



CHALMERS
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Critical Success Factors in the Ship Brokerage Sector

with emphasis on dry bulk in relation to ongoing trends

Master's Thesis in the Master's programme in Maritime Management

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Department of Shipping and Marine Technology
CHALMERS UNIVERSITY OF TECHNOLOGY
Göteborg, Sweden 2015
Master's Thesis 2015:15/312

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Cover:

Drawings made by children from the Bamse division at Förskola Pärlan in Angered, Gothenburg. The drawings illustrate the children's perception of the sea environment and transportation.

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ABSTRACT

Ongoing trends in the shipping industry have placed mid-sized dry bulk ship brokerage firms in dire straits. For one thing, the market share is divided to a reduced number of ship brokerage firms, in respect of mergers and acquisitions (M&A) and, for another thing, the considerable transparency due to the information flow has brought the antagonism a few quarters of a second away. Limited literature and studies exist in relation to this modern matter in the European shipping industry which this thesis makes an effort to cover with a qualitative study. In order for the investigation to have a more representative result, the investigation involves interviews of ship brokerage firms that are situated in the UK, Greece, and Sweden. In addition, since the main trends and obstacles are related to M&A and considerable flow of information, the investigation has adopted an angle towards business intelligence and information technology as well as change management. The outcome of this thesis is several critical success factors that could be applied on the dry bulk ship brokerage sector. These critical success factors are related to Kotter's change management theory and Kelly's network economy theory together with Bullen & Rockart's perspective.

Key words: Critical success factors, Ship brokerage, Change management, Network economy, Mergers and acquisitions, Business intelligence, Information technology, post-Leman brothers crisis

Table of Contents

ABSTRACT	I
TABLE OF CONTENTS	III
PREFACE	VII
LIST OF FIGURES	VII
LIST OF TABLES	VII
LIST OF ABBREVIATIONS	VII
1 INTRODUCTION	1
1.1 Background	1
1.2 Purpose & statement of the problem	2
1.3 Hypothesis & research question	3
1.4 Research Design	4
1.5 Delimitations	4
2 METHODOLOGY	5
2.1 Selection process for the field study	5
2.2 Qualitative data	6
2.3 Transcribing technique	7
2.4 Grounded Theory	7
2.5 Background research	8
2.6 Validity	8
3 THEORETICAL BACKGROUND	10
3.1 Bullen and Rockart's CSFs theory	10
3.2 Kotter's change management theory	10
3.3 Kelly's network economy theory	13
4 RESULTS	18
4.1 The state of the ship broker's market	18
4.1.1 Ongoing trends, influence and change	19
4.2 Aspects of the 21st century ship broker	21
4.2.1 Education, experience and continuous improvements	23
4.2.2 Customer perspective, service and trading custom	24
4.3 A ship broker's future prospects	26

5	ANALYSIS	28
5.1	Kotter's change management theory	28
5.2	Kelly's network economy theory	31
6	DISCUSSION	34
6.1	Suggestions	36
6.1.1	Improvements in relation to Kotter's theory	36
6.1.2	Improvements in relation to Kelly's theory	38
6.2	Methodology discussion	40
7	CONCLUSION	43
7.1	Future research	44
	REFERENCES	45
	APPENDIX A	47

Preface

This thesis is a part of the requirements for the Master's degree in Maritime Management and has been carried out at the Department of Shipping and Marine Technology at Chalmers University of Technology in Gothenburg, Sweden, during the spring term of 2015. The names of the M.Sc students conducting the investigation are Dimitrios Exameliotis and Patrik Kleberg, and they have been supervised by the Technology Lecturer Anna Hedén at Chalmers University of Technology.

The authors would like to start off with acknowledging and thanking their supervisor, who has been very helpful during the whole thesis period between January and June, for her excellent guidance and support throughout the working process in relation to the thesis. They would also like to thank all of the companies that they have been in contact with and welcomed them in London (United Kingdom), Piraeus (Greece), and Gothenburg (Sweden), thus allowing themselves to be interviewed in order for the study to completed. The final results would not have been possible without your help and without your response the validity would have been non-existent.

Göteborg June 2015

Dimitrios Exameliotis

Patrik Kleberg

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List of Figures

Figure 1: Communities and firms in the network economy from the author's point of view	16
Figure 2: Tree of opportunities designed by the authors and based on an illustration in Kevin Kelly's book "New Rules for the New Economy" ...	17
Figure 3: Closed network of professionals achieving collaboration with clients that has pooled their capabilities	39

List of Tables

Table 1: Progression of change of inert objects towards the network economy	15
Table 2: Kotter's theory - degree of implementation by the ship brokerage industry	36
Table 3: Kelly's theory - degree of implementation by the ship brokerage industry	38

List of Abbreviations

BI:	Business Intelligence
BIT:	Business Intelligence Tools
BIMCO:	Baltic and International Maritime Council
CRM:	Customer Relationship Management
CSFs:	Critical Success Factors
ICT:	Information & Communication Technology
IPO:	Initial Public Offering
IT:	Information Technology
M&A:	Merger and Acquisition
PE:	Private Equity
Prosumer:	The customer whose voice has an impact on the products he/she consumes.
SMEs:	Small- and Mid-sized Enterprises

1 Introduction

In this thesis the focal point is on a segment of the maritime industry; ship brokerage firms and, to be more specific, the subsistence of mid-sized ship brokerage firms competitive advantage against the corresponding large-sized enterprises in the dry cargo segment. The advent of modern trends in the ship brokerage sector is evidence to the fact that mid-sized companies can be lucrative targets for acquisitions by the large firms. On the face of it, it seems that the targeted for acquisition mid-sized firms surrender to the powerful giants of the Ship brokerage segment. Without doubt, acquisitions have the potential to play significant role in the successful operation of businesses, since resources have to be reallocated according to the demand (DePamphilis, 2011). However, the separate existence along with the high competitiveness of middle market firms is a major factor that positively affects and drives the economic development of the countries where they operate in (Malshe, 2012). This study's aim is the identification of factors that will aid European mid-sized ship brokerage firms; an aid that will contribute to their endurance of their important position in the competitive environment of the global maritime industry or be part of successful acquisitions or mergers.

1.1 Background

Numerous studies have been carried out in respect of identifying factors and conditions that considerably affect the performance of firms. The question that has been tried to be answered is whether these factors are closely connected or not to the size of the investigated firms; small-, mid-, or large-sized. Furthermore, theories have been developed and researches have taken place in relation to firms' success factors, irrespectively of companies' size. This can be a result of successful organizational change and adaptation to a fast moving environment, while it is important that the core values remain constantly unchangeable and walk hand-in-hand with firms' flexibility (Whiteley & Whiteley, 2007).

Firstly, findings have shown that it is of high importance that the available information technology (IT) is utilized by firms. In specific, it is argued that small- and mid-sized enterprises (SMEs) considerably lack of proper implementation of business intelligence (BI), which in turn leads to inferior business performance in comparison to large-sized enterprise (Olszak & Ziemba, 2012).

In addition, according to a research carried out in 2007 (The Economist Intelligence Unit Ltd., 2007), the combination of information and communication technology (ICT) can provide SMEs with the foundation for confronting the challenges that SMEs face. Thus, they can become highly competitive by implementing IT tools that will allow SMEs to be interlinked and online-interact with partners and customers around the world. Moreover, high-ranked officers of mid-sized companies claim that the contribution of technology is of

major importance when it comes to the customer relationship management (CRM).

Another approach to the matter is the size of the firms. In this perspective, there seems to be a weak but affirmative connection between a firm's size and its profitability (Pervan & Visic, 2012). In particular, the facts that support this position lie in the perspective of increased market power, cost reduction from economies of scale, and considerable multifaceted bargaining power which gives the firms the opportunity to create advantages over customers, suppliers, mergers and acquisitions (M&A).

In addition, there is a need for addressing the important issue of mergers and acquisitions in a more effective way. In this way, the important resources could be allowed to be transferred where they are needed (DePamphilis, 2011). Therefore, companies involved in such actions should have a considerable understanding around M&A and their significance in the economic growth of modern societies. However, the evidence shows that the chance of failure for M&A is approximately 70% (McKinsey&Company, 2010) since long-term perspectives are not taken into consideration. To be more specific, it is of higher priority for them to maintain the satisfaction of the shareholders.

Another issue that is usually engulfed within the core of firms is the difficulty in prioritizing among the concerns that compete for the firms' attention. For this reason, the idea of critical success factors (CSFs) comes to the foreground in order to assist companies in coiling around pivotal success references and measures (Mindtools, 2011). In this matter, there exists a great variety of different methods that could be of great assistance in the identifications of CSFs (Amberg, Fischl, & Wiener, 2005).

To continue, according to Garver et al (1998) it has been identified that one of the most difficult but significantly remunerative area of management is that of sales forecasting. Not surprisingly, it is often the case that companies do not manage to correctly address this important function. Owing to this, accurate sales forecasting can positively affect the bottom line of the firms by keeping satisfied their partners, if any, and their customers. (Garver et al, 1998). Hence, it is important that forecasting should be based on the solid ground of accurate and relevant information rather than the unstable state that is posed by random and frequent information (Lin & Carley, 1993).

1.2 Purpose & statement of the problem

Without doubt, transportation of goods by ships plays the most important role in the world economy by contributing with 80% of the global transported volume in the global logistics system (United Nations, 2013). Under this condition, it is well understood that the importance of ship brokerage firms is of major importance in order for the maritime industry to function efficiently and effectively (Prasad, 2009). In specific, mid-sized ship brokerage companies' contribution is significantly enhanced, compared to the small- and large-

sized ship brokerage firms. Additionally, they are better sustained during economical crises and, moreover, together with the rest of the mid-sized market they contribute to a higher extend to the creation of national employment and drivers for economical growth (Malshe, 2012). Therefore it is considered of great importance that the mid-sized ship brokerage firms remain at the foreground of the competition of the sector they belong in. Consequently, this study aims towards covering the gap in the knowledge by identifying factors that will assist mid-sized ship brokerage firms in surviving changes detrimental to the shipping sector in terms of:

- Low dry cargo freight and bunker rates
- Mergers and acquisitions
- Demanding customers
- Standardization of transportation of goods
- Modern ways of doing business
- Overnight regulations' changes and bans

From a more narrow perspective, this study's purpose is to become a tool of great assistance for the European mid-sized ship brokerage companies in order to proceed to better decision-making. In this way it is established a base of a possibility for the European mid-sized firms' successful positioning and adaptation to the perpetual flow of changes in the competitive global ship brokerage industry.

1.3 Hypothesis & research question

The present study springs from the authors' deep interest in the European mid-sized ship brokerage market, which contributes with its own resources and capabilities to the large pot of resources and capabilities of the general European mid-sized market. In turn, the mixture that is delivered from the pot has the ability, if it is successful, to help in building up a European society which can be comprised of low unemployment rates, high competitiveness and revenues (Malshe, 2012).

The present thesis contributes to the knowledge bank, in relation to the factors that successfully facilitate the competitiveness of European mid-sized ship brokerage firms, by finding answers through what the ship brokerage sector perceives as CSFs in order for the dry bulk sector to endure and/or excel against ongoing trends in the shipping industry.

- Research question

Is it important for the mid-sized dry bulk ship brokerage firms, and to what extent, the implementation of BI such as high-end IT solutions in relation to communication, use of information, and customer relationship management from a network and change management perspective?

1.4 Research Design

This investigation uses the open interviews method and it is focused on ship brokerage firms located in United Kingdom (London) or Greece (Piraeus). Moreover, prior to the execution of the interviews, relevant literature has been studied and, on this basis, questions are formulated in order to be used in interviewing the selected participants. Afterwards, pilot interviews are performed with two Swedish ship brokerage firms in order to test the relevance and effectiveness of the interviews.

In respect of the data collection, the interviewers choose to audio-record each and every interview. Moreover, during the interviews notes are written down of the most important comments that the participants make. Each of the audio-recordings is marked with an individual and randomly chosen number in order to be protected the anonymity of the interviewed companies. Therefore, when this thesis refers to an interview or participant, instead of mentioning the name of the interviewee and/or company, it is mentioned a corresponding number of the interview or participant.

Taking into consideration the knowledge that it is acquired from the pilot interviews, the real interviews are carried out with the selected participants. These interviews, since they are recorded, are carefully transcribed, and the produced text is fed into the *Atlas.ti* computer software which is suitable for the method of interview-analysis that the authors follow; the grounded theory.

1.5 Delimitations

This investigation is limited to the dry bulk ship brokerage sector in scope. However, the concluded interview sample includes actors from other sectors as well. In this way, it is identified how different actors in the ship brokerage sector perceive dry bulk and the shipping industry from a holistic perspective. The interviewed sample only consists of five ship brokerage firms of varying size, all members of BIMCO, over lack of time due to hectic market conditions. Furthermore, the interviewed sample is divided between the United Kingdom (London) and Greece (Piraeus) in order to acquire a representative sample for the European market. The size of firms is categorized according to the number of their employees, limited to their own perception, and not in respect to either annual turnover or diversification.

Moreover, the following broader areas of knowledge in reference to *Bullen & Rockart's theory of CSF*, *Kotter's change management theory*, and *Kelly's ten principles of the network economy* are studied and incorporated into the manifestation of the present study. In addition, a more detailed presentation of the theories mentioned afore takes place in chapter 3, Theoretical background, of the present Master's Thesis.

2 Methodology

A qualitative study is considered to be appropriate for the requirements of the current thesis. To be more specific, this method has the ability to elicit deeper understanding in relation to day-to-day business practice, needs, systems and culture (Huberman & Miles, 2002) in the ship brokerage sector. Furthermore, the qualitative investigation emphasized on conducting a field study methodology with open issued questions in a semi-structured interview survey throughout personal communication connected to the research question and scope. The interview survey has been organized after four types of phases where as they could be categorized as context, initial questions, key issues and summary (Höst, Regnell, & Runesson, 2006).

According to these four phases, the investigation started with a broader perspective in order to capture a spontaneous while general expression before culminating down to specifics. Furthermore, since all interviews were conducted outside Sweden, the interview surveys were sent on beforehand to the recipients in order to gain as many details and in-depth responses as possible during the interview sessions while show respect and give room for confidentiality when desired. However, when and where some of the respondents for various reasons angled their responses during the sessions, the open issued interview survey was complemented with more in-depth and semi-structured follow-up questions. This type of interview was seen as qualitative and was planned to be recorded in as many cases as possible aside from keeping entries during the sessions since it otherwise would be difficult to write down all the essential information.

In similarity to entirely structured follow-up questions, the semi-structured follow-up questions had the same purpose of being more explanatory and descriptive when trying to find in-depth quantities and qualities of the interviewees' opinion and/or experience (Höst, Regnell, & Runesson, 2006). Moreover, since the supplementary questions, initially, were not planned to be needed or supplemented in respect of the successfulness of the upcoming pilot interviews, neither were they prepared before the interview sessions and only executed when it was found necessary to seek deeper knowledge of the respondents. The semi-structured interview or complementary issued survey that might be incorporated was a mixture of an open direction and completely structured questions needing either fixed or restricted responses on the initial open question (Höst, Regnell, & Runesson, 2006).

2.1 Selection process for the field study

Due to the fact that there exists a great prospect of different actors within the area of the thesis' scope, the targeting group was considered to be huge. Also, due to the size of the whole sector, it was considered to be impossible to cap-

ture every actor's opinions in-depth through interviews of mentioned nature. It was therefore required to perform a field study with an aim of trying to fulfill and capture a general perception in the industry.

Moreover, a field study is in description a general approach and observational method for obtaining data about users and their needs and experiences in a particular field. Additionally, a field study observes and pictures how the interviewees work and analyze their area of business in their daily work. As a result, a field study is primarily trying to describe a holistic approach while conduct an investigation within the area of the purpose of a project in real time. There are many different ways to find a representative sample within the sample group and if the field study concludes all the actors in the industry, it is called a full selection or a comprehensive field study (Höst, Regnell, & Runesson, 2006).

However, this investigation did not have the opportunity to perform such a selection throughout personal communications. That was due to the fact of limitations such as the time frame, the financial and physical ability. Therefore, the investigation would instead focus on a so-called random sample among the stakeholders within the industry in respect of their diversification in segments and interest. Throughout such random sample, the population was geographically segmented while naturally divided in reference to interest and in respect of linguistic capabilities in Swedish, English and Greek. Moreover, the choice of selected interview candidates was in respect of whether they were members of the BIMCO organization or not. A compilation of the interview results can be found in chapter 4, Results, and refers to the questions in Appendix A.

2.2 Qualitative data

All data that had been analyzed in this thesis were, in depth, considered in a holistic process. Additionally, this highlights that the handling and process of obtained results should culminate and reflect a text that is considered easy to understand (Robson, 2007). Since several interviews have been processed and reviewed, the majority of the produced results were considered as qualitative data. Moreover, qualitative data is primarily defined as words and descriptions.

Other data that were also considered and incorporated, in this thesis, followed the definition of qualitative data. This was implemented as such throughout the interview data and kept entries. In addition, when the raw data streaming from the process from the interviews were collaborated, it was of high importance to manage the data correctly. This is a process, which in some cases, might take up to ten times longer than the actual interview (Höst, Regnell, & Runesson, 2006). Furthermore, the problem with this type of data is that it also could become quite complex due to the fact that it sometimes is seen as a challenge when trying to find the right way of treating the raw data (Robson, 2007).

2.3 Transcribing technique

Due to the extensive nature of planned interviews, the authors have decided to use a so-called "listen and repeat"-transcription technique. However, in order to implement this type of technique, it is required to be conducted throughout a certain set of equipment (Matheson, 2007) such as e.g.:

- A computer with a voice recording software
- A playback software accepting recorded files on the computer
- Headphones or speakers applicable to the computer
- A word processing software applicable on the computer

There exist numerous ways how one could incorporate this technique when transcribing one's recordings. However, the technique concludes that, depending on how one tweaks it, that one basically has two options. Either the word processing software of choice is trained to accept and transcribe your own voice or the recordings are processed manually. One of the flaws with the first option is that, as obviously pictured, one of course has to train the voice recording software to accept your own voice before processing the recordings. The reason for this is that the software otherwise will not process the recordings due to the difference in linguistic knowledge between every user and interviewee (Matheson, 2007). That is why it was decided to execute the second option when transcribing the raw data.

Once all of the needed equipment was gathered in reference to the field study, all of the materials were manually processed throughout a software called *Atlas.ti*. The process was conducted in such way that *Atlas.ti* was used as a playback software on the computer where the playback speed was regulated either faster or slower. When the playback speed was regulated to a comfortable speed in reference to the interview and the recording at hand, the recordings were manually processed into words with the aid the software. All of the recordings were marked with numbers after they had been submitted to a scrabble where the recordings were named after numbers non-biased to the interviewed companies. Additionally, clear remarks and notes were made in the transcriptions separating the interviewer's responses when and where e.g. there had been more than one interviewee present, anonymously, besides the interviewers and/or when breaks was undertaken.

2.4 Grounded Theory

Grounded theory is a general approach which, inductively, can complement research of such nature as this project. This concludes a methodology that has been used in order to compile a satisfying result that consisted of conceptual categories connected to the underlying facts and rigorous research of the stated research question. However, since grounded theory is a general approach; it constitutes that one actually could base this methodology non-dependent of either qualitative and/or quantitative data. Moreover, grounded theory implies, in short, that the starting point initially starts with a broad concept that

later throughout the data collection narrows down into codes. These codes, connected to common keywords pervading the raw data, are then later summarized into memos stating the essential information given in respect of each respondent. Once these memos and their relationship has been theorized, the theoretical outline is considered sufficiently underpinned while final and in line for being analyzed (Grounded Theory Institute, 2014).

2.5 Background research

Several elements have, during the project's preparation, been demanding that underlying facts must be presented and theoretically underpinned. Due to this reasoning, the investigation relied on and incorporated several resources supporting the research question. These types of resources are described as printed literature that exclusively emphasizes on higher academically studies. Furthermore, the literature review was used as a base for the interview survey in order to identify and fill a potential gap in reference to the stated research question. Additionally, relevant theoretical framework helped the investigation to get a good grip on the crucial issue of CSFs in the ship brokerage sector in Europe. Therefore, it was of essential importance that a thorough exploration of relevant studies was performed in the general domain of CSFs. Thus, this study initiated an effort to test and tailor general knowledge to the needs and capabilities of the ship brokerage sector with a view to supply it to mid-sized ship brokerage firms in the dry bulk sector.

However, in order to give clarity and mirror relevance in the project, a decision was made on relegating such type of literature that was published as late as possible. Upon the review of every resource, the same philosophy was exercised in the same manner that the self-titled Höst, Regnell, & Runesson (2006) consider to be essential throughout such practice. This practice can be boiled down into five value founding questions safeguarding such agenda:

- Is the material reviewed and if so, how and by whom?
- Who is the underwriter for the credibility?
- Is the methodology of the survey credible?
- Are the developed results in a context that is relevant to my research question?
- Have the results been confirmed or led to any recognition or been referred to in any other credible context?

2.6 Validity

The validity of the project is about how accurate and precise the investigation's qualitative data is nevertheless there is no absolute way of clarifying if the result is absolute credible. There is neither any warranty stating that states it could be credible. However, what one could do is to try to convince potential readers that all of the data that has been collected and reviewed is reasonably accurate (Denscombe, 2009). In order to do so, a thorough investigation

was conducted and evaluated the obtained data in reference to what is considered good practice; hence, the scope of emphasized countries in the project. Thus, it is given more validity when seeking deeper knowledge in regards linguistic knowledge and location of interviewed participants.

3 Theoretical background

3.1 Bullen and Rockart's CSFs theory

In order for the readers of this thesis to have better understandings of what CSFs are, Bullen and Rockart's definition is chosen to be quoted:

CSFs are the limited number of areas in which satisfactory results will ensure successful competitive performance for the individual, department or organization. Critical success factors are the few key areas where 'things must go right' for the business to flourish and for the manager's goals to be attained. (Bullen & Rockart, 1981, p. 7).

Furthermore, Rockart differentiates CSFs by classifying them into five categories, depending on where the CSFs spring from. These categories are classified according to (Grunert & Ellegaard, 1992):

- The industry. These CSFs can be applicable for the whole industry but it should be kept in mind that the extent of their influence will vary among the individual firms that constitute the industry.
- Competitive strategy and industry position. The CSFs of this category are directly connected to the business under investigation, and they are determined with the aid of data that reveal the history and the competitive positioning of the business in the industry.
- Environmental factors. It is the nearly insusceptible effect that the macro environment has on all the competitors of the industry.
- Temporal factors. They are the CSFs that have an effect on a business' strategy for a specific amount of time, e.g. lack of expertise etcetera.
- Managerial position. In this category the CSFs are the ones that are common among the different managerial disciplines of the functional units of a business.

3.2 Kotter's change management theory

There exists a great deal of change management models that could be used for successful implementation, but for this study *Kotter's Change Management Theory* is used. The reasoning behind this is that the approach of this thesis is closely related to Kotter's work due to the business-to-business application of his theory. Moreover, Kotter has observed more than one hundred firms in an effort to successfully adopt their activities and the way they do business in reference to a new and more demanding market environment (Kotter, 1996) such as the ship brokerage sector. This adoption can be addressed with Kotter's eight-stage process for effecting transformation change. According to Kotter, the eight stages are:

Stage 1: Establish a sense of great urgency.

- Examine market and competitive realities in order to be identified potential hidden opportunities and threats.
- Convince at least 75% of the firm's executives that it is safer to explore the unknown than being in their comfort zone.
- Identify and discuss crises, potential crises, or major opportunities.

Stage 2: Create a strong guiding coalition.

- Establish a group with powerful position, knowledge, experience, and good communication skills that will confidently orchestrate the change process.
- Emphasis on the team work of the group, outside the common framework of hierarchy and expectations.

Stage 3: Establish a vision.

- Support the change process with a vision in order for the organization to know where it is heading to.
- Establish strategies and intermediate goals in order to be reached the company's vision.

Stage 4: Communicate the vision.

- Make use of new methods in order to circulate the new vision and strategies for achieving this vision.
- The guiding coalition should be the leading light for cultivating and implementing new behaviours.

Stage 5: Enable other players to act on the vision.

- It should be taken rigorous actions in order to be removed all the barriers that hinder the realization of the vision.
- Encourage risk taking and non-traditional ideas, activities, and actions.

Stage 6: Planning for and creating short-term goals.

- Establish clear performance measuring mechanisms.
- Set clear goals and reward the people taking part in the realization of the goals.

Stage 7: Concentrate improvements and produce more change.

- Use increased credibility from early wins to change systems, structures, and policies that are connected to past practices and that they undermine the vision.
- Support the change process with new projects and change agents.

Stage 8: Institutionalize new approaches.

- Make a clear connection between the improved performance and the new practices, behavior, and attitudes.
- Create leadership development and succession plans consistent with the new approach.

In addition to the above, Kotter also identifies matching risks for each of the eight stages. These, according to Kotter, are:

Stage 1 error: Not establishing a sense of great urgency.

- Underestimating the amount of effort that it is required in order to pull the people out of their comfort zone.
- Not paying considerable attention to the risks undermining peoples' moral and decision making.

Stage 2 error: Not creating a strong guiding coalition

- Lack of experience for the teamwork at working at the top level.
- Senior line management should be entrusted with the team leadership.
- It is required a strong guiding coalition in order to be activated the necessary amount of thrust for change.

Stage 3 error: Not establishing a vision

- Establishing a vision which is too complex and vague in order to be understood and efficiently communicated.
- Projects, directions, plans, and actions should be aligned with a concrete vision; it will serve as a compass that it will take the company to the right direction.

Stage 4 error: Not efficiently communicating the vision

- More than a single transformation form should be used in order to be communicated the well-developed vision.
- Management is not walking the talk. It should be put more emphasis on doing things rather than consuming vital time in performing long presentations to the people of the company.
- It has to be established continuous effort in communicating the vision and, furthermore, reminding people about the connected desired behaviour.

Stage 5 error: Not enabling other players to act on the vision

- Failing to remove powerful individuals who resist the change effort and who discourage other people from acting in favour of the changing efforts.
- Communication is not sufficient by itself unless the change process also engulfs the removal of obstacles.

Stage 6 error: Not systematically planning for, and creating, short-term goals

- Without short-term goals, a large amount of people quits the effort, or in the worst case scenarios, joins the ones that resist the change.
- Leaving the success of the short-term goals to fate.
- Without measure mechanisms that can evaluate the progress of short-term goals, the level of urgency can plunge.

Stage 7 error: Declaring victory too soon

- Raising a victory flag before even the changes in the business, along with the improvements, have become united with the company's core.
- Declaring victory too soon, based on the primer performance improvements, can reduce the driving force towards the change.
- Allowing the resisters to pass an assumed early victory so that the company returns back to its traditional routines.

Stage 8 error: Not institutionalize new approaches.

- Not adjusting the new ways with the social norms and shared values.
- Promoting people into top management positions who do not espouse and understand the transformation and the new view.

3.3 Kelly's network economy theory

Furthermore, since 1969, people have become witnesses of the great transition from simply using technological devices for calculations and gathering or storing information to a new powerful function of them; the ability to be part of a network. Kevin Kelly, in his book *New Rules for the New Economy* outlines ten principles that are related to the network economy and which any type of business can apply and stay ahead in the tough competition. According to Kevin Kelly this is the emerging new economy which "represents a tectonic upheaval in our commonwealth, a social shift that reorders our lives more than mere hardware or software ever can". The *new economy* is the network economy that it has deeply penetrated our modern society. Unless businesses realize that their way of thinking and organizing their financial activities revolves around the new economy, they will not be able to gain profit and their way of doing business is doomed to become obsolete (Kelly, 1998). These ten principles are outlined as follows:

Embrace the swarm: the network economy is a massive and astonishing world which continuously expands in dimension and power. Interestingly, this power springs merely from interconnecting every single bit that finds its way to the maze of the network's corridors of bits. Therefore, one could highly benefit from this highway of information by utilizing forces that are located on the periphery and, most importantly, with the assistance of top-down

leadership which, in addition, will provide space for a bottom-up approach (Priest, Kaufman, Brunton, & Seibel, 2013) as well.

Increasing returns: according to maths, even though the number of the added points in a network increases arithmetically, the value of the network follows a quadratic growth as to the equation n^2 , where n is the number of points that build up the network at a given time. The economist Brian Arthur stresses the fact that great success can be, to a great extent, the result of increasingly acquiring space in the web. By moving in such a path the initial gains are limited. Nevertheless, once the network is settled a huge growth can be expected since the law of increasing returns kicks in. The more individuals join the network, the greater the value is.

Plenitude, not scarcity: open systems in plenitude are superior to, in contrast, closed systems in scarcity. According to the systems theory (Friedman & Allen, 1997), an open system constantly interacts with the outer environment causing a bidirectional influence. This interaction allows the open system to easily adapt and maintain growth, and therefore it poses a higher than a closed system probability of survivability.

Follow the free: one can easily notice the fact or trend that most of everyday activities, related to transferring of information through the network economy, heads towards a free of charge approach. Good examples of this near zero tariffs are calculations, news, transaction cost etcetera. The reasoning behind this cause is that the cost of a bit, the frame work of the network economy, is provided at a minimal cost; a fixed low monthly fee combined with an open-handed limitless use of it, which practically means that the more one uses the bits, the cheaper they become since they follow an asymptotic curve that approaches the zero cost. On one hand according to the classic economics books the supply of goods increases along with their price. However, on the other hand, in the economy of network the things in abundance are provided at a very low cost. In addition, as it is already explained in a previous paragraph, plenitude is closely related to valuable goods. In other words, if a company hands out goods, it will draw attention and its market share in the network economy will increase.

Feed the web first: among the first things that the web economy has changed is one's identity; people are characterized by whether they are connected to the network or not. Consequently, this alteration is reflected in the loyalty people have towards the network with considerable preference favouring the open systems. Moreover, the network functions in a way that tends to expand and include everything into its existence; the use of material is replaced by information. Firms, therefore, need to invest more in the network economy and it should be made a necessity that from this move all the other firms in the adjacent environment, such as subcontractors, suppliers etcetera, will benefit from it as well. [Table 1](#) exhibits the steps they are followed during the transition according to which money and information are related to inert objects in such a way, that they become part of the new economy or network economy.

Let go at the top: one of the traits of the new economy is the high level of transparency. This means that the pace of turning over the rules of the game has considerably increased; the time distance between the zenith and nadir of commodities has considerably decreased; they are overlapping each other, in a sense. Therefore, companies should not rest in their laurels but constantly seek for perfection with adaptation through innovation. No firm needs to base its existence on a perfect product which inevitably, even though perfect, it will address an even narrower zone of customers. Nevertheless, the most difficult part is not the accommodation of companies in innovative paths but the mind-set at the top of the hierarchy that does not let go. Nowadays, leaders are required to perform two antipodal tasks; build up success and then reverse it in order to avoid stagnation and give space to new successful horizons based on innovation. In the economic world it is known as Joseph Schumpeter's Creative destruction.

Table 1: Progression of change of inert objects towards the network economy

Inert objects (e.g. ship's data)	Step	Progression
	1	...become alive by information networks (i.e. position easily accessible)
	2	...when touched by a network, they obey the rules of information (i.e. enhanced transparency)
	3	...as part of the network generate new dimensions (i.e. filtering & categorizing)
	4	...on the whole will eventually be part of the function of the network (i.e. financial gains)

From places to spaces: the network economy is not hindered by boundaries since it does not operate locally but freely in the three dimensions of distance, area, and volume. Moreover, an ever increasing number of transactions are transferred to the network which it practically means that competitors are in fact a few deciseconds away! For one thing, this globalization poses a tremendous impact on the current forms of intermediaries; since anyone is able to find anything he or she desires and communicate with everyone, a long as they are connected to the net, without the need for middlemen's intervention. However, for another thing, the demand for a different kind of intermediaries keeps increasing. To be more specific, these are the middlemen that they are assigned the burden of protecting firms and individuals from unwanted communication; filtering of the data traffic with one way or another is the new intermediary of the network economy. Nevertheless, if one delves deeper into this service, he or she will clearly distinguish the benefits for the market. To be more explicit, firms have the ability to address a specific group of people that share the same interest and thoughts; a community. The network economy abounds all types of virtual communities which are essential to as-

sertively starting up an activity or migrating companies' current activities. In reference to the above, Figure 1 illustrates how the retailers and the communities work in the network economy.

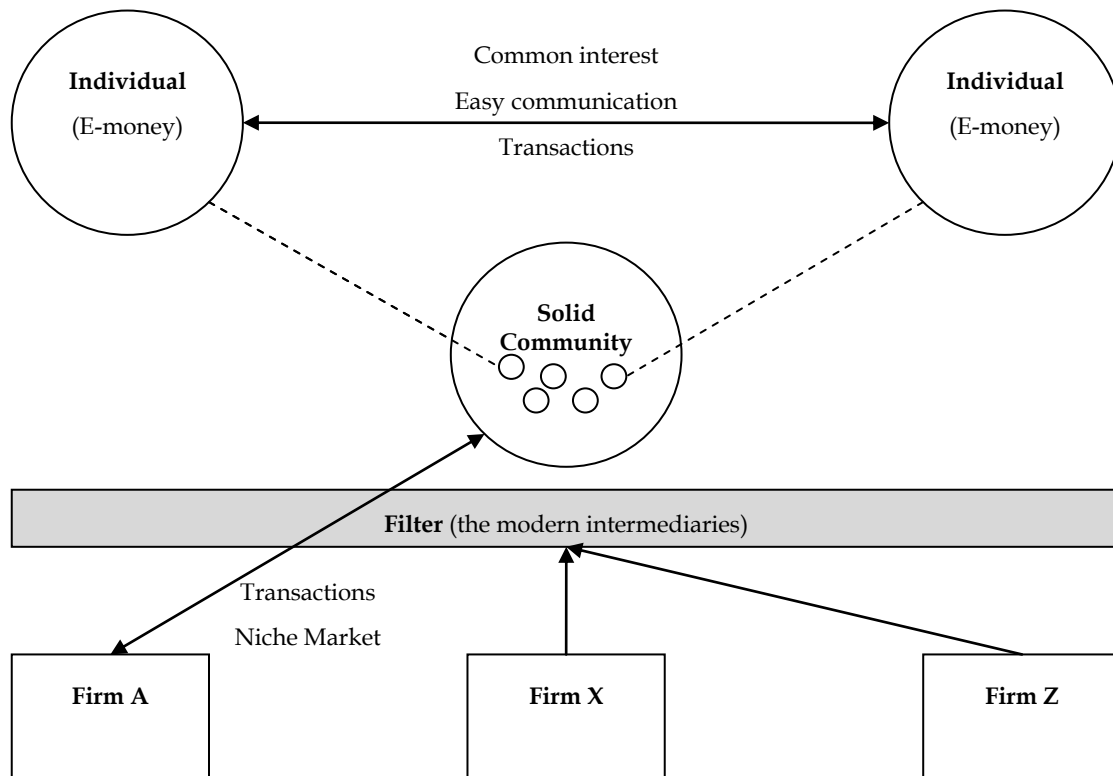


Figure 1: Communities and firms in the network economy from the author's point of view

No harmony, all flux: firms should be only committed to their core values and let the rest should obey a dynamic behaviour that constantly changes the firms and adapts them in a constantly changing, transparent, and competitive game of the network economy. In other words, flux is a natural state and it cannot be avoid, as the ancient Greek philosopher Heraclitus claims as well. The chaotic conditions of the flux can build the base of innovation, learning, change, adaptation and survival provided that the involved companies do not surrender to the dark side of chaos. To be more specific, companies need to embrace the flux by holding on the lifeline of a few unchanged things, namely the core values (Wendy, 2013), which they will serve as the leading light towards the constantly changing conditions of the new economy.

Relationship tech: the network is based on technology but the final outcome is entrustment. This resides in the fact that relationships, through the network, are amplified which in turn generates higher quality and quantity of economic relationships, too. In specific, by using technology as a catalytic agent in building up solid relationships, the traditional relationship between a producer and a consumer, in goods and services respectively, radically changes. The consumer turns into a *prosumer*; the producer and the consumer can be identified as the same person who is willing to back and promote a firm. In order for the high potential of prosumers to be harnessed, five steps (Conelius, 2010) can be followed:

1. They have to be identified the major online users that apply a great momentum on our goods, company etcetera.
2. These users have to be embraced with respect; e.g. their opinion on a firm's services matters etcetera.
3. The community where the above mentioned users belong and spend time at has to be identified and joined with e.g. online conversations.
4. Firms should elevate their relationships with the key online users by increasing the online interaction through constructive and humane paths.
5. It has to be taken advantage of the social web with the creation of blogs and the use of social networks, such as Facebook, Twitter etcetera, in order for a company's brand to become conspicuous.

As an afterword, companies should demonstrate and elevate its commitment to the customers and not be afraid of considerably involving them in its affairs. Doubtless, there exist customers that are cleverer than the firm itself; why not use them in a proliferant and fair manner; or from another point of view, firms should educate the customers so that they become as smart as them.

Opportunities before efficiencies: Even the smallest opportunity establishes the foundation for the creation of at least two more opportunities. In turn, these two opportunities produce at least two more opportunities each, and so on. Therefore, it is easy to understand that small opportunities are not small at all since the sum of consequential opportunities that can potentially be built on them might become vast. Consequently, focusing on the next innovative thing is more productive than insisting in improving the current opportunity. Figure 2 below, as described above, illustrates how opportunities work their way up.

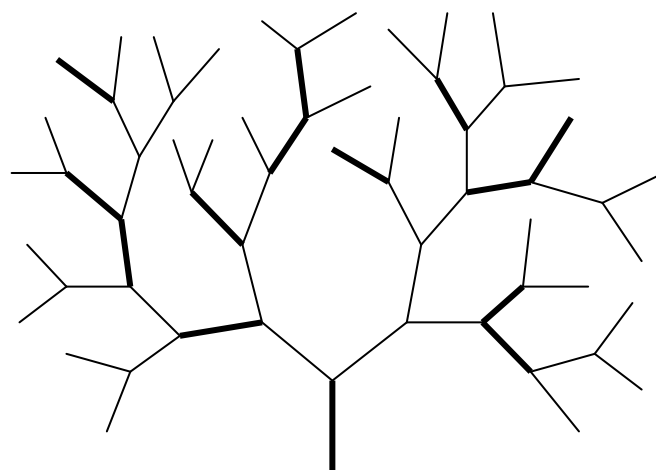


Figure 2: Tree of opportunities designed by the authors and based on an illustration in Kevin Kelly's book "New Rules for the New Economy"

4 Results

4.1 The state of the ship broker's market

In the year 2000 there was a huge expansion of the shipyards in China, Korea, and Japan and a huge amount of people was employed. Therefore, even though these shipyards are not needed any more, the transition towards balancing the redundancy is slow. In other words, these shipyards are being subsidized by local governments in order to postpone the socioeconomically consequences that unemployment will pose. As a result, local governments have given incentive to ship owners to replace their old ships. However, this tactic does not solve the imbalanced supply and demand problem in the dry bulk market. The freight rates are nowadays negatively affected by the fact that there is provided a high supply of tonnage whilst the volume of goods that needs to be carried is much lower. On one hand, large ship owners try to counterbalance the gloomy situation by enjoying the benefits of economies of scale. On the other hand, small ship owners are affected more because they cannot have competitive expenses. Additionally, the fluctuation in the oil prices and the euro-dollar exchange rates has greatly contributed to the stagnation of the market since the rates do not favour transactions of products. To continue, governments and organizations affect the oil prices to remain low and thenceforth changed charterers' focus from profit making into cutting down the costs.

Furthermore, it is difficult for the ship owners to make long-term decisions because the market information is available to everybody due to technological advancements and networks. Different ship owners talk to the same ship brokers and shipyards and this leads to leakage of information and complete transparency that eliminates the competitive gaps in the market. Likewise, ship brokerage firms have been facing difficulties in finding and sustaining niche markets. It is the great volume of information that it is accessed by everyone that makes the markets easily exploited and the competition between ship brokerage firms very tough. Since the power of information is hold by all ship brokers nowadays, it is difficult to notice the difference between an inexperienced and an experienced ship broker. The bottom line is that everything comes down to the service provided by the ship brokerage companies and that is where the distinction is made. Furthermore, since the same information comes from different ship brokers, clients might have a higher tendency in choosing the ship broker that comes from the same culture.

Lastly, sustainability is closely related to the imposed regulations and, therefore, this means that it is not a matter of choice for the industry to become greener. Should the transportation of commodities not violate any environmental regulations, it will not be favoured a more sustainable and considerably costly option.

4.1.1 Ongoing trends, influence and change

Since 2008, banks have taken a very conservative path and money lending strategy has been toughened against the shipping industry. Nevertheless, even though there is a lack of cash flow in the shipping industry, the order books have been constantly increasing. The reason for that are the private investors that, even though they hold minimum or even no experience related to shipping, they see investment opportunities. On the other hand, this is not based on a long-term perspective that will benefit the shipping industry but it is established because the industry has given an indication of an opportunity of making quick money in a crippled market.

Moreover, from a ship brokers' perspective, there are ship brokers that are tempted into making extra money by operating as charters as well. Nevertheless, in a number of cases the ship brokers have been heavily exposed because it was taken into consideration only the opportunity for profit making and not the viability of the deals; e.g. clients that went bankrupt or costs that would be denied to be covered by the receivers such as demurrage etcetera.

Shipping firms and ship brokers are today in no doubt under severe and intense pressure in regards of trying to produce results and stay alive while as keeping its stakeholders and shareholders well satisfied. However, a lot of organisations, especially niche and large ship brokerage firms, have found themselves to be operating in dead-ends. This has resulted in a need for new strategies in terms of either greater diversification or further collaborations in order to expand since the markets are overtraded. These strategies are however fuelled by a specific motivation and it is argued that firms proceed with one of the following motivations in their minds: "Can we do it from a position of strength or do we have to do it from a position of weakness?"

Taking a deeper look at a few of the world most niche or largest ship brokerage firms that lately have merged together, it is speculated that they acted from a position of strength with a few reservations. These firms have today been rocketed to the stratosphere in terms of size, multiple jurisdictions and market shares because of their decision to merge. This has inevitably reduced the amount of actors operating in their segment. To continue, what their game plan exactly concludes is hard to tell but business analysts claim that it was done in order to, for one thing, complement the diversification and enhance the full service coverage vertically. For another thing, to increase its margins and cut costs or give its shareholders and stakeholders a more futuristic action plan for gaining more market shares. These transitions have thenceforth compelled clients to deal with one entity instead of two firms. Thus all types of clients are put in a more complex bargaining position since they are now experiencing the state of a lock-in effect and they are losing their ability to negotiate. These mergers are therefore presented in philosophies of being able to have a more global reach due to the new global scale of the merged entity. Hence, this enforces them with greater competitive advantage since the new entities now have the possibility to operate the shipping sectors more efficiently. However, this mentality has also compelled a lot of clients to deal

with smaller ship brokerage firms instead due to their secrecy, traditionalism and focused service.

On the contrary, if a merger or joint venture is not pursued from a position of strength one would inevitably, as previously mentioned, outface it from a position of weakness. This is mainly due to avoiding financial difficulties or bankruptcy. Since the market has been flooded with new money coming in from investment firms and private equity (PE), some organizations have decided to follow through with the Initial Public Offering (IPO) route and proceeded with acknowledging offerings because they have had a necessity of sustaining in the industry or at least the personal incentive for doing so. This could lead to that old traditional family owned companies ultimately have to change the organizational structure into a structure with a board of directors that holds a dilemma with mixed agendas. However, that is why a lot of organizations also have declined investment firms and PE offers. Additionally, there are other ways as well such as shipping pools and joint-fleets to avoid tragic end cases. In other words, consolidations and mergers are in general definition mentioned as a positive thing but it all depends from which horizon one looks at it. Therefore, consolidations are a necessary action in some certain areas but it is essential that the people considering it do it in a manner of looking at specific circumstances and try to identify the rational background for it rather than just seeing it as a hyped or radical thing to do.

To continue, there are other examples where companies try to diversify themselves without merging by providing ancillary services such as technical, logistics, oil spill cleaning, and various marine services that have to take place for customers before contracts get concluded. Therefore, this approach is adopted by big companies in order to balance their finances since even though some sectors provide the firms with losses other sectors are more profitable. Ship owners have started being involved in other shipping activities, apart from the core business with transporting cargoes only. To be more specific, they have benefited themselves from trading commodities as well; products that have a low value in one country but high value in another. In addition, it should be kept in mind that the ancillary services should have equally much attention from the firm as the core business so that they will not lack quality.

In the light of the aid of broadband internet, some companies are directly connected to the ships of their interest and real time data are instantly received in relation to the transported commodities and the transportation itself. Moreover, the creation and distribution of paperwork has totally changed face since all the data and reports are inserted into computers connected to an intranet/extranet. Therefore, all information can be viewed in real time by all the interested parties. In this way, considerable amount of time in terms of access and organization is saved. This pooling of information can be very helpful to companies' expansion because there is better circulation of information. At the same time though, the organizations need to restructure them-

selves from strict hierarchical models to rather flat ones so that the flow of information to be handled better.

Finally, new trading regulations are being introduced on a yearly basis, such as e.g. bans in certain geographical areas. Therefore, ship brokerage firms and their brokers should be continuously informed about the changes since some customers will not be able to trade in certain areas and they have to offered different alternatives to them.

4.2 Aspects of the 21st century ship broker

Looking at what the investigation identifies as a good organization, one could argue about many concerns and stress several fundamental factors leading up to such. Not only does a good organisation need specific qualities, but it also needs a good management team and efficient outfit that in essence are able to absorb and be susceptible to change when projecting the future. Without an agile and flexible mindset within the organisation, one would risk suffering from being outcompeted quite easily in the arena of today's market. However, in order to be so, there is a need for the organisation to be known to the shipping society while as properly know the market when marketing and promoting its business. What this ultimately culminates down to today is that an efficient ship broker needs to have what they themselves call the "know-how" i.e. you need to know what you talk about while as be updated with the market's environment and be capable of coping with the existing conditions. This could constitute several things but a few examples of such are seen as having virtues in technical specifications and different cargo technicalities in different areas in and between different nations. But in order to be able to sufficiently support the clients, a good management outfit also needs to be able to endorse other qualities such as for example academic and administrative. In this sense, without the know-how the supporting essentials become meaningless when trying to solve an issue, which inevitably today's ship brokerage is all about.

When boiling it all down, what a good organisation needs is good coordination within the organisation. Everything needs to be streamlined when it comes to staying updated and adaptable to the information that is given in order to alter a strategy or pursue business opportunities. However, this requires the organisation to be relatively flat with a good synergy between its management levels and active when it comes to important decisions such as questions concerning either HR or trade. Since, without an efficient day-to-day business and without a fully organized and filtered database, the internal organisation might lose its potential to grow in terms of business development. The lack of a two-way feedback loop might lead to a crack in the exchange of information management since the organisation needs to be able to change management and conclude drastic trading measures when needed to. To be more specific, a good organisation needs transparency and the whole company needs to work as one and be able to share experience, expertise and

information between its department and the staff in order to be able to strive for success, nondependent of its focus. Moreover, the organisation needs, throughout already mentioned, to be supported by a vision clarifying what the company want and how it is supposed to be executed but still susceptible to change when required. However, this stresses the fact and pressure of having a good company vision and highly flexible management style that the whole company can identify and connect with. A company's brand image could be what makes it highly recognisable in the market. However, it is not the slogan that builds a company; it is the management's ability to execute the vision that leads to results whereas sustainability in terms of business relationship and/or environmental agendas could be in scope.

In other terms of transparency, one could identify another aspect to it. This perception is about having public books. Due to the fact that many large companies while as medium-sized ones operating in the market today are stock listed, their official books need to be transparent to its shareholders and stakeholders. But in order to sustain trust and keep a good company value, the organisation needs to have clear and result oriented books with an efficient action plan for the future in collaboration with a good financial base whether the company is stock listed or not. Everything needs to be, as previously mentioned, streamlined and in compliance to regulations but also be in line with the company's ability to execute its mission and vision. Having a streamlined organisation might give the company an ability to be more proactive or luxury of comfort to monitor the shipping situation rather than being completely reactive which today seems to be the general case due to the fluctuant market. It could give the company an opportunity of having a long-term strategy complemented with short-term risk alterations.

However, when two organisations are in the actual phase of transitioning together and merge or consolidate there is a high risk of losing the transparency. Merging is not only the case since several other companies around the world lack proper transparency and flexibility in the general opinion due to pervading conservatism, strict hierarchic management styles and short-sightedness. But the way back could be long for the new entity. What speaks in favour of a merger between two companies when discussion *ibid* management and vision is the selection of resources available and therefore ability of regaining and exceeding previous position even greater nondependent on its diversification, which in general should excel throughout the merger. On the other hand, a few flaws with a stock listed organisation is the inherited inertia that could affect the new entity i.e. losing the ability of making a smooth transition while as being able to make vast and vital decisions fast due to the new organisational board of directors and strict management style that might consist of inexperienced and narrow minded investors. Moreover, such stock listed entities are also in the scope of being affected by other things that could be out of their control since the share price needs to be in a cumulative state.

Due to the amount of information that is daily received, a good organisation needs a system that can handle between 1500-5000 or more emails per day.

Moreover, this system needs to be able to filter, organize and input the data without complications in order to cope with the competition i.e. having an updated address books and other vital information could be important to one's business and it is considered important for everybody to have access to information that supports their specific agendas e.g. a public email server within the company. Other important Business Intelligence Tools (BIT) that are essential of keeping the database updated is seen as known business transcripts in forms of either "Lloyd's Register" or "Trade Winds" but also various other books, vessel/cargo/port databases and trading information with support from local ship agents or other research institutes which in itself sells research to ship brokers all over the world if the organisation does not have any in-house department of such nature e.g. IT-department and/or research department.

According to the investigation, the most important investment that has to be taken into consideration by companies is business trips. Furthermore, this move should be supported by ship brokers with enough training and interpersonal capabilities in order for the firm to be correctly marketed and the customers to be effectively approached. In addition, small and medium ship brokerage firms are considered to be a good size. This is due to the fact that they hold the ability to be very flexible and, in addition, it is easy for them to remain focused on the customers' specific needs. Moreover, flexibility could be a key towards the surviving in tough markets and it is argued that the optimal number of employees is six because it is greatly related to the company's flexibility. In this sense, they are all situated in the same open area and they work as a team. Therefore, if something comes up that needs the attention of not one but five ship brokers, then it is easy to make it happen. For another thing, flexibility is also translated to faster adaptation of the company to changes and therefore flexibility is a key attribute.

4.2.1 Education, experience and continuous improvements

In regards of development, it is essential that the working teams be renewed at regular intervals. For one thing, the teams that have been working for the same company for many years tend to resist changes. For another thing, new employees, especially the ones that have recently got some kind of relevant university education, bring in fresh ideas and techniques that add to the dynamism of the company. Highly educated personnel on different fields, especially in the field of research and development, are considered to be very important for the expansion of small and medium sized ship brokerage firms. Nevertheless, their financial capabilities put boundaries on the number of employees that can be hired. Therefore, there is put priority on hiring people that efficiently can bring cash flow to the company by concluding contracts with customers.

Moreover, shipping is a fast changing industry and ship brokerage firms have to constantly educate their employees in order to increase awareness. In specific, commercial awareness is one of the most important training that people

should have because it promotes the coordination between different departments. In this holistic approach, everybody works as a coherent unit and the decisions produce effective and efficient results. All in all, there exists a belief that the new generation of ship brokers is well educated.

Apart from education and training, experience plays a major role in the ship brokerage industry, as well. Nevertheless, many ship brokers, even though they have been exercising their profession for more than five years, they lack experience. This is because they have been operating in a previously good market where the contracts were easily concluded. Nowadays, the crisis poses a high pressure on ship brokerage firms due to the fact that the inexperienced ship brokers do not have the expertise to negotiate in tough market conditions. Therefore, even though the new generation of ship brokers has a good amount of academic knowledge, it is a positive factor that the older generation is still involved in the ship brokerage industry. It is the old generation which contributes with technical and operational knowledge to the effective operation of ship brokerage firms. For this reason, it is important for the young ship brokers to have some experience from sailing with merchant ships since they need to have broad knowledge of the shipping industry, as well as education.

Innovation in the sense of internal organization is very important as well because there can be found new ways of information handling that, for one thing, can drive an organization in a more efficient way. For another thing, the information could be filtered in ways that could be more effective for different clients and their specific needs. A good example of innovation is a Greek shipping company which in 1980 had developed its own intranet and had managed communication and paperwork to be carried out through electronically through computers e.g. all the bill of lading were in electronic format and they could instantly be streamed from the head office in Piraeus over to its terminals in the United States. The unanswered question is however whether that system paid back or not. Ship brokerage companies work on continuous improvement by keeping a functioning IT department and system, or just IT system for small and medium firms. When it comes to the innovating approach towards continuous improvements, ship brokerage companies wish they could work more proactively so that they got competitive advantages. Unfortunately, it is more common for them that it is followed a more reactive path because of the requirements posed by e.g. ISM, ISO etcetera. On the other hand, proactive could be the approach when someone starts making changes in relation to forthcoming regulations and legislations.

4.2.2 Customer perspective, service and trading custom

Looking at the customer side of a ship broker, it is considered important to stay in contact and keep the flow of information continuously bilateral in a careful manner. Non-dependant of the size of the customer vis-a-vis ship brokerage firms, every company and broker need to dedicate their full potential and service to every client and spread the risks in order to feel appreciated while as desirable in today's market condition because money is hard to come

by. Without the fixed client base, acting organisations might risk losing their fundamental base that keeps the company afloat. This mentality might however vastly differ between companies' executives but it is all relative. Besides keeping the flow of information updated between the parties in a ship broker's web, the common custom is to uphold the personal contact while as meet and socialize with both new or old customers and ships in person on a regular basis at events or similar business meetings. Because even though one might be operating in a niche market, one also needs to know what's happening in other markets. Not only does it contribute to firms' short-term plan but it might also contribute to firms' prospects and networking for the future. This is something that is commonly seen as highly valued and good way of marketing because without this mindset deals might fall through and the broker continues to be perceived as "just an email". Whether it is because of the old traditional and conservative trading custom the industry possesses or due to the monetary flow that sets this standard is hard to say but this is how trading customary still works within the industry, nondependent on where the parties are situated in the world. However, if one would retract from this procedure or experience a lack of interest in this area, one would also miss out on getting first hand information prospecting the future which in the long run might be very valuable. In short, it educates while as enhances and contributes to the organisation's ability to maintain its position. One has to have the urge to find new solutions and collect information about both old and new customers' issues and struggles.

However, when it all comes down to customer and client relationship, it is all fuelled by mutual philosophy, intercultural values and confidence where as a ship broker is usually identified throughout its clients. If the customer does not believe or perceive that the synergy between the parties does not work in terms of vision or agendas, a deal will never be concluded. That is why one could speculate that a ship broker's mentality should be in constant alternation, publicly, in order to keep up with the competition and gain or sustain market shares. This approach is generally applicable in a ship broker's horizons as well since one does not dare trusting people one does not know or feel comfortable doing business with. One has to "smell the winners" throughout the know-how and gut feeling for doing business nondependent on the size of the deal and prioritize thenceforth for the most competitive great alternative and solution without diverting the customer. But then again, the synergy is completely reliant on what type of philosophy and/or psychology the organisation possesses. Furthermore, this also means that it would be in favour for a company to have a broad variety of human factors and personalities across the organisation.

When discussing more eco-friendly or more environmentally efficient solutions or trades there is a difference between heart and mind. Eco-friendly solutions is a good philosophy, however the fact is that it is usually much more expensive than other solutions in reference to today's ruling oil price, scrapings and waste management. Because for example if the oil price would be higher, the whole shipping space would have an incentive of cutting more

costs in which a more environmental friendly solution could conclude and cope with. But as of today the green agenda is highly subjective to companies' margins and financial ability, post-Leman Brothers, even though it has its pros e.g. reduced port taxes and green passports. However, since there are not a lot of accidents occurring over the world, none of the other segments have really embraced the idea or passed it along for the shipyards to kick-start or use as a marketing tool. Hence, today's ship brokers are not affected even though they perhaps should be in reference of getting greater commissions. It is the regulations that generally set the standards and there is no incentive from the industry for greener quality. What could have solved this issue is the pet theory about having a more gradual implementation of eco-friendly solutions rather than a drastically because then the imbalance of available supply and demand would be more balanced in reference to shipyards' order books. It might also enlighten the urge of being a "first mover" in a more sustainable way and keep the prices less fluctuant.

4.3 A ship broker's future prospects

A lot of companies, especially among recent mergers¹ being executed over the shipping space, consider future comings optimistic even due to the fact that it will take some time before the new merged entities become properly integrated together. There is always a time gap between the initial phase until the merger is actually transitioned well and truly but the prevailed opinion is that these new entities themselves will be highly successful; it is just a matter of time before the synergy and efficiency is definite within the organization. However, the main concern of obstructing these transitions is the anxiety of future trading patterns and unstable oil price. This is of course deeply varying depending on whom or what the information is sent or stressed by. The shipping industry and the ship brokerage space are however to some extent blaming the volatile and unstable market condition on different political and financial agendas poisoning the market e.g. speculations initiated via power games between nations and via private equity firms entering the market. On the other hand, there will be more and significant bankruptcies in the industry whereas banks will start to increase the pace of repossession ships and flood the market with cheaper second hand vessels in respect of the halved price since the turn of the year. Furthermore, speculators argue that more and more companies will fall in the IPO or PE pit due to the urge of desperate financial support and there will be a lot more mergers, commercial pools and consolidations between companies largely out of necessity to sustain.

Others argue that pervading trading attitude will remain quite conservative in reference to change but in reach of even more upheaval. However, some indicate that the dry cargo sector might end up being more standardized in similarity to the tanker sector in some near future. Because what is usually common and on top of everybody's agenda today is cutting costs and sustaining

¹ E.g. Braemar & ACM, Clarksons & RS Platou, ICAP & Howe Robinson etcetera

profits while widen the margins and ultimately only boil down to dollars and cents and nothing else at the end of the day. More deals might be fixed. However, since today's informational flow could be considered of getting out of hand, the industry is forcing itself to some extent to draw back on continuous improvement while as pushing the industry back to old trading customs where long-term and personal business relationships bear greater value for the future. The industry will see more scrapping of ships in the dry cargo sector in reference of companies trying to renew while as take advantage of cheap new building prices in the sector. However, this might also inevitably lead to more lay-ups since there is no need for the new demand.

On the whole, there exists a general expectancy that PE investors will fail and start to rethink their mission in the shipping industry. Since the industry does not need new money to be pumped in the market, the situation is simply prolonging the disastrous condition. By stopping the flow, banks might be able to pick up and kick-start the traditional shipping module and ultimately choke the new building industry while as balancing out the supply and demand together with the increase of scrapings. This could lead to a more sustainable market growth in synergy rather than being as highly fluctuant and volatile as of today. It might also lead to a more sustainable world economy that throughout its domino effect could affect other industries in a positive aspect as well. There is a need for more significant bankruptcies in all of the shipping space's sectors e.g. yards, operators, owners, ship brokers etcetera. In this sense, hopefully, and ultimately, there will be a core left to pick up the industry and its market while be able to see opportunities and restart the expansion in regards of financial stability.

5 Analysis

The following chapter will analyze and identify in which ways the investigation is overlapping, or lack, in regards of the result from conducted interview of the thesis. The analysis will thenceforth, throughout the perception of Bullen and Rockart Theory about aspects of CSF, be evaluated and applied to Kotter's Change Management Theory and Kelly's New Economy Theory.

5.1 Kotter's change management theory

Kotter's Theory has been adopted in order to identify how actors in the market qualify against a successful implementation of change management. This practice will allow the analysis of the result to be handled in a systemic way whilst possibly be the leading light into covering the gaps and boil down to possible CSFs in reference to change management. Thus, following part of the analysis will be conducted via Kotter's 8 stages for change management:

- Stage 1: There exists a great sense of urgency but not always the support for development

There's no doubt that the majority of operating ship brokers in the industry have to be in constant lookout for new opportunities and gaps in the market. The most common way to find such availabilities is therefore via either the continuous information flow that flows through the shipping sphere globally or due to first hand information. Fundamentally, these actors are convinced that they have to explore unknown opportunities in order to prevail instead of copying what others do in the industry since different parts or rising segments of the market eventually will be saturated. Their company mentality is thenceforth strongly fixed on trying to cope with the condition in terms of diversification within or outside the main scope of business. However, diversification could be tricky to implement when a company for example possesses a traditional management structure and mission. In addition, it is considered too risky than staying in the comfort zone hoping for the best where as it could be considered to be a drastic and radical measurement for sustaining.

Additionally, there is also a dilemma for doing such vast decisions when needed to for a merged entity due to its modern way of management structure. Hence, they suffer from an inherited inertia. It is also concluded that mergers create a sense of insecurity to the personnel since it evidently would lead to unnecessary personal being redundant when merging departments. Furthermore, other obstacles such as lack of transparency, internal flow of information top-down/down-top and flexibility due to conservatism are factors that hinder the implementation.

- Stage 2: A strong guiding coalition group does not exist

Even if the experience, educational skills and leadership do exist within the company, some actors do not always manage to sufficiently orchestrate the qualities in terms of organisational structure. Hence, a lack of proper middle management that would put synergy between company levels and departments is needed. However, this problem is most common within companies categorized as large entities. Small and medium sized firms struggle however with having no middle management at all. They do therefore lack the thrust for steaming change towards the owners but this is something that might be varying between the actors since it's not always applicable due to the size and number of brokers operating in the firm. What these firm do risk suffering from is instead the susceptibility of being too narrow minded and the staff might not dare to speak their minds or indicate hints in respect of the owners when in need for change. However, they do exist an emphasis on the teamwork which eventually could develop into a strong guiding coalition in the end if properly supported by the management.

- Stage 3 & 4: Ambiguous impression of what the vision is or should be

The impression is that the investigation advocates a need for having a vision and that it is important to embrace the company around the same mantra. However, people in charge or in influential positions do not always know what it is or should conclude. As a result, the actor's perception in and between the focus group usually varies in terms of what their vision should be whilst indicators points in a direction that this mindset pervades throughout their whole company structure. The reason for this could be due the atmosphere of the industry since it forces its actors to focus on the day-to-day business and not the long-term agenda. Moreover, when trying to cultivate new behaviours the vision is easily confused with strategy and goals, thus, the vision is not always exercised or communicated in a correct manner if even at all. It could be connected to the top management level's personal or mixed agendas; however, the fluctuation of the market is usually mentioned as an excuse for not having a proper long-term perspective or vision. Surviving the crisis is more essential and the short-term mission is inevitably more vital for sustaining the firm.

- Stage 5: Change is not hindered but it does not happen in reference to the vision.

The firms and the people connected to it are enabled in reference of glancing gaps whilst advocate for change when available. However, it is not in regards of the companies' visions but rather in respect of current strategy and goals. Additionally, when entities are diversifying its core business, the conservative people are let go if they are hindering the development. Because when companies are on the brink for streamlining the business, the need is commonly stronger than the wills of individual people trying to operate it. Hence, keeping the flexibility is thus supported by their arguments even if the need for change could be clouded by misleading ideas. Moreover, since the employee

turnover in this industry usually is high, there exists a possibility of fuelling the company with young but well educated personal with fresh ideas free from old and conservative practises. Thus, encourages a possibility of gaining new but perhaps risk taking enlightenment from a non-traditional horizon.

- Stage 6: Short-term goals exist but not in connection to the vision.

Short-term needs and problems are tackled on a day-to-day basis while as seen as the general norm and praxis of doing business in reference of ruling market conditions. However, as previously mentioned, it is not in respect of a vision. What companies usually do, because of the global flow of information, is that they wait for other companies to find gaps and then try to copy their practice if possible. Owing to this, change is considered to be difficult to tackle since everything nowadays is commonly short-term based where one risk plunging if misreading the opportunity.

- Stage 7: Improvements and change is dependent on the market condition

It is easy to speculate that one could perceive it difficult to bring about changes when only supported by and based on early "wins" since the previous market cycle was considered to be in an immense state whilst operated effortlessly without any experience being gained. Innovation is, in this industry, only fuelled when a crisis emerges because a good market turns a blind eye for change even though it should advocate companies to have a proactive mindset; since bad market conditions evidently force companies to be rather reactive. However, some companies do save money and credibility from good market periods in order to surf through bad times and continue the development whilst other decide to merge and consolidate with others in order to remain attractive to investors. Thus, declaring victory too soon in order to satisfy the stake- and shareholders. But changes take time when transitioning together with another entity and it is therefore hard to underline the credibility of that improvement since the transition is slow until it is definite. Hence, it could be hard to put emphasis on earlier wins due to the constantly fluctuation of the market due to the fact that it could be hard to exercise the same praxis once again in respect of conservative mentalities and changed game plan.

- Stage 8: New approaches could be more institutionalized but usually locked-in

Companies that recently have pursued a transition or change seem to have a clear connection to the new approach and performance where as the employees are fully aware of its current or future financial overlook. Due to the fact that a diversification and new auxiliary services manages to cover a broader variety of sectors, the business is not as affected by the fluctuation in the market that it used to be. However, since auxiliary services usually is bound to companies' core business they are also restricted by available resources and capabilities. Hence, they are locked-in for further development or expansion.

Companies thenceforth risk keeping a conservative mindset because they can't make too radical or too risky decisions too fast even if they have to.

5.2 Kelly's network economy theory

Kelly's Theory has been adopted in order to be identified the extent to which ship brokerage firms follow the network economy theory. In this way, the analysis of the results will develop in a systematic way. Moreover, it will be shed light on possible gaps that will be filled in as CSFs in relation to Kotter's network economy theory. Therefore, the following analysis is based on Kelly's 10 rules of the network economy in comparison to the results from the interviews:

- Rule 1: The ship brokerage sector has embraced the swarm

According to the interviews, ship brokerage firms are connected to large networks of constant and huge amount of information that project opportunities and gaps in the market. Moreover, there exists a focus on expanding the current network and absorb even greater flow of information in order to identify opportunities and solve issues. In addition, mergers aim, among other things, towards embracing a broader network of services provided to the customers.

- Rule 2: Due to the network effect both increasing and decreasing returns can take place in the ship brokerage sector

Owing to the great flow of information, the high transparency bridges the gaps and eliminates the opportunities in the market. At the same time, the power of negotiation is considerably diminished. In order for the firms to cope with these tough market conditions that the common flow of information imposes, mergers and collaborations take place in order to be avoided harsh competition against one another. In other words, the competitive obstacles and difficulties that the global network has brought to the foreground are eliminated.

- Rule 3: "Plenitude not scarcity" requires more action by the ship brokerage industry

Ship brokerage firms work with open databases, internal or/and external, that the employees have access to; limited in some occasions. However, this valuable tool can be developed further so as it serves more than just a simple data bank. In addition, it should be able to orchestrate the different departments within a ship brokerage firm in order for efficiency and out-of-the-box thinking be added to the organization.

- Rule 4: "Follow the free" is in favour of the mergers at the moment

Merged companies follow, in a sense, this rule since their customers are provided with a broader coverage of services without any additional cost. Offerings that spring from diversification and the, consequently, enhanced full service coverage foster greater value for the customers. In this way, there is built

a firm-customer relationship based on trust while additional costs are eliminated. The benefits for the firms are enhanced brand image and long-term relationships with their customers.

- Rule 5: Feed the web first. This rule is not implemented by the ship brokerage firms

According to the interviews, the ship brokerage sector obeys to conservatism, secrecy and traditionalism which these facts and only hinder collaborations between different ship brokerage firms due to conflict of interest. Therefore, in order for this obstacle to be overcome, collaborations between different shipping firms through pooling of capabilities will suffice towards a more competitive and flexible function of the ship brokerage firms under collaboration.

- Rule 6: "Let go at the top" is implemented by the ship brokerage industry

Ship brokerage firms have shown that they adapt after market's changes and demands, e.g. from dry bulk to tankers and containers. However, it has to be realized by the managers that the market is dominated by transparency and continuous improvement requires innovative solution.

- Rule 7: "From places to spaces" is implemented by the ship brokerage firms

Since every ship brokerage firm has the same infinite access to information, there is put considerable weight on tailoring the provision of information as much as possible to the customers' specific needs, individually customer-wise and filter it throughout the flow. Ideally, instead of waiting for the customers, for example cargo owners, to ask for their service, the ship brokers should put more emphasis on identifying and expand their community of customers and try to enter it and provide them with their refined and focused community information and build the trust.

- Rule 8: No harmony, all flux

Small and medium Ship brokerage firms do business with people that share the same philosophy and can be identified with them in recognition of mutual core values; e.g. focus is put on trying to find business opportunities and adapt after the constantly changing market environment that matches one's own conditions. For one thing, this can prove highly important when it comes to building trust and long-term relationship with the customers. For another thing, ship brokerage firms can be successfully led when searching for opportunities through the fluctuant market conditions. On the other hand, there exist ship brokers that work for big/merged companies and there is put weight on the number of the deals that they are concluded. Therefore, they adapt their character and their philosophy after the customers which, in turn, do not help building up long-term relationship. All in all, customers are seen as people by small and medium ship brokerage firms and as deals by big/merged ship brokerage firms.

- Rule 9: Relationship tech

Small and medium-sized ship brokerage firms build relationship and do business with customers that they support them and a trusted relationship is built up. On the other hand, big firms conclude deals with any customer.

- Rule 10: Opportunities before efficiencies in some cases implemented by the ship brokerage firms by creating shipping pools and consolidating their available resources

Nowadays, it is of high importance that ship brokerage firms build close and strong collaborations with each other. In this way, gaps in their expertise could be covered with ensue enhanced service and clientele expansion without compromising flexibility.

6 Discussion

Without doubt, the ship brokerage sector is one of the oldest segments in the shipping industry that is still governed by old customs and practices. One could argue that, until recently, there was no actual need for change since the ship brokerage firms had been operating under fruitful market conditions. Negotiations were handled from an advantageous position and contracts would be effortlessly concluded. However, this hibernation state has fertilized an ominous condition bound to cause a prolonged crisis in the market, starting from the year 2008, that caught the entire shipping industry by surprise.

Ironically, it is argued that the industry was properly informed and ready to gradually implement mechanisms for change long before the downturn hit since most actors had sufficient funds, capabilities and incentives in order to cope with upcoming obstacles. Nowadays, seven years after the introduction of the crisis, the ship brokerage sector still seem to be disoriented by its traditionalism and strict management structure in a battle that now requires effective and vast whilst sometimes drastically changes in order to prevail even if they have been aware about the situation for almost a decade. For one thing, small and medium ship brokerage firms have been forcing radical changes without taking into consideration long-term implementations and synergies that would smoothly absorb the pending changes and establish the solid basis for success. For another thing, big ship brokerage firms have merged in order to gain competitive advantage in the market even though the signals being received by them show an in-house lack of uniformity.

From a broader perspective, ship brokerage firms tend not to be very flexible towards the occurring changes in the market and, in addition, appear to be a bit narrow minded since they copy each other's maneuvers. It is interesting aspect while fact that ship brokerage firms are aware of the measures that have to be taken in order to bring about change and survive the crisis. However, what prevails in the sector is stagnation and it has not been surprisingly introduced considering that they act as consultants to a sector that is highly affected by the actors it serves. Additionally, one could argue that further diversification could keep the current market state in a more stable position but due to lack of gradual implementation the industry remains in a non-cumulative and fluctuant curve. A fundamental reasoning for this could be found in the mindset where as a lot of firms perceive this approach as a quick fix rather than looking at what actual factors should be fueling such act. Thus, they are made drastic measures in desperation whilst enforcing the fear for not being able to achieve a successful implementation since it could be too late. Hence, it is hindered the innovative mentality that would strive for change even if it would reside sufficient support in terms of available resources and capabilities within the firms. It is the "hows" and "whys" in reference to future foreseeing that is seen to be the key of keeping it as a successful achievement if one does not have any specific motivation behind it.

When it comes to the flow of information, ship brokerage firms are surrounded by plenty of information which in certain cases causes a lot of issues even if there do exist solutions to the problem. For example, the information has to be filtered because it includes a lot of noise or unwanted and useless information. Nevertheless, filtering procedures need to become more enhanced by IT and organized to a greater extent so that the information be in line with the uniqueness of each customer and firm's' core values and competences. Furthermore, IT and innovation are used as the base for continuous improvement towards a more day-to-day efficient way of working. On the contrary, from a future perspective and engagement there exists lack of innovation since everybody awaits the competition to find a solution or a gap in order to be copied by the rest of the industry. When it comes to personal contacts with the customers, the engagement is still subject to the comfort of the old well known customs while possible innovative ways and solutions are overlooked. Intercultural values and the human factor are still a big part of operating in the ship brokerage sector in order to build trust and loyalty within the network. This advocates that current mentality will probably pervade whilst remain intensely important when trying to build long-term relationships in the sector where as indicators point in a direction that this is what more and more companies might focus on instead of trying to embrace available technology. Thus, promoting disruptive innovation as being the remedy of sustaining and instead focus on old and mutual philosophies rather than look for future solution and possibilities.

Generally speaking, even though day-to-day work functions mostly efficiently, ship brokerage firms are in great need of a vision to become focused on. This will serve them as a compass with which, no matter how fluctuant the market is, it will be maintained a strong focus on certain paths and strategic agility towards the achievement of the vision. In other words, the backbone of ship brokerage firms is backed in order to be only supported their survival on a day-to-day perspective. Moreover, it might force operating actors to focus on making small and gradual changes instead of pursuing great business alternations diverging from the focus completely, which today seems to be the general approach. On one hand, this tactic does enforce fear and suspiciousness against the necessity of change. On the other, it could also provide a more stable market while it nurtures stagnation and adherence to old practices and beliefs. However, due the fact that ship brokerage firms are as dependant as they are in reference to customer needs, mentioned approach could be hard to justify and be completely reliant to.

Furthermore, whether recent or ongoing mergers will be successful or not is too early to tell. However, if the background research behind these decisions are sufficiently underpinned, one will eventually be able to see the result soon enough but as of today the general opinion is quite skeptical even though one also could project that this approach will escalate throughout the industry non dependant on focused segment. It is not a connected issue concerning either lack of education or expertise but it could be affected and blurred by personal incentives rather than wisdom.

6.1 Suggestions

In this section Kotter's and Kelly's theory are used in combination with chapter 5 Analysis. The aim is to be identified the additional actions that a ship brokerage firm could take in order to successfully implement Kotter's and Kelly's theory and better position itself in the competitive and fluctuant shipping industry.

6.1.1 Improvements in relation to Kotter's theory

Table 2 shows the degree of implementation of Kotter's theory by the ship brokerage industry and it is divided in two columns. In the column named as *Stage*, they are shown the steps that need to be followed for a successful implementation of Kotter's change management theory. In the column named as *Degree of implementation*, it is shown the extent by which ship brokerage firms have implemented Kotter's stages according to chapter 5 Analysis.

Table 2: Kotter's theory - degree of implementation by the ship brokerage industry

Stage	Degree of implementation
1. Establish a sense of great urgency	Lacking
2. Create a strong guiding coalition	Lacking
3. Establish a vision	Not implemented
4. Communicate the vision	Not implemented
5. Enable other players to act on the vision	Not implemented
6. Planning for and creating short-term goals	Implemented
7. Concentrate improvements and produce more change	Not implemented
8. Institutionalize new approaches	Lacking

According to Table 2 and Kotter's change management theory, the following suggestions are given for the lacking and not implemented steps in order for the ship brokerage companies to introduce an effective change management tactic:

- Stage 1: Lacking

Ship brokerage firms should be less hierarchical and internal transparency should be promoted in order for them to enhance synergy between different departments and management levels. It is considered of great importance that

ship brokerage firms become more flexible in order to adapt quicker and more effective to the changes.

- Stage 2: Lacking

It is suggested that large ship brokerage firms appoint a coalition team that will ensure synergy between different departments and keep people concentrated around the same focus in relation to the change goal. When it comes to small and medium-sized firms, depending on the number of the employees, one person could be appointed to execute the duties instead of having a coalition team. In this way it could be solved the issue of the natural communication gap between owners/general managers and the employees.

- Stages 3,4 and 5: Not implemented

It is highly important the construction of a vision since it has the ability to orchestrate the direction of a ship brokerage firm. Moreover, the vision should be made known internally throughout the company and externally towards the clients.

- Stage 6: Implemented
- Stage 7: Not implemented

Change should use as a leading light the vision of the ship brokerage firm in order not to get lost in the flux of information and market fluctuation. Any implementation of change needs to be connected to the vision and the long-term perspective and not to short-term strategy and goals. All in all, an organization cannot be streamlined without an embracing mantra.

- Stage 8: Lacking

Ship brokerage firms should support the change process with new projects and change agents. Even though it might be difficult to do so when operating in a bad market, it should be promoted during good market conditions in order to be able to stay proactive and effectively confront bad market cycles. Moreover, it should be made clear throughout a firm, through follow-up mechanisms, that the change and the new practices have become united with the core business in order to be avoided a return to a previous state. In addition, it should be circulated within and outside the company the fact that the improvements are owing to the change.

6.1.2 Improvements in relation to Kelly's theory

Table 3 shows the degree of implementation of Kelly's theory by the ship brokerage industry and it is divided in two columns. In the column named as *Rule*, they are shown the rules that need to be followed for a successful implementation of Kelly's network economy theory. In the column named as *Degree of implementation*, it is shown the extent by which ship brokerage firms have implemented Kelly's rules according to chapter 5 Analysis

Table 3: Kelly's theory - degree of implementation by the ship brokerage industry

Rule	Degree of implementation
1. Embrace the swarm	Implemented
2. Increasing returns	Lacking
3. Plentitude not scarcity	Lacking
4. Follow the free	Lacking
5. Feed the web first	Not implemented
6. Let go at the top	Implemented
7. From places to spaces	Implemented
8. No harmony, all flux	Lacking
9. Relationship tech	Lacking
10. Opportunities before efficiencies	Implemented

According to Table 3 and Kelly's network economy theory, the following suggestions are given for the lacking and not implemented rules in order for the ship brokerage companies to introduce an effective network economy tactic:

- Rule 1: Implemented
- Rule 2: Lacking

Ship brokerage firms should more effectively infiltrate the acquired information. It is suggested that this is used for diversification, enhancement of their services, and merger or consolidation with another party through the implementation of Kotter's change management theory.

- Rule 3: Lacking

It is suggested that internal systems and databases are accessed by everybody within a ship brokerage firm. Therefore the interaction between different departments/employees will be increased and the efficiency of the operations

will be enhanced without the use of personal interaction. Ultimately, this openness could support “a thinking out of the box mentality” and an enhanced global reach with the exchange of hints and best practises between different departments.

- Rule 4: Lacking

Ship brokerage firms should be more engaged to this rule by offering the option to their customers of service packages in return of a monthly fee instead of a one-time fixed commission. This approach will allow customers to save money and ship brokerage firms to gain loyalty and dedication, and standard income in relation to long-term business relationships.

- Rule 5: Not implemented

Create a closed network/society of a great variety of different professionals that the clients will have access to with a single phone call to one of them; thus these professionals become agents for each other by pooling each other’s capabilities in some kind of consolidation. This is shown in Figure 3 which is a variation of Figure 1 on page 16. It is illustrated a consolidation of different firms offering different service and supporting each other towards enabling access to a community of clients that they have pooled their capabilities.

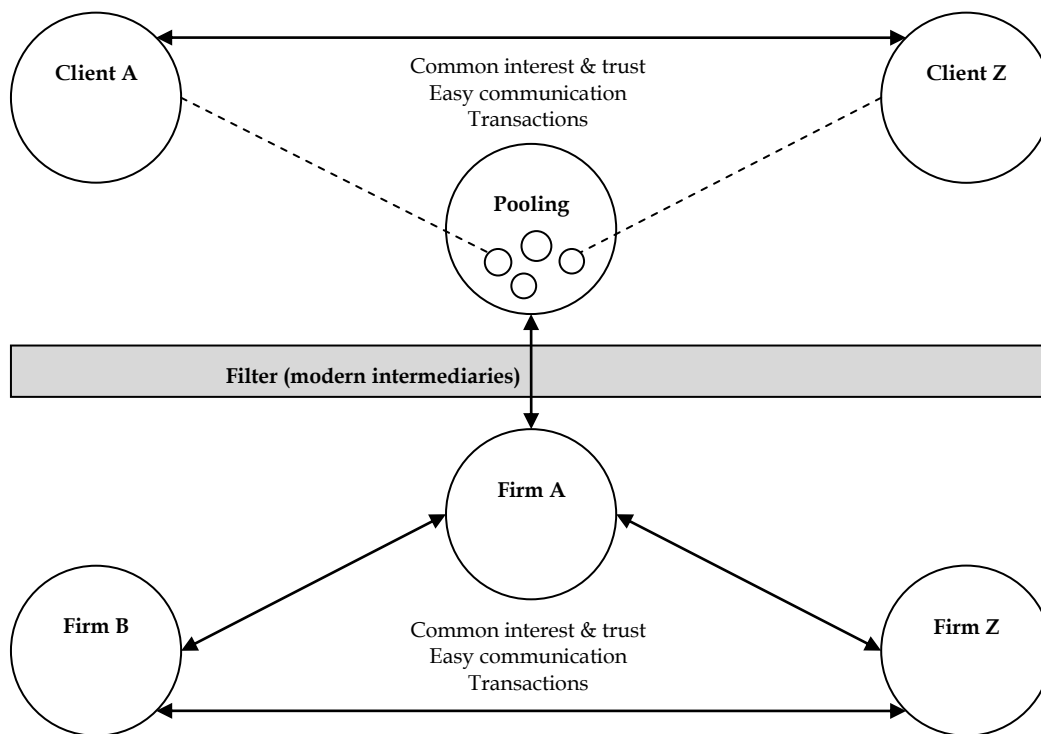


Figure 3: Closed network of professionals achieving collaboration with clients that has pooled their capabilities

- Rule 6 and 7: Implemented

- Rule 8: Lacking

It is suggested that ship brokerage firms maintain constant agility against market conditions and flexibility for implementation of change. Therefore, ship brokerage firms should be in continuous diversification depending on the environment, or be ready to change focus of the core business and make way for a smooth transition when the time comes.

- Rule 9: Lacking

It is suggested that ship brokerage firms be proactive even when they do well since they have the possibility of monitoring their current situation and, in this way, their business can be complemented in order for short-term risk avoidance to take place. This could be enhanced with the introduction of an internet based platform or/and phone application for clients where small issues can be solved efficiently. For example, clients could log in with their username and password to the company's relevant forum e.g. freight rates, trading patterns, oil prices etcetera. These forums/parameters could be updated on a daily basis through research, other information platforms, and contribution from the other clients. Since the platform could promote the possibility of solving common day-to-day business solutions, trust and long-term relationships could be built between a ship brokerage firm and its clients.

- Rule 10: Implemented

6.2 Methodology discussion

For the purpose of this thesis a qualitative approach through open interviews is considered to be more suitable since they have to be identified deeper values and actions of the ship brokerage firms. Nevertheless, it should be kept in the reader's mind the fact that the interviewed parties' opinion might be biased by a variety of factors. On the other hand, should it have been chosen a quantitative approach, the result of this work would have only been limited to financial measures which they do not reveal essential data in relation to actions that have already been performed.

One of the major issues that came up during the interviews was the fact that the interviewees had to keep their opinion for themselves and let the interviewees express themselves without being affected by unnecessary intervention by the interviewers. Furthermore, some of the interviewed ship brokerage firms treated the interviewers with suspicion when certain questions were asked e.g. in relation to whether they exist any gaps in the market or not. In general, even though the interviewers discerned some secrecy from the interviews side, the interviews took place under very friendly and relaxed conditions, and it was given space to the interviewees to deeply elaborate on their answers. All of the interviewees were very interested to the subject of this thesis and they would wish to have a copy of this thesis.

The results from the conducted interviews can be considered as highly valid. This is due to the fact that all of the interviewed firms are considered to be ship brokerage firms with long history, significant experience, and broad knowledge in relation to all ship brokerage sectors. However, the number of the interviews was not in accordance to the interviewers' plan since they had been initially planned double interviews than the actual ones; five interviews. For one thing, the ship brokerage sector is quite hectic and the ship brokerage firms did not have time to spare on interviews. For another thing, even though the interviewers could have planned a prolonged trip in order to be able to reach more ship brokerage firms, they were lacking the right amount of time and the financial capacity for such a solution.

Moreover, by having concluded the mentioned pilot studies relatively early in the thesis procedure has helped and guided the whole investigation. Since, throughout these pilot studies, essential insights led the research towards an unexplored while actual area that could be considered unknown. Why it is so far unexplored is considered irrelevant but the aspects behind the reasons for ongoing trends gave the thesis' mentality an interesting indication of being explored. Additionally, it gave the research relevance in reference to the actual state of the ship brokerage sector.

Given the vital hint of possible research area fueled the investigation to look for frameworks and background research connected to today's agenda e.g. what is considered to be possible CSF in reference to ongoing trends in the industry. Emphasis was therefore put on educating the investigation with theories and philosophies connected to change management whilst how to cope with further networking in a general market perspective. As a result, the research culminated into focusing on analyzing a possible result throughout Kotter's Change Management and Kelly's New Economy via Bullen and Rockart's aspects of CSF. Since the ship brokerage sector is based on large and complex networking, the above mentioned theories had been chosen in order for an effective exploitation and adaptation to modern networks. Moreover, it is perceived that this could effectively take place with the aid of change management.

One should not neglect the important fact that, according to Kotter, these errors are nothing but a guideline to the process of change; they are the largest errors but they should be carefully taken into consideration other possible mistakes as well, which might undermine the process of successful change. Likewise, no one should take Kelly's principles literally. His theory ought to be used as a guiding light in order to be understood by the individuals and the firms the importance of being part of the network economy, preserving solid core values, and last but not least not resting on their laurels. For one thing, the networks are not a recent phenomenon since they have been transforming the global economy for a long time ago; a good example is the shift from the isolated rural life to the interconnected urban life. For another thing, even though the internet has multiplied the pace of communication there is no sign on the horizon that more traditional means of communication, such as

telephone, mail, fax or even letters, are on the edge of extinction; on the contrary, there exists a number of people that they prefer and need the physical contact when they communicate, socialize, or are involved in business activities.

However, even though these theories to some extent seemed to be a bit out of the scope and unconnected to the research, the investigation indicated that these were the few most connected philosophies to the research. Some readers might be under the perception that Kotter's theory is connected to a business-to-customer approach. Nevertheless, after careful consideration, Kotter's theory could well be adopted to a business-to-business approach, as well. Moreover, the main drawback was that these theories had to be adopted in such way that they could be used as an analyzing theory in connection to the raw data streaming from the qualitative approach properly. That is why further emphasis was put on boiling down essential facts via the use of grounded theory and Atlas.ti. The choice of implementing grounded theory and Atlas.ti helped the research in ways of pinpointing what was relevant whilst still kept the interviewed sample group anonymous during the grouping process of the generated codes and the result summarizing process.

Lastly, it is believed that the final investigation has met the study's primary aim and character sufficiently throughout the chosen methodology. It is therefore concluded that the research is subjected to finding out how the ship brokerage sector could be investigated and explored. Perhaps some alterations concerning the choice of theoretical frameworks could have been made or complemented but all in all it is believed that the research has been executed and sufficiently underpinned in a correct manner.

7 Conclusion

The study has focused on the identification of CSFs in relation to ongoing trends, which could be implemented on mid-sized firms in the dry bulk sector of the ship brokerage industry. For the purpose of the study, interviews with various actors from the ship brokerage industry were carried out via personal communication based on an interview questionnaire. Moreover, the results from the interviews were prepared with the aid of and compared to Kotter's change management theory, Kelly's network economy and Bullen & Rockart's perception of CSFs in order to identify possible CSFs that could be applied on the above mentioned type of firms in order to cope with ongoing trends.

Due to the fact that the largest pervading trends and obstacles that now are streaming throughout the industry are considered to be in connection with M&A and the flow of information, the investigation was angled towards BI /IT, as well as change management, when entities consolidate. With the aid of mentioned theories, the investigation concludes with perceived CSFs in relation to the dry bulk sector in the ship brokerage industry which additionally can be divided in two broad and interdependent categories; successful change management and successful adoption to the network economy according to Kotter and Kelly respectively. Since every actor perceives the agenda from different horizons, the result culminated down to several unique aspects to the hypothesis. However, several common CSFs were identified as following:

- Imperative sense for change
- Existence of a guiding group through the change
- Existence of a vision which is effectively communicated and engaging
- Planning and creation of short-term goals
- Improvements and further change should be related to the vision
- Establishment of new projects and approaches
- Be part of an increasing in size network
- Merge or collaborate with other actors in order to avoid competition
- Enhance transparency and interdepartmental collaboration
- Offer more value with the same amount of compensation e.g. broader area of services
- Adapt after the market changes and support continuous improvements through innovative solutions
- Filter the information in order to identify a community of customers and build trust
- Find business opportunities that match the firm's core values
- Be agile and ready to change focus of the business

- Small day-to-day business problems for the customers should be sold effortlessly through e.g. a web-based platform

7.1 Future research

Since the study, is solely focused on the ship brokerage sector with regards to the dry bulk sector; other sectors are left out. However, since the total shipping industry is considered to be complex while highly integrated sector with all of its segments connected and reliant to each other, one could argue that the findings from the investigation could be applicable on any other brokerage sector in the industry. As a result, the thesis is believed to cover the investigation's context with CSFs in reference to ongoing trends. The main drawback could however be considered to be the lack of participating actors from the industry underlining the results. This means that if, for some reason, one would question the validity of the findings it would be interesting to see someone else conducting the same type of research with a larger sample size in order to identify whether the sample size actually is representative for the whole European market or not. If not, what one could do is to continue with existing investigation and try to apply the findings on more actors in the dry bulk ship brokerage sector e.g. via regular surveys. In this way, the retrieved result could lead to identifying whether the findings from this investigation are considered to be CSFs are applicable to the sector or not in reference to current ongoing trends. However, this also means that a similar investigation would have to be executed quite soon due to the volatile market cycle.

Moreover, should another approach be in preferred, it is advocated that someone else should try to investigate how the ship brokerage sector possibly could promote a greener quality. Even though the actors are highly affected by the clients they serve, it could be interesting to look into what the incentive or gap could culminate down to in order to enhance the environmental mentality throughout the shipping industry. Other emphases are of course possible as well, where as trying to apply other types models in reference to what today is considered to be minor trends since the market is in constant adaptation and change. However, the main opinion is that the environmental agenda will grow and one should therefore put the emphasis on trying to investigate a similar or related issue in such case.

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Appendix A

Generic interview survey

General questions

- Describe how you perceive ruling business climate in the industry.
 - Atmosphere/market environment - the competitiveness?
 - Ongoing trends/obstacles in reference to where you see the industry head?
 - Are there any cumulative changes pervading or going on or are there just “small bubbles” popping up everywhere?
- How is your firm influenced by this (above mentioned)?
 - What are you doing in reference to this? Business as usual/accumulative adaption and change?
 - If no change, what would the incentive for it to happen be? Full grown crisis/edge of no tomorrow? Red numbers in your ledger?
- What’s your opinion about the grown scale of ongoing acquisitions & mergers of and/or between middle-sized firms around the world?
 - Are the larger firms starting to gain more market shares and/or dominating the markets?
 - Are you influenced by this or are you trying to pursue such agenda with your own firm?

Perceived “Critical Success Factors”

- Is it important to stay close to the customer through continuous flow of information?
 - How about the smaller shippers/customers? (Does the size of the customer matter?)
- Do there exist any gaps that have not yet been filled or mitigated in your segment/industry?
 - Are there any hidden opportunities outside your, as of today, reach?
 - Is there anything hindering your expansion?
 - Short/long term horizon?
- Do you give the customers more than one alternative or option when trying to satisfy their needs?
 - Why/why not?
 - Importance of “green” alternatives?
 - Incentives for the above mentioned?

Change management

- Looking at today's market and competitiveness, do you think that there is a lack in expertise and/or educational skills in the ship brokering sector?
 - In terms of research, business development & analysis, ship brokering in general etcetera.
- Has your firm's vision changed over the years?
 - If so, in what way and why?
 - Or why not?
 - What's your general opinion about gathering the whole enterprise around the same "mantra" when pursuing the firm's mission?
- To what extent do you get influenced by your shareholders/stakeholders opinions when trying to implement any changes in the enterprise?
 - How much do their opinions matter?
- Are you focusing on continuous improvements on current services or are you looking for innovative approaches in terms E.g. diversifying your scope?
 - Change of core business and/or core values (ethical, moral etcetera.)?
 - Are you proactive in adopting new market trends or is it executed reactively? (E.g. trend for SECA changes)
 - Are there any fears of going outside the box and try doing something new?
 - Due to "conservativeness" or because of non existing support from the management/investors?
 - Simply just no need?

Business Intelligence/Information Technology

- What type of Business Intelligence tools do you use?
 - Why/why not?
 - Big data
 - IT-platform
 - Social networking
 - Various business analyses or information gathering tools

Concluding questions

- In what direction can you see your firm heading?
- Where would you like to see that the industry head?
 - Where would you like to see your firm head?