual expectations. Previous non-owners of assets now place a higher value on these assets than their owners and vice versa. The result is an M&A wave. This theory is not reflecting on further for three bases. First, it does not discuss the institutional framework for mergers. Second, most disturbances are of a sectoral nature. Lastly, Gort (1981) explains how disturbances affect individual expectations is not sufficient for his hypothesis that this
overturns the ordering of expectation.

3.2.8 Information theories

Information theories refer to the revaluation of the ownership shares of firms owing to new information that is produced during the merger negotiations, the tender offer process, or the joint venture planning. This theory is described as two types such as the kick-in-the-pants explanation and the sitting-on-a-gold mind hypothesis. The first shows where management is encouraged to implement a higher valued operating strategy. The latter describes where negotiations or tendering activity may involve the dissemination of new information or lead the market to judge that the bidders have superior information. The market may then revalue previously "undervalued" shares (Foerster & Fortier, 2000).

3.3. M&A leadership

Every merger and acquisition deal illustrates a different goal and a different mix of critical issues to manage. Leaders of successful M&A deals tend to excel at one of the toughest challenges – articulating the promise of the merged corporation and leading employees, customers, and investors to fulfill it. These leaders focus on the critical elements that drive the merger or acquisition. To improve their chances for success, they review models that others have adopted to handle similar transactions because research shows that most M&A fail for
reasons other than money, generally centered around leadership issues, such as unclear roles, poor decision making, rocky integration, and cultural clashes (Ashkenas et al., 1998; Buono, 1989; Marks and Mirvis, 1999; Post, 1994).

In all mergers and acquisitions, leaders play five essential roles such as visionary, cheerleader, closer, captain, and crusader researched by Gadiesh, Buchanan and Ormiston, 2002 as outlined below.

- First they must establish and communicate the strategic vision for the merger. This means clearly articulating “why we are doing this” and “what we plan to achieve,” both externally and internally typically.

- The leader’s second job is to cheer on the troops – initially his own and eventually both companies’ – to generate enthusiasm for the mergers and acquisitions, and to confront fear and uncertainty in its various forms. Challenges here include combating investors’ fear of stock-price falloff, regulator concerns about unfair competition, executives’ fear of losing status to counterparts from the merging company (often a former rival), employees’ concern over job losses, and customers’ and suppliers’ worries about potential disruptions in service.

- Third, leaders must close the deal, and this is not a given. One in five deals falls through after it is announced, sometimes because of regulatory issues, other times
because of the failure of leaders to resolve outstanding disagreements.

- Fourth, a leader’s task is to captain change by managing the integration of the two firms. The leader should have the action plan including milestones and deliverables for the team.

- Finally, the most challenging call is to crusade for the new firm. Crusading roots itself in the second task – building enthusiasm in both companies – and develops momentum as the deal closes and integration progresses. The crusader needs to give guidance on how to behave and to set both hard and soft targets for performance.

3.4. Post mergers and acquisitions

Post-acquisition achievement study has often investigated the impact of four variables such as a conglomerate firm (Lubatkin, 1987; Agrawal, Jaffe, and Mandelker, 1992; Berger and Ofek, 1995), related acquisitions (Wansley, Lane and Yang, 1983; Hayward and Hambrick, 1997; Lubatkin, Srinivasan, and Merchant, 1997; Walker, 2000), method of payment (Travlos, 1987; Franks, Harris, and Mayer, 1988; Walker, 2000), and prior acquisition experience (Franks, Harris, and Titman, 1991; Kroll et al., 1997; Halebian and Finkelstein, 1999; Hayward, 2002).
3.4.1 Conglomerate firms

Conglomerate firms are widely subscribed as the strategic management literate as that exhibiting significant unrelated product-market diversification (Rumelt, 1974). Conglomerate mergers as defined by the Federal Trade Commission involve the acquisition of completely unrelated companies, companies in different geographic markets, or companies whose products do not directly compete with those of the acquiring firm. Ravenscraft and Schere (1987) describe that the 13 most acquisitive conglomerate firms, experienced returns 3.6 times greater than the S&P500 between 1965 and 1968, and 2.7 times greater than the S&P500 between 1965 and 1983. In addition, Campa and Kedia (2002) conclude diversification is a value-enhancing strategy. A positive impact on performance in conglomerate firms is suggested since they are more likely to possess a business integration competence that allows them to create rather than simply acquire value through M&A activity (Salter and Weinhold, 1978). The assumed presence of what might be termed a ‘conglomerate effect’ on post-acquisition performance has led to several studies in this area (Agrawal et al., 1992; Lubatkin, 1987).

3.4.2 Related acquisitions

Majority of the M&A literature suggests that acquiring related firms lead to increased post-acquisition performance (Capon et al., 1988; Kusewitt, 1985; Palich, Cardinal, and Miller,
Business relatedness is described as enabling the acquiring firm’s managers to effectively employ their ‘dominant logic,’ or common conceptualization of the success requirements in an acquired business (Prahalad and Bettis, 1986). Industry familiarity can eliminate or significantly diminish the need for acquiring firm managers to ‘learn’ the business of the acquired firm, and facilitate learning from the acquisition process per se (Hitt, Harrison, and Ireland, 2001).

In the context of acquisitions that require remarkably managerial involvement, familiarity with the acquired firm’s market is frequently key to the successful post-acquisition integration of the acquired business (Robert and Berry, 1985). Related acquisitions can also allow acquired firm’s existing assets including intellectual properties to be productively leveraged in new businesses where those resources are more likely to be worth and suitable. Also related acquisitions may simply diminish the financial risk innate to acquisitions (Bergh, 1997).

Previous study describes the discoveries of the acquired firm interconnectedness on acquired firm performance.

3.4.3 Method of payment

Method of payment simply describes two fundamental ways by which an acquiring firm can pay for an acquisition: cash and stock shares. Research from finance suggests that an acquiring firm’s managers will seek to finance an acquisition in the most profitable way
(Travlos, 1987). For example, executive will pay an acquisition with cash if they believe their firm’s stock is underestimated, while if they believe their firm’s stock is overvalued, with stock. Thus whether to use the cash or not may sign manager expectations that post-acquisition performance will be specifically very positive.

The method of payment also influences on the way of accounting for an acquisition, which has suggestions for post-acquisition performance. Most of studies introduce two ways of accounting for an acquisition such as the pooling of interest method and the purchase of method. Pooling of interests is mostly used when an acquired firm is acquired using stock as payment (Ravenscroft and Scherer, 1987). Pooling of interest accounting is associated with higher acquisition premiums (Ravenscroft and Scherer, 1987), and premiums paid for acquired firms have been shown to negatively impact post-acquisition (Hayward and Hambrick, 1997; Sirower, 1997). Still, a direct relationship between way of payment and post-acquisition performance remains to be demonstrated (Hayward and Hambrick, 1997).

3.4.4 Acquisition experience

Acquisitions create complex organizational challenges, and both individual and organizational experience may be required to avoid integration problems (Haspeslagh and Jemison, 1991). As an example, at the individual lever, lack of acquisition experience may make a CEO specifically vulnerable to escalation of commitment that can lead to the completion of deals at
unreasonably high costs (Haspeslagh and Jemison, 1991). Besides, experience from past acquisitions may build facilitating processes for the identification (Hitt et al., 1998) and integration of acquired firm resources, which may be required to improve post-acquisition performance (King et al., 2004).

Prior acquisition experience has been found to predict success in later acquisitions (Bruton, Oviatt, and White, 1994; Fowler and Schmidt, 1989), to predict a diminishment in performance as the number of acquisitions improve (Kusewitt, 1985), and to have no impact on acquisition performance (Lahey and Conn, 1990).

3.5. Success factors in mergers and acquisitions

1) Critical success factors in M&A

In terms of success factors for M&A deals, the literature diagnoses many sets of the factors covering different stages in the M&A process. As showed in Table 15, four 'must-do' factors were researched by Rockwell (1968) in the planning namely identifying merger objectives, specifying gains for owners, checking management ability and seeking a good fit, while labeling the other six factors such as the continuous involvement of head management, defining the business area, analyzing performance factors, resolving problem early, moving M&A activities in the right advances at the right time, and absorbing human resource with care as key factors for consideration. Similarly, Jennings (1985, p.37) places importance in
the planning stage, “Planning an acquisition strategy can help avoid a takeover marked by poorly matched partners and maximize the potential for success”. He also suggests that the firms focus on comprehensive analysis, consider more than financial growth, later invest considerably in managing the integration process, and always stay alert for warning signs of unsuccessful acquisitions.

Table 15 Literature summary on success factors in mergers & acquisitions

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1. Pinpoint the objectives</td>
<td>1st stage: front-end success - selecting the right target for M&amp;A</td>
<td></td>
</tr>
<tr>
<td>2. Specify gains for owners</td>
<td></td>
<td></td>
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<tr>
<td>3. Check management ability</td>
<td></td>
<td></td>
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<tr>
<td>4. Seek a good fit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 key factors for consideration</td>
<td>2nd stage: integration success – achieving combination objectives</td>
<td></td>
</tr>
<tr>
<td>5. Involve the head man</td>
<td>6. Selecting the right leadership</td>
<td></td>
</tr>
<tr>
<td>6. Define business</td>
<td>7. Structuring the integration team</td>
<td></td>
</tr>
<tr>
<td>7. Analyze performance factors</td>
<td>8. Detailed planning</td>
<td></td>
</tr>
<tr>
<td>8. Face problem early</td>
<td>- Communication plan</td>
<td></td>
</tr>
<tr>
<td>9. Make the right advances</td>
<td>- Integration plan</td>
<td></td>
</tr>
<tr>
<td>10. Absorb people with care</td>
<td>- People plan</td>
<td></td>
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</tbody>
</table>

Source: Hoang and Lapumnuaypon, 2007

Specifically about the planning issue, Jennings (1985) notes that in successful M&A projects, the M&A program in the acquiring company is well-structured, with comprehensive acquisition criteria, backed up by comprehensive analysis of various factors/areas, and
proactive candidate identification and contact. The successful acquiring company also makes a subsequent comprehensive plan covering all functional areas and defined responsibilities and timing for the integration phase. More recent studies diagnose various success factors of M&A such as effective communication throughout the M&A process, clear goals, reasonable time frame, top management commitment and support, competence of project team, flexible and comprehensive integration plan, learning organization, and manager capabilities (Appelbaum et al., 2000a and 2000b, Schraeder and Self, 2003, Gomes et al., 2007). Galpin and Herndon (2000) construct ten key recommendations in creating a successful merger which they define as a faster and smoother integration for the resulting firm. However, many of these recommendations are those that firms have to prepare or do prior to deal closure. DiGeorgio (2002, 2003) goes more specifically to classify the success of M&A into two stages. The first stage is called front-end success and the second stage is integration success. The result of the front-end success is to select the right target for M&A which comprises many elements such as characteristic of leadership, the facilitating climate within the stakeholder team, adequate time and resources and tools for M&A analysis, possessing learning mechanisms, and understanding culture and organizational structure differences entailed in the analysis. The successful outcome of the second stage is to achieve the objectives, which needs selecting the right leadership, structuring the integration team, and detailed plan in terms of communication, integration, and people issue (Hoang and
2) Critical success factors in different industries

In the vast literature in the area of critical success factors, there are many reviews to identify and compare the factors for a particular type of industries. The Success factors have different relative importance across different industries evidenced by Belassi and Tukel (1996), Belout and Gavrevant (2004), and Zwikael and Globerson (2006). Especially, Belassi and Tukel (1996) noted that managerial skills are the most important factor in MIS and manufacturing industries. In the study of Belout and Gavrevant (2004), all factors accounted for in their study are conducted significant in information technology industry. In engineering industry, project mission and client acceptance seem to have important links to the project success for advisory firms. Whereas Zwikael and Globerson (2006), in their researches to prioritize the impact of the factors across industry, illustrate that project plan development is a critical factor regardless of industry type. Besides, the perceived importance of the same set of success factors is different across industries illustrated by Fryer, Antony, and Douglas. According to many studies, the relative importance of the success factors varies across different industries as shown in Table 16 to assist readers with a quick view on the literature review in this specific area.
Table 16 Critical success factors in different industries

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Project size</td>
<td>Project mission</td>
<td>Activity definition</td>
<td></td>
</tr>
<tr>
<td>Coordination</td>
<td>Management support</td>
<td>Schedule development</td>
<td></td>
</tr>
<tr>
<td>Technology background of project team</td>
<td>Project schedule</td>
<td>Project plan development</td>
<td></td>
</tr>
<tr>
<td>Competence of project team</td>
<td>Personnel</td>
<td>Scope planning</td>
<td></td>
</tr>
<tr>
<td>Top management support</td>
<td>Technical Tasks</td>
<td>Organizational planning</td>
<td></td>
</tr>
<tr>
<td>External factor-Technology</td>
<td>Communications</td>
<td>Activity duration estimating</td>
<td></td>
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<td></td>
<td>Monitoring-control</td>
<td>Staff acquisition</td>
<td></td>
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<tr>
<td>Troubleshooting</td>
<td>Resource planning</td>
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</table>

| Engineering                         | Project mission          | Activity definition         |                             |
|                                     | Client acceptance        | Schedule development        |                             |
|                                     |                          | Project plan development    |                             |
|                                     |                          | Activity sequencing         |                             |
|                                     |                          | Scope definition            |                             |
|                                     |                          | Cost estimating             |                             |

| Construction                        | Coordination             | Client acceptance           |                             |
|                                     |                          | Communications              |                             |
|                                     | Technology background of project team | Monitoring-control |                             |
| Communication                       |                          |                             |                             |
| External factors-Economic, Technology, Client |                          | Project plan development |                             |
|                                     |                          | Cost budgeting              |                             |
|                                     |                          | Quality planning            |                             |
|                                     |                          | Communication planning      |                             |
|                                     |                          | Resource planning           |                             |

Source: Hong and Lapumnuaypon, 2007
IV. The Key Principles to Successful M&A of STX

4.1. A deeper understanding of the value of targets

The essential starting point is a clear understanding of the value of the company to a given acquirer under his or her ownership since a successful merger integration program should be built on a strong understanding of the key reasons for the deal.

Table 17 STX’s M&A activities in shipbuilding industry

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Rename</th>
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<tbody>
<tr>
<td>2000</td>
<td>Ssangyong Heavy Industries</td>
<td>STX Engine</td>
</tr>
<tr>
<td>2001</td>
<td>Daedong Shipbuilding</td>
<td>STX Offshore &amp; Shipbuilding</td>
</tr>
<tr>
<td>2002</td>
<td>Sandan Energy</td>
<td>STX Energy</td>
</tr>
<tr>
<td>2004</td>
<td>Pan Ocean Shipping</td>
<td>STX Pan Ocean</td>
</tr>
<tr>
<td>2007</td>
<td>Norway’s Aker Yards</td>
<td>STX Europe</td>
</tr>
</tbody>
</table>

For 27 years, Mr. Kang Duk-su, a founder of STX, was an ordinary salaried worker at Ssangyong Heavy Industries Company in Shipbuilding industry. Thus the management has a deeper understanding of their targeted companies since the targets are almost related to shipbuilding industry. As a result, STX bought Daedong Shipbuilding, Sandan Energy, Pan Ocean Shipping and Norway's Aker Yards in order and rebadged STX Offshore & Shipbuilding, STX Energy and STX Pan Ocean, and STX Europe; one of Europe's largest
shipbuilder specialized in cruise vessels.

4.2. Focus on future value of Targets: nurturing targets after M&A

Mr. Kang Duk-su, a Chairman of STX group, emphasizes “The key to successful mergers and acquisitions is to create synergy with your existing businesses. We are differentiated in that we are not just good at acquiring companies but at boosting the acquired company's value.”

![Figure 16 Total sales & assets and STX’s M&A activities](image)

Source: Annual report of STX, 2010

STX directed a major effort toward improving future value of targets as synergy effect.

Various types of synergies exist such as cost savings, revenue enhancements and process improvements. In terms of cost savings, this is probably the most common type of synergy
achieved through economies of scale. So STX could enjoy taking advantage of economies of scale since the company adds value in this context by capitalizing on functional economies of scale to cut costs and improve target’s value and assets.

After M&A, STX diversified their business from containers to LNG ships and worked hard to improve their financial structure as effective management and due to economic boom at the same time; its company could reach its sales of $25bn, compared with only $727m in 2001 as shown in Figure 16.

In addition, STX had created a very advanced value chain from shipbuilding to shipping in order to maximize a synergy effect so that its company acquired a Pan Ocean firm whose sales was bigger than those of STX in 2004 and then renamed it STX Pan Ocean. The STX Pan Ocean showed a dramatically growth since most of factors might be synergy effects between businesses, the increased demand of both iron ore & coal due to economic boom.

4.3. To buy Targets as well as human resources

A follow-up strategy after M&A of Mr. Kang, a Chairman of STX, is so-called ‘magnanimity.’

For instance, CEOs of STX, STX Pan Ocean, and STX Energy were from external companies including targets such as Pan Ocean. Each business of STX group assigned the people who were responsible for same businesses for long while. Mr. Kang emphasizes ‘I bought talented
persons rather than companies’ as often as he acquired targets. Thus STX has been never renewal of personnel in targets after M&A. Because of this principle, STX didn’t face some problems such as employees ‘concerns over job losses and customers’ and suppliers’ worries about potential disruptions in service. In order to overcome a short history of STX, its company needs to unite its people from external targets and to enthusiasm for the teams responsible for integration as one which Mr. Kang knew well. The chairman of STX group has never expected massive layoffs for laborers and a reduction in managerial positions as a result of the mergers and acquisitions.

4.4. Initial Public Offering as a sound conservation strategy

Most of targets which STX acquired were unlisted firms. STX made a good purchase because the targets had already a high effective management and lower in debt. STX went to public with IPO which means an Initial Public Offering, also known as “going public”, is the most profitable and most high profile conservation strategy. An IPO in simple words is when a company issues shares (equity), to the public in order to raise funds. IPO’s usually take place when the firm would be at a peak of its productivity cycle (Clementi, 2002). Being a public company comes with certain benefits. The more immediate positive is the large amount of cash raised through an IPO, which can enable solid growth and redeem a capital invested.
4.5. Enter into New Segment through abroad

STX felt the limit on standard ship building with major competitors of Korean shipbuilders as the center, acquired Aker yard in order to build a new power source of growth. Acquiring Aker gives STX a strong footprint in the cruise ship and offshore service market. The cruise ship product (which is still dominated by EU countries) only accounts from 2% of production output but accounts for 20% of market value. Despite its significant advancements in shipbuilding technology, South Korea has had some difficulties in breaking into the cruise market as one of the “High Value Ship” segment as it faces intense competition in the Standard Ship segment.

STX's acquisition of Aker has raised fears that it could transfer the expertise in cruise ships to its lower-cost Asian yards, leading to the loss of more European shipbuilding jobs. Cruise ships are one of Europe's last areas of competitive advantage in the industry. It will also help it to expand in Europe at a time when it faces increased competition from China and lags behind bigger rivals such as Hyundai Heavy Industries and Samsung Heavy Industries.
V. Findings and Discussions

This chapter presents analyses and discusses the research findings from both literatures and the case of STX. Based on my review of the literature on success factors for M&A activity, this study have arrived at the following two key findings:

1) **Fast and remarkable growth strategies of the firm.**

This study shows Mergers and acquisitions (M&A) can be an effective strategy for the growth of firms even though M&A may not lead to positive performance outcomes in accordance with multiple studies; Ravenscraft and Scherer (1987) and Herman and Lowenstein (1988) examine the earnings performance after takeovers and conclude that merged firms have no operating improvements; Porter (1987) found that more then half of the acquisitions by major US companies failed. However many researches strongly support M&A as one of the most important growth strategies, the advantages of having this kind of M&A include achieving economies of scale, combining complementary resources, garnering tax advantages and eliminating inefficiencies (Coffee, Louis & Susan, 1988). Ravenscraft and Schere (1987) noted that the several most acquisitive conglomerate firms, witnessed returns about three times greater than the S&P500 between 1965 and 1983. Also Campa and Kedia (2002) describe diversification is a value-enhancing strategy. Therefore, STX has used M&A as a central post of its overall growth strategies, helping it achieve one of top-shipbuilding players in the world.
2) STX faithfully tags along with critical success factors and theories of literates.

In the first stage, in order to select the right target for M&A, STX pursues fundamentally to achieve synergies of three types: financial, operational and managerial described by efficiency theory. Besides, the firm had instinctively reached the four ‘must-do’ factors researched by Rockwell (1968) in the planning namely identifying merger objectives, specifying gains for owners, checking management ability and seeking a good fit, and also deeply considered the six factors such as the continuous involvement of head management, defining the business area, analyzing performance factors, resolving problem early, moving M&A activities in the right advances at the right time, and absorbing human resource with care.

![Figure 17 Relationship between literatures and STX M&A activity](image)

In the second stage, Mr. Kang had took personal commend of every STX’s M&A activities in order to achieve combination targets due to being the right leadership, structuring the integration team, and detailed plan in terms of communication, integration, and people issue...
since many recent researches diagnose management commitment and support, competence of project team, flexible and comprehensive integration plan, learning organization, and manager capabilities are the most essential success factors of M&A. As a result, STX after M&A had enjoyed taking advantages of cross-subsidize products, economics of scale and scope which result in higher market power and the owner of STX became a man of wealth described by *Monopoly theory* and *Empire-building theory*.

- The two key findings reveal a knowledge gap in the literature

In accordance with literature researches (Lubatkin 1983; Trautwein 1990; Cox 2006), the theories of merger motives are separated into two categories: 1) focusing on shareholders’ interest, 2) emphasizing on manager’s interest and their deviations from shareholder value maximization as shown below

![Merger as rational choice](image)

This study, however, is observed on a knowledge gap in the literature between shareholder’s interest and managers’ one since STX’s case have used several M&A as a primary pillar of their growth strategies, which helps definitely the two stakeholders achieve their maximized benefits since M&A deals has to a great expanse been driven by the greatest synergies and
market power in various different segments. Therefore, the case of STX shows the intersection area of two circles as shown below whose area could be new ‘Merger motives’ for both shareholders’ benefit and managers’ one which would be needed as another independent theory in ‘Merger motives’ theories conducted by Lubatkin, 1983.

![Diagram showing the intersection of merger benefits for bidder's shareholders and managers](image)

**Figure 18 The intersection of merger benefits**

- Lessons from the case of STX

Mergers and acquisition is an endless happening in the business world, and always critical issues for study since many of literatures have shown that most deals destroy value for the acquirer’s shareholders. Although many acquisitive companies do destroy value of their firm (Ravenscraft & Scherer, 1987; Herman & Lowenstein 1988; Porter, 1987), some of the world’s best performing corporations are also unusually acquisitive (Ravenscraft and Schere, 1987). Besides, M&A have been an important strategic tool for well over a century (Langford and Brown, 2004). So M&A is a well-know way for businesses growth, not secret business tools. However key success factors after reviewing many literatures conducted by various
accredited researchers and scholars on a particular M&A do exist.

In order to learn lessons from STX’s case as one of the most successful acquirers, rivals should consider keeping track of STX activities which might not be an absolutely sure-fire formula for M&A success, but many businesses could be using this case as an important reference material. So they could replicate STX’ successful strategies only if they follow STX’s success factors and principles: i) focusing on synergies and diversification rather than goals of savings, ii) boosting the acquired company's value, and iii) avoiding selecting the wrong targets, overpay and neglect their pre-existing businesses due to a winner curse and an excitement of post-deal integration. Besides, the chairman in STX group is so good with figures because he was CFO (Chief Financial Officer) at previous company, Ssangyong heavy industry. Because of this reason, Mr. Kang had took the leading role in dealing for every its M&A activities due to management commitment, support, and manager capabilities are the most necessary success factors of M&A.
VI. Recommendations to Rivals in the Emerging Markets

This chapter led to the final-and perhaps most valuable-aspect of this paper. Now that this article has provided recommendations on "what" rivals in the Emerging Markets must do to increase their chances of success, but rivals in emerging economics must consider many strategies in accordance with researches: Thomas, Robert, and Sabine (2009) conclude important differences exist across developing countries in terms of successful business strategies. This STX’s case illustrates M&A could be an important strategy for corporate growth, but the firms need to consider a balance between corporate strategy and M&A strategy. In line with Harding and Rovit (2004), businesses in the current study emphasized the need for alignment between corporate strategy and M&A strategy. But some businesses lamented that they did not always link their merger and acquisition strategy with their corporate plan concluded by Jarrod McDonald, et.al., (2005), because strategic planning has long been emphasized by organizations as an important tool leading to business success (Coulthard, Howell & Clarke, 1996). Also in a study conducted by Harding and Rovit (2004) the importance of aligning corporate strategy to planning for mergers and acquisitions was examined.

In this study, STX’ strategic rationale for M&A that creates value typically conforms to the following five recommendations: 1) improving the performance of the target company, 2) having a sound conservation strategy such as IPO, 3) creating market segments access for
products, 4) acquiring human resources with skills or technologies as well as their care, and 5) building a vertically-integrated business structure for growth opportunity.

This case of STX shows M&A could be one of success factors: The M&A activity has to a great extent been driven by synergies and market power in the case of STX. Although many acquisitive companies do destroy shareholder value, this study illustrates STX group’s case is one of the world’s best performing firms, and proves acquisitive is one of the best strategies for firms growth.

In addition, STX have faithfully followed critical success factors and theories for M&A since the firm believes the main source of value addition in M&As arise from synergies so that its company that has been made in shipbuilding industry has more focused on the goal of growth through synergies and diversification rather than goals of savings others. And STX had created the greatest vertical integration from shipbuilding to shipping in order to maximize a synergy effect. This also provides further support to the M&A as one of the business strategies for corporate growth.
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