INDUSTRIAL MARKETING

in a

NETWORK PERSPECTIVE

A Qualitative study of ABB Crane Systems and its Sales Network
Abstract

Course:
EFO703 Bachelor Thesis in Business administration 15 ECTS

University:
Mälardalen University
School of Sustainable Development of Society and Technology, Västerås

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Research question:
How is the sales network of ABB Crane system related to industrial marketing in a network perspective?

Purpose of the research:
The main task is to investigate if the sales network of ABB Crane Systems is related to established theory of industrial marketing in a network perspective.

Method:
The research strategy has been formed from a deductive approach and the empirical data has been gathered with a qualitative approach. Both primary and secondary data has been used in order to fulfill the purpose of our paper. The empirical findings represent the primary data which was gathered through interviews with the management of ABB Crane Systems. The secondary data was gathered from journal articles, literature, ABB’s website and Mälardalen University’s databases.

Conclusion:
With the help of three different theories, it has been concluded that the sales network of ABB Crane Systems has a rather close relationship with Industrial Marketing in a network perspective. However, it has also been found that the company is not entirely related to the important aspect of embeddedness in its sales network, which is a deliberate strategy in order to minimize the risks of miscommunication, maintain control over the sales process, remain flexible, as well as not waste scarce resources. The implication is that the level of embeddedness in the industry depends on several factors such as market concentration, competition, number of projects per year, size of available projects, the stage in the relationship building process and overall market uncertainty.
Kurs: EFO703 Bachelor Thesis in Business administration 15 ECTS

Högskola: Mälardalens Högskola
School of Sustainable Development of Society and Technology, Västerås

Författare: Peter Strömberg & Sandeep Jain

Examinator: Ole Liljefors

Handledare: Per Nordqvist

Frågeställning:
Hur är ABB Crane Systems försäljningsnätverk relaterat till nätverksperspektivet inom industriell marknadsföring?

Syfte:
Huvudsyftet är att undersöka om ABB Crane Systems försäljningsnätverk är relaterat till det etablerade nätverksperspektivet inom industriell marknadsföring.

Metod:
Denna undersökning har strategiskt formats utifrån en deduktiv ansats, och den empiriska datan har samlats in med en kvalitativ metod. Både primär och sekundär data har använts för att uppfylla syftet samt svara på frågeställningen. Empirin representerar primärdatan vilken har samlats in genom intervjuer med chefer på ABB Crane Systems. Den sekundära datan samlades in från academiska tidskrifter, litteratur, ABBs hemsida samt från databaser på Mälardalens Högskola.

Slutsats:
Med hjälp av tre olika teorier har slutsatsen dragits att ABB Crane Systems försäljningsnätverk har en relativt nära relation till nätverksperspektivet inom industriell marknadsföring. Emmelertid har det även påvisats att företaget inte helt är relaterat till "embeddedness" i försäljningsnätverket, vilket är förankrat i ett medvetet strategiskt val för att minimera riskerna med missförstånd, upprätthålla kontroll över säljprocessen, bibehålla flexibilitet, likväl för att inte slösa på de begränsade resurserna. Innebördens är att nivå av "embeddedness" beror på flera faktorer såsom marknadskoncentration, konkurrens, antal project per år, storlek på tillgängliga project, relationsnivån i den relationsbyggande processen, samt den överliggande osäkerheten på marknaden.
Acknowledgements

This paper would not have been possible without the help and co-operation of both Frederik Johanson, Sales Manager and Lars-Tuve Hansson, Product Manager, from ABB Crane Systems, Västerås. The process of obtaining all the relevant information has been insightful and valuable and we are grateful to their support in a number of ways.

We are also greatly indebted to our supervisor, Per Nordqvist, for all his guidance, patience and support during the past few months, from the initial to the final stages of this paper. His precious time spent in helping us through this process is invaluable.

We cannot forget all our group-mates for all their constructive criticism to our working paper. It has been a rewarding learning experience for us and we thank you for all your help.

Lastly, we will also like to extend our deepest gratitude to our family members who have been a continuous support to us during these past few months.

__________________________________________
Peter Strömberg                               Sandeep Jain

Västerås

2011
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## Keywords

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<tr>
<th><strong>B2B</strong></th>
<th>Business-to-Business (or industrial market)</th>
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<tr>
<td><strong>Prospect</strong></td>
<td>A potential customer or client qualified on the basis of his or her buying authority, financial capacity and willingness to buy. Also called sales lead (Definition of Prospect, n.d.).</td>
</tr>
<tr>
<td><strong>Bid</strong></td>
<td>Complete proposal (submitted in competition with other bidders) to execute specified job(s) within prescribed time (Definition of Bid, n.d.)</td>
</tr>
<tr>
<td><strong>BU</strong></td>
<td>Business Unit</td>
</tr>
<tr>
<td><strong>End-user</strong></td>
<td>The organization eventually using the equipment in production.</td>
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<tr>
<td><strong>ASTAT</strong></td>
<td>An ABB Crane Motion Controller</td>
</tr>
<tr>
<td><strong>OEM</strong></td>
<td>Original Equipment Manufacturer (crane builder)</td>
</tr>
<tr>
<td><strong>STS</strong></td>
<td>Ship-to-Shore (crane)</td>
</tr>
<tr>
<td><strong>RTG</strong></td>
<td>Rubbed tyred gantry (crane)</td>
</tr>
<tr>
<td><strong>Center of Excellence</strong></td>
<td>Nurtures the core competence, science and technology within area of responsibility</td>
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<tr>
<td><strong>ABB</strong></td>
<td>Asea Brown Boveri</td>
</tr>
<tr>
<td><strong>MoCon Robust</strong></td>
<td>Motor Controller Robust</td>
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1

INTRODUCTION

This chapter starts by outlining a common background and problem area, followed by the problem specification, purpose of research, target group, delimitations, reference system used, definitions and lastly a chapter view of the paper.

1.1 Background

A recent study shows that the cost for getting a new customer is six to ten times more than keeping an old one and for most Fortune 500 companies, half of their customers are lost within five years. A typical company with this index communicates on average four times per year with its customer base and six times a year with potentially new customers. Despite this, the backbone of future sales comes from the already established customer base. In some industries, this share can be as high as 80 percent, implying that a single purchase is up to ten times less worth than customer loyalty (Keillor, Orr, & Hawes, 2007, p. 3).

Customer loyalty is crucial in both business-to-consumer (B2C) and business-to-business (B2B) markets (also called industrial markets), but the respective marketing approach used by firms to reach customers is typically distinguished in the two. The major difference lies in the importance of the promotion tools used. Business-to-consumer companies usually aim to create a larger demand through pull strategies, meaning that large investments are made into aggressive advertisement in order to create a demand for the product(s). In contrast, business-to-business companies push their product(s) by investing relatively more into personal selling (Kotler & Armstrong, 2008, p. 416).

Goods in industrial markets tend to be more expensive and risky, in which personal contacts remain emphasized instead of impersonal advertising (Turnbull, 1979, p. 329). A complex pattern of interaction, a long term perspective and a setup of embedded relationships among parties further defines industrial marketing as an academic field (Hart, 2003, p. 164). One rationale behind greater significance in interpersonal communication is that both buyers and sellers need more information in decision making (Turnbull, 1979, p. 326). Relationships are therefore built among various parties in what is referred to as a network. The relationships are considered as one of the major assets of an industrial company (Ford et al., 1998, p. 41).

Inside the network where various companies reside, the characteristics of the interaction and behavior among the parties are shaped. The variation of the interactions in the network can be wide in nature, meaning that relationships also can become distant and largely impersonal, hence making it similar to the consumer market. This is very
characteristic in industrial markets, where the players are multinational companies which establish relationships across national boundaries and the international variables of language, culture, education and political differences. Such variables add complexity to the domestic market (Turnbull, 1979, p. 13).

It is mainly due to the trend of this increased interaction and awareness of customers that many organizations have experienced a shift in their resources from marketing to sales. Strategies dedicated to the sales force are becoming increasingly important in order to manage top priorities of marketing and business strategy (Piercy, 2010, p. 350). Later research has shown that more influence lies in the sales department rather than the marketing department when it comes to marketing decisions and that the primary marketing personnel increasingly exist more in the sales unit rather than in the marketing unit. “Sales plays a growing role in formulating as well as executing marketing strategies” (Piercy, 2010, p. 351).

One company that has had a long tradition in industrial markets is the engineering conglomerate ABB. “ABB is a leader in the development of power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact” (About ABB, 2011 and Our businesses, 2011). Its global footprint is extensive - they have operations in approximately 100 different countries in the world.

Wide industrial markets, such as the ones in which ABB is part of, are relatively stable and long-term oriented, meaning that the investments are planned for and are executed over a long period of time. In order to obtain purchase orders, process the orders and finally supply the goods and services to end-users, relationships with other organizations in the network must be certain and established. Both the in- and outward distribution channels within internal ABB units, suppliers, original equipment manufacturers (OEM) and end-users (or end-customers) can be long and complex. In a network involving such varied parties, one unit of ABB cannot easily on its own assure customer satisfaction and a high quality, since its outcome is affected by several other organizations in the industrial market.
1.2 Problem Discussion

Coping with the complexity of relationships in industrial markets is a tedious task and even though technology is helpful to manage data on different levels, “we are still just people selling products and services to other people” (Keillor et al., 2007, p. 12). Therefore, finding and retaining sales talent is considered to be a major competitive strength (Keillor et al., 2007, p. 14). Estimates indicate that hiring and training a replacement for lost sales personnel costs approximately 50 percent of the worker's annual salary (Gemignani, 1998, p. 2). High-performing salespeople not only know about the network in which the business operates, but also the product and service offerings, competitive strengths and weaknesses. Their knowledge and experience is thus a significant part of a firm's human capital and image (Griffeth & Griffin, 2000, p. 400).

Evidence has shown that many senior managers are dissatisfied with the productivity of their sales functions and that the cost of selling and coordination is misaligned with the strategic goals. This is commonly referred to as a strategy gap (Touche, 2005, p. 1). The main task of the sales function is to reach the sales budget, resulting in a high pressure for the sales and marketing department. Thus, “The shaping of the selling function has become a strategic corporate issue”, which requires clear role descriptions, new structures and new management approaches (Shapiro, Slywotsky, & Doyle, 1994, p. 3).

Even though ABB’s industrial markets generally constitute a few actors, the competition for the sales prospects is still high. Some markets might only have a few but major sales prospects available per year, leading to a major impact on the parties involved in the network. Winning such critical bids can sometimes be a matter of long-term survival for an individual business.

Given that ABB is a large multinational company, managing business relationships is continuously a major concern and topic for discussion within the organization. Relationships affect the image and reputation of ABB as well as their financial result. At the same time, most of the costly labor intensive engineering and project management is facing much tougher competition due to the cost disadvantage of most countries in Europe compared to those in Asia. The competitors are improving and building on engineering and management competence in East Asia and this is creating a growing concern – whether the business units in Europe will be able to maintain their competitive strength on the global market.
1.3 **Problem Specification**

Figure 1.1 - Research Question

Research Question

How is the sales network of ABB Crane System related to industrial marketing in a network perspective?

1.4 **Purpose of the research**

The purpose of this paper is to investigate if the ABB Crane Systems sales network is managed according to the network perspective of industrial marketing. The analysis obtained might be helpful for ABB Crane Systems for both its future strategic compilation and decision making within its sales network with regards to sales of its new products and services.

1.5 **Target Group**

This paper is relevant for ABB’s sales personnel and management interested in improving their competitiveness on the global market. The paper should also appeal to students and teachers interested in deductive empirical studies about industrial marketing in a network perspective.

1.6 **Delimitations**

Research has been conducted with only one company used when gathering the empirical data. The authors chose to look at only one company since it is most connected to our research topic. ABB Crane Systems is an experienced supplier on a complex global industrial market platform and both respondents within the company have held a high position in the hierarchy and have several years of experience.

The authors have delimited the research to relationships in the sales network. It is acknowledged that also other units in the organization have relationships with both suppliers and customers. These include units such as project management and supply chain management, etc. It is important to point out that the research is seen from a salesman’s point of view and that other units in the organization might not always agree.
It was found to be more interesting to look closer at one company rather than spending less time on many. The authors of this paper are hence aware of some subjectivity that might occur in such a limitation. A critical stance has therefore been taken during the formulation of the interview questions as well as the analysis. Nevertheless, the impression is that the information from the respondents will be sufficient to carry out an appropriate analysis of the situation and allow the authors to come up with an appropriate analysis and conclusion. Considering the fact that this study is conducted using a qualitative approach, the study will primarily focus on connecting to the management’s point of view.

1.7 Reference System

The referencing system used for this paper is according to the APA (American Psychological Association) system; meaning that the paper will mention the author’s name, followed by the year of the publication release and in some cases the page number as well, if the quotation can be found on a particular page. It will be given within or after a sentence. These references will be stated in alphabetical order in the reference list, which will also include full details of all the text citations and their publishers (Fisher, 2007, p. 269).

1.8 Definitions

**Industrial Markets** - Also referred to as “business-to-business markets”, “Buys goods and services for further processing or for use in the production process” (Kotler & Armstrong, 2008, p. 66)

**Industrial Network** - “Consists of companies linked together by the fact that they either produce or use complementary or competitive products” (Håkansson, 1989, p. 16)

**Embeddedness** - A network consists of interdependent relationships, where the particular relationship does not appear in isolation, but as a part of a greater whole. Each relationship then performs as embedded in, or linked to, some other relationships and its progress and the purposes cannot be appropriately understood if the interdependencies are ignored (Håkansson & Snehota, 1995, p. 3).
Chapter Overview

INTRODUCTION
This first chapter includes a synopsis of the paper.

COMPANY PRESENTATION
Presented in this chapter is the background information of the chosen company, ABB, its history and structure. At the end, the problem area of the business unit is presented.

INDUSTRIAL MARKETING IN A NETWORK PERSPECTIVE
The history and definition of industrial marketing in a network perspective will be presented in this chapter.

RESEARCH MODEL
The research model describes the process of this paper from the chosen topic, to the relevant theory, empirical findings, analysis and lastly the conclusion.

METHOD
In this chapter, a detailed description of the procedure used in the research as well as the method and reasons behind the data collection are presented.

THEORETICAL FRAMEWORK
In this chapter, the theories suitable for this paper are discussed. It continues to explain industrial marketing in a network perspective, starting from inter-organizational theory, to the network and finally the relationship development.

EMPIRICAL FINDINGS
Presented in this chapter is the data collected from the interviews.

ANALYSIS
In this chapter, both the secondary and primary data have been analysed using the theories previously chosen.

CONCLUSION
Here, the conclusion has been drawn about the analysis carried out, with a purpose of answering the research question of the paper.
2

COMPANY PRESENTATION

Presented in this chapter is the background information of the chosen company, ABB as well as its history and structure. At the end, the problem area of the business unit is defined.

2.1 Historical Background of ABB

The ABB Group, a leading company in power and automation technologies, employs about 124,000 people in around 100 countries. This multinational corporation is headquartered in Zürich, Switzerland. The long history of ABB goes back to Sweden, all the way to the late nineteenth century. At that time, a man named Ludvig Fredholm established Elektriska Aktiebolaget in Stockholm, Sweden, a company that manufactured electrical lighting and generators. A few years later in Switzerland, namely in 1891, Charles E.L. Brown and Walter Boveri established Brown, Boveri & Cie in Baden, Switzerland, the first company to transmit high-voltage power. It was about 100 years later since the founding of Elektriska Aktiebolaget which at that time was named ASEA (Allmänna Svenska Elektriska Aktiebolaget), and BBC (Brown Boveri & Cie) to merge in 1986 and eventually become ABB (Asea Brown Boveri) as it is known today (About ABB and Our Businesses, 2011).

Both companies have had a long tradition of innovation within the area of electrical engineering, where ASEA historically has focused primarily on high voltage power transmissions and Brown, Boveri & Cie on power plant applications, turbines and generators. Today, ABB is the world’s largest builder of electricity grids and is active in many industrial sectors. The core business today is in power and automation technologies which are further divided into five divisional business areas (figure 2.1).

The strategy of the company for the next coming years is to continue to improve the performance of utility and industry applications while lowering the environmental impact. This will be possible together with technological capability and leadership, as well as global presence.
and local expertise. The ABB Group will also continue to focus on core strengths in power and automation technologies, in compliance with its vision statement “Power and productivity for a better world” (Mission and Vision 2011, 2008). The corporation strives for an organic and profitable growth and top-quality products and systems.

2.2 The Business Unit

ABB’s five divisions are, Power Products, Power Systems, Discrete Automation and Motion, Low Voltage Products and Process Automation. These can further be separated into several industries. Marine is one such industry which consists of several business units (BUs). Figure 2.2 shows where Marine is located within the ABB Group.

Figure 2.2 - Segmented Industries in Process Automation

The business units of Marine are divided into various market segments such as Propulsion, Azipod, Electric Power Systems, Drilling Systems, Turbo charging, Ship Propulsion, Cranes & Harbor and other. Table 2.1 shows the multinational structure of Cranes & Harbor.

(About ABB and Our Businesses, 2011)
ABB Crane Systems in Sweden, our selected business unit for the empirical study, is responsible for coordinating the global sales, service and business development in the worldwide container crane market which is also referred to as a center of excellence. In line with the mission of ABB, the culture of ABB Crane Systems promotes responsibility, sustainability and business ethics (Mission and Vision 2011, 2008).

In principal, ABB is a supplier of crane systems and service. In terms of customer value, the organization sells tools and techniques that help its clients to move “boxes” (containers) in a safe, energy-efficient and cost-effective way. The backbone of the equipment in such a crane system is sourced from other BUs within ABB which are located in countries such as Sweden, Germany, Finland and China, but a large portion of components are also sourced from external third-party suppliers all across the globe.

### 2.3 Introducing a New Product

Apart from the core business of selling complete crane systems, approximately 15% of the annual revenues of ABB are generated from the sales of heavy duty motion controllers known as ASTAT. The ASTAT product line is sold to a number of countries in the world for a wide range of applications in the steel industry and the largest buyers of these are internal BUs in India, China and Taiwan. These customers in turn, deal with the final sales process by nurturing OEMs or end-users in their respective countries. A typical end-user in India is Tata Steel.
ASTAT® is a highly developed, cost-effective and well-proven crane control system for speed-controlled heavy duty motors in industrial cranes that are designed for the toughest environments. Using leading edge computer technology, ASTAT combines advanced control features with comprehensive information and data distribution to enhance its performance at all levels. ASTAT is made especially for high utilization with higher grade components and larger margins than the normal industrial drives.

With almost a ten year long life-cycle, the product line of ASTAT is now running towards obsolescence. ABB Crane Systems has been working hard over the last three years, to come up with a replacement line called the MoCon Robust. MoCon Robust makes use of the latest state-of-the-art automation processing technology and at the same time helps the operators to cut down their maintenance costs.

During December 2010, one of the authors visited ABB Crane Systems and met with both its global sales manager Fredrik Johanson and product responsible manager Lars-Tuve Hansson. Three years of heavy investments into the research and development of MoCon Robust had already taken place. The meeting highlighted that both Fredrik Johanson and Lars-Tuve Hansson were interested in planning future strategies and making decisions about the sales network, prior to the official launch of their new product line MoCon Robust in the summer of 2011.
THE HISTORY AND DEFINITION OF INDUSTRIAL MARKETING IN A NETWORK PERSPECTIVE

3.1 History of the Theory

The basis of Industrial Marketing in a Network Perspective has been carried out over the last 30 years by the International Marketing and Purchasing (IMP) Group and a number of other contributors. The aspects of interaction, relationships and networks capture the lion's share of the major research conducted by this group, underlining much of the research that has been ongoing in Europe and largely in Sweden, Britain and France (Turnbull, Ford, & Cunningham, 1996, p. 44).

The research of social interaction has been prolonged and by 1974, early fragmented research of industrial markets in the USA and Europe recognized that purchase was a multi-person activity and that buyers were often unwilling to change their supply channels due to the established high degree of long-term stability. Reducing the risk factors in forming stable relationships was the evident explanation to this phenomenon (Turnbull et al., 1996, p. 44).

Throughout the 1970’s, it was apparent that a few actors in the market gave a more restricted choice of partners and the market had thus increased its concentration. Several explanations were offered, such as the high costs recognized with changing partners, strong source loyalty and a general inertia in the buying behavior. By 1975, these studies had led to the recognition that the buyer and seller relationship was complex in its nature and that it should give way to further studies of the relationship interaction as a whole (Cunningham & Turnbull, 1982, p. 27).

The IMP Group was formed in 1976 to develop the research conducted about the relationships between companies in complex markets. The distinct approach of the group was rather different from previous studies. Instead of studying discrete purchasing decisions, the group agreed on the importance of the pattern of dependencies between companies and the factors affecting their transactions over time. The framework of the IMP Group was later recognized as the interaction approach.

The interactive approach recognizes a major part of competitiveness as a company’s capability to develop and manage its variety of network relationships (Turnbull et al., 1996, p. 46). This has led to the view that the coordination and structure of a company’s established relationships, and the usage and improvement of the resource factors of
both parties through interaction, is the core contributing factor for improving a company’s network position and competitive strength (Turnbull et al., 1996, p. 46).

### 3.2 Definition

For the purpose of clarity in this paper, it is essential to define industrial marketing in a network perspective. In order to understand a business, it is also required to know about its relationships and in order to understand the relationships of the business; it is essential to also know about the network. It is in the network where several relationships are formed and by analyzing on the network level, it is possible to obtain insights of the overall business behavior. It is at this network level where the relationships start to clarify the complicated matters such as joint ventures and consortiums and how capabilities grow through combined technologies of many other companies.

The main idea of industrial network theory is that firms are embedded in networks of business relationships. The structure of the network, sometimes also referred to as a web, is created by the ways in which firms are linked to each other. The network is under constant change as a consequence of various transactions taking place between firms (Mattsson & Johanson, 1992, p. 205).

Three attributes are seen as being central to the network perspective. Firstly, the network is viewed as sets of connected relationships between actors. There is a distinction between two levels in the industrial system; the network of exchange relationships between various actors and the production system where an exchange of resources takes place for production. Secondly, the concept of network positioning is used to describe how individual actors are related to each other in a network structure. Thirdly, the strategic actions are closely linked to the concept of position (Mattsson & Johanson, 1992, p. 205).

The inter-company relationships play a significant role in exploiting and enhancing resources in the network. Such complexity makes it essential for a company to have a strategic approach towards analyzing and managing their business. The idea of relationship development and strategy on the individual level is important in such an analysis, “but without a wider network view, any approach to relationship strategy runs the risk of degenerating into short-termism” (Turnbull et al., 1996, p. 47). The development of the strategy as such depends on the analysis of the company, its individual relationships and its overall relationship portfolio and network position (Turnbull et al., 1996, p. 49). The theory itself is further explained in detail in the Theoretical framework.
The research model describes the process of this paper from the chosen topic to the relevant theory, empirical findings, analysis and lastly conclusion.

In this research model, the authors will first present information about the company ABB Crane Systems. They will then present a short description of industrial marketing in a network perspective. After that, three topics within this theory will be described and related to the sales network of ABB Crane Systems. Following this, the empirical findings will be documented based on the interviews conducted with both the sales and marketing manager and the product responsible manager of the company. In the end, the analysis will be summarized and the authors will form their conclusions.

Figure 4.1 - Research Model
5

**METHODODOLOGY**

In this chapter, a detailed description of the procedure used in the research as well as the method and reasons behind the data collection are presented.

5.1 **Selection of Research Topic**

Initially the topic of our work was based on something different; it focused more on the improvement and establishment of the sales process involved for the launch of new product MoCon Robust. However, after a casual conversation that Peter had with two representatives of the management team at ABB (since he is also working at ABB) and heard the full story of the company, the authors sat down, discussed and came to the conclusion that the emphasis of the research topic must be put on a particular researchable problem that the company is experiencing. Since a new product is about to be released and the company is interested to optimize its operation for the investment to bear fruit, managing the sales network and relationships is important and relevant.

ABB Crane System is a perfect example of a technological advanced company. It was founded due to a need for new technology and has been making revenues by coming up with new products that utilize new innovations. ABB is a company who strives to constantly innovate, which is a highly complicated task in the industries which they are operating. ABB Crane Systems is trying to make its sales network more efficient by not only maintaining its old customer relationships, but also create new ones. By emphasizing the network perspective and relationship development process, it can simultaneously sell its new products irrespective of hard competition from its competitors.

5.2 **Research Approach**

In general, there are two categories of research, quantitative and qualitative approach. Qualitative research is a research strategy that generally evaluated through words rather than numbers (Bryman & Bell, 2007, p. 402). On the contrary, quantitative research is evaluated through numbers and statistics, an approach used to analyze relationships, correlation and trends in various data (Ghauri & Grønhaug, 2002, p. 86).

A qualitative approach has been used in order to investigate the purpose of paper. The information and problem is to investigate how the current sales network of ABB Crane Systems is related to established theory within industrial marketing in a network perspective. This can be furthermore expressed in perceptions and assumptions.
5.3 Research Strategy

The theory has been used to shape the approach of the data collection from the company and the analysis of the data; an approach referred to as deductive approach. The data has been collected from two interviews with representatives from the company used in the research; hence the characteristic of the data is of qualitative nature, meaning that fewer interviews have been made with more content. Data collection in a deductive approach can be said to be more structured and formalized in comparison with the data that is collected in an inductive approach, on the other hand, the intent of this research is not solely to compare empirical findings to theory, but also to leave some part of the interviews as open and less structured. When research is conducted from a deductive approach combined with qualitative data, there is a risk that the views shaped from theory will depart from the views of the participants’ reality, hence that these theoretical constructs might be disfavored because of the possibility of presenting a premature conclusion on the issues. This research uses theory to guide the content and gathering of empirical data, but the process has been critically evaluated in order to leave some parts for exploring and creative contribution (Saunders Lewis, & Thornhill, 2009, p. 489).

5.4 Choice of Theories

The theories used in this paper have been selected from a variety of secondary data. Four of those articles have been used to express the main ideas behind the theories, these are, “Interaction and International Marketing: An Investment Process” written by Peter W. Turnbull, “No business is an island: the network concept of business strategy” written by Håkan Håkansson and Ivan Snehota, “The development of buyer-seller relationships in industrial markets” by David Ford and “The network – the company and the marketing function” written by Kåri-Olof Hammarkvist, Håkan Håkansson and Lars-Gunnar Mattsson. Among several books referred to in this paper, “Managing Business Relationships”, written by David Ford, Lars-Erik Gadde, Håkan Håkansson and Ivan Snehota, has also been utilized for much of the deep insight and explanation of the theoretical review.

The main purpose of this paper is to study how the sales network of ABB is related to industrial marketing in a network perspective. In return this might help ABB Crane Systems to get a better view of network perspective in its sales network which can help the company to make future strategies for its sales network in order to sell its products and services. The deep view of the chosen theories was acquired from other electronic books and academic articles. This has enabled authors to get a broader and deeper view prior to the gathering of the empirical data. The broader view has further helped throughout the analysis and conclusion.
5.5 **Data Presentation and Analysis**

The approach to be utilized when analyzing the data is determined by the character of the research conducted. As the research is qualitative in nature, the best way to produce any suggestions about the research is to combine both the theories and the empirical findings. The questions were structured in such a way by the authors allowing ease of understanding. Since the interview conducted was semi-structured, the topics, interviewees and questions to be asked were prepared in advance prior to the actual interview (Ghauri & Grønhaug, 2002, p. 101). Thus, a descriptive approach has been adopted. The information collected during the interviews with the management of ABB Crane System has provided us with a very deep insight about many areas within the workings of the company, for example the historical background, the sales network, among the many areas that were discussed at that time. The authors have tried to make the paper coherent so that the empirical findings follow the structures of the theoretical framework, making it easier for the reader to comprehend the paper.

5.6 **Choice of Data Collection**

The data collection depends upon the decision regarding kind of information needed for investigating the research question (Ghauri & Grønhaug, 2005, p. 108). The source of data collection in order to write this paper has been both primary and secondary. Primary data in which authors choose interviews, which is most common method to collect data for business paper. Interview questions were structured to get the empirical view of the sales network of ABB Crane System. Secondary data has also been used in which authors have reviewed articles, books, other theses and lecture notes which have helped them to analyze the information properly. The list of all books and articles and websites is given in the reference list.

5.6.1 **Primary Data**

Primary data consists mainly of interviews, which are conducted to collect the data for the empirical investigation. The authors went to ABB Crane Systems office in Västerås and met with Fredrik Johanson, Sales Manager and Lars-Tuve Hansson, Product Manager, to present them the questions prepared a couple of days before. These two respondents have more than 20 years of experience within the global crane industry which is the main reason for choosing them for our empirical investigation. These interviews were conducted during two separate occasions – 14, May 2011 and 17, May 2011. Interviews were very insightful and all answers were written down on a laptop. Most of the information needed was obtained in order to picture how the company is structured in overall, what marketing and expansion strategies it is following in its sales network, as well as most importantly some of the concerns that the company is experiencing in its sales network. The interview was semi structured, in which the interview was conducted between two persons and the topics, interviewees and questions to be asked were determined in advance (Fisher, 2007, p. 159).
5.6.2 Secondary Data
Secondary data plays an important role when undertaking research work regarding a paper which adopts a deductive and qualitative approach. The authors conducted extensive literature review on the subject industrial marketing in a network perspective and the theories which could be connected to answering the research question. Secondary data also involves the process of obtaining the findings, choosing and structuring the research paper and finally selecting the theoretical framework and models (Ghauri & Grønhaug, 2002, p. 35). The secondary data has been collected through various literatures and articles connected to our topic and purpose. The literature and articles have been collected from the search engines of Mälardalen University. The main data base such as ProQuest, JSTOR and Emerald gave us appropriate and useful information. In addition to it, Google's online book database has been served as in depth material for the theoretical framework as well as for the definitions of embeddedness, industrial marketing and industrial network.

5.7 Reasonableness, Credibility & Conscientiousness
Patel and Tebelius (1987, p. 82) state that there are three main, important factors to consider when conducting research based on a qualitative approach. Since the data collection is dependent on personal meetings, reasonableness refers to how well the information reflects the complex reality. This information must be open and associative to real world examples. The researcher's prior knowledge about the respondent's situation can increase the probability of the empirical investigation being more reasonable. However, there is a risk of personal bias if the author can relate his or her preliminary knowledge to the research conducted (Patel & Tebelius, 1987, p. 78). Credibility is based on how truthful and accurate the respondent's information relating to their experience is, as well as the researcher's interpretation and ability to distance him or herself from the investigation in order to maintain neutrality (Patel & Tebelius, 1987, p. 80). Conscientiousness is important as it leads the empirical investigation and analysis to an honest result and conclusion. In addition, the researcher also has to reflect over the process of gathering the information and ensure that he or she does not compel the respondents to give a certain answer (Patel & Tebelius, 1987, p. 81).

For the purposes of our research paper, the authors have tried our best to retain reasonableness, credibility and conscientiousness. As one of the authors was familiar with both the respondents in the crane business prior to this investigation, the information obtained was perceived being deep and reflective over the complex reality of ABB Crane Systems. However, since the other author was unfamiliar with both the topic as well as the crane business, it was possible for him to maintain credibility and neutrality throughout the process of the paper. Continuance of a high level of honesty, commitment and genuine interest of the research has been a further priority for this paper in order to reach a trustworthy result.
6
THEORETICAL FRAMEWORK

In this chapter, the theories suitable for this paper are discussed. It continues to explain industrial marketing in a network perspective, starting from inter-organizational theory, to the network and finally the relationship development.

6.1 Inter-organizational Theory

An essential characteristic of international business-to-business organizations is that they face not only complex challenges in coping with the network, but also complexity in various embedded relationships with other organizations inside their network. The challenge from an interactive approach often lies in the establishment of relationships with several partners, as well as defending existing relationships in what is referred to as the decision making unit (DMU) (Cunningham & Homse, 1982, p. 332). Within the area of inter-organizational theory, Turnbull (1987, p.11) outlines an elaboration of the interaction approach by illustrating the model in a case study of a company. The model builds upon the established concept of relationship development and industrial marketing in order to illustrate the interactions between the buying and selling in organizational units.

Figure 6.1 – The Interactive Interface in Industrial Markets

The interactive interface in industrial markets identifies the marketing and sales department as one part of a more complex relationship with the customer. As depicted in figure 6.1, the supplier and customer involves individuals from several units in the decision making process. When this occurs, the parties have reached a level of embeddedness. The figure is, of course, simplified as it shows no intermediary buying or selling organization in the supply chain. “Recognizing the complexity of relationships in
the marketing of industrial products is an important step forward in management understanding" (Figure 6.2).

**Figure 6.2 – Extended Interaction Network/ System**

The interaction approach illustrates some of the real complexity of industrial marketing. From an international point of view, the interaction approach is particularly relevant. In order to develop relationships on the international platform, various distances must be overcome. Ford (1980, p. 349) categorizes these distances into:

- **Social distance** - the unfamiliarity with each others’ way of working
- **Cultural distance** - the difference between norms, values or working methods between the two companies due to separate nationalities.
- **Technological distance** - the difference between product and process technologies
- **Time distance** - the time it takes to establish contact and process the order.
- **Geographic distance** - the physical distance between the buyer and seller.

Overcoming such distances is very time-consuming and resource intensive (Cunningham & Homse, 1982, p. 329). Furthermore, it has been noted that since the environment is complex and uncertain, this leaves considerable room for bounded rationality (IMP Group, 1982, p. 13). Bounded rationality is commonly explained as the
behavioral outcome of people when they face a “limited ability to process information and understand the environment surrounding them” (Jones, 2007, p. 76-77).

One of the more common mistakes made by firms penetrating a new market is their failure to anticipate and plan for long lead times and associated costs for the development of these relationships. The interaction approach provides a framework for the analysis of investment decisions and adoptions which might be necessary to enter a foreign market within a given time frame (Turnbull, 1987, p.12).

6.2 The Network in the Industrial Market

What is an Industrial Network? Even if this question is difficult to answer, a rather straightforward answer is that a network is a model or metaphor describing a number of connected entities. As opposed to social networks and everyday communication, the entities are actors (suppliers, intermediaries, OEMs and end-users) which are involved in various economic processes and convert resources to finished goods and services. These links are usually defined by the economic exchanges among the actors; exchanges which are themselves conducted inside the framework of a continuing relationship (Axelsson & Easton, 1992, p. 2).

The network perspective of organizational environment has been built from casual observations that actors operate in environments with only a limited number of organizations. These organizations not only continuously form relationships and exchange information, but each organization also exerts a significant influence on other organizations - a web of relationships called network (Håkansson & Snehota, 2006, p. 260). This situation is common in markets where a “limited number of suppliers, competitors and customers are established” (Håkansson & Snehota, 2006, p. 259).

Relationships in networks are generally continuous over time rather than short-term and they are often complex and interactively embedded with interdependencies (Håkansson & Snehota, 2006, p. 257). The performance and effectiveness for the individual organization operating in the network, by whatever measures, becomes dependent not only on its own performance, but also the performance and economic development of others. An organization’s performance is thus dependent on the parties it interacts with (Håkansson & Snehota, 2006, p. 261).

The effectiveness in such an interaction is given by its capability to obtain resources through exchange with other organizations in its network (Yuchtman & Seashore, 1967, p. 893). Furthermore, the formation and progress of an inter-organizational relationship requires mutuality (Ford, Hakonsson, & Johanson, 1986, p. 33). This orientation is particularly important when considering industrial companies in business markets which consist of fewer parties. Parties in such settings are normally responsible for purchasing or selling of large volumes (Ford, 2002, p. 4).
In addition, the effectiveness of an organization is not given by its ability to adapt to the environment, but by how it is relating to the network; such relating activities include the connection of resources to other parties in several levels, as well as the gain of influence over others, while adapting is seen as a more inward looking process of the organization. The term relating shifts the inward focus of the organization to the view of interactions in the network (Håkansson & Snehota, 2006, p. 265).

Within the network, every actor is pursuing its own self-interests and goals. In such a setting, it can sometimes be more important for an organization to act according to other actors' actions rather than acting on its own. Since every action has a reaction and the reactive behavior is highly uncertain, the behavior of other parties in the network can only be guided by the norms and values which have been shaped through experience and routines (Nelson & Winter, 1982, p. 414). The coordination of these interactions in the network is so complex that the issue is dealt with on a continuous basis under close relationships with one another (Håkansson, 1989, p. 232). Maintaining these relationships is likely to be fairly costly at times as it would not make significant contributions to financial rewards (Araujo, Dubios, & Gaade, 2000, p. 452). However, the cost for managing the relationships is likely to decrease over time (Ford, 2002, p. 9).

The social exchange taking place is similar when only two individuals gradually build on their relationship as the same principles seem to be applicable to relationships between organizations. Put differently, similar to the individual level, confidence and trust matter in organizational relationships, but these concepts must be applied realistically. The social exchange relationships evolve slowly, starting with minor transactions and little trust. Networks usually include a social aspect which ranges beyond individual actors as these aspects usually characterize the social pattern of the network as a whole. All in all, relationships also embody a constraint on independence and autonomy as the company binds itself to certain parties in the network (Hamfelt & Lindberg, 1987, p. 178).

The complexity of business markets implies that managers do not have the complete, true picture and thus seek to reduce the amount of complexity by simplifying and reducing the number of variables involved in decision making. The manager will also seek to exclude some areas in order to focus on the change that is anticipated. Argued by Håkansson (1989, p. 29), a relationship view can be a useful way to handle some complexity. But occasionally, it might be difficult or even impossible to foresee the actions of others and endeavors in doing so will be an exercise of self-delusion. Instead, a manager usually tries to coordinate his self-interests with those he recognizes as influential or simply accepts that the anticipated change cannot come through. Even when the manager cannot influence the decisions, it is likely that the “course of action” will be communicated as a feeling of how he personally views the world. When this feeling is commonly understood and accepted, then everyone can more easily streamline
their efforts and share the thought that whatever “new” place will not be reached alone (Håkansson, 1989, p. 31).

As previously mentioned, “without wider network view, any approach to relationship strategy runs the risk of degenerating into short-termism” (Ford, 2002, p. 5). It is also possible that the company is unaware of the effects of its own interaction and how to best manage the opportunities and threats. The development of a relationship strategy therefore, must consider the analysis of not only the company itself, but also the embeddedness of individual relationships, the relationship portfolio and the overall network position (Ford, 2002, p. 5). The relationship analysis can be a tedious and most complex task for companies with a large relationship portfolio. In such a situation, the cost is likely to exceed the benefits of the analysis. As a result of this, companies might be better able to complete their analysis by categorizing the various types of relationships (Ford, 2002, p. 10).

6.3 The Development of Buyer-Seller Relationships

“If there are no relationships, using the word in a rather general sense, between buying and selling organizations in an industrial system, then the free market models beloved of economists should reign” (Axelsson and Easton, 1992, p. 8). Put differently, relationships among firms form the industrial network and the development of relationships bring us further on in the relevant theoretical framework of industrial marketing in a network perspective - from the macro view of networks and inter-organizational view, to the micro focus of the relationship building process.

Both the network and inter-organizational theory consider relationships as an important feature. When a relationship is established, the information exchange among the parties will increase due to increased trust. Relationship development is very important in industrial markets as it enables the seller to get an insight of the buyer’s underlying latent needs. It also enables the seller to come up with suggestions for improvement, thus obtaining leads for new orders and information that helps the seller to stay ahead of competition (Stanley, Slater, & Olson, 2000, p. 815).

It has previously been pointed out that relationships are continuous and that industrial markets apply a long-term approach. Nevertheless, the relationships formed in industrial markets are not necessarily always close and long-term. The difference in complexity of the product, system or service that is supplied generally determines both the closeness of the relationships and the time frame involved. Another important factor is the structure of the buyers and sellers and the level of substitutability. Companies seek to develop long-term and close relationships where benefits in the form of cost and risk reduction or increased revenues can be distinguished from short-term and more distant relationships. Investments in such circumstances where relationships are close and long-
term naturally lead to adaptations by a company in the relationship and these in turn lead to a level of commitment by the buyer and the seller (Ford, 1980, p. 340).

Research points out that a great deal of inertia in buying companies exists in the situation when seeking new sources of supply. “Buyers may continue to use existing sources with relatively little knowledge or evaluation of the wider supply markets available to them” (Ford, 1980, p. 341). However, various situations might lead the buyer towards evaluating alternative sources of supply where a major price increase or general cost pressures might be faced by the company. The first stage in building a new relationship is the pre-relationship stage which will be conducted without commitment to the supplier. “The evaluation will be conditioned by three factors: experience, uncertainty and distance” (Ford, 1980, p. 341). Experience from previous relationships provides conditions for the judgment of the new partner where uncertainty with the new supplier can be faced regarding potential costs and benefits, and finally distance can be perceived in various forms between the buyer and the seller.

Below the various stages that follow are explained:

Stage two is considered to be the early stage, at a time when potential suppliers correspond and negotiate with purchasers for a capital goods purchase.

Stage three is when the development of a relationship starts to be shaped and the continuous deliveries of purchased products increase.

Stage four is the long-term stage, a stage which is difficult or impossible to fix a timetable around. The major characteristics are that both the buyer and seller accept their mutual importance to each other and this is normally reached after repeated large-scale deliveries on a continuous time basis.

The final and fifth stage is marked by an extension of trust, “to a point where the conduct of business is based on industry codes of practice. The final stage is reached in stable markets over long periods of time” (Ford, 1980, p. 349).

Figure 6.3 summarizes the five stages in the relationship building process between a buyer and a seller.
The relationships already formed between existing buyers and sellers in industrial markets constitute a powerful barrier for new actors to enter. Since relationships establishes over time, the barrier is described as inertia in existing relationships. The inertia is explained by the uncertainty faced by the buyer in the change of supplier, various distances between the buyer and the new seller, lack of information about possible partners and a high switching cost. When buyers are in the pre-relationship stage, such factors play a significant role for overseas procurements and sellers might further be judged on stereotypical national premises (Ford, 1980, p. 342).

**Figure 6.3 – The Development Stages of Buyer/Seller Relationships in Industrial Markets**

<table>
<thead>
<tr>
<th>Evaluation of new potential supplier</th>
<th>Negotiation of sample delivery</th>
<th>Contract signed or delivery build-up scale deliveries</th>
<th>After several major purchases or large</th>
<th>In long established stable markets</th>
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<tr>
<td>Evaluation initiated by:</td>
<td>Evaluation conditioned by:</td>
<td>Commitment Actual - Low</td>
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<td>Commitment Actual - Maximum</td>
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<td>Extensive institutionalization</td>
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<td>- “distance” from potential</td>
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<td>supplier performance</td>
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(Ford, 1980, p. 342)
An important characteristic of the relationships developed in the network is that they also work as bonds. The bonds in the various relationships have different objectives. Some of the bonds are founded in technology, others in time, knowledge, social and legal aspects (Hammarkvist, Håkansson, & Mattsson 1982, p. 22).

Technical bonds are formed between two actors when each of them adjusts to each other on the basis of technology. The buyer might for example, match its design and production to fit with the suppliers’ input goods, or vice versa (Hammarkvist et al., 1982, p. 22-23).

Time-related bonds refer to activities that are synchronized among the parties. The seller might for example, adjust the time and planning of his activities to fit the buyer’s activities (Hammarkvist et al., 1982, p. 22-23).

Knowledge bonds refer to the learning outcomes of both the buyer and the seller interacting with each other. Both actors learn about each other’s views and solutions to common issues. Knowledge about the needs, issues and visions often influences the course of decisions of research and development as well as investments (Hammarkvist et al., 1982, p. 22-23).

Social bonds refer to the personal contacts among individuals across both the seller and buyer. The social bonds complement the legal side of the business as contracts cannot cover everything. It is not until trust has been developed and proven between the buyer and the seller, that there will be economic exchange. It usually takes a considerable amount of time to reach a significant level of trust (Hammarkvist et al., 1982, p. 22-23).

Economical and legal bonds refer to the formulated contracts and legal aspects necessary to execute transactions among the actors (Hammarkvist et al., 1982, p. 22-23).

Even though relationship marketing is important in business markets, it must also be pointed out that there might be reasons for buying and selling firms to develop both close and less close relationships (IMP-Group, 1982, p. 21).
EMPIRICAL FINDINGS

The authors present the data collected from the interviews conducted.

7.1 Inter-Organizational Theory

7.1.1 Approaching the Decision Making Unit (DCM)

The Decision Making Unit (DCM) consists of different individuals from different departments and it is a big process of building relationships in order to find out who makes the decisions. There is always an “official” and an “unofficial” organization in order to find out who has an impact while making decisions. The sales unit has to keep track of who knows what and who will make suggestions about ABB Crane Systems if they want to sell their products and systems. It is often that many individuals together have a great impact on decisions. For example, the actual “end-users”, that is, the maintenance companies and operators are very important because they can report to the management whether the equipment from ABB Crane Systems works properly or not (F. Johanson, Personal communication, May 14, 2011).

The sales organization of ABB Crane Systems is trying to find ways to work on different levels with the customers. The basic strategy is to connect different skillful people with the appropriate levels involved in the network. The setback with an embedded approach is that many people have relationships and it is difficult to keep track of the functions of each individual and also to get a good grip of all the information exchange taking place. This task is easier to deal with if only a few people from ABB Crane Systems are involved (F. Johanson, Personal communication, May 14, 2011).

According to Lars-Tuve Hansson, OEM’s are the most important customers in the product business. The OEM’s consists of several people in various departments who are involved in decision making process. It is the responsibility of local ABB sales organizations to identify these important people and keep continuous contact with them in order to sell their products successfully. ABB Crane Systems works strategically to approach the individuals in the DCM. By first contacting one individual in the customer organization and making a start to know him or her properly, the company can then obtain the information about other individuals in the DCM through this initial relationship. Then step by step, the sales person might contact other individuals in the DCM who might also be interested in getting a presentation, training, or other technical knowledge about the product. There is a clear view from ABB Crane Systems regarding interactions with the individuals in the DCM and that involves a rather “clean” contact surface towards its end-users, as the company does not believe in involving too many individuals in the interaction. Most of the personnel from the sales organization of ABB Crane Systems usually involved in this are the customer responsible key account
managers and technical experts who have regular contacts with customers. Through this approach, the customers do not have to contact many individuals when they have concerns about an order, specification, or support matter. In this way, the company tries to be a trustworthy partner that is easy to deal with - a partner that avoids complications and confusions which might arise if too many individuals are involved (L. Hansson, Personal communication, May 17, 2011).

Another reason to keep the contact surface clean is that it could be risky if there are too many individuals involved in the network, as people quit their jobs and join new organizations. ABB Crane Systems is an engineering company and its core assets consist of the tacit technical and industrial know-how embedded in its human capital. It is therefore important to protect such information and know-how from leaking out. Furthermore, the cost and time involved when several individuals work together to complete a particular job might not contribute significantly to a better result. ABB wants to be efficient in both external and internal matters in the network and this varies from situation to situation. Sometimes it is better to include relatively more people and sometimes it is not (L. Hansson, Personal communication, May 17, 2011).

7.1.2 Geographical, Social and Cultural aspects in the sales network
It is the sales manager who decides which individuals are responsible for a particular customer or particular geographical area. For example, one key account manager is fully accounted to the Middle East area and nobody in the sales organization of ABB is allowed to build up relationship in that area without his consent and coordination. Since all customers require a long-term approach in which not only the geographical distance must be overcome, but also social, time, technological and cultural distances. It takes a considerable time to get to know the right individuals and their demand, a process that must be continuous and comfortable for the customer (F. Johanson, Personal communication, May 14, 2011).

Much time is consumed when developing new relationships and the process is often very varied within different cultures, geographical areas and individuals. It is very difficult to generalize the international sales network on the basis of cultural, social and geographical distances. However, by understanding the business and overcoming the technical requirements of the customer, ABB Crane System can go a long way when building new relationships and satisfying the different needs of the customer. There are different demands from different countries and ABB’s sales organization acts according to these various situations. It can be highlighted that nobody would buy crane equipment for several million dollars without knowing the sales person (L. Hansson, Personal communication, May 17, 2011).
7.2 The Network in the Industrial Market

7.2.1 Relationship with other parties

According to Fredrik Johanson, Global Sales Manager and Lars-Tuve Hansson, Product Manager of ABB Crane Systems, the relationships with parties in their network affect the company in many ways. We can clearly see these relationships with the different parties in the network and some of them are given below:

7.2.1.1 Suppliers

ABB is highly depended on its suppliers, though it sometimes might be believed that the company is not. For example, the huge earth quake in Japan affects us, perhaps not directly, but through a long chain of interactions. Through supply management activities, ABB is trying to spread the risks through developing relationships with different suppliers or factories, instead of having only one or a few alternatives (F. Johanson, Personal communication, May 14, 2011).

ABB Crane Systems is usually influenced by three different types of suppliers - those of the individual components, those of contractual manufacturers and those of the engineering companies. In regards to individual components, if the components have any sign of showing that their manufacturer is a country like China or India, this causes difficulties in getting payments for these products as the customers would rather pay for a European product and its quality. The origin of components therefore affects the image of ABB (L. Hansson, Personal communication, May 17, 2011).

The contractual manufacturers have direct contact with the end-users in one way or another. ABB Crane Systems always provides clear information about their role description and insists that they should be followed strictly as per their instructions so that the customers can get the right information. This in turn helps the company to portray its right image among the end-users. It is also vital that the contractual manufacturers inform the company about problems that might occur in the manufacturing process for example lead times, defective components etc (L. Hansson, Personal communication, May 17, 2011).

As for the engineering companies, it is difficult to assess their effect on the actual products of ABB Crane Systems, since their input cannot easily be distinguished. Even though this is true, they still affect both the end result and the performance. The engineering companies must also keep their promises and deliver their services on time (L. Hansson, Personal communication, May 17, 2011).

7.2.1.2 Intermediaries

ABB does not believe in intermediaries as a value creation activity. An intermediary was previously interpreted as someone who is not really in the business but still takes part of the profit. The entire ABB organization has stopped working with intermediaries...
because of its policy of reliability and for reducing the unnecessary loss of economic returns (F. Johanson, Personal communication, May 14, 2011).

According to Lars-Tuve Hansson, the word intermediary might not even exist in ABB’s business dictionary. An intermediary is a person who happens to know the actors in the network and therefore could sell the products easily to these customers without adding any additional value to the product. Even though intermediaries have been removed from the business model, there are still wholesalers who act like intermediaries in the network. ABB Crane System does not work with wholesalers but still ABB obtains some help from wholesalers in selling their products such as circuit breakers, contactors and small motors. These wholesalers, in contrast to intermediaries, do not help to build any relationships (L. Hansson, Personal communication, May 17, 2011).

### 7.2.1.3 Original Equipment Manufacturers (OEM)

ABB Crane Systems is highly dependent on OEMs. Fredrik Johanson exemplified the situation with an OEM named Shanghai Zhenhua Heavy Industries Co. Ltd. (ZPMC), the world’s largest crane builder. If the performance of ZPMC would suddenly worsen in terms of handling the communication, technology and finances, it might happen that no party further downstream in the network gets any return on their activities. This could in turn also hurt the financial performance of ABB Crane Systems. “If the OEM can’t get paid, we can’t either” (F. Johanson, Personal communication, May 14, 2011).

The OEMs affect ABB Crane Systems in many ways. Generally three situations might occur. Firstly, it is always a challenge and unprofitable to sell the product at the cheapest possible price to obtain a contract. This might sometimes be required by an OEM in order to be part of the bidding. Secondly, if the OEM does not want to buy the electrical equipment from ABB Crane Systems, then in order to be part of bidding, the approach must be towards the end-users. By trying to influence their approach towards the OEM, the end-user can then decide to force the OEM to include ABB Crane Systems in the offering of a new crane. Lastly, if the OEM and ABB Crane Systems have a good relationship and are comfortable with each other, such situations help to create a strong interdependence in the network. In this case, ABB Crane Systems would have a good service and trust level, not be too expensive and have equipment that is easy to handle and install (L. Hansson, Personal communication, May 17, 2011).

### 7.2.1.4 End-users

It is the end-user who finally assesses ABB in the market. ABB is totally dependent on them. For example, at the moment, it has been known that a large terminal with its electrical system from ABB has not performed as well as expected. This new terminal has not heavily increased the traffic to the port. This means that the success and reputation of the parties who delivered the cranes would be affected. ABB Crane Systems also has terms and conditions of payments which are linked to the performance
of the end-user. For example, the company measures “mean moves between failures” and if the customer moves fewer boxes, this can result in the company having to pay fines to the customers for failures caused by a low usage of the crane (F. Johanson, Personal communication, May 14, 2011).

The end-users do not purchase a separate product for a crane or electrical equipment for a crane. They prefer to buy a “crane” with the whole system intact. End-users are usually not commercial partners with ABB Crane Systems. For aftermarket activities such as modernization of old cranes or purchase of spare parts, they would usually communicate directly with the company. Nevertheless, the decisions made by the end-users are ultimately of utmost importance. In a nutshell, end-users affect ABB Crane Systems through the way they communicate with the OEM and furthermore through the way they handle their cranes (L. Hansson, Personal communication, May 17, 2011).

7.2.2 Relationship Strategy
Both Fredrik Johanson and Lars-Tuve Hansson assert that the company has different strategies in order to improve and expand the sales network. ABB Crane Systems follows different strategies according to different concepts and some of them are given below:

7.2.2.1 Network Position
The positioning in the network is made very strategically. In the case of MoCon Robust, ABB Crane Systems is trying to position it as a modular product. The Company is planning to package MoCon according to the customer needs by emphasizing different arguments towards OEMs and end-users. For example, for OEM companies, their opinion is that the process of ordering the product should be simple and that it should be easy to handle the product physically. In terms of end-users, modularization should equal flexible maintenance during the life length of the product and allow for easier upgrades at the end of the product’s life span (L. Hansson, Personal communication, May 17, 2011).

7.2.2.2 Relationship Portfolio
When ABB Crane Systems recruits new personnel in their sales department, the ability of that person to create new relationships is always considered as an important ability. Finding the right sales personnel is a difficult task which often takes time. Since relationships with both the end-users and OEMs are very important for the company, several individuals in the sales unit have more than 20 years of experience in the crane business. Some of them focus on the large OEMs, while others focus on important end-users. Technical knowledge is essential in order to build confidence and to construct a network. In addition, it is more difficult to sell systems rather than pure products. “A system is not about individual products, but about the much larger scope of a whole solution and the confidence that customers put in ABB Crane Systems to deliver what has been promised”. The sales unit of ABB Crane Systems always considers the total
solution instead of considering only a part of it. Customers make huge investments and give the company the responsibility to manage and try and avoid problems that might occur (F. Johanson, Personal communication, May 14, 2011).

ABB Crane Systems does not have any list of priorities in its portfolio. The company prioritizes majority of its relationships. Since the industry is small due to the numbers of customers and individuals involved, the company cannot afford to turn down any customer. There are approximately 100 major terminals which the company would have to be aware of and between 200 – 300 people who have the decision making power in the world market. One difficulty is that these people move around the world and change their jobs, something which is quite common these days. One example of such a case was presented to the author. Fredrik Johanson knows a person who was working at a customer company in Pakistan and sometime later, the same person was found to be working in a technical service department based in Hong Kong. After one year he had to go back to Pakistan, but as he did not want to work there, he quit his job and shifted to London instead. Now several years later, this same person is evaluating a large contract with ABB Crane Systems in London. It should therefore be noted that one does not have to know thousands of people in the crane industry as relatively fewer individuals are making decisions in the relationship network (F. Johanson, Personal communication, May 14, 2011).

ABB Crane Systems is quite conscious about the importance of contacts. In the network portfolio, it is very common that most of the customers know each other. Lars-Tuve Hansson points out an example - there is a group called the “Järnverkens krangrupp” which meets in Västerås. During this meeting, the participants discuss the performance of the companies in the crane business during the year and what might have been good or bad experiences with the different actors in the network. The performance of ABB Crane Systems as a supplier of MoCon Robust products is also evaluated during this meeting. If the MoCon Robust product has performed badly or is not up to standard, the experience of one of more parties will be communicated to the whole market and this can result in a ruining of the image and reputation of the company. Therefore it is very important to treat each and every customer well and deliver the expected quality. It is also very important that the right person is chosen from the sales organization to interact with new customers so that they can get right information and thus represent the correct image of the company (L. Hansson, Personal communication, May 17, 2011).

7.2.2.3 Embeddedness with other Parties
ABB Crane Systems is aware of how they should connect with other organizations in the network. For example, for major terminal projects it is a requirement that there is closeness with the end-user and OEM. It is also important to point out, however, that it is easier to send out the wrong message if more individuals are involved with other
parties in the network. If we take the example of a key account management, he or she should have a major knowledge of the customers and information sharing, but need not sit with all the expertise regarding technical matters. When Fredrik Johanson was project manager, he adopted the policy that all communication should pass through him in the network so that every message could be filtered properly and no wrong message could reach the OEM’s or end-users. He also told us another story about an individual working for another business unit within ABB. This individual worked with technical support and visited the customer but did not leave his business card even though he received one himself. The reason for this was that the individual from ABB wanted the customer to contact the sales unit instead of him in the future. It had been decided that all communication should go through the key account manager to avoid the confusion for the customer having to deal with too many different parties. Therefore, embeddedness might be important in some cases in order to connect more extensively and obtain information, but it also involves some risk of misalignment and thus can send out the wrong information to parties in the network (F. Johanson, Personal communication, May 14, 2011).

ABB often requires expertise in all the different departments of its concern. For example, individuals from finance, research and development or project management often need to communicate with the appropriate partner on “the other side”. It may not be possible to channel all the information through a key account manager and therefore it is very important that everybody in the network has clear information about their role description. When the roles are clearly defined, the interaction in the network can take place accurately and frustration due to lack of coordination in the information exchange can be avoided (L. Hansson, Personal communication, May 17, 2011).

### 7.2.3 Self-interest of the Actors in the Network

The actions of others are important to consider, but often difficult to foresee. The crane business is a “game of chess”, but instead of detailed and uncertain plans, ABB Crane Systems tries to influence its counterparties with information. By communicating in a specific manner, the company tries to influence its competitors to move in a certain preferred direction. Information in such situations plays a significant role and ABB Crane Systems tries to spread this information in specific ways through different communication channels in the network and might help to make an impact on the next move of the competitors in the market (L. Hansson, Personal communication, May 17, 2011).

Further pointed out by Lars-Tuve Hansson, the various parties in the network might also affect each other. Simplified this means that ABB Crane Systems might have a relationship with “x” and one with “y”. If “y” has a bad relationship with “x”, then this might interfere with the ABB Crane Systems’ relationship with “y” (L. Hansson, Personal communication, May 17, 2011).
7.2.4 Cost of Building andMaintaining Relationships
It costs lots of money to recruit a person to be responsible for customer contacts. If this does not work, it can lead to heavy financial and brand management losses. It is easier to recruit a design engineer because he mostly sits in the office and does his work, while a project manager or salesperson actually has to deal with the end-users. If they do not handle this responsibility well, it would not only cost the company their salary, but also a loss of relationships and millions of dollars in business opportunities. It is very difficult in industrial markets to manage communication and one always has to be up-to-date and skilled in order to maintain old relationships as well as build new relationships (F. Johanson, Personal communication, May 14, 2011).

The personnel are the core assets of ABB but often they are overloaded with work and this restricts the possibilities of managing and building relationships. One of the major costs of this is the loss of opportunities due to limited resources (L. Hansson, Personal communication, May 17, 2011).

Despite being expected in some occasions, expenses like inviting people to expensive dinners or similar luxurious activities are not considered to be very large for ABB Crane Systems. The company is trying to concentrate on potential buyers based to its code of conduct and business ethics in order to manage these relationships. It is sometimes very difficult to rank the importance of customers. As previously mentioned, everybody is part of a large network or “informal organization”. By affecting one customer, the company can then affect all other customers. ABB therefore, always considers the end-users first while managing the portfolio since they eventually nurture the entire business (L. Hansson, Personal communication, May 17, 2011).

It is possible to count situations that have occurred where a lot of work has been done without any financial reward. It is very difficult to explain these kinds of situations, but still one of them can arise during bidding, in which ABB spends significant time and resources when presenting its offer. It is common that even after putting considerable effort into a new project, no purchase order is obtained (L. Hansson, Personal communication, May 17, 2011).

7.2.5 Social Aspects in Relationships
The ordinal social aspect must always be in line with the code of conduct of ABB. Furthermore, one cannot relate the way a crane system is sold to the way of selling products. The social interaction and complexity involved is completely different. In the crane business, much is about building trust with the customers and to “deliver what has been promised”. By asking questions, ABB Crane Systems can determine the customer requirements and deliver the goods and service according to the demand. The demand might be very different from customer to customer. For example, if one of the
customers asks for a return on investment calculations, ABB will complete it for that customer (F. Johanson, Personal communication, May 14, 2011).

This industry at large cannot be generalized as the social interaction is quite different when comparing for example the Korean and Swedish perspective. Koreans like to drink more beer and mingle around compared to the Swedish people. For instance, the Swedes might not make any business decisions while drinking beer, but they create the relationships and perceive the possibility of obtaining valuable information (F. Johanson, Personal communication, May 14, 2011).

It should be noted that sales is like warfare and is a matter of survival. The one who has the most information wins. But information at all cost is not always likely to lead to winning situations. One has to be compliant and ABB must never use information blindly. If ABB gets information about a competitor’s proposal, ABB must not use this information. But if ABB gets the information about end-users and tenders, then the company will use it according to its needs. The company always tries to make sure that the offer fits the application as required by the customer, while keeping its promises that are made during the beginning of the business deals. The balance between offers and promises should be realistic, or else the trust and confidence will be decreased. This policy has helped ABB to retain its customers as well as helped it to gain new customers in the market (L. Hansson, Personal communication, May 17, 2011).

Nevertheless, it can be difficult to make a price decision if for example, the customer would say that the contract would be assigned to ABB Crane System if the price would be lowered by 10%. Such situations might be difficult to handle with respect to compliance matters. The problem in the market is that not all companies are white as snow. Other organizations might use information to the largest possible extent in order to obtain deals (F. Johanson, Personal communication, May 14, 2011).

It is important to point out that the sales personnel of ABB Crane Systems want to be known as reliable and “social sales engineers”. If the customers do not know the salesperson, it so happens sometimes, that they make enquiries to “test” that particular person regarding his knowledge about the business, technology and the processes involved. To attain the best possible result from meetings with potential customers, it is very essential that the person should have technical knowledge or otherwise, the customer will wait for another person who understands them and is aware of their complete requirements. In spite of technicalities in the crane business, the complexity of a crane system can still be simplified and understood by an individual. The social exchange is thus much dependent on the level of technical knowledge as well as the position of this person in the hierarchy. Therefore, the characteristic of the interaction from ABB Crane Systems’ point of view must be dependent and adjustable according to the receivers’ situation (L. Hansson, Personal communication, May 17, 2011).
Relationships must sometimes be changed over time. As pointed out by Fredrik Johanson (2011), “it is much easier to find a new audience than to put together a new show”. As in most industries, it is vital that ABB Crane Systems also adjusts its focus, depending on the kind of projects that might come up. There is no need to run after someone who has not bought anything for a long time, but this does not mean that one should forget them. The sales organization evaluates each visit even if the potential customers are not going to buy anything tomorrow; they might instead buy something in two years. Therefore, it is important to stay in contact with the customers as often as possible. The strategic thinking has to be that ABB Crane Systems is “there when it happens”, so that the company can grab the contract whenever it appears in the market (F. Johanson, Personal communication, May 14, 2011).

7.2.6 The Sales Network and Coordination
Fredrik Johnson states that it is very important to maintain coordination inside the sales unit in order to be a trustworthy partner. It is the Sales Manager who is mainly responsible for this coordination as he informs and coordinates the day-to-day customer activities, directs the responsibilities to everybody and gives clear directions that are to be followed so that personal visits and contacts reveal the information needed in the sales network. Coordination of such a kind plays a crucial role in order to obtain orders (F. Johanson, Personal communication, May 14, 2011).

On the contrary, aftermarket activities such as spare parts are generally more difficult to coordinate as end-users often contact different ABB units to enquire about the price and lead time. The same situation occurs with OEMs who also usually contact several ABB units through the various channels. It has been difficult for ABB to keep track of such proceedings as there is no much proper coordination and agreement between the different units. “It is a very complicated task to coordinate the local ABB units in the different countries” (Hansson, 2011). Lack of coordination in sub-optimization of the spare part business may also sometimes cause problems in the settling price of these products. As end-users and OEMs contact several units to enquire about spare parts, this may result in a lack of information and coordination between different ABB units and lead to spare part sales at unnecessarily high prices. This can develop frustration among the end-users and OEMs if they find out about the major price differences of ABB spare parts. ABB is trying hard to avoid such situations which arise due to a lack of coordination and sometimes also due to politics (L. Hansson, Personal communication, May 17, 2011).

7.3 The Development of Buyer-Seller Relationships
7.3.1 The Importance of Relationships in the Sales Network
Relationships are very important for the sales network of a company but ABB Crane Systems also needs to be good at technology and deliver high quality. In some projects it might be important to also be good in advanced technology. The relationships are seen as
more or less the way in to the bidding process but despite having a good relationship and high technological quality, if the price tag is wrong no contracts will be awarded to the company. ABB Crane Systems continuously works to get the relationships, price tag, technology and quality right. Their sales team always gets technical inquiry specifications from the customers according to their requirements, but in general, these written specifications might not be very important as the end-users do not always know what is best for them. What is important is to know what the end-users really need. Therefore, an important task of the sales organization is to interpret and understand the interest of the customers in order to give them the best possible service and to sell the product successfully. A good relationship should thus start by knowing the customer needs (F. Johanson, Personal communication, May 14, 2011).

Lars-Tuve Hansson mentions this same importance of a new relationship and that it starts by obtaining some sort of understanding about the requirement and conditions of potential customers. ABB Crane Systems mostly relies on trade exhibitions instead of impersonal advertising when it comes to building relationships; this seems to be the best way to meet new important individuals. Salespersons try to make contact with customers in order to create an understanding about them and then arrange further meetings (L. Hansson, Personal communication, May 17, 2011).

In spite of external relationships in the network, it is also important to build internal relationships in the company. Some ABB units have a policy annually, to gather their employees and customers for camping and other get-together activities once in a while. ABB Crane Systems in Västerås does not arrange such activities very often because in the crane business, the customers themselves are competitors. The crane business market is different and more difficult in comparison to other industrial markets. In the crane market, one organization can possess a major control and thus dominate the entire market. Due to this fact - the way the industry is set up and the business is conducted, the approaches used are very “person oriented” (L. Hansson, Personal communication, May 17, 2011).

Relationships within the sales network of ABB Crane Systems are often long-term relationships and the company, being on both the buying and the selling side, requires certain continuity with its partners. Such procedures can only be obtained through long-term relationships. However, even though long-term relationships are preferred, they might not always be the most profitable ones. It is all dependent upon what might be the most profitable situation for ABB Crane Systems, long-term or short-term. For example, if the company has to introduce new technology within the old established relationship, it might end up with a heavy bargain, but new customers might instead result in higher margins (F. Johanson, Personal communication, May 14, 2011).
7.3.2 Stages in the Development of a New Relationship

ABB places a big emphasis on having long term relationships with its OEMs. In the case of MoCon, ABB’s sales organization plans to start this sale through sample deliveries to its customers. In the beginning, this will help the customers to gain a better understanding of the product and also get accustomed to it. This in turn will help ABB to both manage and build new relationships gradually with much commitment and trust. Lars-Tuve Hansson mentions that the perceived uncertainty in such a procedure decreases with the time when more trust and commitment is built into the relationship. Through this, the company hopes to receive larger contracts in the future. Simultaneously, when the deliveries increase together with the trust and commitment, the quality of the product also increases. The reason is that the products are optimized to the customer application so as to achieve maximum performance. The customers improve their skills when operating and maintaining the equipment as they get more experienced with it. All in all, it takes between 4 to 5 years from the first contact to develop a relationship where long term trust and commitment prevails (F. Johanson, Personal communication, May 14, 2011).

ABB Crane Systems also work to establish long-term relationships with the end-users. One case that was introduced referred to the relationship-building process with one such end-user in Panama. In 1998, the container terminal in Panama was evaluating various electrical suppliers for a new project consisting of 2 STS cranes. The relationship between ABB Crane Systems and ABC-Terminal was not very good at the time. In fact, it was slightly on the “minus side” and the commitment from the end-user was very low. The decision of whether to use ABB equipment or not, seemed to be much of a policy decision. After several personal meetings (personal selling) with the end-user, the first “sample” order came through in 1998. It was a project consisting of 2 STS cranes together with the OEM Hyundai. The experience was rather low even though the relationship was heading slightly towards the “plus side”. Nevertheless, the uncertainty perceived by the end-user was still high and Panama seemed to be worried whether ABB Crane Systems would be able to keep their commitment or not. The heavy investment in management time was needed to strengthen the commitments as well as reduce the distance and uncertainty. Unfortunately, it was not easy to please this new customer and one project manager at ABB Crane Systems even left the company as he did not like the stressful situation and the constant pressure from the end-user (F. Johanson, Personal communication, May 14, 2011).

In 2001, ABB received a second order for a small upgrade of 6 STS cranes. This was followed shortly by a third order in 2003 consisting of 3 STS cranes. The experience was now starting to increase and both the uncertainty and distance were decreasing. Although both the management and the end-user operators were now more familiar with each other as well as with the equipment from ABB Crane Systems, the commitment was still quite low. Much time and several phone calls, e-mails and
personal meetings between the management of ABB Crane Systems and ABC-Terminal were required in order to build higher trust and commitment (F. Johanson, Personal communication, May 14, 2011).

After having used ABB’s electrical system on the cranes for some years, during which the operational staff and management of ABC-Terminal had received plenty of training and experience of ABB’s technology, a fourth order came in for 3 STS upgrades in 2006. The end-user was now starting to get more positive about this relationship and it was realized that in order to get the contract the support and service had to be very good from ABB Crane Systems’ side. “Keep the commitment” was the message. The experience gained had now deepened even though they had started with an almost zero level of uncertainty in the relationship. The distance had been further reduced between ABB Crane Systems and ABC-Terminal due to relatively more individuals who were now involved with each other. The commitment was now very high and the end-user seemed to be open to try new technological solutions from the company (F. Johanson, Personal communication, May 14, 2011).

In 2008, a fifth order came from ABC-Terminal. This contained new, groundbreaking technology which would make it possible for the end-user to remotely control a STS crane through a video system. At this point, the experience with ABB Crane Systems was considerably higher compared to their very first order placed 10 years earlier. Even with a new technology that had never even been developed or used before, the uncertainty that ABC-Terminal felt was considerably small, similar to the perceived distance. This project was advanced and it even contained motors with a customized design which had been developed for the environment in Panama. According to Fredrik Johanson, “this order showed that we had reached the real long-term step of the relationship”. Interestingly, by this time, the management of ABC-Terminal had now reached the level of trust where they also could spread the good word about ABB to other end-users within the same industry. Consequently, the success in Panama helped ABB Crane Systems to receive four new orders from Colombia, Vietnam, Ecuador and Mexico (F. Johanson, Personal communication, May 14, 2011).

### 7.3.3 Relationship Bonds

When asking the question about bonds, Fredrik Johanson points out that the relationship-building steps previously mentioned all can be connected to various relationship bonds. The technical bonds in the case of ABB Crane Systems and ABC-Terminal emphasize the fact that the engineers and operators of the end-user now are very familiar with ABB’s equipment. These individuals have all been trained in using the equipment, not only formally but also when it comes to everyday operations. In addition to it, ABC-Terminal now uses a custom made ABB motor that was developed in collaboration at the end of the previous decade (F. Johanson, Personal communication, May 14, 2011).
The time-related bonds refer to how ABB Crane Systems tries to synchronize the design and production with the OEM and the end-user. The company tries to meet the schedule in a timely manner, as well as inform their sub-suppliers to assure them that they also plan to fulfill the time requirements. When both ABB Crane Systems and the suppliers know each other, there is more flexibility in the production based on shared forecasts. For example, we might tell the factory that “1 000 units will be needed the second week in August” (F. Johanson, Personal communication, May 14, 2011).

In such situations planning together makes it possible for both ABB Crane Systems and its suppliers to lower the cost of production (F. Johanson, Personal communication, May 14, 2011).

With regards to knowledge bonds, it is not required to look at ABC-Terminal specifically. For example, the motor supplier might have limited knowledge about the end-users application and their environment. The motor supplier will therefore be able to learn from our application and about the standards required in a tough outdoor environment only a few meters from the sea. With this knowledge, the motor supplier will have inputs to their R&D department which will result in a better design for new motors. “When they are developing and manufacturing a new motor, they will think about cranes and that a more robust connection box is needed, etc” (Johanson, 2011). These inputs have led to a different casting and thus a different design, which now goes directly into the standard assortment at ABB Motors (F. Johanson, Personal communication, May 14, 2011).

The social bonds show that trust is earned after evidence of showing that you can keep your promises. It is less of “wine and dine” in this industry, meaning that even though the social interaction is important, it is the commitment and promise that matters the most. “If ABB Crane Systems cannot deliver what has been promised, then nobody is going to eat dinner with me” (F. Johanson, Personal communication, May 14, 2011).

The economic and legal bonds are bound in the form of a contract which clearly states the responsibility of ABB Crane Systems towards its customers. The economic and legal side of this business is necessary to guarantee that the parties involved are committed to their promises (F. Johanson, Personal communication, May 14, 2011).
8

ANALYSIS

In this chapter, both the secondary and primary data have been analyzed using the theories previously chosen so that authors can answer the research question and accomplish the purpose of this paper.

8.1 Inter-organizational theory

8.1.1 Approaching the Decision Making Unit (DCM)

One of the major challenges in industrial markets is to build and manage the customer relationships at different levels and this is referred to as the decision making unit (DCM) (Cunningham and Homse 1982, p. 332). Turnbull (1987, p. 11) illustrates this complex interaction between a buying and selling actor in which several individuals from different units are involved in the decision making process.

ABB Crane Systems is constantly trying to identify individuals who have decision making power. The company refers to this as an “official” and “unofficial” organization in which different individuals are present. It is essential for the business that the sales personnel keep track of these individuals in order to make any sales products and systems possible. Besides the importance of approaching the management of the customer, ABB Crane Systems also provides an example of the importance of the maintenance and operating staff as they frequently report to the management about their experience with ABB’s equipment.

ABB Crane Systems tries to approach several of the hierarchical levels at the customer end. By actively working to connect skillful individuals from the company with the appropriate counterparties, a closer and hence more embedded relationship can be achieved. When the customer is relatively new, the strategic thinking is that ABB Crane Systems should first work to establish a relationship with one individual at the customer end. Then through sequential, strategic motives, the company will try to get to know the customer by asking the right questions.

In addition, the company also suggests that the procedure involved might be different from customer to customer. A close embeddedness from a salesman’s point of view is usually not optimal as it involves more risk. Since ABB Crane Systems is an engineering company which makes business out of its tacit know-how, it is important that this know-how is protected from leaking out. By keeping the level of connections to the minimum, this risk is therefore minimized. Furthermore, it is difficult to coordinate the information exchange between ABB Crane Systems and the customer when several individuals are involved. Maintaining control over the interactions in the sales network is one of the main reasons why extensive embeddedness may not always be optimal. Such activities involve management time and the use of scarce resources and the company
points out the many advantages that can be achieved when maintaining a relatively “clean” contact surface towards the customer - risks can be lowered, costs decreased and confusion avoided when the customer has to deal with too many individuals at the same time.

It is clear that ABB Crane Systems recognizes that the complex decision making process involving several individuals from different levels in the customer hierarchy and that these individuals influences the result of the decisions. The company sees the advantages as well as disadvantages with the interaction approach and level of embeddedness. Sometimes, it can be beneficial to involve several individuals from different units in order to obtain more information and forge a closer relationship with the customer, but the general strategy is to maintain a contact surface which involves as few individuals as possible in order to avoid confusion, risk and a waste of scarce resources.

8.1.2 Geographical, Social and Cultural aspects in the Sales Network

Turnbull (1987, p. 12) further illustrates the interaction approach with some complexity of an industrial market as a whole. From an international point of view, the connections also involve cultural, social and geographical distances. Cunningham and Homse (1982, p. 329) describe the management of such factors as very time-consuming and resource intensive.

The sales manager of ABB Crane Systems decides who is responsible for various geographical areas and its customers. Several cultural and social barriers must be overcome before forgoing a good relationship with a customer. It is therefore important for the company to divide the responsibility into various long-term key account managers. One such key account manager is responsible for the Middle East and no individual from ABB Crane Systems is allowed to arrange any activities in this sales network without coordination from that manager.

The company spends a considerable amount of time and resources in order to develop cross-border relationships as the process of interaction is very different depending on the cultural, social, time, technological and geographical distances. Nonetheless, ABB Crane Systems points out that with proper technical knowledge and an understanding of the customer situation and needs, a new relationship will have a good start. The company highlights that nobody buys products or systems for millions of dollars if they are not familiar with the sales person from whom they are buying these items.

ABB Crane Systems recognizes the complexity and resource intensity of the cross-national interaction process. This process has to be strictly coordinated with the sales manager and the appropriate key account managers. We can clearly see that the company considers the geographical, cultural and social aspects when outlining their strategic approach towards the customers.
8.2 The Network in the Industrial Market

8.2.1 Relationships with other parties

Axelsson and Easton (1992, p. 2) state that there are various actors involved in economic process and conversion of the resources to finished goods and services. These actors are usually linked through the economic exchanges which are conducted inside the network of existing relationships. We can clearly see such economic exchanges and how these actors affect the sales network of ABB Crane Systems.

In case of the suppliers, ABB Crane Systems is highly dependent on them due to the fact that they do not manufacture products themselves. The huge earthquake in Japan has not had a direct impact on the company, but indirectly, it has affected their business. We also found out that ABB Crane Systems has three different types of suppliers (individual components, contractual manufacturers and engineering companies) all of whom have a varied but direct impact on the economic exchange in their sales network. In case of individual components, the origin of components directly affects the impression of the end-users and evidently also the economic returns. The end-users pay for a “European” product or system and they expect the equipment to originate from within Europe instead of India or China. The link inside the network, all the way from single components to the final end-user, seems to impact ABB Crane Systems in an economic sense.

The contractual manufacturers have a direct contact with the end-users. Therefore, ABB Crane Systems emphasizes on giving clear information regarding them to the manufacturers so that the end-users can get a correct picture of both the quality of the product and the appropriate service level. For example, it would not be beneficial if one of these contractual manufacturers would portray the wrong image of ABB Crane Systems in terms of not providing correct information to the end-users, or even be ignorant about informing them about issues related to the manufacturing process.

Lastly, the engineering companies do not deliver products to ABB Crane Systems but deliver their services instead. Their input cannot easily be distinguished but still they affect the performance of the company in terms of lead time and quality. If these parties do not deliver on time, the total cost would increase and this could affect the company financially.

When looking at intermediaries, we found that ABB Crane Systems no longer uses this means of distribution within its sales network. The reason for this is that they do not contribute significantly to the financial performance of the company but take part of the profit which leads to an unnecessary reduction in returns. Wholesalers on the other hand, which sometimes act as intermediaries, do affect the sales network of other business units inside ABB.
The business model of ABB Crane System is highly dependent on Original Equipment Manufacturers (OEMs). Since the end-users never buy single components or even electrical systems, they contact the OEMs when they want to buy a new crane. Similar to the upstream suppliers of ABB Crane Systems, the company is connected downstream to the end-users through OEMs. One example of an OEM is Shanghai Zhenhua Heavy Industries Co., Ltd. (ZPMC), which is the largest crane builder in the world and furthermore the largest customer of ABB Crane Systems. Since ZPMC is such a large actor in the network, their performance directly affects the financial performance of ABB Crane Systems. In turn, they also need to deliver according to their promises or else they might not get paid by the end user. “If the OEM can’t get paid, we can’t either” (Johanson, 2011). In addition to this, ABB Crane Systems has to act according to the demands of the OEM. This is clear as the OEM often has the power to force ABB Crane Systems to reduce their price, or sometimes the OEM does not even include the company in the bidding process. In such a situation, ABB Crane Systems has to convince the end-users to force the OEM to include the company in the bidding process. The company then has to spend a considerable amount of time and financial resources in order to influence the decision making in the sales network. So here, we can clearly see the financial interdependence of ABB Crane Systems and the OEMs.

Furthermore, the most important actor is still the end-user who eventually will use the crane in its operations. ABB Crane Systems is fully dependent on them and that they also succeed in their business. Though end-users are not usually commercial partners with ABB Crane Systems, we found one typical direct economic link between the end-users and the sales network of the company where the conditions of payments were linked to the business performance of the end-user.

In our above mentioned findings, we can clearly see how ABB Crane Systems is affected by the various actors within the sales network. The economic exchange is a highly interrelated process and the financial performance, by whatever measures, is dependent not only on ABB Crane Systems, but also its counterparties in the sales network.

8.2.2 Relationship Strategy

According to Ford (2002, p. 5), a wider network view is needed for the development of a relationship strategy in order to avoid the risk of degenerating into short-termism. Culminating from three concepts - the overall network position, the relationship portfolio and the level of embeddedness with other actors - the relationship analysis is a difficult task which takes up much time and resources of the companies, especially those with a large relationship portfolio.

The network position of ABB Crane Systems is made very strategically. In order to strengthen the network position and being the preferred partner in the network, the
company is trying to make the process of ordering MoCon Robust easy for its customers, especially since the product is designed for a modular purpose, meaning that it is easy to handle in terms of installation, maintenance and future upgrades. In terms of the end-users, the company is trying to position the product and portray the company as being flexible and reliable. This shows that the company is trying hard to position itself in the network and that the relationship strategy is important in this process.

Griffith and Griffin (2000, p. 400) state that high-performing sales personnel should possess a great amount of experience and knowledge about the sales network. It is therefore highlighted that the sales force is a significant part of a firm’s human capital. In addition to this, Keillor et al., (2007, p. 14) mention that finding and retaining sales talent is considered to be a major competitive strength.

Managing and developing the relationship portfolio is essential for ABB Crane Systems. The company emphasizes the specific characteristics of sales personnel needed to manage this complicated task. Since these relationships are very important, not only with the customers (OEMs) but also the end-users, there are several individuals in the sales unit who have more than 20 years of experience in the crane business. The company knows the value of these sales personnel and how they also contribute to the competitive strength of ABB Crane Systems within the crane business.

Since the crane industry is very small in terms of the customers and individuals involved in decision making, ABB Crane Systems prioritizes most of these relationships in their portfolio. Only approximately 200-300 individuals spread over 100 container terminals worldwide have decision-making power. In addition, these individuals are also familiar with each other and communicate amongst themselves. They are aware of the increasing trend that is in play that they change their positions and even organizations more often. This leads to a vital strategic implication for the ABB Crane Systems relationship portfolio. All relationships matter since the company never knows where these individuals will end up. For example, Fredrik was in contact with a person who was working in Pakistan. A few years later, the same person was found to be working in Hong Kong at another container terminal. Now, he is located in London, evaluating a new large contract for the container terminal, for which ABB Crane Systems is one of the many bidding companies. Moreover, there is another situation which exemplifies the importance of the relationship portfolio strategy of ABB Crane Systems. A group called “Järnverkens Krangrupp” consists of several customers from the crane industry and they have annual meetings to discuss the positive and negative experiences with the different actors in the network over the past years. Considering this situation, it would be devastating for ABB Crane Systems if one of the relationships in the sales network did not work out, as this would then present ABB Crane Systems in a bad light in front of all the other relationships.
ABB Crane Systems is aware of the impact of embeddedness in the network; when it should be present and when it should not. It is evident that the company does not want to have too much embeddedness in its sales network, since there is a risk when several parties are involved in a network as this might incur confusion regarding the information exchange with the customers. It can be difficult to control and coordinate such an information exchange with a rather high degree of embeddedness. Nevertheless, it is important to point out that individuals at ABB Crane Systems often have to communicate with the relevant individuals from the counterparties in the network.

When looking at the relationship strategy of ABB Crane Systems, we can clearly see how the three aspects mentioned above have had a great impact on its sales network.

### 8.2.3 Self-interest of the Actors in the Network

Nelson and Winter (1982, p. 414) mention that every actor is driven by its own objectives and self-interests, emphasizing that in order to maximize the outcome, it is sometimes important to act according to other parties' actions. However, the actions of other parties in the network can be highly uncertain and difficult to predict. This therefore implies that these interactions can be very complex (Håkansson, 1989, p. 232).

ABB Crane Systems considers the actions of others in the network and the company always tries to influence its counterparties to move in a certain favored direction. The business is seen as a “game of chess” and in order to get a better overview, the company communicates in a specific manner through the different channels in the sales network, so that it can make an appropriate impact on the next move of the counterparties. However, despite the fact that ABB Crane Systems tries to influence its counterparties, it is often difficult to predict their respective future moves.

The type of actions of other parties within the sales network that are considered complex and uncertain can be simplified through the following example. If ABB Crane Systems has a relationship with “x” and “y”, and “y” has a bad relationship with “x”, then the interaction between these two actors might negatively affect the respective relationships with ABB Crane Systems.

This clearly shows that the actions of other parties affect ABB Crane Systems and that the company itself also tries to create an impact on its counterparties through the various means of communication.

### 8.2.4 Cost of Building and Maintaining Relationships

The cost of building and maintaining the relationships in the network is considered high and sometimes does not make any substantial contribution to the financial returns (Araujo, Dubios, & Gaade, 2000, p. 452). In addition, studies also indicate that it costs around 50 percent of a worker’s annual salary to replace an experienced and trained sales person (Gemignani, 1998, p. 2).
ABB Crane Systems is aware of the fact that recruiting a new sales person is costly, not only in terms salary and management time, but also when considering the risk of losing millions of dollars in sales and tarnishing the image of the company in case a new sales person turns out to be inappropriate for the task. The company highlights that it is difficult to manage and build up new relationships as this demands specific individual skills. The communication with customers requires the individual sales person to manage this in an effective and professional manner.

The company states that another relationship-based cost for the company is the actual loss of opportunities due to limited resources. Overloaded sales personnel might not have enough time to maintain all the required relationships and this would restrict the chances of exploiting new opportunities.

ABB Crane Systems follows the code of conduct of ABB where both the business ethics and integrity is highly prioritized. In some occasions, it might be expected that the company should invite people to expensive dinners and other luxurious activities. ABB Crane Systems does not concentrate on buyers with such interests and therefore this type of cost is considered very low when maintaining and building relationships in the sales network.

It is therefore possible to imply that there have been situations where the company has failed to get a new purchase order in spite of putting in lots of hard work and a substantial amount of financial resources and time. This has proven very costly for the company.

Through all this, it can be observed that the cost associated with building and maintaining relationships in the sales network is high, but necessary to maintain business in the crane industry.

8.2.5 Social Aspects in Relationships

Hamfelt and Lindberg (1987, p. 178) mention the social exchange and social aspects are important when two individuals as well as two parties are building up a relationship. This process involves confidence and trust of both the individuals and the parties as a whole and where the company binds itself to certain commitments within the network.

The social aspect in the sales network of ABB Crane Systems is based on trust and commitment with its customers. The sales personnel of the company describe themselves as being “social sales engineers” who aim to gain trust and confidence of their customers through technical knowledge and kept promises. This social exchange is difficult to generalize throughout the whole sales network since the demand of both individuals and parties differs from country to country. One example that was brought up was a comparison between the Swedish and Korean perspective. The Koreans generally prefer social activities such as informal beer drinking when building
relationships and making decisions, while the Swedes also build relationships and exchange information in such contexts but without making any business decisions.

When ABB Crane Systems commits itself to its customers, they always try to obtain as much information as possible to be on the winning side. The company describes its sales network as being part of “warfare”, which essentially depends on the acquired information. Being “there when it happens” literally means that the company gets the right information about the end-users and tenders at the right time through social exchange. But even if this is available, the use of all this information has to be critically evaluated. The code of conduct of ABB sets clear rules and regulations that ABB Crane Systems must follow - these rules involve the use of information about competitors and other parties in the sales network.

In short, the social aspects of maintaining and building the relationships in the sales network of ABB Crane Systems mainly depend on building trust and commitment with their customers. In line with the theory, we can clearly see the importance of the social aspects when maintaining and building relationships in the sales network.

8.2.6 The Sales Network and Coordination
Managing existing and new relationships requires both coordination and structure. This is essential in order to improve not only the position in the network, but also the competitiveness in the industrial market (Turnbull et al., 1996, p. 46). The coordination of the interactions between the company and its counterparties in the network is so complex that the issue is dealt with on a continuous basis under close communication with one another (Håkansson, 1989, p. 232)

It is the sales manager of ABB Crane Systems who is responsible for all the coordination of the sales activities in the network. The sales manager defines the roles and directs responsibilities to each individual salesperson, a rather important task when giving and obtaining the right information at the right time to and from the customers. Generally, some aftermarket activities such as spare parts are more complicated to coordinate since the customers can acquire a price and delivery from the different ABB units. Each unit sets its own price in order to maximize their own profit. Unfortunately, the lack of coordination among the ABB units might damage the impression of a “unified” ABB when such situations occur. Sometimes, customers might find out that they have paid an unnecessarily high price for spare parts which can lead to frustration among the customers and even to a damaged reputation of ABB Crane Systems.

Managing existing and relationships in the sales network of ABB Crane Systems is therefore, a complicated task which requires coordination on a continuous basis. So here, we can see how central it is to coordinate the activities and interactions in the sales network. Both sending and receiving accurate information on time seems to be very important for the company in its pursuit for high financial returns.
8.3 The Development of Buyer-Seller Relationships

8.3.1 The Importance of Relationships in the Sales Network

Relationship development is very important in industrial markets as it enables the seller to get a clearer picture of the underlying needs of the customers. A closer relationship enables the seller to come up with suggestions for improvement, which in turn, leads to information exchange and business development (Stanley, Slater, & Olson, 2000, p. 815). Without relationships in the industrial network then only the price and quantity model beloved to economists would be the only deciding factors for the end-user when evaluating suppliers for a new system or product (Axelsson and Easton, 1992, p. 8). The relationships in industrial markets are generally formed over several years, applying a long-term perspective (Ford, 1980, p. 340).

ABB Crane Systems values the importance of relationships in its sales network as they are essential to get both an insight into the customer’s needs as well as obtain a way in to the bidding process. For example, this importance comes into real practice when the company gets an enquiry from a customer regarding a new project or product. The enquiry generally includes technical requirements specified by the end-user, but in general, it can be noted that the end-user does not always know which solution is the best for their application. In such situations, the relationship with that end-user has greatly helped ABB Crane Systems to offer a solution that is even more feasible. These relationships therefore help the company to deliver a higher level of quality and service to its customers.

When it comes to building relationships, the company prefers to take part in exhibitions and trade shows instead of impersonal advertising. Such means of interactions helps the company to make contact and arrange further meetings with other parties in the sales network. ABB Crane Systems further specifies that it is not only the external relationships that matter, but also the internal relationships within ABB Crane Systems.

The relationships between the suppliers and customers in the sales network of ABB Crane Systems are usually on a long-term basis. Nonetheless, even though most relationships are preferred to be long-term, this does not necessarily mean that they are always the most profitable. In such situations, the company might be forced to cut down its margins when new relationships might instead be more profitable.

We can clearly see that relationships are very important for the sales network of ABB Crane Systems and that the company applies the long-term perspective majority of the times. Getting to know the customers and their needs has helped both the customers and ABB Crane Systems in their respective business development.
8.3.2 Stages in the Development of a New Relationship
When building a new relationship, one has to go through different stages in the relationship building process. The evaluation of a new relationship depends upon the experience, uncertainty and distance in the network and this eventually results in a level of commitment and adaptation. There are mainly five different stages during which a relationship is evaluated - pre-relationship stage, early stage, development stage, long-term stage and final stage (Ford 1980, p. 342).

ABB Crane Systems exemplifies these five stages when recalling the relationship building process with an end-user in Panama which started in 1998. The pre-relationship stage occurred when ABC-Terminal was evaluating electrical suppliers for a new project consisting of 2 STS cranes. At that time, ABC-Terminal had no experience with ABB Crane Systems and the commitment level was very low. From a relationship point of view, the end-user seemed to be reluctant and critical.

After extensive investment in personal selling, the relationship building process entered the early stage and this resulted in the first “sample” order being obtained at the end of 1998 and the delivery being made in 1999. The experience and commitment level was still low and both the distance and uncertainty were high at this stage. ABC-Terminal was worried about whether the equipment from ABB Crane Systems would fit according to their requirements or not. ABB Crane Systems worked hard to adapt itself to the end-user’s demands during this stage in order to reduce the distance and increase the commitment perceived by the end-user.

Years passed and the relationship entered into the development stage. In 2001, the company received a small order of 6 STS upgrades. Following this, another order of 3 more STS cranes was placed in 2003. The experience level had now increased and the uncertainty and distance had reduced due to continuous communication and adaptation through e-mails, phone calls and personal visits. Both the management and the user operators at ABC-Terminal were now more familiar with the equipment as well as the individuals from ABB Crane Systems. It was during this stage that the trust and commitment was starting to really differentiate from what it was during the early stage.

The relationship now entered into the long-term stage after ABB Crane Systems had shown a high level of commitment and adaptation. This helped the company to obtain two more orders in 2006 and 2008. Here, the uncertainty and distance had been reduced to a minimum level. The experience at this time was very high due to several years of operation with ABB equipment and service. Through better routines and understanding of the end-user’s demand and environment, an even higher level of adaptation had made it possible for the company to become more cost effective.

We can clearly see that when ABB Crane Systems entered the final stage of the relationship building process with ABC-Terminal, the experience, commitment and
Adaption were so high that the end-user felt confident enough to try a new advanced, groundbreaking technology from ABB Crane Systems which was in the form of a video system within a fixed cabin for a STS Crane. The following project also included custom-made motors which were designed specifically for ABC-Terminal. Such examples can generally only be seen in the final stage in the long process of building new relationships. The good relationship and word-of-mouth effect from the success in Panama helped ABB Crane Systems to obtain four new orders from other end-users in both 2010 and 2011.

It is noted that the relationship building process between ABB Crane Systems and ABC-Terminal took a considerable amount of time, from the pre-relationship stage to the final stage. In this example, it took more than 10 years. It is clear how the new relationship was established between these two parties through the above mentioned five stages. This relationship was critically dependent on the progress of experience, uncertainty and distance. Figure 8.1 given next clearly illustrates the relationship building process between these two parties.
8.4 Relationship Bonds

An important characteristic of the relationships developed in the network is that they also work as bonds. There are different kinds of bonds and they have different objectives in the process of building and maintaining relationships. Some of the bonds are founded in technology, others in time, knowledge, social and legal aspects (Hammarkvist, Håkansson, & Mattsson 1982, p. 22).

From the previous example with ABC-Terminal, we can further relate that scenario to the different bonds involved in the relationship building process. The technical bonds are...
connected to the engineers and operators of the end-user and the equipment involved. The engineers and operators had been trained to adjust to the technology of ABB Crane Systems. Furthermore, at the end of the previous decade, the company developed a custom-made motor exclusively for ABC-Terminal in order to satisfy their specific needs.

Time-related bonds are considered to be important for the company as it tries to adjust its design and production to fit the schedule according to the demand of the customer. This time adjustment takes place not only internally but also externally with the sub-suppliers of the company. Time-related bonds are relevant to lowering the cost of production to the minimum level possible.

Knowledge bonds connect not only to the specific example of the relationship building process with ABC-Terminal, but more generally to the relationship with the motor factory of ABB. ABB Crane Systems makes an effort to share their knowledge with the motor factory in order to help them improve in their own R&D efforts. The knowledge bonds thus lead all the way from the end-user to ABB Crane Systems, and further upstream to the motor supplier. It can be noted, that this stream of knowledge resulting from such bonds, influences the course of further development and investments at ABB Crane Systems.

Social bonds in the business of ABB Crane Systems refer to the trust and commitment in relationships. The company refers to their social bonds to less of “wine and dine” and more to the social interaction and kept promises. Such promises cannot only be covered in legal contracts and it is due to these social bonds that the company can develop the real commitment and trust.

When conducting business in an industrial market, it is necessary to formulate legal aspects and contracts referred to as economical and legal bonds. ABB Crane Systems makes efforts in guaranteeing that its clients fulfill its legal and economic accountability.

To sum up, we can clearly see how these five different bonds are important in interaction and when building and maintaining relationships in the sales network of ABB Crane Systems.

After analyzing the empirical findings and relating them to our theoretical framework, we have found that the sales network of ABB Crane Systems follows the network perspective of industrial marketing in every aspect, except for embeddedness. Embeddedness is an essential part of Industrial Marketing in a network perspective; it is therefore important to point out the different view that the company has regarding this matter. It should be noted that the theory of industrial marketing in a network perspective was developed more than 20 years ago and that the industry might have changed the way in which businesses are conducted. A paradigm shift in information
technology and increased globalization are among some of the possible changes. ABB Crane Systems might deviate from the theory in the aspect of embeddedness due to the fact that information has now become more easily controllable and efficiently spread. Increased possibilities of effective communication through e-mails and telephone as well as traveling to countries all across the globe, have also made it possible for salespersons to deal with more relationships than before. At the same time, various sales activities such as issuance of quotations to customers are now possible to automate to an even higher extent with the help of spreadsheet tools and business intelligence.

If this different view of ABB Crane Systems is due to such structural changes, it might indicate that other companies in the industry also have the same view of embeddedness. This would imply that the theory has become old-fashioned and that it no longer is optimal to work according to the interaction approach. On the other hand, it might also be that ABB Crane Systems has another view compared to other companies - both in the crane industry and other industrial markets. Its way of looking at embeddedness might be different due to the fact that it is a relatively small business unit. Considering the tough competition and cost disadvantage compared to Asian companies, ABB Crane Systems might not have the ability to make extensive embeddedness possible if its labor hour resources are too scarce. It should also be emphasized that working according to embeddedness in the sales network is a complicated task which requires a lot of resources in the form of labor hours and this might therefore not be beneficial.

Another advantage associated with reduced embeddedness other than those previously mentioned in the analysis, is that more flexibility is possible within the sales network of ABB Crane Systems. With fewer individuals involved, the company can then contact new end-users more easily than would be possible with extensive embeddedness. An embeddedness strategy creates inertia in relationships. Since the length of the business cycles seems to decrease every year and economic development in some parts of the world is rapid, the crane industry has now become more volatile and unpredictable. It might therefore be a good strategic choice for the company to be precautious regarding embeddedness, since it is important to be open for available business opportunities. Many times such opportunities (projects) take place across the whole globe at the same time.

Other organizations within ABB are perhaps more embedded in their sales networks. For example, the business unit Power Transmission and Distribution might have to involve more individuals from its various departments since its sales opportunities are few in number, but consist of larger investments in comparison to the crane industry. The number of competitors in this industry are also fewer due to the high technological barriers of entry. Industrial characteristics such as the amounts of projects per year, the size of investments and market concentration might also have an impact on the optimal level of embeddedness. Another characteristic that might also be relevant is what was
previously mentioned about resources. Larger companies have more resources and better capabilities to handle the complex interactions involved with extensive embeddedness. This might therefore be possible to a higher extent of embeddedness for them compared to smaller companies such as ABB Crane Systems.

The analysis has shown that it took ABB Crane Systems more than 10 years to reach the long term stage of the buyer and seller relationship with ABC-Terminal. This was a process that involved more and more individuals step by step as the orders grew in both quantity and size. First, we noted that only few salespersons were involved in the preliminary stage. Then when the first sample order was acquired, only one project manager and commissioner were involved with the end-user relationship. As the relationship continued to develop and more orders were acquired, it became more natural for ABB Crane Systems to involve more individuals. The preliminary stage might thus have involved little or no embeddedness in order to first make the end-user comfortable with ABB Crane Systems and its offering. During the final stage, the company had then agreed to deliver a customized video upgrade system and customized motors exclusively for ABC-Terminal. Such research and development processes would not have been possible without closer interaction and embeddedness in the sales network, since technical inputs and communication between engineers is essential in such complex projects. Due to the many factors that have to be considered in ABB Crane Systems sales network, it is not possible to give a clear answer whether the company is following this key aspect of the theory or not. Thus, what can be said is that “it depends”.
CONCLUSION

Here, the conclusion has been drawn about the analysis carried out, with a purpose of answering the research question of the paper.

The main purpose of this paper was to investigate how the sales network of ABB Crane Systems is related to industrial marketing in a network perspective. The qualitative approach towards the research has helped us to get that deeper understanding of this purpose. Three main theories within industrial marketing in a network perspective have been used in order to answer the research question.

We have found that the sales network of ABB Crane Systems is related, although not fully, to the inter-organizational theory within industrial marketing. The main aspect of this theory considers the strategic approach towards the decision making unit (DCM) of customers. The company shows much of the strategic thinking in order to get closer to the individuals who have both official and unofficial decision-making power and it further acknowledges both the advantages and disadvantages with the interaction approach and level of embeddedness. In general, ABB Crane Systems strives towards consistency and efficiency in its means of communication with the other actors in the sales network. The company tries to minimize the number of individuals involved in the sales relationships in order to not waste scarce labor hours and resources. Maintaining control over the information exchange and reducing the risks involved with extensive embeddedness are other arguments supporting their view. However, this does not mean that the company avoids the complex interactions that have been recognized by the theory. We have found that the level of embeddedness might depend on various factors such as market concentration, technological barriers of entry, the business cycle, time, number of projects per year and size of available projects, the stage in the relationship building process, as well as overall market uncertainty. It is therefore difficult to answer whether the theory is outdated or not since several aspects must be weighted according to pros and cons. Concluded from the analysis is that the level of embeddedness is kept at a minimum, but that the company gets more embedded with its customers as the relationship moves closer to the final stage of the relationship building process. The theoretical description of uncertainty, complexity and resource intensity when considering technological, geographical, social, time and cultural aspects do also fit well with the situation of ABB Crane Systems.

Regarding the network perspective in industrial marketing, we have referred to four different actors and their impact on the economic exchange. It was noted that three out of these four actors have a direct economic impact on the company and its business model. It is important to point out that these actors are interconnected through various
communication channels and a global web of relationships. ABB Crane Systems is highly dependent on the success of end-user businesses since the real demand for crane equipment originates from there. The network positioning of the company is made very strategically and this can clearly be seen in its efforts towards building relationships and maintaining a high level of technological competence.

It is very important for ABB Crane Systems to remain a reliable player in the crane industry - a company that focuses on the social aspects like commitment and trust as well as the presence of high-quality engineering. We note that managing the global relationship portfolio is a very difficult and costly task that requires skillful and highly experienced sales personnel as well as day-to-day coordination by the sales manager. All relationships matter to ABB Crane Systems as the company cannot afford to turn down any customer in its sales network. The company also constantly tries to foresee and influence the next move of their competitors, in order to achieve its own self-interests and goals.

For the development of the buyer - seller relationships, ABB Crane Systems always tries to build and maintain long term relationships to be able to run its business more effectively. Long term relationships have helped the company to gain a good insight into customers’ need, which have enabled the company to provide customized solutions suitable for a wide range of applications. In the analysis we have also observed an example that the company has gone through the five main stages to build a new relationship - one which was highly dependent on experience, uncertainty and distance. It is clear that the company strives to reach the final stage in order to profitably run its business in the sales network. Furthermore, ABB Crane Systems also establish different bonds in its relationships which all are considered to be important in the management of old and development of new relationships. These bonds are important characteristics to consider in all relationships in the sales network.

In conclusion, by taking into consideration all the above mentioned points, we can now claim that the sales network of ABB Crane Systems has a close relationship with the selected theories within Industrial Marketing in a network perspective. However, we have found that the company is not entirely related to the important aspect of embeddedness in the sales network, which is a deliberate strategy in order to minimize the risks of miscommunication, maintain control over the sales process, remain flexible, as well as not waste scarce resources. The implication is that the level of embeddedness in the industry depends on several factors such as market concentration, competition, number of projects per year, size of available projects, the stage in the relationship building process and overall market uncertainty.
REFERENCES

Books and Journals


Internet Sources


Other


Interview Participants

Johanson, Fredrik, Sales Manager of ABB Crane Systems conducted from 9:00 am - 10:30 am, 2011-05-14

Hansson, Tuve Lars, Product Manager of ABB Crane Systems conducted from 2:00 pm - 3:30 pm, 2011-05-17
INTERVIEW QUESTIONS

Inter-organizational Theory

1. In inter-organizational theory it is stated that the decision making unit (DCM) of customers consists of several individuals from various units such as purchasing, engineering, finance and end-users. Is this description common also in the business of ABB?
   a. If yes, how do ABB work to recognize these individuals inside the DCM?
   b. Is there any strategic approach towards the DCM?
   c. How do ABB interact with the individuals in the DCM? Are several, few, or single ABB-individuals involved in the interaction with the customer?

2. In industrial selling and prospecting it is important to establish communication with suppliers in order to clarify agreements such as costs and scope of supply. From a sales point of view, how do ABB interact with its suppliers in the network?
   a. Are several or few individuals involved in the interaction between ABB and the suppliers?
      i. When several individuals are involved at both ABB’s and the suppliers end we say that the relationship is embedded. If this is the situation of ABB, what are the difficulties when managing the interaction process and embeddedness?
      ii. If few people are involved in the interaction, what are the reasons?

3. How does ABB consider the cultural, social and geographic distance when developing its international sales network?

The Network in the Industrial Market

4. In an industrial market and network, it is often claimed that relationships with other parties are interdependent and long-term with the organization. How do such parties in the network affect the performance and effectiveness of ABB?
   a. Suppliers
   b. Intermediaries
   c. OEM’s
   d. End-user
5. Do ABB have a strategy concerning the improvement and expansion of the relationships in the sales network, according to the following concepts:
   a. Network position
   b. Relationship portfolio
   c. Embeddedness with other parties

6. It is commonly known that actors in the network are pursued by self-interests. Do ABB plan and act according to the actions of other parties in the network?
   a. If yes, is there any short example of such a plan and execution?
   b. If no, what is the reason?

7. The costs associated with building and maintaining relationships are considered to be high in industrial markets. How do both internal resources and opportunities affect the selection of target relationships?
   a. Does ABB have any sales relationship which has turned costly while maintaining it, resulting in no financial benefit?

8. When building relationships in the network, social exchanges are taking place between ABB and other organizations. What norms and values are characteristic for this social exchange?
   a. Are these norms and values characteristic also for the network social exchange as a whole?

9. To what extent do ABB and its customer's value confidence and trust in the sales network?
   a. If high, how do ABB build confidence and trust with its partners and customers?
   b. If low, what are the reasons?

10. In terms of coordinating the various sales activities, how is the course of action communicated internally in order to get a unified approach towards the sales network and its interacting parties?
The Development of Buyer-Seller Relationships

11. How important are relationships in the sales network?

12. Do ABB have a relationship strategy for:
   a. Building new relationships...
   b. Defending existing relationships...
   c. Is there any short example?

13. Are the relationships with ABB short-, long-term or both?
   a. What relationships might be shorter term and longer term and what determines the duration?

14. When building a relationship from the ground and up between a buyer and a seller, it is important to consider the time aspect and steps to reach a long-term perspective. How is the uncertainty, distance and commitment changing as the relationship improves between two organizations?

15. An important characteristic of the relationships developed in the network is that they also work as bonds. The bonds in the various relationships have different characteristics and objectives. Referring to the technical, time-related, knowledge, social, economic and legal bonds, is there any short example which can be referred?